Auckland Unitary Plan (Operative in Part) – Objectives and Policies Assessment

The following Table provides a framework for identification and assessment of the objectives and policies of the Auckland Unitary Plan (AUP). The content focusses on the relevant objectives and policies rather that every single provision.

AUP Objectives and Policies	Comments
Chapter B. Regional Policy Statement	
B2 Urban Growth and Form	
B2.2.1 Objectives	
(1) A quality compact urban form that enables all of the following: (a) a higher-quality urban environment; (b) greater productivity and economic growth; (c) better use of existing infrastructure and efficient provision of new infrastructure; (d) improved and more effective public transport; (e) greater social and cultural vitality; (f) better maintenance of rural character and rural productivity; and (g) reduced adverse environmental effects	The proposed residential zoning pattern at Waihoehoe Road will provide quality, compact neighbourhoods on land located within the Rural Urban Boundary and increase residential capacity. The proposed Terrace Housing and Apartment Building zoning supports maximising the efficient use of land within the Plan Change area which is most accessible to the proposed public transport network for Drury. The Plan Change is located within the Future Urban Zone. The Drury-Opāheke Structure Plan and the Future Urban Land Supply Strategy 2017 (FULSS) states that the Plan Change area will be 'development ready' in 2028-2032. Despite this, the more detailed analysis undertaken as part of this proposal indicates that the early release of the Plan Change area for urban development is still in keeping with Objective B.2.2.1(5). The Plan Change area can be serviced by the water and wastewater network with upgrades in place which have been agreed with Watercare Services Limited. The Integrated Transport Assessment, demonstrates that the land can be developed with targeted upgrades in place. Rules are included within the Plan Change to coordinate the release of development capacity within the Plan Change area with the delivery of required transport infrastructure. This allows some limited but much needed residential capacity to be available in the short to medium term. It also allows for consenting and development for preliminary works to proceed without creating any additional demand on infrastructure. Additionally, the Council has initiated a Drury Transport Investment Project (DTIP) which is investigating the timing, sequencing and funding of required transport upgrades in Drury. This project will be completed in early 2020 and prior to the Hearing on the Plan Change. The Plan Change is entirely keeping with these objectives.
(2) Urban growth is primarily accommodated within the urban area 2016 (as identified in Appendix 1A).	
(3) Sufficient development capacity and land supply is provided to accommodate residential, commercial, industrial growth and social facilities to support growth.	
(4) Urbanisation is contained within the Rural Urban Boundary, towns, and rural and coastal towns and villages	
(5) The development of land within the Rural Urban Boundary, towns, and rural and coastal towns and villages is integrated with the provision of appropriate infrastructure.	
B2.2.2 Policies	

(1) Include sufficient land within the Rural Urban Boundary that is appropriately zoned to accommodate at any one time a minimum of seven years' projected growth in terms of residential, commercial and industrial demand and corresponding requirements for social facilities, after allowing for any constraints on subdivision, use and development of land.	The Plan Change will result in the urbanisation of future urban zoned land with a zoning pattern that is generally consistent with Council's Drury-Opāheke Structure Plan which was released in August 2019. The proposed zoning pattern will encourage a range of housing choice and intensive housing development in close proximity to Kiwi's proposed Metropolitan Centre and the proposed Drury train station. The Plan Change will enable residential development that integrates with planned public transport. There are also proposed rules to enable the full development capacity of the Waihoehoe Road Precinct to be realised as the required infrastructure is provided. The Plan Change is entirely keeping with these policies.
(3) Enable rezoning of future urban zoned land for urbanisation following structure planning and plan change processes in accordance with Appendix 1 Structure plan guidelines.	
(4) Promote urban growth and intensification within the urban area 2016 (as identified in Appendix 1A), enable urban growth and intensification within the Rural Urban Boundary, towns, and rural and coastal towns and villages, and avoid urbanisation outside these areas.	
(5) Enable higher residential intensification: (a) in and around centres; (b) along identified corridors; and (c) close to public transport, social facilities (including open space) and employment opportunities.	
(6) Identify a hierarchy of centres that supports a quality compact urban form: (a) at a regional level through the city centre, metropolitan centres and town centres which function as commercial, cultural and social focal points for the region or sub-regions; and (b) at a local level through local and neighbourhood centres that provide for a range of activities to support and serve as focal points for their local communities.	
(7) Enable rezoning of land within the Rural Urban Boundary or other land zoned future urban to accommodate urban growth in ways that do all of the following: (a) support a quality compact urban form; (b) provide for a range of housing types and employment choices for the area; (c) integrate with the provision of infrastructure; and (d) follow the structure plan guidelines as set out in Appendix 1.	
B2.3 A Quality Built Environment	
Objectives and Policies	
B2.3.1 Objectives (1) A quality-built environment where subdivision, use and development do all of the following: (a) respond to the intrinsic qualities and physical characteristics of the site and area, including its setting; (b) reinforce the hierarchy of centres and corridors; (c) contribute to a diverse mix of choice and opportunity for people and communities; (d) maximise resource and infrastructure efficiency; (e) are capable of adapting to changing needs; and (f) respond and adapt to the effects of climate change	The proposed rezoning of the Plan Change area from Future Urban Zone to a mixture of Terrace Housing and Apartment Building and Mixed Housing Urban zones will result in a quality residential environment. The Terrace Housing and Apartment and the Mixed Housing zones provide for a variety of housing typologies and take a design based approach to ensure that future development maintains the amenity of adjoining sites and contributes to the safety of the site, street and neighbourhood. The precinct includes provisions that seek to ensure that development and subdivision result in increased connectivity with a permeable street pattern and walkable urban form. The

(2) Innovative design to address environmental effects is encouraged.	provisions also ensure that cyclist safety is prioritised on the collector road network and park-edge connections.
(3) The health and safety of people and communities are promoted.	
B2.3.2 Policies (1) Manage the form and design of subdivision, use and development so that it does all of the following: (a) supports the planned future environment, including its shape, landform, outlook, location and relationship to its surroundings, including landscape and heritage; (b) contributes to the safety of the site, street and neighbourhood; (c) develops street networks and block patterns that provide good access and enable a range of travel options; (d) achieves a high level of amenity and safety for pedestrians and cyclists; (e) meets the functional, and operational needs of the intended use; and (f) allows for change and enables innovative design and adaptive re-use.	Taking into account the existing rural environment, this is likely to result in development that enhances the connectivity and safety of the street & neighbourhood beyond what currently exists in the surrounding area. The Plan Change is entirely keeping with these objectives and policies.
(2) Encourage subdivision, use and development to be designed to promote the health, safety and well-being of people and communities by all of the following: (a) providing access for people of all ages and abilities; (b) enabling walking, cycling and public transport and minimising vehicle movements; and (c) minimising the adverse effects of discharges of contaminants from land use activities (including transport effects) and subdivision.	
(3) Enable a range of built forms to support choice and meet the needs of Auckland's diverse population.	
(4) Balance the main functions of streets as places for people and as routes for the movement of vehicles	
B2.4 Residential Growth	
Objectives and Policies	
B2.4.1. Objectives (1) Residential intensification supports a quality compact urban form	High density residential activity is enabled in the southern portion of the Plan Change area which is proposed to be zoned Terrace Housing and Apartment Building zone. The zoning seeks to make the most efficient utilisation of the physical land resource, and offers the potential for a greater range of housing types, contributing to greater housing choice in a location that is in close proximity to the proposed Drury Metropolitan Centre, a significant employment area (Drury South Industrial area) and the proposed Drury train station. The Plan Change increases residential capacity within southern Auckland within the short, medium and long term, with the Plan Change area eventually providing for an additional of at least 1133 dwellings. This will increase housing capacity and choice within southern Auckland.
(2) Residential areas are attractive, healthy and safe with quality development that is in keeping with the planned built character of the area.	
(3) Land within and adjacent to centres and corridors or in close proximity to public transport and social facilities (including open space) or employment opportunities is the primary focus for residential intensification.	
(4) An increase in housing capacity and the range of housing choice which meets the varied needs and lifestyles of Auckland's diverse and growing population.	
(5) Non-residential activities are provided in residential areas to support the needs of people and communities.	
(6) Sufficient, feasible development capacity for housing is provided, in accordance with Objectives 1 to 4 above, to meet the targets in Table B2.4.1 below:	

<table><tr><th>Term</th><th>Short to Medium 1 - 10 years (2016 – 2026)</th><th>Long 11 - 30 years (2027 – 2046)</th><th>Total 1 – 30 years (2016 – 2046)</th></tr><tr><td>Minimum Target (number of dwellings)</td><td>189,800</td><td>218,500</td><td>408,300</td></tr></table>	The proposed zoning pattern is generally in accordance with the zoning indicated within Council's Drury-Opāheke Structure Plan which was released in August 2019. This ensures that the future development of the Plan Change area effectively integrates with future development in the wider neighbourhood. The Plan Change is entirely keeping with these objectives and policies.
B2.4.2 Policies (1) Provide a range of residential zones that enable different housing types and intensity that are appropriate to the residential character of the area.	
(2) Enable higher residential intensities in areas closest to centres, the public transport network, large social facilities, education facilities, tertiary education facilities, healthcare facilities and existing or proposed open space.	
(3) Provide for medium residential intensities in area that are within moderate walking distance to centres, public transport, social facilities and open space.	
(4) Provide for lower residential intensity in areas: (a) that are not close to centres and public transport; (b) that are subject to high environmental constraints; (c) where there are natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character; and (d) where there is a suburban area with an existing neighbourhood character.	
(5) Avoid intensification in areas: (a) where there are natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage or special character; or (b) that are subject to significant natural hazard risks; where such intensification is inconsistent with the protection of the scheduled natural or physical resources or with the avoidance or mitigation of the natural hazard risks.	
(6) Ensure development is adequately serviced by existing infrastructure or is provided with infrastructure prior to or at the same time as residential intensification.	
(7) Manage adverse reverse sensitivity effects from urban intensification on land with existing incompatible activities.	
(8) Recognise and provide for existing and planned neighbourhood character through the use of place-based planning tools.	
(9) Manage built form, design and development to achieve an attractive, healthy and safe environment that is in keeping with the descriptions set out in placed-based plan provisions.	

(10) Require non-residential activities to be of a scale and form that are in keeping with the existing and planned built character of the area.	
B2.7 Open Space and Recreational Facilities	
Objectives and Policies	
B2.7.1 Objectives (1) Recreational needs of people and communities are met through the provision of a range of quality open spaces and recreation facilities.	The Auckland-wide provisions will ensure the adequate provision of accessible and quality open space for future residents. The surrounding existing and planned amenities and social facilities, are accessible by active and public modes of transport, and are of a sufficient size to cater for the social and cultural needs and well-being of future residents of the Plan Change area. The Plan Change is in keeping with the relevant objectives and policies.
(2) Public access to and along Auckland's coastline, coastal marine area, lakes, rivers, streams and wetlands is maintained and enhanced.	
(3) Reverse sensitivity effects between open spaces and recreation facilities and neighbouring land uses are avoided, remedied or mitigated.	
B2.7.2 Policies (1) Enable the development and use of a wide range of open spaces and recreation facilities to provide a variety of activities, experiences and functions.	
(2) Promote the physical connection of open spaces to enable people and wildlife to move around efficiently and safely.	
(3) Provide a range of open spaces and recreation facilities in locations that are accessible to people and communities.	
(4) Provide open spaces and recreation facilities in areas where there is an existing or anticipated deficiency.	
(7) Avoid, remedy or mitigate significant adverse effects of land use or development on open spaces and recreation facilities.	
(8) Avoid, remedy or mitigate significant adverse effects from the use of open spaces and recreational facilities on nearby residents and communities.	
(9) Enable public access to lakes, rivers, streams, wetlands and the coastal marine area by enabling public facilities and by seeking agreements with private landowners where appropriate.	
B2.8 Social Facilities	
Objectives and Policies	
B2.8.1 Objectives (1) Social facilities that meet the needs of people and communities, including enabling them to provide for their social, economic and cultural well-being and their health and safety.	The Plan Change area is adjacent to the proposed Drury Metropolitan Centre and Drury Village. The Plan Change area is also 4.5km of the Papakura Metropolitan Centre. Schools and other facilities will be required to cater for the future community and there is flexibility in the provisions for Government agencies and the private market to deliver these as development occurs and the demand arises. The Plan Change is in keeping with the relevant objectives and policies.
B2.8.2 Policies (2) Enable the provision of social facilities to meet the diverse demographic and cultural needs of people and communities.	
B3.2 Infrastructure	

Objectives and Policies	
B3.2.1 Objectives (5) Infrastructure planning and land use planning are integrated to service growth efficiently.	Watercare Services Limited have confirmed that the development enabled by the Plan Change can be serviced in the future through extending the water and wastewater network to provide services to meet the anticipated demand in the areas marked as "Decade 1" and "Development underway". Watercare and the applicant intend to enter into an infrastructure funding agreement which provides a delivery mechanism for connecting infrastructure to service the Plan Change area. Watercare have confirmed that services are expected to be available progressively from 2019 and 2020. The Plan Change is in keeping with the relevant objectives and policies.
(7) The national significance of the National Grid is recognised and provided for and its effective development, operation, maintenance and upgrading are enabled.	
B3.2.2 Policies (4) Avoid where practicable, or otherwise remedy or mitigate, adverse effects of subdivision, use and development on infrastructure.	
(5) Ensure subdivision, use and development do not occur in a location or form that constrains the development, operation, maintenance and upgrading of existing and planned infrastructure.	
B3.3 Transport	
Objectives and Policies	
B3.3.1 Objectives (1) Effective, efficient and safe transport that: (a) supports the movement of people, goods and services; (b) integrates with and supports a quality compact urban form; (c) enables growth; (d) avoids, remedies or mitigates adverse effects on the quality of the environment and amenity values and the health and safety of people and communities; and (e) facilitates transport choices, recognises different trip characteristics and enables accessibility and mobility for all sectors of the community.	The effects of the Plan Change on the existing and future transport network have been assessed in an Integrated Transport Assessment (ITA) prepared by Stantec and included within **Appendix 8**. The ITA has shown that extent of development enabled by the Plan Change can be accommodated on the surrounding road network while maintaining acceptable levels of safety and efficiency through the next three decades. It is proposed to provide staged accesses to the Plan Change area in response to the level and rate of development and required roading infrastructure. Within the Plan Change area, the internal road network is proposed to be arranged in six key streets and includes consideration of active transportation such as cycling and walking amenities. The Plan Change includes provisions to guide the location and layout of local roads to ensure these achieve a highly connected street layout that integrates with the surrounding transport network. The Plan Change includes indicative road cross sections to ensure that the road network within Drury East integrates with the surrounding development within the Fulton Hogan and Kiwi Property Plan Change areas. These road cross sections include provision of pedestrian and cycle paths to promote active transport modes. The ITA identifies the Drury Central train station and public transport hub as the focus for the public transport network servicing Drury East. The train station and public transport hub integrates multiple modes of transport that link the local network and the wider, regional network. The train station, located on the southern line between Papakura and Pukekohe, will
B3.3.2 Policies (1) Enable the effective, efficient and safe development, operation, maintenance and upgrading of all modes of an integrated transport system.	
(2) Enable the movement of people, goods and services and ensure accessibility to sites.	
(3) Identify and protect existing and future areas and routes for developing Auckland's transport infrastructure.	
(4) Ensure that transport infrastructure is designed, located and managed to: (a) integrate with adjacent land uses, taking into account their current and planned use, intensity, scale, character and amenity; and (b) provide effective pedestrian and cycle connections.	
(5) Improve the integration of land use and transport by: (a) ensuring transport infrastructure is planned, funded and staged to integrate with urban growth;	

(b) encouraging land use development and patterns that reduce the rate of growth in demand for private vehicle trips, especially during peak periods; (c) locating high trip-generating activities so that they can be efficiently served by key public transport services and routes and complement surrounding activities by supporting accessibility to a range of transport modes; (d) requiring proposals for high trip-generating activities which are not located in centres or on corridors or at public transport nodes to avoid, remedy or mitigate adverse effects on the transport network; (e) enabling the supply of parking and associated activities to reflect the demand while taking into account any adverse effects on the transport system; and (f) requiring activities adjacent to transport infrastructure to avoid, remedy or mitigate effects which may compromise the efficient and safe operation of such infrastructure.	provide high capacity, high frequent movement to / from the Auckland CBD particularly once the future electrification of the rail line between Drury and Pukekohe is completed. The bus network will primarily service the local network, providing critical connections between routes. The combination of these public transport facilities alleviates traffic congestion and allows for a more sustainable outcome. Additional upgrades to those currently planned and funded are required within the first two decades to transport infrastructure to facilitate development in the Plan Change area. The Plan Change includes rules to sequence development with the delivery of this infrastructure. Overall, the Plan Change is consistent with these objectives and policies. The Plan Change will enhance accessibility all modes of transport within the Plan Change area by providing a connected an integrated road network which provides for cyclists and pedestrians and creates linkages to the new Drury Central train station.
(6) Require activities sensitive to adverse effects from the operation of transport infrastructure to be located or designed to avoid, remedy or mitigate those potential adverse effects.	
(7) Avoid, remedy or mitigate the adverse effects associated with the construction or operation of transport infrastructure on the environment and on community health and safety.	
B6.2 Recognition of Treaty of Waitangi/Te Tiriti o Waitangi partnerships and participation	
Objectives and Policies	
B6.2.1 Objectives (1) The principles of the Treaty of Waitangi/Te Tiriti o Waitangi are recognised and provided for in the sustainable management of natural and physical resources including ancestral lands, water, air, coastal sites, wāhi tapu and other taonga.	A series of hui have been between Oyster and Mana Whenua with interests in the Plan Change area to determine the outcomes which Mana Whenua are seeking through the Plan Change Process. The agreed actions in relation to these outcomes are documented in the Iwi Engagement Memo and have been incorporated within the Plan Change as far as practicable. Discussions with Mana Whenua are ongoing. The Plan Change is in keeping with the relevant objectives and policies.
(2) The principles of the Treaty of Waitangi/Te Tiriti o Waitangi are recognised through Mana Whenua participation in resource management processes.	
B6.2.2 Policies (1) Provide opportunities for Mana Whenua to actively participate in the sustainable management of natural and physical resources including ancestral lands, water, sites, wāhi tapu and other taonga in a way that does all of the following: (a) recognises the role of Mana Whenua as kaitiaki and provides for the practical expression of kaitiakitanga; (b) builds and maintains partnerships and relationships with iwi authorities; (c) provides for timely, effective and meaningful engagement with Mana Whenua at appropriate stages in the resource management process, including development of resource management policies and plans; (d) recognises the role of kaumātua and pūkenga;	

(e) recognises Mana Whenua as specialists in the tikanga of their hapū or iwi and as being best placed to convey their relationship with their ancestral lands, water, sites, wāhi tapu and other taonga; (f) acknowledges historical circumstances and impacts on resource needs; (g) recognises and provides for mātauranga and tikanga; and recognises the role and rights of whānau and hapū to speak and act on matters that affect them.	
B7.2 Indigenous Biodiversity	
Objectives	
B7.2.1 Objectives (2) Indigenous biodiversity is maintained through protection, restoration and enhancement in areas where ecological values are degraded, or where development is occurring.	The Plan Change will result in loss of vegetation to facilitate land development; however, this will be kept to a minimum and will be avoided where possible. There is also considerable potential to restore habitats at the site as part of the Plan Change through the proposed drainage reserves. The Plan Change is in keeping with this objective.
B7.3 Freshwater Systems	
Objectives and Policies	
B7.3.1 Objectives (1) Degraded freshwater systems are enhanced.	The stormwater Management Plan (**SMP**) prepared to support this Plan Change application demonstrates that mitigation measures can be put in place to manage any adverse effects of rezoning and developing the Plan Change area on the freshwater systems. The stormwater quality provisions included within Chapter E9 of the AUP will apply within the Plan Change area. Additionally, the Stormwater Management Area Flow 1 Control is proposed to apply. This will ensure that there are rules in place to manage the stormwater runoff quality from new impervious areas that have the potential to adversely affect waterways. The Plan Change includes a riparian margin rule which requires a 10m planted riparian margin along identified streams which will assist with improving water quality. In terms of any permanent loss or modification of waterways it may be necessary to modify some streams and wetlands to facilitate urban development. Impacts to stream or wetland habitat may require resource consents and further consideration of effects at that time under the standard AUP provisions. Where any reclamation is required which may result in loss of aquatic habitat, the effects can be offset through enhancement measures or the creation of new stream habitat through diversion. The Plan Change is in keeping with the relevant objectives and policies.
(2) Loss of freshwater systems is minimised.	
(3) The adverse effects of changes in land use on freshwater are avoided, remedied or mitigated.	
B7.3.2 Policies (1) Integrate the management of subdivision, use and development and freshwater systems by undertaking all of the following: (a) ensuring water supply, stormwater and wastewater infrastructure is adequately provided for in areas of new growth or intensification; (b) ensuring catchment management plans form part of the structure planning process; (c) controlling the use of land and discharges to minimise the adverse effects of runoff on freshwater systems and progressively reduce existing adverse effects where those systems or water are degraded; and (d) avoiding development where it will significantly increase adverse effects on freshwater systems, unless these adverse effects can be adequately mitigated.	
(2) Identify degraded freshwater systems.	
(3) Promote the enhancement of freshwater systems identified as being degraded to progressively reduce adverse effects.	

(4) Avoid the permanent loss and significant modification or diversion of lakes, rivers, streams (excluding ephemeral streams), and wetlands and their margins, unless all of the following apply: (a) it is necessary to provide for: i. the health and safety of communities; or ii. the enhancement and restoration of freshwater systems and values; or iii. the sustainable use of land and resources to provide for growth and development; or iv. infrastructure; (b) no practicable alternative exists; (c) mitigation measures are implemented to address the adverse effects arising from the loss in freshwater system functions and values; and (d) where adverse effects cannot be adequately mitigated, environmental benefits including on-site or off-site works are provided.	
(5) Manage subdivision, use, development, including discharges and activities in the beds of lakes, rivers streams, and in wetlands, to do all of the following: (a) protect identified Natural Lake Management Areas, Natural Stream Management Areas, and Wetland Management Areas; (b) minimise erosion and modification of beds and banks of lakes, rivers, streams and wetlands; (c) limit the establishment of structures within the beds of lakes, rivers and streams and in wetlands to those that have a functional need or operational requirement to be located there; and (d) maintain or where appropriate enhance: i. freshwater systems not protected under Policy B7.3.2(5)(a); ii. navigation along rivers and public access to and along lakes, rivers and streams; iii. existing riparian vegetation located on the margins of lakes, rivers, streams and wetlands; and iv. areas of significant indigenous biodiversity.	
(6) Restore and enhance freshwater systems where practicable when development, change of land use, and subdivision occur.	
B7.4 Coastal water, freshwater and geothermal water	
Objectives and Policies	
B7.4.1 Objectives (2) The quality of freshwater and coastal water is maintained where it is excellent or good and progressively improved over time where it is degraded.	Water supply, stormwater and wastewater infrastructure will be adequately provided for in accordance with the anticipated growth. In addition, the SMP prepared to support this Plan Change application demonstrates that mitigation measures can be put in place to manage any adverse effects of rezoning and developing the Plan Change area on coastal water and freshwater.
(4) The adverse effects of point and non-point discharges, in particular stormwater runoff and wastewater discharges, on coastal waters, freshwater and geothermal water are minimised and existing adverse effects are progressively reduced.	

(5) The adverse effects from changes in or intensification of land use on coastal water and freshwater quality are avoided, remedied or mitigated.	The stormwater quality provisions included within Chapter E9 of the AUP will apply within the Plan Change area. Additionally, the Stormwater Management Area Flow 1 Control is proposed to apply. These provisions will ensure that there are rules in place to manage the stormwater runoff quality from new impervious areas as well as sediment and contaminant runoff which could make its way into the coastal receiving environment. The Plan Change includes a riparian margin rule which requires a 10m planted riparian margin along identified streams which will assist with improving water quality to receiving coastal waters. The CVA reports and consultation undertaken with relevant iwi groups provide guidance on measures the iwi would like to see to manage adverse effects of urban development on the mauri of water and other taonga and these recommendations are recognised and provided for. The Plan Change is in keeping with the relevant objectives and policies.
(6) Mana Whenua values, mātauranga and tikanga associated with coastal water, freshwater and geothermal water are recognised and provided for, including their traditional and cultural uses and values.	
B7.4.2 Policies (1) Integrate the management of subdivision, use, development and coastal water and freshwater, by: (a) ensuring water supply, stormwater and wastewater infrastructure is adequately provided for in areas of growth; and (b) requiring catchment management planning as part of structure planning; (c) controlling the use of land and discharges to minimise the adverse effects of runoff on water and progressively reduce existing adverse effects where those water are degraded; and (d) avoiding development where it will significantly increase adverse effects on water, unless these adverse effects can be adequately mitigated.	
(6) Progressively improve water quality in areas identified as having degraded water quality through managing subdivision, use, development and discharges.	
(7) Manage the discharges of contaminants into water from subdivision, use and development to avoid where practicable, and otherwise minimise, all of the following: (a) significant bacterial contamination of freshwater and coastal water; (b) adverse effects on the quality of freshwater and coastal water; (c) adverse effects from contaminants, including nutrients generated on or applied to land, and the potential for these to enter freshwater and coastal water from both point and non-point sources; (d) adverse effects on Mana Whenua values associated with coastal water, freshwater and geothermal water, including wāhi tapu, wāhi taonga and mahinga kai; and (e) adverse effects on the water quality of catchments and aquifers that provide water for domestic and municipal supply.	
(8) Minimise the loss of sediment from subdivision, use and development, and manage the discharge of sediment into freshwater and coastal water, by: (a) promoting the use of soil conservation and management measures to retain soil and sediment on land; and (b) requiring land disturbing activities to use industry best practice and standards appropriate to the nature and scale of the land disturbing activity and the sensitivity of the receiving environment.	
(9) Manage stormwater by all of the following: (a) requiring subdivision, use and development to: i. minimise the generation and discharge of contaminants; and	

ii. minimise adverse effects on freshwater and coastal water and the capacity of the stormwater network; (b) adopting the best practicable option for every stormwater diversion and discharge; and (c) controlling the diversion and discharge of stormwater outside of areas serviced by a public stormwater network.	
(10) Manage the adverse effects of wastewater discharges to freshwater and coastal water by all of the following: (a) ensuring that new development is supported by wastewater infrastructure with sufficient capacity to serve the development; (b) progressively reducing existing network overflows and associated adverse effects by all of the following: i. making receiving environments that are sensitive to the adverse effects of wastewater discharges a priority; ii. adopting the best practicable option for preventing or minimising the adverse effects of discharges from wastewater networks including works to reduce overflow frequencies and volumes; iii. ensuring plans are in place for the effective operation and maintenance of the wastewater network and to minimise dry weather overflow discharges; iv. ensuring processes are in place to mitigate the adverse effects of overflows on public health and safety and the environment where the overflows occur; (c) adopting the best practicable option for minimising the adverse effects of discharges from wastewater treatment plants; and (d) ensuring on-site wastewater systems avoid significant adverse effects on freshwater and coastal water.	
B10.2 Natural Hazards and Climate Change	
Objectives and Policies	
B10.2.1 Objectives (1) Communities are more resilient to natural hazards and the effects of climate change.	A comprehensive assessment of hazards has been undertaken to support the proposed Plan Change. This includes Geotechnical reporting (refer to **Appendix 12**) and flood modelling (refer to **Appendix 9).** Based on the findings of the analysis and the mitigation measures proposed, it is considered that the land conditions are generally suitable for urban development and can be appropriately managed through the resource consent process. Further, the standard provisions in Chapter E36 of the AUP would apply to any development within identified flood plains and/or overland flow paths, which would sufficiently manage the effects of potential development in these areas. The Plan Change is in keeping with the relevant objectives and policies.
(3) New subdivision, use and development avoid the creation of new risks to people, property and infrastructure.	
(4) The effects of climate change on natural hazards, including effects on sea level rise and on the frequency and severity of storm events, is recognised and provided for.	
(5) The functions of natural systems, including floodplains, are protected from inappropriate subdivision, use and development.	
(6) The conveyance function of overland flow paths is maintained.	

B10.2.2 Policies (5) Manage subdivision, use and development of land subject to natural hazards based on all of the following: (a) the type and severity of potential events, including the occurrence natural hazard events in combination; (b) the vulnerability of the activity to adverse effects, including the health and safety of people and communities, the resilience of property to damage and the effects on the environment; and (c) the cumulative effects of locating activities on land subject to natural hazards and the effects on other activities and resources.	
(7) Avoid or mitigate the effects of activities in areas subject to natural hazards, such as earthworks, changes to natural and built drainage systems, vegetation clearance and new or modified structures, so that the risks of natural hazards are not increased.	
(10) Encourage redevelopment on land subject to natural hazards to reduce existing risks and ensure no new risks are created by using a range of measures such as any of the following: (a) the design and placement of buildings and structures; (b) managing activities to increase their resilience to hazard events; or (c) change of use to a less vulnerable activity.	
B10.4 Land - Contaminated	
Objectives and Policies	
B10.4.1 Objective (1) Human health and the quality of air, land and water resources are protected by the identification, management and remediation of land that is contaminated.	Preliminary Site Investigation reports have been undertaken as part of the proposed Plan Change application (refer to **Appendix 13**). In summary, the Plan Change will be generally suitable for future commercial and residential development, with some targeted remediation likely required. Any land contamination will therefore be managed through the resource consent process including consent conditions. These rules are addressed in the NES and Chapter E30 of the AUP.
B10.4.2 Policies (1) Identify land that is or may be contaminated based on: (a) sites known to have supported contaminating land use activities in the past; (b) sites with a significant potential risk to human health; or (c) sites having significant adverse effects on the environment.	
(3) Manage or remediate land that is contaminated where: (a) the level of contamination renders the land unsuitable for its existing or proposed use; or (b) the discharge of contaminants from the land is generating or is likely to generate significant adverse effects on the environment; or (c) development or subdivision of land is proposed.	

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<tr><th colspan="2">Chapter E Auckland Wide</th></tr>
<tr><th colspan="2">E1 Water Quality and Integrated Management</th></tr>
<tr><th colspan="2">Objectives and Policies</th></tr>
<tr><td>E1.2 Objectives
(1) Freshwater and sediment quality is maintained where it is excellent or good and progressively improved over time in degraded areas.</td><td rowspan="5">Given the existing rural land use activities present and enabled on land it is considered that the proposed freshwater systems in the Plan Change Area will in fact be improved over time as the land is developed for urban land uses. Riparian margins will be enhanced and stormwater will be better managed.

The improvements in stormwater management, the provision of reticulated wastewater networks and riparian protection and enhancement should ensure that the mauri of freshwater will potentially be better protected that it is at the present time.

The application of the SMAF Flow 1 controls along with the Auckland-wide provisions will ensure that stormwater discharges and sediment runoff are appropriately managed to ensure that water quality is enhanced.

An integrated approach to stormwater has been adopted and will be applied through Waihoehoe Road Precinct. The proposed stormwater management measures as well as riparian planting will minimise and mitigate effects on freshwater systems arising from changes in water temperature.

As above, effects arising from stormwater discharges will be effectively managed through the resource consent process that will follow the Plan Change. The layout, location and type of zoning proposed seek to achieve integration of future development whilst minimising effects on hydrology and receiving environments.

Connectivity of waterways will be retained and protected and enhanced as much as possible.

Earthworks within the Plan Change area have the potential to create an uncontrolled discharge of sediment laden water which can impact water quality of receiving watercourses. In this case, implementation of an erosion and sediment control plan that is designed and maintained in accordance with Auckland Council GD05 - Guidance for Erosion and Sediment Control will be appropriate to deal with effects of sedimentation from earthworks. This can be dealt with through the resource consent process.

For the reasons above, it is considered that the proposed Plan Change is in keeping with the relevant E1 objectives and policies.</td></tr>
<tr><td>(2) The mauri of freshwater is maintained or progressively improved over time to enable traditional and cultural use of this resource by Mana Whenua</td></tr>
<tr><td>(3) Stormwater and wastewater networks are managed to protect public health and safety and to prevent or minimise adverse effects of contaminants on freshwater and coastal water quality.</td></tr>
<tr><td>E1.3 Policies
(2) Manage discharges, subdivision, use, and development that affect freshwater systems to:
(a) maintain or enhance water quality, flows, stream channels and their margins and other freshwater values, where the current condition is above National Policy Statement for Freshwater Management National Bottom Lines and the relevant Macroinvertebrate Community Index guideline in Table E1.3.1 below; or
(b) enhance water quality, flows, stream channels and their margins and other freshwater values where the current condition is below national bottom lines or the relevant Macroinvertebrate Community Index guideline in Table E1.3.1 below.

Table E1.3.1
Macroinvertebrate Community Index guideline for Auckland rivers and streams
<table><tr><th>Land Use</th><th>Macroinvertebrate Community Index</th></tr><tr><td>Native Forest</td><td>123</td></tr><tr><td>Exotic Forest</td><td>111</td></tr><tr><td>Rural Areas</td><td>94</td></tr><tr><td>Urban Areas</td><td>68</td></tr></table></td></tr>
<tr><td>(3) Require freshwater systems to be enhanced unless existing intensive land use and development has irreversibly modified them such that it practicably precludes enhancement.</td></tr>
<tr><td>(8) Avoid as far as practicable, or otherwise minimise or mitigate, adverse effects of stormwater runoff from greenfield development on freshwater systems, freshwater and coastal water by:
(a) taking an integrated stormwater management approach (refer to Policy E1.3.10);</td></tr>
</table>

(b) minimising the generation and discharge of contaminants, particularly from high contaminant generating car parks and high use roads and into sensitive receiving environments; (c) minimising or mitigating changes in hydrology, including loss of infiltration, to: i. minimise erosion and associated effects on stream health and values; ii. maintain stream baseflows; and iii. support groundwater recharge; (d) where practicable, minimising or mitigating the effects on freshwater systems arising from changes in water temperature caused by stormwater discharges; and (e) providing for the management of gross stormwater pollutants, such as litter, in areas where the generation of these may be an issue.	
(10) In taking an integrated stormwater management approach have regard to all of the following: (a) the nature and scale of the development and practical and cost considerations, recognising: i. greenfield and comprehensive brownfield development generally offer greater opportunity than intensification and small-scale redevelopment of existing areas; ii. intensive land uses such as high-intensity residential, business, industrial and roads generally have greater constraints; and iii. site operational and use requirements may preclude the use of an integrated stormwater management approach. iv. the location, design, capacity, intensity and integration of sites/development and infrastructure, including roads and reserves, to protect significant site features and hydrology and minimise adverse effects on receiving environments; v. the nature and sensitivity of receiving environments to the adverse effects of development, including fragmentation and loss of connectivity of rivers and streams, hydrological effects and contaminant discharges and how these can be minimised and mitigated, including opportunities to enhance degraded environments; (d) reducing stormwater flows and contaminants at source prior to the consideration of mitigation measures and the optimisation of on-site and larger communal devices where these are required; and (e) the use and enhancement of natural hydrological features and green infrastructure for stormwater management where practicable.	
(11) Avoid as far as practicable, or otherwise minimise or mitigate adverse effects of stormwater diversions and discharges, having particular regard to: (a) the nature, quality, volume and peak flow of the stormwater runoff; (b) the sensitivity of freshwater systems and coastal waters, including the Hauraki Gulf Marine Park; (c) the potential for the diversion and discharge to create or exacerbate flood risks;	

(d) options to manage stormwater on-site or the use of communal stormwater management measures; (e) practical limitations in respect of the measures that can be applied; and (f) the current state of receiving environments.	
(12) Manage contaminants in stormwater runoff from high contaminant generating car parks and high use roads to minimise new adverse effects and progressively reduce existing adverse effects on water and sediment quality in freshwater systems, freshwater and coastal waters.	
(13) Require stormwater quality or flow management to be achieved on-site unless there is a downstream communal device or facility designed to cater for the site's stormwater runoff.	
E3 Lakes, rivers, streams and wetlands	
Objectives and Policies	
E3.2 Objectives (2) Auckland's lakes, rivers, streams and wetlands are restored, maintained or enhanced.	There are permanent and intermittent streams which traverse the Plan Change area. To the greatest extent possible, it is intended that the aquatic habitats within the Plan Change area will be retained and enhanced where possible. The Plan Change requires riparian margins planting on each side of permanent and intermittent streams to a minimum width of 10m. This planting must be eco-sourced native vegetation consistent with local biodiversity. To enable urbanisation of the Plan Change area to occur impacts on streams cannot be completely avoided and it will be necessary to modify some streams to facilitate development. Impacts to stream habitat will require resource consents allowing the further consideration of the effects under the standard AUP provisions once the final development layout has been confirmed. The loss of aquatic habitat as a result of reclamation will need to be offset through enhancement measures or the creation of new stream habitat through diversion in accordance with Policy E3.3(4). For the reasons above, it is considered that the proposed Plan Change is in keeping with the relevant objectives and policies.
(3) Significant residual adverse effects on lakes, rivers, streams or wetlands that cannot be avoided, remedied or mitigated are offset where this will promote the purpose of the Resource Management Act 1991.	
(4) Structures in, on, under or over the bed of a lake, river, stream or wetland are provided for where there are functional or operational needs for the structure to be in that location, or traverse that area.	
(5) Activities in, on, under or over the bed of a lake, river, stream and wetland are managed to minimise adverse effects on the lake, river, stream or wetland.	
(6) Reclamation and drainage of the bed of a lake, river, stream and wetland is avoided, unless there is no practicable alternative.	
E3.3 Policies (2) Manage the effects of activities in, on, under or over the beds of lakes, rivers, streams or wetlands outside the overlays identified in Policy E3.3(1) by: (a) avoiding where practicable or otherwise remedying or mitigating any adverse effects on lakes, rivers, streams or wetlands; and (b) where appropriate, restoring and enhancing the lake, river, stream or wetland.	
(3) Enable the enhancement, maintenance and restoration of lakes, rivers, streams or wetlands.	
(4) Restoration and enhancement actions, which may form part of an offsetting proposal, for a specific activity should: (a) be located as close as possible to the subject site; (b) be 'like-for-like' in terms of the type of freshwater system affected;	

(c) preferably achieve no net loss or a net gain in the natural values including ecological function of lakes, rivers, streams or wetlands; and (d) consider the use of biodiversity offsetting as outlined in Appendix 8 Biodiversity offsetting.	
(5) Avoid significant adverse effects, and avoid, remedy or mitigate other adverse effects of activities in, on, under or over the beds of lakes, rivers, streams or wetlands on: (a) the mauri of the freshwater environment; and (b) Mana Whenua values in relation to the freshwater environment.	
(6) Manage the adverse effects on Mana Whenua cultural heritage that is identified prior to, or discovered during, subdivision, use and development by: (a) complying with the protocol for the accidental discovery of kōiwi, archaeology and artefacts of Māori origin; (b) undertaking appropriate actions in accordance with mātauranga and tikanga Māori; and (c) undertaking appropriate measures to avoid adverse effects, or where adverse effects cannot be avoided, effects are remedied or mitigated.	
(7) Provide for the operation, use, maintenance, repair, erection, reconstruction, placement, alteration or extension, of any structure or part of any structure in, on, under, or over the bed of a lake, river, stream or wetland, and any associated diversion of water, where the structure complies with all of the following: (a) there is no practicable alternative method or location for undertaking the activity outside the bed of the lake, river, stream or wetland; (b) the structure is designed to be the minimum size necessary for its purpose to minimise modification to the bed of a lake, river, stream or wetland; (c) the structure is designed to avoid creating or increasing a hazard; (d) the structure is for any of the following: i. required as part of an activity designed to restore or enhance the natural values of any lakes, rivers, streams or wetlands and their margins, or any adjacent area of indigenous vegetation or habitat of indigenous fauna; ii. designed to maintain and/or enhance public access to, over and along any lake, river, stream or wetland and their margins; iii. necessary to provide access across a lake, river, stream or wetland; iv. associated with infrastructure; v. necessary for flood protection and the safeguarding of public health and safety; or vi. required for the reasonable use of production land. (e) the structure avoids significant adverse effects and avoids, remedies or mitigates other adverse effects on Mana Whenua values associated with freshwater resources, including wāhi tapu, wāhi taonga and mahinga kai.	

(13) Avoid the reclamation and drainage of the bed of lakes, rivers, streams and wetlands, including any extension to existing reclamations or drained areas unless all of the following apply: (a) there is no practicable alternative method for undertaking the activity outside the lake, river, stream or wetland; (b) for lakes, permanent rivers and streams, and wetlands the activity is required for any of the following: i. as part of an activity designed to restore or enhance the natural values of any lake, river, stream or wetland, any adjacent area of indigenous vegetation or habitats of indigenous fauna; ii. for the operation, use, maintenance, repair, development or upgrade of infrastructure; or iii. to undertake mineral extraction activities; and (c) the activity avoids significant adverse effects and avoids, remedies or mitigates other adverse effects on Mana Whenua values associated with freshwater resources, including wāhi tapu, wāhi taonga and mahinga kai.	
(15) Protect the riparian margins of lakes, rivers, streams, and wetlands from inappropriate use and development and promote their enhancement to through all of the following: (a) safeguard habitats for fish, plant and other aquatic species, particularly in rivers and streams with high ecological values; (b) safeguard their aesthetic, landscape and natural character values; (c) safeguard the contribution of natural freshwater systems to the biodiversity, resilience and integrity of ecosystems; and (d) avoid or mitigate the effects of flooding, surface erosion, stormwater contamination, bank erosion and increased surface water temperature.	
(16) Protect land alongside streams for public access through the use of esplanade reserves and esplanade strips, marginal strips, drainage reserves, easements or covenants where appropriate and for water quality, ecological and landscape protection purposes.	
E10 Stormwater Management Area – Flow 1 and Flow 2	
Objectives and Policies	
E10.2 Objective (1) High value rivers, streams and aquatic biodiversity in identified urbanised catchments are protected from further adverse effects of stormwater runoff associated with urban development and where possible enhanced.	The proposed Plan Change, and related land use outcomes, is not considered to generate further adverse effects on streams and aquatic biodiversity arising from stormwater discharges. The proposed mitigation measures discussed throughout this assessment will ensure adverse effects are avoided, mitigated or enhanced where possible. The SMAF – 1 control is proposed to be applied to the proposed Plan Change area. Additionally, the proposed riparian margin rule shall assist with enhancing stream naturalness, biodiversity and improving bank stability.
E10.3 Policies (1) Manage stormwater runoff from impervious areas in Stormwater management area – Flow 1 and Flow 2 areas to minimise the adverse effects of stormwater runoff on rivers and streams to retain, and where possible enhance, stream naturalness, biodiversity, bank stability and other values	

(2) Require stormwater hydrology mitigation in Stormwater management area control – Flow 1 and Flow 2 areas where there are: (a) new impervious areas; (b) redeveloped impervious areas; or (c) entire sites where the area of development or redevelopment comprises more than 50 per cent of the site area.	Overall, the proposal achieves the outcomes sought by E10 objectives and policies.
E11 Land Disturbance - Regional	
Objectives and Policies	
E11.2 Objectives (1) Land disturbance is undertaken in a manner that protects the safety of people and avoids, remedies and mitigates adverse effects on the environment.	Land disturbance is required to prepare the land for urban development to achieve the higher level objectives of the RPS. The standards set out in Chapter E11 and E12 of the AUP will sufficiently manage the effects of earthworks and relevant consent conditions will ensure that sediment generation from land disturbance is minimised, and land disturbance is undertaken in a manner that protects the safety of people and avoids, remedies and mitigates adverse effects on the environment. As such, it is considered that any land disturbance effects can be appropriately managed through the resource consent process. If any sensitive material is discovered accidental discovery protocols will be followed. For the reasons above, it is considered that the proposed Plan Change is in keeping with the relevant objectives and policies for regional and district land disturbance.
(2) Sediment generation from land disturbance is minimised.	
(3) Land disturbance is controlled to achieve soil conservation	
E11.3 Policies (2) Manage land disturbance to: (a) retain soil and sediment on the land by the use of best practicable options for sediment and erosion control appropriate to the nature and scale of the activity; (b) manage the amount of land being disturbed at any one time, particularly where the soil type, topography and location is likely to result in increased sediment runoff or discharge; (c) avoid, remedy and mitigate adverse effects on accidentally discovered sensitive material; and (d) maintain the cultural and spiritual values of Mana Whenua in terms of land and water quality, preservation of wāhi tapu, and kaimoana gathering.	
(3) Manage the impact on Mana Whenua cultural heritage that is discovered undertaking land disturbance by: (a) requiring a protocol for the accidental discovery of kōiwi, archaeology and artefacts of Māori origin; (b) undertaking appropriate actions in accordance with mātauranga and tikanga Māori; and (c) undertaking appropriate measures to avoid adverse effects. Where adverse effects cannot be avoided, effects are remedied or mitigated.	
(4) Enable land disturbance necessary for a range of activities undertaken to provide for people and communities social, economic and cultural well-being, and their health and safety.	
(5) Design and implement earthworks with recognition of existing environmental site constraints and opportunities, specific engineering requirements, and implementation of integrated water principles.	

(7) Require any land disturbance that will likely result in the discharge of sediment laden water to a surface water body or to coastal water to demonstrate that sediment discharge has been minimised to the extent practicable, having regard to the quality of the environment; with: (a) any significant adverse effects avoided, and other effects avoided, remedied or mitigated, particularly in areas where there is: i. high recreational use; ii. relevant initiatives by Mana Whenua, established under regulations relating to the conservation or management of fisheries, including taiāpure, rāhui or whakatupu areas; iii. the collection of fish and shellfish for consumption; iv. maintenance dredging; or v. a downstream receiving environment that is sensitive to sediment accumulation; (b) adverse effects avoided as far as practicable within areas identified as sensitive because of their ecological values, including terrestrial, freshwater and coastal ecological values; and (c) the receiving environments ability to assimilate the discharged sediment being taken into account.	
E12 Land Disturbance – District	
Objectives and Policies	
E12.2 Objectives (1) Land disturbance is undertaken in a manner that protects the safety of people and avoids, remedies and mitigates adverse effects on the environment.	See comments above.
E12.3 Policies (2) Manage the amount of land being disturbed at any one time, to: (a) avoid, remedy or mitigate adverse construction noise, vibration, odour, dust, lighting and traffic effects; (b) avoid, remedy and mitigate adverse effects on accidentally discovered sensitive material; and (c) maintain the cultural and spiritual values of Mana Whenua in terms of land and water quality, preservation of wāhi tapu, and kaimoana gathering.	
(3) Enable land disturbance necessary for a range of activities undertaken to provide for people and communities social, economic and cultural well-being, and their health and safety.	
(4) Manage the impact on Mana Whenua cultural heritage that is discovered undertaking land disturbance by: (a) requiring a protocol for the accidental discovery of kōiwi, archaeology and artefacts of Māori origin;	

(b) undertaking appropriate actions in accordance with mātauranga and tikanga Māori; and (c) undertaking appropriate measures to avoid adverse effects, or where adverse effects cannot be avoided, effects are remedied or mitigated.	
(5) Design and implement earthworks with recognition of existing environmental site constraints and opportunities, specific engineering requirements, and implementation of integrated water principles.	
E15 Vegetation Management and Biodiversity	
Objectives and Policies	
E15.2 Objectives (1) Ecosystem services and indigenous biological diversity values, particularly in sensitive environments, and areas of contiguous indigenous vegetation cover, are maintained or enhanced while providing for appropriate subdivision, use and development.	The Plan Change will result in loss of vegetation to facilitate land development; however, this will be kept to a minimum and will be avoided where possible. There is also considerable potential to restore habitats at the site as part of the Plan Change. In particular the Plan Change includes requirements for riparian planting along streams. The Plan Change is in keeping with these objectives and policies.
(2) Indigenous biodiversity is restored and enhanced in areas where ecological values are degraded, or where development is occurring.	
E15.3 Policies (1) Protect areas of contiguous indigenous vegetation cover and vegetation in sensitive environments including the coastal environment, riparian margins, wetlands, and areas prone to natural hazards.	
(2) Manage the effects of activities to avoid significant adverse effects on biodiversity values as far as practicable, minimise significant adverse effects where avoidance is not practicable, and avoid, remedy or mitigate any other adverse effects on indigenous biological diversity and ecosystem services, including soil conservation, water quality and quantity management, and the mitigation of natural hazards.	
E26.2 Network Utilities and Electricity Generation – All Zones and Roads	
Objectives and Policies	
E26.2.1 Objectives (3) Safe, efficient and secure infrastructure is enabled, to service the needs of existing and authorised proposed subdivision, use and development.	Watercare Services Limited have confirmed that there are solutions for wastewater and water supply within the area which can be sized to accommodate the additional discharge from the planned growth within the Waihoehoe Road Precinct. Overall, the Plan Change area can be serviced by the agreed interim solution and planned wastewater infrastructure upgrades. In terms of power, telecommunications and gas infrastructure, the Plan Change area can be serviced with overhead reticulated telecommunications infrastructure, as well as piped underground gas reticulation. Network upgrades will be required to fully service development within the Plan Change area, however, Utility Supply Authorities have confirmed that there are no constraints or issues with undertaking these upgrades.
(4) Development, operation, maintenance, repair, replacement, renewal, upgrading and removal of infrastructure is enabled.	
(5) The resilience of infrastructure is improved and continuity of service is enabled.	
(6) Infrastructure is appropriately protected from incompatible subdivision, use and development, and reverse sensitivity effects.	
(7) The national significance of the National Grid is recognised and provided for and its effective development, operation, maintenance, repairs, upgrading and removal is enabled.	

E26.2.2 Policies (2) Provide for the development, operation, maintenance, repair, upgrade and removal of infrastructure throughout Auckland by recognising: (a) functional and operational needs; (b) location, route and design needs and constraints; (c) the complexity and interconnectedness of infrastructure services; (d) the benefits of infrastructure to communities with in Auckland and beyond; (e) the need to quickly restore disrupted services; and (f) its role in servicing existing, consented and planned development.	The Plan Change includes assessment criteria and indicative cross sections for roads to ensure that they achieve connectivity with the wider Drury area and accommodate all modes of transport. The detailed layout and design of the required infrastructure to service the Plan Change area will be subject to the provisions in E26. The Plan Change is in keeping with the relevant objectives and policies.
(3) Avoid where practicable, or otherwise remedy or mitigate adverse effects on infrastructure from subdivision, use and development, including reverse sensitivity effects, which may compromise the operation and capacity of existing, consented and planned infrastructure.	
(8) Encourage new linear infrastructure to be located in roads, and where practicable within the road reserve adjacent to the carriage way.	
(9) Require new or major upgrades to electricity and telecommunications lines to be located underground in urban areas unless: (a) there are significant operational, functional, technical or economic reasons that require an aboveground network; or (b) the additional lines are part of minor upgrading to the network or are service connections.	
(10) Enable the coordinated undergrounding of existing electricity and telecommunications lines in the road, particularly where the opportunity exists when network improvements are undertaken.	
(13) Have regard to the extent to which actual and potential effects have been avoided, remedied or mitigated by the route, site and method selected when assessing the development of the National Grid.	
(15) Ensure roads are designed, located and constructed to: (a) provide for the needs of all road users and modes of transport; (b) avoid, remedy or mitigate adverse effects on amenity values of adjoining properties; (c) avoid, remedy or mitigate adverse construction effects including effects of vibration, noise, and dust; (d) avoid, remedy or mitigate adverse operational effects particularly on residential or other sensitive activities, including effects of vibration, noise, glare and vehicle emissions; (e) minimise severance effects and changes to drainage patterns; and (f) maintain or enhance the safety and efficiency of the transport network.	

E27 Transport	
Objectives and Policies	
E27.2 Objectives (1) Land use and all modes of transport are integrated in a manner that enables: (a) the benefits of an integrated transport network to be realised; and (b) the adverse effects of traffic generation on the transport network to be managed.	The ITA (refer Appendix 8) shows that the Plan Change will enhance accessibility all modes of transport within the Plan Change area by providing a connected an integrated road network which provides for cyclists and pedestrians and creates linkages to the new Drury Central train station. Furthermore, the extent of development enabled by the Plan Change can be accommodated on the surrounding road network while maintaining acceptable levels of safety and efficiency through the next three decades. It is proposed to provide staged accesses to the Plan Change area in response to the level and rate of development and required roading infrastructure. Within the Plan Change area, the internal road network is proposed to be arranged in six key streets and includes consideration of active transportation such as cycling and walking amenities. The Plan Change includes provisions to guide the location and layout of local roads to ensure these achieve a highly connected street layout that integrates with the surrounding transport network. The Plan Change includes indicative road cross sections to ensure that the road network within Drury East integrates with the surrounding development within the Oyster Capital and Kiwi Property Plan Change areas. These road cross sections include provision of pedestrian and cycle paths to promote active transport modes. The ITA identifies the Drury Central train station and public transport hub as the focus for the public transport network servicing Drury East. The train station and public transport hub integrates multiple modes of transport that link the local network and the wider, regional network. The train station, located on the southern line between Papakura and Pukekohe, will provide high capacity, high frequent movement to / from the Auckland CBD particularly once the future electrification of the rail line between Drury and Pukekohe is completed. The bus network will primarily service the local network, providing critical connections between routes. The combination of these public transport facilities alleviates traffic congestion and allows for a more sustainable outcome. Additional upgrades to those currently planned and funded are required within the first two decades to transport infrastructure to facilitate development in the Plan Change area. The Plan Change includes rules to sequence development with the delivery of this infrastructure. Overall, the Plan Change is consistent with these objectives and policies.
(2) An integrated transport network including public transport, walking, cycling, private vehicles and freight, is provided for.	
(5) Pedestrian safety and amenity along public footpaths is prioritised.	
(6) Road/rail crossings operate safely with neighbouring land use and development.	
E27.3 Policies (1) Require subdivision, use and development which: (a) generate trips resulting in potentially more than minor adverse effects on the safe, efficient and effective operation of the transport network; (b) are proposed outside of the following zones: i. the Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone; ii. Residential – Terrace Housing and Apartment Buildings Zone; iii. the Centre Fringe Office Control as shown on the planning maps; or (c) do not already require an integrated transport assessment or have been approved based on an integrated transport assessment to manage adverse effects on and integrate with the transport network by measures such as travel planning, providing alternatives to private vehicle trips, staging development or undertaking improvements to the local transport network.	
(13) Provide for park-and-ride and public transport facilities which are located and designed to support the public transport network by: (a) locating in proximity to public transport stations, stops and terminals; (b) growing public transport patronage to assist in relieving congested corridors by encouraging commuters to shift to public transport; (c) making public transport easier and more convenient to use, thereby attracting new users; (d) improving the operational efficiency of the public transport network; (e) extending the catchment for public transport into areas of demand where it is not cost-effective to provide traditional services or feeders; (f) reinforcing existing and future investments on the public transport network; and (g) providing free, secure and covered parking for bicycles.	

(14) Support increased cycling and walking by: (a) requiring larger developments to provide bicycle parking; (b) requiring end-of-trip facilities, such as showers and changing facilities, to be included in office, educational and hospital developments with high employee or student numbers; and (c) providing for off-road pedestrian and bicycle facilities to complement facilities located within the road network.	
(28) Discourage new road and pedestrian rail level crossings to ensure the safe, effective and efficient operation of the region's rail network.	
E30 Contaminated Land	
Objectives and Policies	
E30.2 Objectives (1) The discharge of contaminants from contaminated land into air, or into water, or onto or into land are managed to protect the environment and human health and to enable land to be used for suitable activities now and in the future.	Preliminary Site Investigation reports have been undertaken as part of the proposed Plan Change application (refer to **Appendix 13**). In summary, the Plan Change will be generally suitable for future commercial and residential development, with some targeted remediation likely required. Any land contamination will therefore be managed through the resource consent process including consent conditions. The Plan Change is in keeping with these objectives and policies.
E30.3 Policies (2) Require any use or development of land containing elevated levels of contaminants resulting in discharges to air, land or water to manage or remediate the contamination to a level that: (a) allows contaminants to remain in the ground/groundwater, where it can be demonstrated that the level of residual contamination is not reasonably likely to pose a significant adverse effect on human health or the environment; and (b) avoids adverse effects on potable water supplies; and (c) avoids, remedies or mitigates significant adverse effects on ecological values, water quality, human health and amenity values; while taking into account all of the following: (d) the physical constraints of the site and operational practicalities; (e) the financial implications of the investigation, remediation, management and monitoring options; (f) the use of best practice contaminated land management, including the preparation and consideration of preliminary and detailed site investigations, remedial action plans, site validation reports and site management plans for the identification, monitoring and remediation of contaminated land; and (g) whether adequate measures are in place for the transport, disposal and tracking of contaminated soil and other contaminated material removed from a site to prevent adverse effects on the environment.	

E36 Natural Hazards and Flooding	
E36.2 Objectives and E36.3 Policies	
E36.2 Objectives (1) Subdivision, use and development outside urban areas does not occur unless the risk of adverse effects to people, property, infrastructure and the environment from natural hazards has been assessed and significant adverse effects are avoided, taking into account the likely long-term effects of climate change.	A comprehensive assessment of hazards has been undertaken to support the proposed Plan Change. This includes Geotechnical reporting (refer to **Appendix 12**) and flood modelling (refer to **Appendix 9).** Based on the findings of the analysis and the mitigation measures proposed, it is considered that the land conditions are generally suitable for urban development and can be appropriately managed through the resource consent process. Further, the standard provisions in Chapter E36 of the AUP would apply to any development within identified flood plains and/or overland flow paths, which would sufficiently manage the effects of potential development in these areas. The Plan Change is in keeping with the relevant objectives and policies.
(5) Subdivision, use and development including redevelopment, is managed to safely maintain the conveyance function of floodplains and overland flow paths	
(3) Consider all of the following, as part of a risk assessment of proposals to subdivide, use or develop land that is subject to natural hazards: (a) the type, frequency and scale of the natural hazard and whether adverse effects on the development will be temporary or permanent; (b) the type of activity being undertaken and its vulnerability to natural hazard events; (c) the consequences of a natural hazard event in relation to the proposed activity; (d) the potential effects on public safety and other property; (e) any exacerbation of an existing natural hazard risk or the emergence of natural hazard risks that previously were not present at the location; (f) whether any building, structure or activity located on land subject to natural hazards near the coast can be relocated in the event of severe coastal erosion, inundation or shoreline retreat; (g) the ability to use non-structural solutions, such as planting or the retention or enhancement of natural landform buffers to avoid, remedy or mitigate hazards, rather than hard protection structures; (h) the design and construction of buildings and structures to mitigate the effects of natural hazards; (i) the effect of structures used to mitigate hazards on landscape values and public access; (j) site layout and management to avoid or mitigate the adverse effects of natural hazards, including access and exit during a natural hazard event; and (k) the duration of consent and how this may limit the exposure for more or less vulnerable activities to the effects of natural hazards including the likely effects of climate change.	

(4) Control subdivision, use and development of land that is subject to natural hazards so that the proposed activity does not increase, and where practicable reduces, risk associated with all of the following adverse effects: (a) accelerating or exacerbating the natural hazard and/or its potential impacts; (b) exposing vulnerable activities to the adverse effects of natural hazards; (c) creating a risk to human life; and (d) increasing the natural hazard risk to neighbouring properties or infrastructure.	
(21) Ensure all development in the 1 per cent annual exceedance probability (AEP) floodplain does not increase adverse effects from flood hazards or increased flood depths and velocities, to other properties upstream or downstream of the site.	
(23) Provide for flood mitigation measures which reduce flood-related effects and provide for the reconstruction of culverts and bridges where those measures do not create or exacerbate flooding upstream or downstream or otherwise increase flood hazards	
(29) Maintain the function of overland flow paths to convey stormwater runoff safely from a site to the receiving environment.	
(30) Require changes to overland flow paths to retain their capacity to pass stormwater flows safely without causing damage to property or the environment.	
(32) Require risk assessment prior to subdivision, use and development of land subject to instability.	
(33) Locate and design subdivision, use and development first to avoid potential adverse effects arising from risks due to land instability hazards, and, if avoidance is not practicably able to be totally achieved, otherwise to remedy or mitigate residual risks and effects to people, property and the environment resulting from those hazards.	
E38 Subdivision – Urban	
Objectives and Policies	
E38.2 Objectives (2) Land is subdivided in a manner that provides for the long-term needs of the community and minimises adverse effects of future development on the environment.	The Masterplan prepared by HUE (refer to the Urban Design Report within **Appendix 6**) has informed the Plan Change. The indicative masterplan proposes a design response for the Waihoehoe Precinct which responds to the intrinsic qualities of the site including the topography and natural features. The precinct provisions require future development to deliver a collector and local road network that achieves a highly connected street layout that integrates with the wider roading network. While the objectives and policies for urban subdivision will largely be achieved through the provisions within Chapter E38 which apply within the Plan Change area, the Plan Change also includes some tailored precinct provisions to ensure some of the design principles from the Masterplan are translated into a final design and layout. In particular the precinct includes assessment criteria, indicative locations of collector roads and indicative cross sections for a
(4) Infrastructure supporting subdivision and development is planned and provided for in an integrated and comprehensive manner and provided for to be in place at the time of the subdivision or development.	
(6) Subdivision has a layout which is safe, efficient, convenient and accessible.	
(8) Subdivision maintains or enhances the natural features and landscapes that contribute to the character and amenity values of the areas.	
(9) Subdivision to protect indigenous vegetation or wetlands is provided for in the residential zones	
(10) Subdivision:	

(a) within urban and serviced areas, does not increase the risks of adverse effects to people, property, infrastructure and the environment from natural hazards; (b) avoids, where possible, and otherwise mitigates, adverse effects associated with subdivision for infrastructure or existing urban land uses; and (c) maintains the function of flood plains and overland flow paths to safely convey flood waters, while taking into account the likely long-term effects of climate change.	range of roads, to ensure that the roading network achieves connectivity with the wider Drury area and accommodate all modes of transport. The Plan Change is in keeping with these objectives and policies.
E38.3 Policies (1) Provide for subdivision which supports the policies of the Plan for residential zones, business zones, open space zones, special purpose zones, coastal zones, relevant overlays and Auckland-wide provisions.	
(10) Require subdivision to provide street and block patterns that support the concepts of a liveable, walkable and connected neighbourhood including: (a) a road network that achieves all of the following: i. is easy and safe to use for pedestrians and cyclists; ii. is connected with a variety of routes within the immediate neighbourhood and between adjacent land areas; and iii. is connected to public transport, shops, schools, employment, open spaces and other amenities; and (b) vehicle crossings and associated access designed and located to provide for safe and efficient movement to and from sites and minimising potential conflict between vehicles, pedestrians, and cyclists on the adjacent road network.	
(13) Require subdivision to deliver sites that are of an appropriate size and shape for development intended by the zone by: (a) providing a range of site sizes and densities; and (b) providing for higher residential densities in locations where they are supportive of pedestrians, cyclists, public transport and the viability and vibrancy of centres.	
(14) Encourage the design of subdivision to incorporate and enhance land forms, natural features, and indigenous trees and vegetation.	
(17) Require sufficient road reserves to accommodate the needs of: (a) different types of transport modes; (b) stormwater networks; (c) network utilities; and (d) lighting, street furniture, landscaping and reticulated infrastructure in a way that will not create future safety and maintenance issues.	
(18) Require subdivision to provide for the recreation and amenity needs of residents by: (a) providing open spaces which are prominent and accessible by pedestrians; (b) providing for the number and size of open spaces in proportion to the future density of the neighbourhood; and (c) providing for pedestrian and/or cycle linkages	
(19) Require subdivision to provide servicing:	

(a) to be coordinated, integrated and compatible with the existing infrastructure network; (b) to enable the existing network to be expanded or extended to adjacent land where that land is zoned for urban development; and (c) to enable electricity and telecommunications services to be reticulated underground to each site wherever practicable.	
(22) Require subdivision to be designed to manage stormwater: (a) in accordance with any approved stormwater discharge consent or network discharge consent; (b) in a manner consistent with stormwater management policies in E1 Water quality and integrated management; (c) by applying an integrated stormwater management approach to the planning and design of development in accordance with stormwater management policies in E1 Water quality and integrated management; (d) to protect natural streams and maintain the conveyance function of overland flow paths; (e) to maintain, or progressively improve, water quality; (f) to integrate drainage reserves and infrastructure with surrounding development and open space networks; and (g) in an integrated and cost-effective way	
Chapter H Zones	
H6 Residential – Terrace Housing and Apartment Building Zone	
H5 Residential – Mixed Housing Urban Zone	
H6.2. Objectives (1) Land adjacent to centres and near the public transport network is efficiently used to provide high-density urban living that increases housing capacity and choice and access to centres and public transport.	The THAB zone is proposed to be applied to the Plan Change area to provide for higher density residential development on land in close proximity to the proposed Metropolitan Centre and the rapid and frequent transport network. The Plan Change is in keeping with these objectives and policies.
H6.3. Policies (1) Enable a variety of housing types at high densities including terrace housing and apartments and integrated residential development such as retirement villages.	