

New Zealand Coastal Policy Statement (2010)

Reference	Full text	Comment
Objective 1	<p>To safeguard the integrity, form, functioning and resilience of the coastal environment and sustain its ecosystems, including marine and intertidal areas, estuaries, dunes and land, by:</p> <ul style="list-style-type: none"> • maintaining or enhancing natural biological and physical processes in the coastal environment and recognising their dynamic, complex and interdependent nature; • protecting representative or significant natural ecosystems and sites of biological importance and maintaining the diversity of New Zealand's indigenous coastal flora and fauna; and • maintaining coastal water quality, and enhancing it where it has deteriorated from what would otherwise be its natural condition, with significant adverse effects on ecology and habitat, because of discharges associated with human activity 	<p>There will be temporary adverse effects on the coastal environment resulting from construction activities which may result in temporary adverse effects on the form of the coastal environment. However, once reinstated, it is considered that the Project will not result in adverse effects on integrity, form, functioning and resilience of the coastal environment.</p> <p>Vegetation within SEA_T_SEA_T_8319 at the eastern abutment of the Greenhithe Bridge supports suitable potential habitat for at least five indigenous lizard species, four of which have a National threat classification of 'At Risk'. Threat rankings for some of these species, particularly those 'At Risk', may increase over the next 20 years. It is noted that the forest gecko, copper skink and ornate skink have been recorded from SEA_T_8319. The vegetation also has the potential to support roosting and nesting habitat for a range of common native bird species.</p> <p>Technical Report D recommends that preclearance surveys for lizards and nesting birds be undertaken where they have been identified as potentially present, and that an Ecological Management Plan should be prepared to address the potential presence and management of geckos and /or skinks within these areas.</p> <p>Through the adoption of proposed mitigation measures, it is considered that the Project will be consistent with this objective.</p>
Objective 2	<p>To preserve the natural character of the coastal environment and protect natural features and landscape values through:</p> <ul style="list-style-type: none"> • recognising the characteristics and qualities that contribute to natural character, natural features and landscape values and their location and distribution; • identifying those areas where various forms of subdivision, use, and development would be inappropriate and protecting them from such activities; and • encouraging restoration of the coastal environment. 	<p>In addition to the comments above, we note that the proposed works are to provide a critical piece of a network that is considered to be regionally significant infrastructure. The most appropriate means of managing the effect on the coastal environment are to minimise the works footprint and the duration of works. These objectives have been central to the development of the construction method.</p>
Objective 3	<p>To take account of the principles of the Treaty of Waitangi, recognise the role of tangata whenua as kaitiaki and provide for tangata whenua involvement in management of the coastal environment by:</p>	<p>Watercare has engaged with Mana Whenua throughout the investigation of alternatives and development of the Project, with the proposed route avoiding as far as practicable any ancestral lands, sites, waahi tapu and other taonga</p>

Reference	Full text	Comment
	<ul style="list-style-type: none"> • recognising the ongoing and enduring relationship of tangata whenua over their lands, rohe and resources; • promoting meaningful relationships and interactions between tangata whenua and persons exercising functions and powers under the Act; • incorporating mātauranga Māori into sustainable management practices; and • recognising and protecting characteristics of the coastal environment that are of special value to tangata whenua. 	<p>identified as being of significance to tangata whenua. Mana Whenua have indicated that there are values associated with the coastal edges around Lucas Creek, in particular at the reserve located at Schnapper Rock Road, as well as within the Upper Waitemata Harbour.</p> <p>Mana Whenua have noted that they would like to be engaged closer to the time construction is expected to commence. In the interim, Watercare will continue regular discussions with all Mana Whenua who have expressed an interest in the Project.</p>
Objective 4	<p>To maintain and enhance the public open space qualities and recreation opportunities of the coastal environment by:</p> <ul style="list-style-type: none"> • recognising that the coastal marine area is an extensive area of public space for the public to use and enjoy; • maintaining and enhancing public walking access to and along the coastal marine area without charge, and where there are exceptional reasons that mean this is not practicable providing alternative linking access close to the coastal marine area; and • recognising the potential for coastal processes, including those likely to be affected by climate change, to restrict access to the coastal environment and the need to ensure that public access is maintained even when the coastal marine area advances inland. 	<p>There will be short term restrictions on public access and recreation in the coastal environment as a result of construction activities to ensure appropriate health and safety. Construction sites and works through these areas will be designed to minimise disruption on recreation and public access to and along the CMA and to publicly-owned land in the coastal environment as far as practicable. However, there will be temporary effects on public access during construction.</p> <p>Where temporary restrictions are necessary, Watercare will continue to consult with affected organisations to identify opportunities to address any restrictions.</p>
Objective 6	<p>To enable people and communities to provide for their social, economic, and cultural wellbeing and their health and safety, through subdivision, use, and development, recognising that:</p> <ul style="list-style-type: none"> • the protection of the values of the coastal environment does not preclude use and development in appropriate places and forms, and within appropriate limits; • some uses and developments which depend upon the use of natural and physical resources in the coastal environment are important to the social, economic and cultural wellbeing of people and communities; • functionally some uses and developments can only be located on the coast or in the coastal marine area; • the coastal environment contains renewable energy resources of significant value; • the protection of habitats of living marine resources contributes to the social, economic and cultural wellbeing of people and communities; 	<p>The provision of infrastructure to service growth in the area is essential in order to enable the people and communities of those areas to provide for their social and economic wellbeing and for their health and safety by providing for appropriate conveyance of sewage to the Rosedale WWTP.</p> <p>As discussed above, the Project has been developed to avoid as far as practicable adverse effects on the coastal environment. In the overall context of the Project the area of the coastal environment affected is relatively small and any impact on access to the affected area of coastal environment will be temporary.</p>

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	<ul style="list-style-type: none"> • the potential to protect, use, and develop natural and physical resources in the coastal marine area should not be compromised by activities on land; • the proportion of the coastal marine area under any formal protection is small and therefore management under the Act is an important means by which the natural resources of the coastal marine area can be protected; and • historic heritage in the coastal environment is extensive but not fully known, and vulnerable to loss or damage from inappropriate subdivision, use, and development. 	
Policy 6	<p>1) In relation to the coastal environment:</p> <ol style="list-style-type: none"> i. recognise that the provision of infrastructure, the supply and transport of energy including the generation and transmission of electricity, and the extraction of minerals are activities important to the social, economic and cultural well-being of people and communities; ii. consider the rate at which built development and the associated public infrastructure should be enabled to provide for the reasonably foreseeable needs of population growth without compromising the other values of the coastal environment; iii. encourage the consolidation of existing coastal settlements and urban areas where this will contribute to the avoidance or mitigation of sprawling or sporadic patterns of settlement and urban growth; iv. recognise tangata whenua needs for papakāinga, marae and associated developments and make appropriate provision for them; v. consider where and how built development on land should be controlled so that it does not compromise activities of national or regional importance that have a functional need to locate and operate in the coastal marine area; vi. consider where development that maintains the character of the existing built environment should be encouraged, and where development resulting in a change in character would be acceptable; vii. take into account the potential of renewable resources in the coastal environment, such as energy from wind, waves, currents and tides, to meet the reasonably foreseeable needs of future generations; viii. consider how adverse visual impacts of development can be avoided in areas sensitive to such effects, such as headlands and prominent ridgelines, and as far as practicable and reasonable apply controls or conditions to avoid those effects; 	<p>Refer above for comment regarding the provision of infrastructure in the coastal environment.</p> <p>Policy 6 recognises that the provision of infrastructure is important to the social, economic and cultural well-being of people and communities. The Project is therefore consistent with Policy 6.</p>

Reference	Full text	Comment
	<ul style="list-style-type: none"> ix. set back development from the coastal marine area and other water bodies, where practicable and reasonable, to protect the natural character, open space, public access and amenity values of the coastal environment; and x. where appropriate, buffer areas and sites of significant indigenous biological diversity, or historic heritage value 	
Policy 11	<p>To protect indigenous biological diversity in the coastal environment:</p> <ul style="list-style-type: none"> a. avoid adverse effects of activities on: <ul style="list-style-type: none"> i. indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification System lists; ii. taxa that are listed by the International Union for Conservation of Nature and Natural Resources as threatened; iii. indigenous ecosystems and vegetation types that are threatened in the coastal environment, or are naturally rare⁶; iv. habitats of indigenous species where the species are at the limit of their natural range, or are naturally rare; v. areas containing nationally significant examples of indigenous community types; and vi. areas set aside for full or partial protection of indigenous biological diversity under other legislation; and b. avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on: <ul style="list-style-type: none"> i. areas of predominantly indigenous vegetation in the coastal environment; ii. habitats in the coastal environment that are important during the vulnerable life stages of indigenous species; iii. indigenous ecosystems and habitats that are only found in the coastal environment and are particularly vulnerable to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones, rocky reef systems, eelgrass and saltmarsh; iv. habitats of indigenous species in the coastal environment that are important for recreational, commercial, traditional or cultural purposes; v. habitats, including areas and routes, important to migratory species; and 	Refer above.

Reference	Full text	Comment
	<ul style="list-style-type: none"> vi. ecological corridors, and areas important for linking or maintaining biological values identified under this policy. 	
Policy 13	<p>Preservation of natural character</p> <ol style="list-style-type: none"> 1) To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use, and development: <ol style="list-style-type: none"> a) avoid adverse effects of activities on natural character in areas of the coastal environment with outstanding natural character; and b) avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in all other areas of the coastal environment; including by: <ol style="list-style-type: none"> c) assessing the natural character of the coastal environment of the region or district, by mapping or otherwise identifying at least areas of high natural character; and d) ensuring that regional policy statements, and plans, identify areas where preserving natural character requires objectives, policies and rules, and include those provisions. 2) Recognise that natural character is not the same as natural features and landscapes or amenity values and may include matters such as: <ol style="list-style-type: none"> a) natural elements, processes and patterns; b) biophysical, ecological, geological and geomorphological aspects; c) natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks; d) the natural movement of water and sediment; e) the natural darkness of the night sky; f) places or areas that are wild or scenic; g) a range of natural character from pristine to modified; and h) experiential attributes, including the sounds and smell of the sea; and their context or setting. 	Refer above.
Policy 15	<p>Natural features and natural landscapes</p> <p>To protect the natural features and natural landscapes (including seascapes) of the coastal environment from inappropriate subdivision, use, and development:</p> <ol style="list-style-type: none"> a. avoid adverse effects of activities on outstanding natural features and outstanding natural landscapes in the coastal environment; and 	Refer above.

Reference	Full text	Comment
	<ul style="list-style-type: none"> b. avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of activities on other natural features and natural landscapes in the coastal environment; including by: c. identifying and assessing the natural features and natural landscapes of the coastal environment of the region or district, at minimum by land typing, soil characterisation and landscape characterisation and having regard to: <ul style="list-style-type: none"> i. natural science factors, including geological, topographical, ecological and dynamic components; ii. the presence of water including in seas, lakes, rivers and streams; iii. legibility or expressiveness—how obviously the feature or landscape demonstrates its formative processes; iv. aesthetic values including memorability and naturalness; v. vegetation (native and exotic); vi. transient values, including presence of wildlife or other values at certain times of the day or year; vii. whether the values are shared and recognised; viii. cultural and spiritual values for tangata whenua, identified by working, as far as practicable, in accordance with tikanga Māori; including their expression as cultural landscapes and features; ix. historical and heritage associations; and x. wild or scenic values; d. ensuring that regional policy statements, and plans, map or otherwise identify areas where the protection of natural features and natural landscapes requires objectives, policies and rules; and e. including the objectives, policies and rules required by (d) in plans. 	

National Policy Statement for Freshwater Management (2014)

Reference	Full text	Comment
Objective A1	<p>To safeguard:</p> <ul style="list-style-type: none"> a) the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems, of fresh water; and b) the health of people and communities, at least as affected by secondary contact with fresh water; <p>in sustainably managing the use and development of land, and of discharges of contaminants.</p>	<p>Effective wastewater management is integral to the protection of freshwater resources, as management will reduce the potential for contaminants (via overflows) to enter freshwater and having adverse environmental impacts on in-stream ecology and other downstream effects.</p> <p>The proposed designation will safeguard the wastewater pipeline route, enabling these future communities within the Service Catchment to be serviced by the city's sewage treatment facilities, controlling discharges and overflows – meeting community and freshwater health outcomes, and avoiding sensitive freshwater habitats where practicable.</p> <p>Further to the above, through the adoption of proposed mitigation measures (e.g. Ecological Management Plan) it is considered that the Project will be consistent with this objective.</p>
Objective D1	<p>To provide for the involvement of iwi and hapū, and to ensure that tāngata whenua values and interests are identified and reflected in the management of fresh water including associated ecosystems, and decision-making regarding freshwater planning, including on how all other objectives of this national policy statement are given effect to.</p>	<p>The NoR has been developed in consultation with a variety of stakeholders, including tāngata whenua and local communities. The designation covers a large corridor, and detailed design of the pipeline itself will further identify specific community and tāngata whenua interests and address them accordingly.</p>

Auckland Regional Policy Statement (Operative 1999)

Reference	Full text	Comment
Strategic Objective 2.6.1.1	To ensure that provision is made to accommodate the Region's growth in a manner which gives effect to the purposes and principles of the Resource Management Act 1991 and Section 40 of the Local Government (Auckland) Amendment Act 2004, and is consistent with these Strategic objectives and with the provisions of this RPS.	<p>The Project, which is considered to be regionally significant infrastructure, will provide additional wastewater conveyance and treatment infrastructure to service the increasing urban development in the North West Auckland (the Service Catchment).</p> <p>The Project is needed to provide safe and efficient wastewater services to the growing Auckland Region. The proposed designation will safeguard the wastewater pipeline route, enabling these future communities to be serviced by the city's sewage treatment facilities, controlling discharges and overflows – meeting community and freshwater health outcomes.</p> <p>The construction and operation of the Project will provide necessary infrastructure that supports the economic and social wellbeing of the region, and will enable Watercare to meet its obligations under the LGA, and will provide the infrastructure needed to service a growing Auckland.</p>
Strategic Objective 2.6.1.12	To encourage the efficient use of natural and physical resources, including urban land, infrastructure, and energy resources.	<p>As noted above, Watercare is subject to particular statutory obligations as an Auckland water organisation under the Local Government (Auckland Council) Act 2009. Section 57 (1) of that Act says that Watercare must, amongst other things:</p> <p><i>"manage its operations efficiently with a view to keeping the overall costs of water supply and wastewater services to its customers (collectively) at the minimum levels consistent with the effective conduct of its undertakings and the maintenance of the long-term integrity of its assets"</i></p> <p>The Project will enable Watercare to maintain and enhance the wastewater network within the Service Catchment, and will enhance public health and amenity.</p> <p>It is considered that the project constitutes the efficient use and development of natural and physical resources.</p>
Strategic Objective 2.6.1.16	To improve the overall health, well-being and quality of life of the people of the Region.	Refer above.
Strategic Objective 2.6.1.17	To enable the redevelopment, operation and maintenance of existing and provision of new regionally significant infrastructure.	<p>The Project, which is considered to be regionally significant infrastructure, will provide additional wastewater conveyance and treatment infrastructure to service the increasing urban development in the Service Catchment.</p> <p>The Project is needed to provide safe and efficient wastewater services to the growing Auckland Region. The proposed designation will safeguard the</p>

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		<p>wastewater pipeline route, enabling these future communities to be serviced by the city's sewage treatment facilities, controlling discharges and overflows – meeting community and freshwater health outcomes.</p> <p>The construction and operation of the Project will provide necessary infrastructure that supports the economic and social wellbeing of the region.</p>
Strategic Policy 2.6.14	<ol style="list-style-type: none"> 1. The operation of existing regionally significant infrastructure and the provision of new or upgraded regionally significant infrastructure shall: <ol style="list-style-type: none"> i. be consistent with the Strategic Direction of the Regional Policy Statement; ii. support and reinforce the Regional Growth Strategy and the proposed outcomes of that strategy; and iii. ensure that any adverse effects of those activities on the environment (including human health) are avoided, remedied or mitigated in a manner consistent with the relevant provisions of this RPS. 2. Provision is to be made to enable the safe and efficient operation, maintenance and development of regionally significant infrastructure which is necessary for the social and economic wellbeing of the region's people. 3. Land use change should avoid significant reverse sensitivity effects on regionally significant infrastructure. Refer also to Strategic Policies 2.6.2(2) (viii), 2.6.11(1) (n), 2.6.17(e) (i) and 2.6.17(4) (ii). 4. The provision and operation of infrastructure, including transport infrastructure should support the development of high quality urban amenity. 5. In the operation of existing regionally significant infrastructure and the provision of new infrastructure consideration and appropriate provision is to be made for the following matters: <ol style="list-style-type: none"> i. the avoidance of significant adverse effects (including cumulative adverse effects) on: <ol style="list-style-type: none"> a. the environmental values protected by defined limits to metropolitan Auckland and defined limits of rural or coastal settlements; b. significant and outstanding coastal and natural landscapes, vegetation and fauna areas; c. amenity values throughout the whole of the region and the rural character of rural areas in the Region; d. human health; 	Refer above.

Reference	Full text	Comment
	<p>where significant adverse effects cannot be avoided they shall be remedied or mitigated;</p> <ul style="list-style-type: none"> ii. avoiding prematurely foreclosing, or compromising options for future urban and rural and coastal town growth including areas identified in Schedule 1; iii. consideration of alternative locations (including locations in urban areas) for utility service facilities which give rise to significant adverse effects on the environment; iv. environmental enhancement and/or remediation opportunities. 	
Objective 3.3.1	To sustain the mauri of natural and physical resources in ways which enable provision for the social, economic and cultural wellbeing of Maori.	<p>Watercare has engaged with Mana Whenua throughout the development of the Project, with the proposed route avoiding as far as practicable any ancestral lands, water, sites, waahi tapu and other taonga identified as being of significance to tangata whenua.</p> <p>A range of mitigation measures, such as erosion and sediment controls in accordance with TP90 during construction, will be undertaken which will assist in sustaining the mauri of natural resources such as waterbodies and the coastal environment.</p> <p>The Project allows for the management of natural and physical resources in a way that enables people and communities, including Mana Whenua, to provide for their social, economic and cultural wellbeing and for their health and safety.</p>
Objective 3.3.3	<p>To involve Tangata Whenua in resource management processes in ways which:</p> <ul style="list-style-type: none"> i. take into account the principles of the Treaty of Waitangi, including rangatiratanga; ii. have particular regard to the practical expression of kaitiakitanga. 	Refer above.
Objective 6.3.1	To preserve or protect a diverse and representative range of the Auckland Region's heritage resources	As noted in Technical Report B, one heritage building is recorded within c.100m of the proposed NoR – NI (Waitakere). This is the Radio New Zealand Transmitter Building which is scheduled within the Auckland Council District Plan – Operative Waitakere Section 2003 (ID 1174) and as a Category A historic heritage place within the PAUP (Appendix 9: ID 56). The proposed works are anticipated to have no effect on the recorded extent of this site.
Objective 7.3.1	To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use and development	As discussed above, the Project will to provide a critical piece of a network that is considered to be regionally significant infrastructure. The most appropriate means of managing the effect on the coastal environment are to minimise the works footprint and the duration of works. These objectives have been central to the development of the construction method.

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		<p>There will be temporary adverse effects on the coastal environment resulting from construction activities which may result in temporary adverse effects on the form of the coastal environment. However, once reinstated, it is considered that the Project will not result in adverse effects on integrity, form, functioning and resilience of the coastal environment, as the infrastructure associated with the Project will generally be sub-surface (with the exception of pump stations, etc.).</p> <p>Construction sites and works through these areas will be designed to minimise disruption to publicly-owned land in the coastal environment as far as practicable.</p>
Objective 7.3.3	To enable appropriate subdivision, use and development to be undertaken in the coastal environment	Refer above.
Objective 7.3.4	To enable the use of the coastal environment for appropriate port purposes, other water-related industrial and commercial activities and network utilities.	Refer above.
Objective 7.3.6	To maintain and enhance public access to and along the CMA and to publicly-owned land in the coastal environment.	<p>The proposed alignment traverses a number of reserves and public open spaces. Construction sites and works through these areas will be designed to minimise disruption on recreation and public access to and along the CMA and to publicly-owned land in the coastal environment as far as practicable. However, there will be temporary effects on public access during construction.</p> <p>Public access will only be restricted temporarily to the extent necessary to carry out the works in a safe manner, and will only be restricted for the relatively short period of construction in the coastal environment.</p>
Objective 7.3.9	To recognise and provide for the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga of the coastal environment.	Refer above.
Policy 7.4.4	<ol style="list-style-type: none"> 1. The natural character of the coastal environment shall be preserved, and protected from inappropriate subdivision, use and development by: <ol style="list-style-type: none"> i. In areas of high natural character, avoiding adverse effects on: <ol style="list-style-type: none"> a. the natural functioning and natural processes of sediment transport, substrate composition and movement of biota; b. areas of indigenous vegetation and habitats of indigenous fauna and associated processes; 	Refer above.

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	<ul style="list-style-type: none"> c. the physical integrity of coastal landforms and geological features and associated natural processes; d. features, elements and patterns which contribute to landscape value and scenic and visual value; e. natural features, sites and natural areas of historic, aesthetic, cultural or spiritual value; f. water or air quality; g. habitat important for preserving the range, abundance and diversity of indigenous and migratory coastal species; h. habitat important for breeding and feeding of coastal species; i. the healthy functioning of estuaries, coastal wetlands, mangroves, dunes, sand spits and their margins. ii. In all other areas, avoiding any adverse effects which result in the significant reduction in habitat important for preserving the range and diversity of indigenous and migratory coastal species within the Auckland Region. 	
Policy 7.4.10	<ol style="list-style-type: none"> 1. The diverse range of values of the coastal environment shall be recognised and the need to enable people and communities to provide for their social, economic and cultural wellbeing shall be provided for in appropriate areas of the coastal environment. 2. In assessing the appropriateness of subdivision, use and development in the coastal environment particular regard shall be had to the following matters: <ul style="list-style-type: none"> i. natural character is preserved and protected in accordance with Policies 7.4.4-1 (i), (ii) and (iii), and 7.4.4-2; ii. public access is maintained or enhanced in accordance with Policies 7.4.13-1, 2 and 3; iii. amenity values are maintained or enhanced as far as practicable; iv. public open space is maintained or enhanced as far as practicable; v. there is a functional need for use and development within the CMA; vi. efficient use is made of the natural and physical resources of the coastal environment; 	Refer above.

Reference	Full text	Comment
	<ul style="list-style-type: none"> vii. activities are of a scale, design and location that maintain or enhance landscape values in the area, including seascapes and landforms; viii. there are no significant adverse effects of activities on the CMA, or on adjacent land, including effects across the MHWS boundary; ix. adverse effects are avoided, remedied or mitigated in Areas of Special Value in accordance with policies in 7.4.7; x. activities are designed and located to avoid the need for hazard protection works; xi. provision is made for adequate utility services (including the disposal of waste); xii. effect is given to all other relevant provisions of this policy statement, in particular those stated in Chapter 2 – Regional Overview and Strategic Direction, Chapter 6 – Heritage and Chapter 8 – Water Quality. 	
7.4.13	<p>Public access</p> <ol style="list-style-type: none"> 1. Public access shall be maintained and enhanced to and along the CMA and to publicly owned land in the coastal environment. 2. Particular regard shall be had to enhancing public access to and along the CMA and to publicly owned land in the coastal environment where: <ul style="list-style-type: none"> i. areas are of high amenity or recreational value; or ii. areas are of importance to Tangata Whenua for carrying out customary activities and in order to exercise kaitiakitanga; or iii. access would be of particular value or potential value for educational or scientific reasons; or iv. areas are adjacent to the Areas of Special Value identified in Appendix B and Map Series 2, where this would be consistent with the protection of natural and cultural heritage values; or v. a number of esplanade reserves or other public open spaces exist in the vicinity, and the enhancement of public access would contribute to the linking together of disconnected reserves. 3. Public access to and along the CMA should only be restricted where it is necessary to: <ul style="list-style-type: none"> i. protect significant natural or cultural heritage values; or ii. protect sites and areas of Maori spiritual and cultural value; or 	As noted above, public access will only be restricted temporarily to the extent necessary to carry out the works in a safe manner, and will only be restricted for the relatively short period of construction in the coastal environment.

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	<ul style="list-style-type: none"> iii. protect public health and safety; or iv. ensure a level of security consistent with the purpose of a resource consent; or v. protect areas of the coast which are sensitive to physical disturbance from the presence of people; or vi. in other exceptional circumstances sufficient to justify the restriction notwithstanding the national importance of maintaining that access. 	
Objective 8.3.1	<p>To maintain water quality in water bodies and coastal waters which have good water quality, and to enhance water quality which is degraded particularly for the following purposes:</p> <ul style="list-style-type: none"> (i) Estuaries and harbours: protection of aquatic ecosystems, recreation, fishing and shellfish gathering, cultural and aesthetic purposes; and (iv) Lakes, rivers and streams: protection of aquatic ecosystems, recreation, food gathering, water supply, cultural and aesthetic purposes. 	<p>In some instances, earthworks will be required in riparian margins (including coastal edges). Erosion and sediment control measures will be implemented (TP90) for the duration of the land disturbance activities undertaken as part of the project. The measures are expected to prevent the discharge of sediment laden water to nearby waterbodies, particularly in areas on slopes and land subject to instability.</p> <p>We note that resource consents have not been applied for at this time because, commensurate with the “route protection” phase that the project has reached, only a concept level of design has been undertaken of the network and this is insufficient to inform those resource consent applications. The necessary resource consents (include those for coastal permits and earthworks) will be applied for at the time of detailed design of the network in the future.</p>
Policy 8.4.7.3	All land disturbance activities which may result in elevated levels of sediment discharge shall be carried out so that the adverse effects of such discharges are avoided, remedied, or mitigated.	Refer above.
Objective 17.3	To remedy or mitigate any adverse effects of existing contaminated sites	As noted in Technical Report C, the Preliminary Site Investigation indicated that there is potential to encounter contaminated soil during the works, and that there is a very low to moderate risk for significant contamination to be encountered (depending on the source of contamination). Subject to the adoption of recommended mitigation measures (e.g. Contaminated Land Management Plan) it is considered that the proposed works can be undertaken in a manner that mitigates any adverse effects on existing contaminated sites.

Proposed Auckland Regional Policy Statement

Reference	Full text	Comment
Objective B2.2.1(3)	Sufficient development capacity and land supply is provided to accommodate residential, commercial, industrial growth and social facilities to support growth.	<p>The Project is regionally significant infrastructure, in that it will provide additional wastewater conveyance and treatment infrastructure to service the increasing urban development in the Service Catchment.</p> <p>Population forecasts indicate that the Northern Waitakere area, inclusive of the North West Transformation Area (NWTa) inclusive of Massey North Whenuapai and Hobsonville, and South Rodney, inclusive of Kumeu, Huapai and Riverhead will grow significantly, from 75,000 to potentially over 350,000 people over the next 50 years.</p> <p>The Project constitutes an integrated and cost effective solution for the network, addressing the capacity of the network to provide for increased growth in the Service Catchment. Once completed, the Project will facilitate the continued effective operation of the wastewater network generally, and provide capacity in the wastewater network for future growth and development in the Auckland region.</p>
Policy B2.4.2(6)	Ensure development is adequately serviced by existing infrastructure or is provided with infrastructure prior to or at the same time as residential intensification.	<p>A key design parameter in the design of the Northern Interceptor has been the ability to stage the construction so as to adequately respond to actual population growth, rather than build an oversized pipeline based on conservative population projections. By enabling the staging of the Northern Interceptor construction and operation potentially gains:</p> <ul style="list-style-type: none"> a) Flexibility to respond in design and delivery to actual future demand; b) Further ability to utilise existing design life in current assets; and c) The ability to defer large capital expenditure until the community has grown to support it. <p>This also allows capital costs to be spread over a number of years, and to be responsive to actual population growth.</p> <p>The designation will give Watercare the capability to undertake construction as things change in the network, and will give developers and Auckland Council certainty that critical infrastructure will be provided. This also provides assurance that the areas being developed will be serviced (or have the ability to be serviced/connected to), supporting residential and business growth.</p>
Objective B2.7.1(2)	Public access to and along Auckland's coastline, coastal marine area, lakes, rivers, streams and wetlands is maintained and enhanced.	There will be short term restrictions on public access and recreation in the coastal environment as a result of construction activities to ensure appropriate health and safety. Construction sites and works through these areas will be designed to minimise disruption on recreation and public access to and along

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		<p>the CMA and to publicly-owned land in the coastal environment as far as practicable. However, there will be temporary effects on public access during construction.</p> <p>Where temporary restrictions are necessary, Watercare will continue to consult with affected organisations to identify opportunities to address any restrictions.</p>
Policy B2.7.2(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.	The proposed alignment traverses a number of reserves and public open spaces. Watercare has been working with Auckland Council Parks, Sports and Recreation regarding proposed works in these spaces.
Policy B2.7.2(7)	Avoid, remedy or mitigate significant adverse effects of land use or development on open spaces and recreation facilities.	Refer above, and to Section 10.11 of the Report.
Objective B3.2.1(1)	Infrastructure is resilient, efficient and effective	<p>The increasing urban development in the Service Catchment area requires additional wastewater conveyance and treatment infrastructure to service this growth. The construction and operation of the Project will therefore provide infrastructure that supports the economic and social wellbeing of the region.</p> <p>Watercare’s service objectives require development of resilient assets to meet required service delivery standards and foreseeable future needs. This includes providing sufficient capacity to convey and treat wastewater.</p> <p>Once completed the Project will facilitate the continued effective operation of the wastewater network generally, and provide capacity in the wastewater network for future growth and development in the Auckland region. This will also help to prevent further major wastewater overflows by providing appropriate infrastructure.</p> <p>Watercare will maintain and enhance the wastewater infrastructure for the northern Auckland Region by implementing the Project. This will ensure the long-term integrity for the expected population increase over the next 30 years.</p> <p>The proposed designation will safeguard the wastewater pipeline route, enabling these future communities to be serviced by the city’s sewage treatment facilities, controlling discharges and overflows – meeting community and freshwater health outcomes.</p>
Objective B3.2.1(2)	The benefits of infrastructure are recognised, including:	Refer above.

Reference	Full text	Comment
	<ul style="list-style-type: none"> (a) providing essential services for the functioning of communities, businesses and industries within and beyond Auckland; (b) enabling economic growth; (c) contributing to the economy of Auckland and New Zealand; (d) providing for public health, safety and the well-being of people and communities; (e) protecting the quality of the natural environment; and (f) enabling interaction and communication, including national and international links for trade and tourism. 	
Objective B3.2.1(3)	<p>Development, operation, maintenance, and upgrading of infrastructure is enabled, while managing adverse effects on:</p> <ul style="list-style-type: none"> (a) the quality of the environment and, in particular, 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; (b) the health and safety of communities and amenity values 	<p>Vegetation within SEA_T_ SEA_T_8319 at the eastern abutment of the Greenhithe Bridge supports suitable potential habitat for at least five indigenous lizard species, four of which have a National threat classification of 'At Risk'. Threat rankings for some of these species, particularly those 'At Risk', may increase over the next 20 years. It is noted that the forest gecko, copper skink and ornate skink have been recorded from SEA_T_8319. The vegetation also has the potential to support roosting and nesting habitat for a range of common native bird species.</p> <p>Technical Report D recommends that preclearance surveys for lizards and nesting birds be undertaken where they have been identified as potentially present, and that an Ecological Management Plan should be prepared to address the potential presence and management of geckos and /or skinks within these areas.</p> <p>With respect to historic heritage, one heritage building is recorded within c.100m of the proposed NoR – NI (Waitakere). This is the Radio New Zealand Transmitter Building which is scheduled within the Auckland Council District Plan – Operative Waitakere Section 2003 (ID 1174) and as a Category A historic heritage place within the PAUP (Appendix 9: ID 56). The proposed works are anticipated to have no effect on the recorded extent of this site.</p> <p>At the time of writing this Report, no significant cultural site(s) has been identified by Mana Whenua.</p> <p>The provision of infrastructure to service growth in the area is essential in order to enable the people and communities of those areas to provide for their social and economic wellbeing and for their health and safety by providing for appropriate conveyance of sewage to the Rosedale WWTP.</p>

Reference	Full text	Comment
Objective B3.2.1(4)	The functional and operational needs of infrastructure are recognised.	The projected population growth requires additional wastewater conveyance and treatment infrastructure. As such the Project will service growth in the Service Catchment, it is considered to be regionally significant infrastructure. The proposed designation recognises both the locational and function-based requirements of this infrastructure.
Objective B3.2.1(5)	Infrastructure planning and land use planning are integrated to service growth efficiently.	Refer above. We note that Watercare has undertaken consultation with transport authorities (NZ Transport Agency, Auckland Transport and Auckland Motorway Alliance) as well as other network utility providers (Vector, Radio New Zealand) to inform them of the Project and to coordinate works where practicable.
Objective B3.2.1(6)	Infrastructure is protected from reverse sensitivity effects caused by incompatible subdivision, use and development.	The proposed designation will safeguard the wastewater pipeline route, enabling these future communities to be serviced by the city's sewage treatment facilities, controlling discharges and overflows – meeting community and freshwater health outcomes. The designation provides a statutory mechanism to implement the works and protect from potential reverse sensitivity effects.
Objective B3.2.1(8)	The adverse effects of infrastructure are avoided, remedied or mitigated.	Refer above.
Policy B3.2.2(1)	Enable the efficient development, operation, maintenance and upgrading of infrastructure.	The proposed designation will provide for the efficient development, use, operation maintenance and future upgrading of the Northern Interceptor, which is considered to be regionally significant infrastructure.
Policy B3.2.2(3)	Provide for the locational requirements of infrastructure by recognising that it can have a functional or operational need to be located in areas with 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.	Refer above.
Policy B3.2.2(4)	Avoid where practicable, or otherwise remedy or mitigate, adverse effects of subdivision, use and development on infrastructure.	Refer above.
Policy B3.2.2(6)	Enable the development, operation, maintenance and upgrading of infrastructure in areas with 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 while ensuring that the adverse effects on the values of such areas are avoided where practicable or otherwise remedied or mitigated.	Refer above.
Policy B3.2.2(7)	Encourage the co-location of infrastructure and the shared use of existing infrastructure corridors where this is safe and satisfies operational and technical requirements.	Where practicable, the proposed pipeline will be co-located within the road reserve while avoiding impacts on other network utilities. Watercare will continue to engage with network utility operators to confirm these locations.

Reference	Full text	Comment
Policy B3.2.2(8)	Avoid, remedy or mitigate the adverse effects from the construction, operation, maintenance or repair of infrastructure.	Refer above.
Objective B5.2.1(1)	Significant historic heritage places are identified and protected from inappropriate subdivision, use and development.	As noted in Technical Report B, one heritage building is recorded within c.100m of the proposed NoR – NI (Waitakere). This is the Radio New Zealand Transmitter Building which is scheduled within the Auckland Council District Plan – Operative Waitakere Section 2003 (ID 1174) and as a Category A historic heritage place within the PAUP (Appendix 9: ID 56). The proposed works should have no effect on the recorded extent of this site.
Policy B5.2.2(8)	Encourage new development to have regard to the protection and conservation of the historic heritage values of any adjacent significant historic heritage places.	Refer above.
Objective B6.2.1(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 summary of the ongoing engagement with Mana Whenua is summarised in Section 8.2 and the potential effects on Maori and Cultural Heritage matters are discussed in Section 10.12. As the project progresses, Mana Whenua who have expressed an interested in the Project will continue to be consulted, and as noted previously, the preparation of CIAs will be discussed closer to the time of construction. The ongoing engagement with tangata whenua will ensure that appropriate regards has been had for treaty matters.
Objective B6.2.1(2)	The principles of the Treaty of Waitangi/Te Tiriti o Waitangi are recognised through Mana Whenua participation in resource management processes.	Refer above.
Policy B6.2.2(1)	<p>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:</p> <ul style="list-style-type: none"> (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 (h) recognises the role and rights of whānau and hapū to speak and act on matters that affect them. 	<p>Watercare have engaged with tangata whenua throughout the investigation of alternatives and development of the Project, with the proposed route avoiding as far as practicable any ancestral lands, sites, waahi tapu and other taonga identified as being of significance to tangata whenua.</p> <p>As noted in Section 8.2 of this Report, with respect to CIAs for the future phases of the Northern Interceptor, Mana Whenua have noted that they would like to be engaged closer to the time construction is expected to commence. In the interim, Watercare will continue regular discussions with all Mana Whenua who have expressed an interest in the Project.</p> <p>Protocols for the management of accidental discoveries of archaeological material have been provided in the draft conditions (refer Appendix F)</p> <p>A range of mitigation measures, such as erosion and sediment controls in accordance with TP90 during construction, will be undertaken which will assist in sustaining the mauri of natural resources such as waterbodies and the coastal environment.</p>

Reference	Full text	Comment
Policy B6.3.2(3)	Ensure that any assessment of environmental effects for an activity that may affect Mana Whenua values includes an appropriate assessment of adverse effects on those values.	Refer above.
Policy B6.3.2(6)	<p>Require resource management decisions to have particular regard to potential impacts on all of the following:</p> <ul style="list-style-type: none"> (a) the holistic nature of the Mana Whenua world view; (b) the exercise of kaitiakitanga; (c) mauri, particularly in relation to freshwater and coastal resources; (d) customary activities, including mahinga kai; (e) sites and areas with significant spiritual or cultural heritage value to Mana Whenua; and (f) any protected customary right in accordance with the Marine and Coastal Area (Takutai Moana) Act 2011. 	Refer above.
Policy B6.5.2(4)	<p>Protect the places and areas listed in Schedule 12 Sites and Places of Significance to Mana Whenua Schedule from adverse effects of subdivision, use and development by avoiding all of the following:</p> <ul style="list-style-type: none"> (a) the destruction in whole or in part of the site or place and its extent; (b) adverse cumulative effects on the site or place; (c) adverse effects on the location and context of the site or place; and significant adverse effects on the values and associations Mana Whenua have with the site or place; taking into account in such circumstances whether or not any structures, buildings or infrastructure are present and the adverse effects are temporary. 	Refer above.
Policy B6.5.2(6)	<p>Protect Mana Whenua cultural heritage that is uncovered during subdivision, use and development by all of the following:</p> <ul style="list-style-type: none"> (a) requiring a protocol to be followed in the event of accidental discovery of kōiwi, archaeology or artefacts of Māori origin; (b) undertaking appropriate actions in accordance with mātauranga and tikanga Māori; and (c) requiring appropriate measures to avoid, remedy or mitigate further adverse effects 	Refer above. We note that an accidental discovery protocol condition has been provided.
Policy B6.5.2(8)	Encourage appropriate design, materials and techniques for infrastructure in areas of known historic settlement and occupation by the tūpuna of Mana Whenua.	Refer above from comments regarding the provision of infrastructure in/near the coastal environment.
Objective B7.2.1(1)	Areas of significant indigenous biodiversity value in terrestrial, freshwater, and coastal marine areas are protected from the adverse effects of subdivision use and development.	In some instances, earthworks will be required in riparian margins (including coastal edges). Erosion and sediment control measures will be implemented (TP90) for the duration of the land disturbance activities undertaken as part of

Reference	Full text	Comment
		<p>the project. The measures are expected to prevent the discharge of sediment laden water to nearby waterbodies, particularly in areas on slopes and land subject to instability.</p> <p>We note that resource consents have not been applied for at this time because, commensurate with the “route protection” phase that the project has reached, only a concept level of design has been undertaken of the network and this is insufficient to inform those resource consent applications. The necessary resource consents (include those for coastal permits and earthworks) will be applied for at the time of detailed design of the network in the future.</p> <p>Refer to Section 10.6 of the AEE for further information.</p>
Policy B7.2.2(5)	Avoid adverse effects on areas listed in the Schedule 3 of Significant Ecological Areas – Terrestrial Schedule and Schedule 4 Significant Ecological Areas – Marine Schedule.	Refer above.
Objective B7.3.1(3)	The adverse effects of changes in land use on freshwater are avoided, remedied or mitigated.	Refer above.
Policy B7.3.2(1)	<p>Integrate the management of subdivision, use and development and freshwater systems by undertaking all of the following:</p> <ul style="list-style-type: none"> (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. 	Refer above.
Objective B7.4.1(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.	Refer to previous comments, and to Sections 8.2 and 10.12 of the AEE.
Policy B7.4.2(1)	<p>Integrate the management of subdivision, use, development and coastal water and freshwater, by:</p> <ul style="list-style-type: none"> (a) ensuring water supply, stormwater and wastewater infrastructure is adequately provided for in areas of growth; and 	Refer above.

Reference	Full text	Comment
	<ul style="list-style-type: none"> (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. 	
Objective B8.2.1(2)	Subdivision, use and development in the coastal environment are designed, located and managed to preserve the characteristics and qualities that contribute to the natural character of the coastal environment.	<p>During construction it is likely that there will be adverse effects on the natural character of the coastal environment. Adverse effects are associated with construction activities (e.g. the presence of the drilling rig and vegetation removal). These adverse effects are considered to be temporary and not significant, having regard to proposed mitigation. There are not considered to be any significant adverse effects on the natural character associated with permanent works.</p> <p>Refer to previous comments regarding proposed works in the coastal environment.</p>
Objective B8.3.1(1)	Subdivision, use and development in the coastal environment are located in appropriate places and are of an appropriate form and within appropriate limits, taking into account the range of uses and values of the coastal environment.	As noted above, it is considered that there is a locational and function-based requirement for the proposed designation to the within the coastal environment. In assessing the potential effects on the environment in these locations, the range of uses and values of the coastal environment has been taken into account (refer to AEE).
Objective B8.3.1(2)	The adverse effects of subdivision, use and development on the values of the coastal environment are avoided, remedied or mitigated	Refer above.
Objective B8.3.1(5)	Uses and developments that have a need to locate on land above and below the mean high water springs are provided for in an integrated manner.	Refer above.
Objective B8.3.1(6)	Conflicts between activities including reverse sensitivity effects are avoided, remedied or mitigated.	Refer above.
Policy B8.3.2(3)	<p>Provide for use and development in the coastal marine area that:</p> <ul style="list-style-type: none"> (a) have a functional need which requires the use of the natural and physical resources of the coastal marine area; (b) are for the public benefit or public recreation that cannot practicably be located outside the coastal marine area; (c) have an operational need making a location in the coastal marine area appropriate and that cannot practicably be located outside the coastal marine area; or 	Refer above.

Reference	Full text	Comment
	(d) enable the use of the coastal marine area by Mana Whenua for Māori cultural activities and customary uses.	
Policy B8.3.2(4)	Require subdivision, use and development in the coastal environment to avoid, remedy or mitigate the adverse effects of activities above and below the mean high water springs, including the effects on existing uses and on the coastal receiving environment.	Refer above.
Policy B8.3.2(5)	Adopt a precautionary approach towards proposed activities whose effects on the coastal environment are uncertain, unknown or little understood, but could be significantly adverse	Refer above.
Policy B8.2.3(7)	Set back development from the coastal marine area, where practicable, to protect the natural character and amenity values of the coastal environment.	Refer above.
Objective B8.4.1(1)	Public access to and along the coastal marine area is maintained and enhanced, except where it is appropriate to restrict that access, in a manner that is sensitive to the use and values of an area.	Refer above and to previous comments concerning public access to and along the CMA during construction.
Objective B8.4.1(3)	The open space, recreation and amenity values of the coastal environment are maintained or enhanced, including through the provision of public facilities in appropriate locations.	Refer above.
Policy B8.4.2(1)	<p>Subdivision, use and development in the coastal environment must, where practicable, do all of the following:</p> <ul style="list-style-type: none"> (a) maintain and where possible enhance public access to and along the coastal marine area, including through the provision of esplanade reserves and strips; (b) be designed and located to minimise impacts on public use of and access to and along the coastal marine area; (c) be set back from the coastal marine area to protect public open space values and access; and (d) take into account the likely impact of coastal processes and climate change, and be set back sufficiently to not compromise the ability of future generations to have access to and along the coast 	Refer above.
Policy B8.5.2(13)	Require management and decision-making to take into account the historical, cultural and spiritual relationship of Mana Whenua with the Hauraki Gulf, and the ongoing capacity to sustain these relationships.	Refer above.

Auckland Council Regional Plan: Coastal

Reference	Full text	Comment
Objective 3.3.1	To preserve the natural character of the coastal environment by protecting the coastal marine area from inappropriate subdivision, use and development.	<p>As discussed above, the Project will to provide a critical piece of a network that is considered to be regionally significant infrastructure. The most appropriate means of managing the effect on the coastal environment are to minimise the works footprint and the duration of works. These objectives have been central to the development of the construction method.</p> <p>It is anticipated that, during construction it is likely that there will be adverse effects on the natural character of the coastal environment associated with construction activities (e.g. the establishment of construction sites, vegetation removal, and permanent structures in the vicinity of the coastal environment). With the exception of the pump stations, most of these are considered to be temporary in nature.</p> <p>In these areas, a suite of mitigation measures have been proposed that seek to reduce the visual and landscape effects that the works will have, whilst taking into consideration the natural character of the surrounding environment in the overall design. With the adoption of recommended mitigation measures in consultation with PSR and park users, it is considered that potential adverse effects can be appropriately managed.</p>
Policy 3.4.1	The natural character of the coastal environment shall be preserved and protected from inappropriate subdivision, use, and development by avoiding where practicable, remedying or mitigating the adverse effects of subdivision, use and development on the qualities, elements and features which contribute to the natural character of the coastal environment, including those areas characterised by modification and development.	Refer above.

Auckland Council Regional Plan: Sediment Control

Reference	Full text	Comment
Objective 5.1.1	To maintain or enhance the quality of water in waterbodies and coastal water.	<p>We note that resource consents have not been applied for at this time because, commensurate with the “route protection” phase that the project has reached, only a concept level of design has been undertaken of the network and this is insufficient to inform those resource consent applications. The necessary resource consents (include those for coastal permits and earthworks) will be applied for at the time of detailed design of the network in the future.</p> <p>As noted above, the proposed earthworks will be undertaken in accordance with erosion and sediment control measures and earthworks will be sequenced, limiting the amount of earthworks being undertaken at any one time. The implementation of erosion and sediment control measures outlined above should avoid any adverse effects on the quality of water in waterbodies and coastal water.</p>

Auckland Council Regional Plan: Air, Land and Water

Reference	Full text	Comment
Objective 2.2.3.4	To provide for the ongoing operation, maintenance, development and upgrading of physical infrastructure, in a manner that meets regional growth requirements and supports the economic, social and cultural wellbeing of the Region's people and communities and provides for their health and safety, while avoiding, remedying or mitigating adverse effects on the environment.	<p>The Project, which is considered to be regionally significant infrastructure, will provide additional wastewater conveyance and treatment infrastructure to service the increasing urban development in the North West Auckland (the Service Catchment).</p> <p>The Project is needed to provide safe and efficient wastewater services to the growing Auckland Region. The proposed designation will safeguard the wastewater pipeline route, enabling these future communities to be serviced by the city's sewage treatment facilities, controlling discharges and overflows – meeting community and freshwater health outcomes.</p> <p>The designation will give Watercare the capability to undertake construction as things change in the network, and will give developers and Auckland Council certainty that critical infrastructure will be provided. This also provides assurance that the areas being developed will be serviced (or have the ability to be serviced/connected to), supporting residential and business growth.</p> <p>The provision of infrastructure to service growth in the area is essential in order to enable the people and communities of those areas to provide for their social and economic wellbeing and for their health and safety by providing for appropriate conveyance of sewage to the Rosedale WWTP.</p>
Objective 5.3.7	To recognise and have regard to the significant contribution that stormwater and wastewater networks and other regionally significant infrastructure make to the sustainability of the Region's environment, including the health, safety, and economic, social and cultural wellbeing of the community.	Refer above.
Policy 2.2.4.4	<p>The use, development, upgrading or maintenance of network utility infrastructure shall be considered appropriate where:</p> <ul style="list-style-type: none"> (b) it is consistent with the strategic directions of the Auckland Regional Policy Statement; or (c) it is consistent with the Auckland Regional Growth Strategy; or (d) it is to improve environmental outcomes that result from the operation of this infrastructure; or (e) it is undertaken in an efficient and cost effective manner that recognises the community's ability to pay; and (f) significant adverse effects on natural and physical resources are avoided, remedied or mitigated. 	<p>The Project is considered appropriate as:</p> <ul style="list-style-type: none"> • refer above for comment on the Project as it relates to the Auckland Regional Policy Statement; • refer to the AEE for an assessment of the Project against the Auckland Plan (supersedes the Auckland Regional Growth Strategy) • Once completed the Project will facilitate the continued effective operation of the wastewater network generally, and provide capacity in the wastewater network for future growth and development in the Auckland region. This will also help to prevent further major wastewater overflows by providing appropriate infrastructure. • The staging of the Project will allow capital costs to be spread over a number of years, and to be responsive to actual population growth.

Reference	Full text	Comment
		<p>This in turn will ensure that the system operates efficiently and cost-effectively and enable Watercare to achieve its statutory obligations under the LGA (Section 57(1)) which states (in part) Watercare must “manage its operations efficiently with a view to keeping the overall costs of water supply and wastewater services to its customers”</p> <ul style="list-style-type: none"> • During construction, there will be a range of potential and actual adverse effects within the vicinity of the construction areas, but, with the adoption of proposed mitigation measures, any adverse effects will be temporary in nature and can be appropriately managed. Permanent effects are generally associated with above ground structures (such as visual effects of pump stations) and it is considered that these effects can be adequately managed through the adoption of proposed mitigation measures.
Objective 2.3.3.1	To sustain the mauri of natural and physical resources in ways which enable provision for the social, economic and cultural wellbeing of Māori.	<p>As noted previously, Watercare has engaged with Mana Whenua throughout the investigation of alternatives and development of the Project, with the proposed route avoiding as far as practicable any ancestral lands, sites, waahi tapu and other taonga identified as being of significance to tangata whenua.</p> <p>The Project allows for the management of natural and physical resources in a way that enables people and communities, including Mana Whenua, to provide for their social, economic and cultural wellbeing and for their health and safety.</p> <p>A range of mitigation measures, such as erosion and sediment controls in accordance with TP90 during construction, will be undertaken which will assist in sustaining the mauri of natural resources such as waterbodies and the coastal environment.</p>
Objective 2.3.3.2	To afford appropriate priority to the relationship of tangata whenua and their culture and traditions with their ancestral taonga when this conflicts with other values.	Refer above.
Objective 2.3.3.3	To involve tangata whenua in resource management processes in ways which: <ul style="list-style-type: none"> (a) Take into account the principles of the Treaty of Waitangi, including rangatiratanga; (b) Have particular regard to the practical expression of kaitiakitanga 	Refer above.

Auckland Council District Plan (Operative North Shore)

Reference	Full text	Assessment
Policy 6.4.10	<p>Integrated planning of growth to match the needs of the community and the capacity of infrastructure needs to be used in a way that protects environmental values, and avoids the adverse effects of growth that will arise if land use, community and infrastructure planning (including planning for regionally and nationally significant infrastructure) that contributes to the growth concept in the Auckland Regional Growth Strategy and land use transportation integration, is not co-ordinated and sequenced correctly. Infrastructure planning and new growth need to be carried out and sequenced in a timely and efficient manner if the desired urban form is to be achieved and if infrastructure is to be efficiently provided, operated, maintained and upgraded.</p>	<p>A key design parameter in the design of the Northern Interceptor has been the ability to stage the construction so as to adequately respond to actual population growth, rather than build an oversized pipeline based on conservative population projections. By enabling the staging of the Northern Interceptor construction and operation potentially gains:</p> <ul style="list-style-type: none"> a) Flexibility to respond in design and delivery to actual future demand; b) Further ability to utilise existing design life in current assets; and c) The ability to defer large capital expenditure until the community has grown to support it. <p>This also allows capital costs to be spread over a number of years, and to be responsive to actual population growth.</p> <p>The designation will give Watercare the capability to undertake construction as things change in the network, and will give developers and Auckland Council certainty that critical infrastructure will be provided. This also provides assurance that the areas being developed will be serviced (or have the ability to be serviced/connected to), supporting residential and business growth.</p> <p>Once completed the Project will facilitate the continued effective operation of the wastewater network generally, and provide capacity in the wastewater network for future growth and development in the Auckland region.</p>
Objective 7.3	<p>To take into account the principles of the Treaty of Waitangi and the concept of kaitiakitanga in the management of the city's natural and physical resources in such a way that ensures the sustainability of resources.</p>	<p>Watercare has engaged with tangata whenua throughout the investigation of alternatives and development of the Project, with the proposed route avoiding as far as practicable any ancestral lands, water, sites, waahi tapu and other taonga identified as being of significance to tangata whenua.</p> <p>Continued engagement with Mana Whenua as the Project progresses will ensure that appropriate regards has been had for Treaty matters.</p> <p>nt.</p>
Objective 7.4	<p>To identify and provide protection of traditional sites and objects of special significance to the tangata whenua, particularly waahi tapu and other taonga.</p>	<p>To date, no traditional sites and object of special significance to the tangata whenua have been identified. However, Watercare will continue to engage with Mana Whenua who have indicated an interest in the Project as it progresses.</p>

Reference	Full text	Assessment
Objective 8.3.1	To protect the natural character, public access, cultural heritage values, ecology and landforms of the coastal environment	<p>The Project has been developed to avoid as far as practicable adverse effects on the coastal environment. In the overall context of the Project the area of the coastal environment affected is relatively small and any impact on access to the affected area of coastal environment will be temporary.</p> <p>A range of mitigation measures will be undertaken which will assist in sustaining the natural character and landforms of the coastal environment.</p> <p>There will be short term restrictions on public access and recreation in the coastal environment as a result of construction activities to ensure appropriate health and safety. Construction sites and works through these areas will be designed to minimise disruption on recreation and public access to and along the CMA and to publicly-owned land in the coastal environment as far as practicable. However, there will be temporary effects on public access during construction.</p> <p>Where temporary restrictions are necessary, Watercare will continue to consult with affected organisations to identify opportunities to address any restrictions.</p>
Policy 8.3.1.5	By protecting native coastal vegetation, in particular pohutukawa trees, for amenity, ecological and land stability purposes.	Refer above.
Policy 8.3.1.8	By ensuring that development and activities in the Coastal Conservation Area do not adversely affect the proper functioning of ecosystems, or adversely affect the natural coastal environment.	<p>Refer above.</p> <p>Vegetation within SEA_T_SEA_T_8319 at the eastern abutment of the Greenhithe Bridge supports suitable potential habitat for at least five indigenous lizard species, four of which have a National threat classification of 'At Risk'. Threat rankings for some of these species, particularly those 'At Risk', may increase over the next 20 years. It is noted that the forest gecko, copper skink and ornate skink have been recorded from SEA_T_8319. The vegetation also has the potential to support roosting and nesting habitat for a range of common native bird species.</p> <p>Technical Report D recommends that preclearance surveys for lizards and nesting birds be undertaken where they have been identified as potentially present, and that an Ecological Management Plan should be prepared to address the potential presence and management of geckos and /or skinks within these areas.</p>

Reference	Full text	Assessment
		Through the adoption of proposed mitigation measures, it is considered that the Project will be consistent with this objective.
Policy 8.3.2.5	By ensuring that development and activities in the Coastal Conservation Area do not adversely affect the proper functioning of ecosystems, including those below mean high water springs.	Refer above.
Policy 8.3.2.6	By avoiding earthworks and vegetation removal affecting ecosystems and habitats.	The most appropriate means of managing the effect on the coastal environment are to minimise the works footprint and the duration of works. These objectives have been central to the development of the construction method.
Objective 9.3.1	To avoid, remedy or mitigate the adverse effects of subdivision and development on the environment, including the physical environment, biota, amenity values and landscape.	<p>During construction, there will be a range of potential and actual adverse effects within the vicinity of the construction areas, but, with the adoption of proposed mitigation measures, any adverse effects will be temporary in nature and can be appropriately managed. Permanent effects are generally associated with above ground structures (such as visual effects of pump stations) and it is considered that these effects can be adequately managed through the adoption of proposed mitigation measures.</p> <p>Once completed, the majority of the Project works will be underground and temporary construction areas will be reinstated in an appropriate manner.</p> <p>The most significant changes and resultant effects on visual amenity will arise from vegetation removal, earthworks, trenching and construction activity and construction vehicle movements. As discussed in Section 10.8, these effects can be appropriately managed.</p> <p>Earthworks and vegetation removal will adversely affect several areas along/adjacent to the alignment. The works have been designed as far as practicable to avoid ecosystems and habitats, however, where vegetation removal and earthworks are required measures remedy and mitigate these effects are contained within Technical Report D. Subject to the implementation of the proposed mitigation outlined within this report, it is considered that the residual net effects on ecosystems and habitats will be appropriately managed.</p> <p>Measures have been proposed to mitigate adverse ecological effects and overall the effects can be appropriately managed.</p>

Reference	Full text	Assessment
Policy 9.3.1.3	By ensuring that new subdivision and development recognises existing natural features and landscapes, such as waterways and that the form of development reflects the character and environmental qualities of the location	<p>The location of above ground structures, such as pump stations and pipe bridges, will continue to be discussed with PSR and other key stakeholder. As far as practicable – and as discussed in Sections 8 and 10 – the location of these structures will be cited in a way that minimises impacts on recreational use, and are designed using recessive materials so as to limit any visual effects.</p> <p>A Landscape and Visual Management Plan will be prepared for the Project. The objective of this Plan will be to provide a framework to avoid, remedy or mitigate the adverse landscape and visual effects of the Project’s above ground structures and buildings.</p>
Objective 9.3.2	To ensure that new subdivision and development enables people and communities to provide for their well-being health and safety	The provision of infrastructure to service growth in the area is essential in order to enable the people and communities of those areas to provide for their social and economic wellbeing and for their health and safety by providing for appropriate conveyance of sewage to the Rosedale WWTP.
Policy 10.3.2.4	By ensuring that consideration is given to appropriate avoidance and mitigation techniques and, where possible, achieving compliance with noise controls by managing noise at the point of emission in preference to providing defensive infrastructure against noise intrusion.	<p>For the activities identified as potentially exceeding the Project construction acoustic criteria, an adaptive mitigation / management approach will be adopted to avoid, remedy or mitigate adverse effects as far as practicable. The specifics of the required measures will be detailed in the CNVMP, which will be formulated and submitted to Council prior to construction commencement.</p> <p>Where exceedances of the relevant criteria are likely, a SSCNMP will be required to detail the enhanced mitigation measures, and will be kept up-to-date regarding actual timing of activities, equipment use and methodologies.</p>
Objective 10.3.4	To ensure that any adverse effects from the vibration of equipment is avoided, or reduced to an acceptable level.	Vibration from pipe-jacking within 18 metres slant distance of single storey dwellings (15 metres for 2-storey dwellings with bedrooms on upper level), occurring during the night-time, has the potential to exceed the regenerated noise criterion of 35 dB LAeq. An SSCNMP will be required where night-time tunnelling occurs within these distances.
Objective 14.3.1.1	The construction, operation and maintenance of an efficient and effective network of utilities that meets the needs of the community, and recognises	The proposed designation will safeguard the wastewater pipeline route, enabling these future communities to be serviced by the city’s sewage

Reference	Full text	Assessment
	reverse sensitivity effects of other uses locating in close proximity to utility structures.	<p>treatment facilities, controlling discharges and overflows – meeting community and freshwater health outcomes.</p> <p>The designation provides a statutory mechanism to implement the works and protect from potential reverse sensitivity effects.</p> <p>Where practicable, the proposed pipeline will be co-located within the road reserve while avoiding impacts on other network utilities. Watercare will continue to engage with network utility operators to confirm these locations.</p>
Objective 14.3.1.2	To avoid, remedy or mitigate any adverse environmental effects of network utilities, including effects on amenity, landscape, streetscape and heritage values, arising from the construction, operation, and maintenance of network utilities.	Refer above.
Objective 14.3.1.3	An environment where the health and safety of the community is not adversely affected by the construction, operation and maintenance of network utilities.	<p>There will be short term restrictions on public access and recreation in the coastal environment as a result of construction activities to ensure appropriate health and safety.</p> <p>Once constructed, the Project will service growth in the area and enable the people and communities of those areas to provide for their social and economic wellbeing, as well as their health and safety.</p>
Policy 14.3.2.3	Network utilities shall be designed, sited, operated and maintained in such a way that avoids, remedies or mitigates adverse effects on other network utilities.	<p>Watercare meet regularly with various network utility operators to discuss the proposed designation. Watercare will continue to engage with these and other network utilities during the design process in order to confirm the locations of existing services or any future development plans in the vicinity of the proposed construction sites.</p> <p>During the preparation and implementation of the Construction Management Plan (CMP) Watercare will work collaboratively with network utility operators in relation to the management of potential adverse effects on the assets network utility operators (refer to Appendix F for the proposed conditions). The CMP will also detail the procedures for the management of works that that are in close proximity to or directly affected network utilities.</p>
Policy 14.3.2.4	Network utilities, shall be designed, sited, operated and maintained in such a way as to avoid, remedy or mitigate adverse effects on the environment of emissions of noise, light, vibration, odour or hazardous substances.	During construction, there will be a range of potential and actual adverse effects within the vicinity of the construction areas, but, with the adoption of

Reference	Full text	Assessment
		proposed mitigation measures, any adverse effects will be temporary in nature and can be appropriately managed.
Policy 14.3.2.5	<p>Network utilities shall be designed, sited, operated and maintained so that they avoid, remedy or mitigate any adverse effects on the area. This includes, but is not limited to, any adverse effects on;</p> <ul style="list-style-type: none"> a) any site, building, place or area, and b) the landscape or streetscape, and c) any site, building, place or area of heritage and archaeological value, and d) the amenity values of any of these places. 	Refer above.
Policy 14.3.2.6	<p>To recognise that reserve land, and land zoned Recreation 1 in particular, is intended to be open public space free from the adverse effects of buildings, structures and activities not linked to the purpose of the zone. Siting of network utilities should avoid, remedy or mitigate adverse effects on;</p> <ul style="list-style-type: none"> a) The amenity of the reserve, and b) Public use and enjoyment of the reserve, and c) The potential for future development of the reserve. 	The Project will potentially result in adverse effects on parks and facilities whose primary purpose is to provide for sport and recreation activities for the well-being of the community. Watercare has been working with Auckland Council Parks, Sports and Recreation (PSR) to address these issues, which include points (a) to (c) in Policy 14.3.2.6.
Policy 14.3.2.7	<p>To encourage the co-location of structures, the shared use of structures, and the use of existing network utility corridors, subject to;</p> <ul style="list-style-type: none"> • Technical and operational feasibility, and • Recognition that the positive effects can be outweighed by the adverse cumulative effects. • Avoiding, remedying or mitigating any adverse effects. 	Refer above.

Auckland Council District Plan (Operative Waitakere)

Reference	Full text	Assessment
Policy 1.6	<p>Activities (including structures and impermeable surfaces), should be designed, located and carried out in a way that they do not impede or adversely affect the potential for the regeneration of native vegetation, or reduce the extent, range and linkages between areas of native vegetation within riparian margins and coastal edges</p>	<p>The removal of vegetation (both native and exotic) will be required to facilitate construction activities. Vegetation removal will be undertaken in accordance with good practices and the recommendations of the Tree Protection Methodology.</p> <p>In some instances, earthworks will be required in riparian margins (including coastal edges). Erosion and sediment control measures will be implemented (TP90) for the duration of the land disturbance activities undertaken as part of the project. The measures are expected to prevent the discharge of sediment laden water to nearby waterbodies, particularly in areas on slopes and land subject to instability.</p> <p>We note that resource consents have not been applied for at this time because, commensurate with the “route protection” phase that the project has reached, only a concept level of design has been undertaken of the network and this is insufficient to inform those resource consent applications. The necessary resource consents (include those for coastal permits and earthworks) will be applied for at the time of detailed design of the network in the future.</p>
Objective 2	<p>To protect the City’s native vegetation and fauna habitat, including protecting:</p> <ul style="list-style-type: none"> • the quality and resilience of the resource; • the variety and range of species and their contribution to the biodiversity of the City; • their ecological integrity; • their healthiness as a potential source of harvest for cultural purposes. 	<p>Erosion and sediment control measures will be implemented in accordance with TP90 for the duration of the land disturbances activities required as part of the Project to prevent the discharge of sediment laden water to nearby waterbodies.</p> <p>The proposed works will be undertaken in a modified environment.</p> <p>The removal of vegetation (both native and exotic) will be required to facilitate construction activities. Vegetation removal will be undertaken in accordance with good practices and the recommendations of the Tree Protection Methodology.</p> <p>As the permanent works will be located below ground, activities will not impede the regeneration, or future regeneration, of native vegetation. Construction activities will be temporary in nature during and immediately following the construction period and will be mitigated through replacement planting.</p>

Reference	Full text	Assessment
		<p>Land disturbance activities outside of the CMA will be predominantly open cut, and are to be undertaken progressively in stages. This will minimise the proportion of soil/rock exposed at any one time, minimising any adverse effects on the surrounding topsoil and soil structure.</p> <p>Permanent visual effects will predominantly result from the removal of vegetation and the presence of built structures (the pump station at No. 56 The Concourse, the pump stations within Wainoni Park, and a pipe bridge (crossing Manutewhau Creek) and surface features such as manhole covers which are proposed to sit flush within road corridors and open grass areas. Subject to the mitigation measures proposed, the majority of the adverse landscape and visual effects anticipated in the construction and operation phase of the Project can be managed and mitigated to result in low (less than minor) adverse effects overall.</p>
Policy 2.4	<p>Where native vegetation is cleared, this should be carried out in a way that:</p> <ul style="list-style-type: none"> • avoids high quality bush and locates in lower quality bush - clearing should take place in areas which avoid native vegetation on the site which may have greater significance than other native vegetation, as assessed in an ecological or landscape context • avoids notable trees, - the tree's significance being measured by whether it is: <ul style="list-style-type: none"> – highly representative of its species, or – of a rare species, or – of high value in providing for the local diversity of species, or – of a significant size and/or shape, or – of significance in a landscape context • minimises any edge effect on remaining native vegetation; • minimises adverse effects on ecosystems; • does not isolate or remove linkages between areas of native vegetation or fauna habitat; • does not impede the movement of native fauna; • avoids disturbance of root systems of remaining native vegetation. 	<p>Erosion and sediment control measures will be implemented in accordance with TP90 for the duration of the land disturbances activities required as part of the Project to prevent the discharge of sediment laden water to nearby waterbodies.</p> <p>The proposed works will be undertaken in a modified environment.</p> <p>The removal of vegetation (both native and exotic) will be required to facilitate construction activities. Vegetation removal will be undertaken in accordance with good practices and the recommendations of the Tree Protection Methodology.</p> <p>As the permanent works will be located below ground, activities will not impede the regeneration, or future regeneration, of native vegetation. Construction activities will be temporary in nature during and immediately following the construction period and will be mitigated through replacement planting.</p> <p>Land disturbance activities outside of the CMA will be predominantly open cut, and are to be undertaken progressively in stages. This will minimise the proportion of soil/rock exposed at any one time, minimising any adverse effects on the surrounding topsoil and soil structure.</p> <p>Permanent visual effects will predominantly result from the removal of vegetation and the presence of built structures (the pump station at No. 56 The Concourse, the pump stations within Wainoni Park, and a pipe bridge (crossing Manutewhau Creek) and surface features such as manhole covers</p>

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		<p>which are proposed to sit flush within road corridors and open grass areas. Subject to the mitigation measures proposed, the majority of the adverse landscape and visual effects anticipated in the construction and operation phase of the Project can be managed and mitigated to result in low (less than minor) adverse effects overall.</p>
Policy 2.15	<p>Where activities result in an unavoidable adverse effect on native vegetation and fauna habitat, there may be a requirement to remedy or mitigate these adverse effects on or off the site.</p>	<p>Erosion and sediment control measures will be implemented in accordance with TP90 for the duration of the land disturbances activities required as part of the Project to prevent the discharge of sediment laden water to nearby waterbodies.</p> <p>The proposed works will be undertaken in a modified environment.</p> <p>The removal of vegetation (both native and exotic) will be required to facilitate construction activities. Vegetation removal will be undertaken in accordance with good practices and the recommendations of the Tree Protection Methodology.</p> <p>As the permanent works will be located below ground, activities will not impede the regeneration, or future regeneration, of native vegetation. Construction activities will be temporary in nature during and immediately following the construction period and will be mitigated through replacement planting.</p> <p>Land disturbance activities outside of the CMA will be predominantly open cut, and are to be undertaken progressively in stages. This will minimise the proportion of soil/rock exposed at any one time, minimising any adverse effects on the surrounding topsoil and soil structure.</p> <p>Permanent visual effects will predominantly result from the removal of vegetation and the presence of built structures (the pump station at No. 56 The Concourse, the pump stations within Wainoni Park, and a pipe bridge (crossing Manutewhau Creek) and surface features such as manhole covers which are proposed to sit flush within road corridors and open grass areas. Subject to the mitigation measures proposed, the majority of the adverse landscape and visual effects anticipated in the construction and operation phase of the Project can be managed and mitigated to result in low (less than minor) adverse effects overall.</p>
Objective 3	<p>To maintain the life-supporting capacity of the City's land resource.</p>	<p>Erosion and sediment control measures will be implemented in accordance with TP90 for the duration of the land disturbances activities required as part of the Project to prevent the discharge of sediment laden water to nearby waterbodies.</p>

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		<p>The proposed works will be undertaken in a modified environment.</p> <p>The removal of vegetation (both native and exotic) will be required to facilitate construction activities. Vegetation removal will be undertaken in accordance with good practices and the recommendations of the Tree Protection Methodology.</p> <p>As the permanent works will be located below ground, activities will not impede the regeneration, or future regeneration, of native vegetation. Construction activities will be temporary in nature during and immediately following the construction period and will be mitigated through replacement planting.</p> <p>Land disturbance activities outside of the CMA will be predominantly open cut, and are to be undertaken progressively in stages. This will minimise the proportion of soil/rock exposed at any one time, minimising any adverse effects on the surrounding topsoil and soil structure.</p> <p>Permanent visual effects will predominantly result from the removal of vegetation and the presence of built structures (the pump station at No. 56 The Concourse, the pump stations within Wainoni Park, and a pipe bridge (crossing Manutewhau Creek) and surface features such as manhole covers which are proposed to sit flush within road corridors and open grass areas. Subject to the mitigation measures proposed, the majority of the adverse landscape and visual effects anticipated in the construction and operation phase of the Project can be managed and mitigated to result in low (less than minor) adverse effects overall.</p>
Policy 3.5	Activities and structures involving the disposal, movement and storage of solid waste, and human and animal waste, should be designed and managed in a way that avoids any discharge or leaching of contaminants into the City's soils.	<p>Erosion and sediment control measures will be implemented in accordance with TP90 for the duration of the land disturbances activities required as part of the Project to prevent the discharge of sediment laden water to nearby waterbodies.</p> <p>The proposed works will be undertaken in a modified environment.</p> <p>The removal of vegetation (both native and exotic) will be required to facilitate construction activities. Vegetation removal will be undertaken in accordance with good practices and the recommendations of the Tree Protection Methodology.</p>

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Policy 5.1	<p>Activities within Restoration Natural Areas, should be carried out in a way that does not impede regeneration of native vegetation. Where possible, activities in areas identified as Ecological Linkage Opportunities should not prevent the future regeneration of these areas.</p>	<p>Erosion and sediment control measures will be implemented in accordance with TP90 for the duration of the land disturbances activities required as part of the Project to prevent the discharge of sediment laden water to nearby waterbodies.</p> <p>The proposed works will be undertaken in a modified environment.</p> <p>The removal of vegetation (both native and exotic) will be required to facilitate construction activities. Vegetation removal will be undertaken in accordance with good practices and the recommendations of the Tree Protection Methodology.</p> <p>As the permanent works will be located below ground, activities will not impede the regeneration, or future regeneration, of native vegetation. Construction activities will be temporary in nature during and immediately following the construction period and will be mitigated through replacement planting.</p> <p>Land disturbance activities outside of the CMA will be predominantly open cut, and are to be undertaken progressively in stages. This will minimise the</p>

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Policy 5.3	<p>Activities on any public land should be carried out in a way that promotes and enhances regeneration and the re-establishment of linkages between areas of native vegetation and fauna habitat within the Green Network, and the effectiveness of any adjacent Ecological Linkage Opportunities and Restoration Natural Areas in protecting the stability of native ecosystems.</p>	<p>Erosion and sediment control measures will be implemented in accordance with TP90 for the duration of the land disturbances activities required as part of the Project to prevent the discharge of sediment laden water to nearby waterbodies.</p> <p>The proposed works will be undertaken in a modified environment.</p> <p>The removal of vegetation (both native and exotic) will be required to facilitate construction activities. Vegetation removal will be undertaken in accordance with good practices and the recommendations of the Tree Protection Methodology.</p> <p>As the permanent works will be located below ground, activities will not impede the regeneration, or future regeneration, of native vegetation. Construction activities will be temporary in nature during and immediately following the construction period and will be mitigated through replacement planting.</p> <p>Land disturbance activities outside of the CMA will be predominantly open cut, and are to be undertaken progressively in stages. This will minimise the proportion of soil/rock exposed at any one time, minimising any adverse effects on the surrounding topsoil and soil structure.</p> <p>Permanent visual effects will predominantly result from the removal of vegetation and the presence of built structures (the pump station at No. 56 The Concourse, the pump stations within Wainoni Park, and a pipe bridge (crossing Manutewhau Creek) and surface features such as manhole covers which are proposed to sit flush within road corridors and open grass areas. Subject to the mitigation measures proposed, the majority of the adverse</p>

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		<p>landscape and visual effects anticipated in the construction and operation phase of the Project can be managed and mitigated to result in low (less than minor) adverse effects overall.</p>
Objective 7	<p>To preserve and enhance the natural character of the City's coastal environment and lakes, rivers and wetlands and their margins, including preserving the action on the land of those processes which form that natural character.</p>	<p>Erosion and sediment control measures will be implemented in accordance with TP90 for the duration of the land disturbances activities required as part of the Project to prevent the discharge of sediment laden water to nearby waterbodies.</p> <p>The proposed works will be undertaken in a modified environment.</p> <p>The removal of vegetation (both native and exotic) will be required to facilitate construction activities. Vegetation removal will be undertaken in accordance with good practices and the recommendations of the Tree Protection Methodology.</p> <p>As the permanent works will be located below ground, activities will not impede the regeneration, or future regeneration, of native vegetation. Construction activities will be temporary in nature during and immediately following the construction period and will be mitigated through replacement planting.</p> <p>Land disturbance activities outside of the CMA will be predominantly open cut, and are to be undertaken progressively in stages. This will minimise the proportion of soil/rock exposed at any one time, minimising any adverse effects on the surrounding topsoil and soil structure.</p> <p>Permanent visual effects will predominantly result from the removal of vegetation and the presence of built structures (the pump station at No. 56 The Concourse, the pump stations within Wainoni Park, and a pipe bridge (crossing Manutewhau Creek) and surface features such as manhole covers which are proposed to sit flush within road corridors and open grass areas. Subject to the mitigation measures proposed, the majority of the adverse landscape and visual effects anticipated in the construction and operation phase of the Project can be managed and mitigated to result in low (less than minor) adverse effects overall.</p>
Policy 7.4	<p>Activities should be carried out in a way that removal or damage to native vegetation that contributes to and is an essential part of the natural character of coastal edges and riparian margins, is minimised.</p>	<p>Erosion and sediment control measures will be implemented in accordance with TP90 for the duration of the land disturbances activities required as part of the Project to prevent the discharge of sediment laden water to nearby waterbodies.</p> <p>The proposed works will be undertaken in a modified environment.</p>

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		<p>The removal of vegetation (both native and exotic) will be required to facilitate construction activities. Vegetation removal will be undertaken in accordance with good practices and the recommendations of the Tree Protection Methodology.</p> <p>As the permanent works will be located below ground, activities will not impede the regeneration, or future regeneration, of native vegetation. Construction activities will be temporary in nature during and immediately following the construction period and will be mitigated through replacement planting.</p> <p>Land disturbance activities outside of the CMA will be predominantly open cut, and are to be undertaken progressively in stages. This will minimise the proportion of soil/rock exposed at any one time, minimising any adverse effects on the surrounding topsoil and soil structure.</p> <p>Permanent visual effects will predominantly result from the removal of vegetation and the presence of built structures (the pump station at No. 56 The Concourse, the pump stations within Wainoni Park, and a pipe bridge (crossing Manutewhau Creek) and surface features such as manhole covers which are proposed to sit flush within road corridors and open grass areas. Subject to the mitigation measures proposed, the majority of the adverse landscape and visual effects anticipated in the construction and operation phase of the Project can be managed and mitigated to result in low (less than minor) adverse effects overall.</p>
Objective 8	<p>To protect and maintain those aspects of the environment that are of significance to tangata whenua, including:</p> <ul style="list-style-type: none"> • protecting the spiritual dimension and the mauri (life force) of natural and physical resources and of humans; • recognising and protecting the kaitiaki of these resources and significant sites and waahi tapu within the City; • providing for those institutions that are integral to the relationship of tangata whenua with their environment; <p>in a way that promotes the expression and practice of kaitiakitanga (guardianship).</p>	<p>Erosion and sediment control measures will be implemented in accordance with TP90 for the duration of the land disturbances activities required as part of the Project to prevent the discharge of sediment laden water to nearby waterbodies.</p> <p>The proposed works will be undertaken in a modified environment.</p> <p>The removal of vegetation (both native and exotic) will be required to facilitate construction activities. Vegetation removal will be undertaken in accordance with good practices and the recommendations of the Tree Protection Methodology.</p> <p>As the permanent works will be located below ground, activities will not impede the regeneration, or future regeneration, of native vegetation. Construction activities will be temporary in nature during and immediately</p>

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		<p>following the construction period and will be mitigated through replacement planting.</p> <p>Land disturbance activities outside of the CMA will be predominantly open cut, and are to be undertaken progressively in stages. This will minimise the proportion of soil/rock exposed at any one time, minimising any adverse effects on the surrounding topsoil and soil structure.</p> <p>Permanent visual effects will predominantly result from the removal of vegetation and the presence of built structures (the pump station at No. 56 The Concourse, the pump stations within Wainoni Park, and a pipe bridge (crossing Manutewhau Creek) and surface features such as manhole covers which are proposed to sit flush within road corridors and open grass areas. Subject to the mitigation measures proposed, the majority of the adverse landscape and visual effects anticipated in the construction and operation phase of the Project can be managed and mitigated to result in low (less than minor) adverse effects overall.</p>
Policy 8.1	Any activity that takes place within the City's coastal edges or riparian margins must be carried out in a way that adverse effects on the quality of the water resource, and the mauri of that waterway, taiapure or mahinga maataitai are avoided or, where unavoidable, are remedied or mitigated.	<p>Erosion and sediment control measures will be implemented in accordance with TP90 for the duration of the land disturbances activities required as part of the Project to prevent the discharge of sediment laden water to nearby waterbodies.</p> <p>The proposed works will be undertaken in a modified environment.</p> <p>The removal of vegetation (both native and exotic) will be required to facilitate construction activities. Vegetation removal will be undertaken in accordance with good practices and the recommendations of the Tree Protection Methodology.</p> <p>As the permanent works will be located below ground, activities will not impede the regeneration, or future regeneration, of native vegetation. Construction activities will be temporary in nature during and immediately following the construction period and will be mitigated through replacement planting.</p> <p>Land disturbance activities outside of the CMA will be predominantly open cut, and are to be undertaken progressively in stages. This will minimise the proportion of soil/rock exposed at any one time, minimising any adverse effects on the surrounding topsoil and soil structure.</p>

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<p>Policy 8.4</p>	<p>Any activity within the Riparian Margins/Coastal Edges Natural Areas, Coastal Natural Areas and Protected Natural Areas that involves:</p> <ul style="list-style-type: none"> • disturbance of soils and removal of rock; • alteration to the natural character of the coastal area or impeding of any natural process that forms that character; • alteration to the interface between land and water; • removal of vegetation; <p>should be managed in a way that avoids, remedies or mitigates adverse effects on the natural character and mauri of the coastal area.</p>	<p>Erosion and sediment control measures will be implemented in accordance with TP90 for the duration of the land disturbances activities required as part of the Project to prevent the discharge of sediment laden water to nearby waterbodies.</p> <p>The proposed works will be undertaken in a modified environment.</p> <p>The removal of vegetation (both native and exotic) will be required to facilitate construction activities. Vegetation removal will be undertaken in accordance with good practices and the recommendations of the Tree Protection Methodology.</p> <p>As the permanent works will be located below ground, activities will not impede the regeneration, or future regeneration, of native vegetation. Construction activities will be temporary in nature during and immediately following the construction period and will be mitigated through replacement planting.</p> <p>Land disturbance activities outside of the CMA will be predominantly open cut, and are to be undertaken progressively in stages. This will minimise the proportion of soil/rock exposed at any one time, minimising any adverse effects on the surrounding topsoil and soil structure.</p> <p>Permanent visual effects will predominantly result from the removal of vegetation and the presence of built structures (the pump station at No. 56 The Concourse, the pump stations within Wainoni Park, and a pipe bridge (crossing Manutewhau Creek) and surface features such as manhole covers which are proposed to sit flush within road corridors and open grass areas. Subject to the mitigation measures proposed, the majority of the adverse landscape and visual effects anticipated in the construction and operation phase of the Project can be managed and mitigated to result in low (less than minor) adverse effects overall.</p>

Reference	Full text	Assessment
Policy 8.5	<p>Any activity (including subdivision design and placement of structures), should be carried out in a way that avoids adverse effects on the historical, cultural or spiritual significance of any site or waahi tapu of significance to iwi. The effect of activities which facilitate the direct relationship of iwi with their waahi tapu should also be taken into account. Particular regard should be had for the effect of activities within the iwi heritage areas.</p>	<p>Erosion and sediment control measures will be implemented in accordance with TP90 for the duration of the land disturbances activities required as part of the Project to prevent the discharge of sediment laden water to nearby waterbodies.</p> <p>The proposed works will be undertaken in a modified environment.</p> <p>The removal of vegetation (both native and exotic) will be required to facilitate construction activities. Vegetation removal will be undertaken in accordance with good practices and the recommendations of the Tree Protection Methodology.</p> <p>As the permanent works will be located below ground, activities will not impede the regeneration, or future regeneration, of native vegetation. Construction activities will be temporary in nature during and immediately following the construction period and will be mitigated through replacement planting.</p> <p>Land disturbance activities outside of the CMA will be predominantly open cut, and are to be undertaken progressively in stages. This will minimise the proportion of soil/rock exposed at any one time, minimising any adverse effects on the surrounding topsoil and soil structure.</p> <p>Permanent visual effects will predominantly result from the removal of vegetation and the presence of built structures (the pump station at No. 56 The Concourse, the pump stations within Wainoni Park, and a pipe bridge (crossing Manutewhau Creek) and surface features such as manhole covers which are proposed to sit flush within road corridors and open grass areas. Subject to the mitigation measures proposed, the majority of the adverse landscape and visual effects anticipated in the construction and operation phase of the Project can be managed and mitigated to result in low (less than minor) adverse effects overall.</p>
Objective 10	<p>To maintain and enhance those natural and physical characteristics (amenity values) that contribute to the wellbeing of residents and workers, including maintaining:</p> <ul style="list-style-type: none"> • an acceptable level of quiet and freedom from nuisance created by noise, odour, dust and vibration; • adequate levels of daylight and sunlight in dwellings; • adequate levels of darkness for sleep; • a safe environment; 	<p>Following completion of the works, replacement planting will assist in returning sites to their previous appearance.</p> <p>Furthermore, noise mitigation measures will be implemented on-site and be monitored to ensure that proposed works do not have a detrimental impact on the health and safety of sensitive receivers.</p>

Reference	Full text	Assessment
	<ul style="list-style-type: none"> • an accessible environment, which includes enhancing public access to and along the coast and waterways and between areas of public land; • adequate levels of on-site privacy; • healthy air quality. 	
Policy 10.10	Any activity that generates vibration should be carried out in a way that does not cause a nuisance, or otherwise have an adverse effect on the health of occupants of adjacent properties.	<p>Following completion of the works, replacement planting will assist in returning sites to their previous appearance.</p> <p>Furthermore, noise mitigation measures will be implemented on-site and be monitored to ensure that proposed works do not have a detrimental impact on the health and safety of sensitive receivers.</p>
Policy 11.2	<p>Activities should be managed in a way that avoids the clearance of or damage to trees and vegetation, to extent that the following characteristics are adversely affected:</p> <ul style="list-style-type: none"> • the visual dominance of trees on private property within the neighbourhoods of the Living Environment; • the remnant native vegetation within the urban Human Environments; • the remaining native vegetation along riparian margins and coastal edges in the urban area and Foothills Environment; • the shelter trees along fencelines and clumps of vegetation within the pastoral landscape of the Countryside Environment; • the mixture of native and exotic vegetation and the scattering of native vegetation along ridgelines and stream edges in the Foothills Environment; • the lines of trees along road edges within the Transport Environment; • the amenity value associated with native vegetation and its relative significance in all parts of the City; • the historic and cultural value of trees associated with the above characteristics; <p>provided that nothing in this policy should prevent the removal of species identified in the Environmentally Damaging Plants List.</p>	<p>Following completion of the works, replacement planting will assist in returning sites to their previous appearance.</p> <p>Furthermore, noise mitigation measures will be implemented on-site and be monitored to ensure that proposed works do not have a detrimental impact on the health and safety of sensitive receivers.</p>
Policy 11.3	Buildings and structures should be located so that they maintain the neighbourhood character, visual amenity of the surrounding area and the characteristic streetscape of the area, including providing for:	<p>Following completion of the works, replacement planting will assist in returning sites to their previous appearance.</p> <p>Furthermore, noise mitigation measures will be implemented on-site and be monitored to ensure that proposed works do not have a detrimental impact on the health and safety of sensitive receivers.</p>
Policy 11.4	Structures (including infrastructure) within the Transport Environment should be of a scale (height, form and bulk), and designed, located and managed in a	Following completion of the works, replacement planting will assist in returning sites to their previous appearance.

Reference	Full text	Assessment
	<p>way that the adverse effects on the amenity values and neighbourhood character of any surrounding Environments and which enhances the amenity of the Transport Environment itself. In particular, structures should:</p> <ul style="list-style-type: none"> • be compatible with the existing streetscape, including the links between streetscape and the neighbourhood character and amenity of the surrounding Environments; • minimise impact on views from adjacent sites; • minimise the removal or damage to existing native and exotic vegetation; • minimise physical domination and intrusion into the privacy of adjoining sites; • located so that planting of road berms can be provided for. 	<p>Furthermore, noise mitigation measures will be implemented on-site and be monitored to ensure that proposed works do not have a detrimental impact on the health and safety of sensitive receivers.</p>
Policy 11.7	<p>Infrastructure should be designed and managed in a way that:</p> <ul style="list-style-type: none"> • will maintain, and not adversely affect the amenity values and neighbourhood character of the surrounding area, including streetscape character; • placement on sensitive ridgelines in a way that visual intrusion above that ridgeline when viewed from a public place is avoided, or where unavoidable, remedied or mitigated; • does not detract from the significance to tangata whenua of any ridgeline; • minimises disturbance of natural and physical features; • does not physically dominate adjoining sites; • minimises adverse effects on the Upper Waitemata Harbour. 	<p>Following completion of the works, replacement planting will assist in returning sites to their previous appearance.</p> <p>Furthermore, noise mitigation measures will be implemented on-site and be monitored to ensure that proposed works do not have a detrimental impact on the health and safety of sensitive receivers.</p>
Policy 11.8	<p>Structures, (except within the Working and Community Environments and specific intensive Living Environments Living 5 and Living 6), should be of a form, height and scale which avoids physical domination of surrounding sites and buildings, which does not adversely affect the landscape character and other amenity values of these areas, and which minimises encroachment on views. In particular, relocated housing must be of a scale, form and finished quality, and located so as to maintain and enhance surrounding amenity values and neighbourhood character.</p>	<p>Following completion of the works, replacement planting will assist in returning sites to their previous appearance.</p> <p>Furthermore, noise mitigation measures will be implemented on-site and be monitored to ensure that proposed works do not have a detrimental impact on the health and safety of sensitive receivers.</p>
Policy 11.9	<p>Structures and accessways should be placed in such a way that they do not encroach visually on those natural landscape elements that have been identified as contributing to the amenity of an area. Particular regard should be had for the placement of structures so that intrusion above any sensitive ridgeline when viewed from a public place is avoided, or where unavoidable, remedied or mitigated.</p>	<p>Following completion of the works, replacement planting will assist in returning sites to their previous appearance.</p> <p>Furthermore, noise mitigation measures will be implemented on-site and be monitored to ensure that proposed works do not have a detrimental impact on the health and safety of sensitive receivers.</p>
Policy 11.18	<p>Non-residential activities (other than retail activities) may be located within residential areas of the City, provided that the individual and cumulative impacts of such a provision do not adversely affect amenity values and</p>	<p>Following completion of the works, replacement planting will assist in returning sites to their previous appearance.</p>

Reference	Full text	Assessment
	<p>neighbourhood character or fragment residential activities to the point that essential residential character is lost, and the safety of residents is harmed.</p> <p>In residential areas that provide for apartment-type developments, a broad range of non-residential activities can locate in these areas to provide a mixed use environment for residents, provided that the nature and scale of activities is managed to protect the vibrancy of adjacent town centre cores.</p>	<p>Furthermore, noise mitigation measures will be implemented on-site and be monitored to ensure that proposed works do not have a detrimental impact on the health and safety of sensitive receivers.</p>
Policy 12.4	<p>Activities on sites containing heritage items listed in the District Plan, should be managed and located, and be of a scale, form and appearance which does not detract from the appearance and integrity of the listed heritage item.</p>	<p>As noted in Technical Report B, one heritage building is recorded within c.100m of the proposed NoR – NI (Waitakere). This is the Radio New Zealand Transmitter Building which is scheduled within the Auckland Council District Plan – Operative Waitakere Section 2003 (ID 1174) and as a Category A historic heritage place within the PAUP (Appendix 9: ID 56). The proposed works should have no effect on the recorded extent of this site.</p>
Policy 12.5	<p>Activities on sites adjacent to sites containing listed heritage items shall be designed, located and carried out in a way that minimises:</p> <ul style="list-style-type: none"> • physical domination of the listed heritage item; • loss of the original setting, including surrounding trees and gardens; • incompatibility with the scale and form of any heritage building, including roof form and roof angles. 	<p>As noted in Technical Report B, one heritage building is recorded within c.100m of the proposed NoR – NI (Waitakere). This is the Radio New Zealand Transmitter Building which is scheduled within the Auckland Council District Plan – Operative Waitakere Section 2003 (ID 1174) and as a Category A historic heritage place within the PAUP (Appendix 9: ID 56). The proposed works should have no effect on the recorded extent of this site.</p>

Auckland Unitary Plan

Reference	Full text	Assessment
Objective D9.3(1)	<p>Manage the effects of activities on the indigenous biodiversity values of areas identified as significant ecological areas by:</p> <ul style="list-style-type: none"> (a) avoiding adverse effects as far as practicable, and where avoidance is not practicable, minimising adverse effects on the identified values; (b) remedying adverse effects on the identified values where they cannot be avoided; (c) mitigating adverse effects on the identified values where they cannot be avoided or remediated; and (d) considering the appropriateness of offsetting any residual adverse effects that are significant and where they have not been able to be mitigated, through protection, restoration and enhancement measures, having regard to Appendix 8 Biodiversity offsetting. 	<p>In some instances, earthworks will be required in riparian margins (including coastal edges). Erosion and sediment control measures will be implemented (TP90) for the duration of the land disturbance activities undertaken as part of the project. The measures are expected to prevent the discharge of sediment laden water to nearby waterbodies, particularly in areas on slopes and land subject to instability.</p> <p>We note that resource consents have not been applied for at this time because, commensurate with the “route protection” phase that the project has reached, only a concept level of design has been undertaken of the network and this is insufficient to inform those resource consent applications. The necessary resource consents (include those for coastal permits and earthworks) will be applied for at the time of detailed design of the network in the future.</p> <p>Refer to Section 10.6 of the AEE for further details on the potential effects and proposed mitigation on areas identified as SEAs.</p> <p>During construction, there will be a range of potential and actual adverse effects within the vicinity of the construction areas, but, with the adoption of proposed mitigation measures, any adverse effects on the values or sites included in the SEA overlays will be temporary in nature and can be appropriately managed.</p>
Objective D9.3(3)	<p>Enhance indigenous biodiversity values in significant ecological areas through any of the following:</p> <ul style="list-style-type: none"> (a) restoration, protection and enhancement of threatened ecosystems and habitats for rare or threatened indigenous species; (b) control, and where possible, eradication of plant and animal pests; (c) fencing of significant ecological areas to protect them from stock impacts; (d) legal protection of significant ecological areas through covenants or similar mechanisms; (e) development and implementation of management plans to address adverse effects; (f) re-vegetating areas using, where possible, indigenous species sourced from naturally growing plants in the vicinity with the same climactic and environmental conditions; or 	<p>Refer above. A provision that plant species to be used should be appropriate to the area, and be chosen for site-specific conditions, has been included in the proposed conditions. Where possible, these will be eco-sourced.</p>

Reference	Full text	Assessment
	(g) providing for the role of Mana Whenua as kaitiaki and for the practical exercise of kaitiakitanga in restoring, protecting and enhancing areas.	
Objective D9.3(6)	<p>Avoid as far as practicable the removal of vegetation and loss of biodiversity in significant ecological areas from the construction of building platforms, access ways or infrastructure, through:</p> <ul style="list-style-type: none"> (a) using any existing cleared areas on a site to accommodate new development in the first instance; (b) assessing any practicable alternative locations and/or methods that would reduce the need for vegetation removal or land disturbance; (c) retaining indigenous vegetation and natural features which contribute to the ecological significance of a site, taking into account any loss that may be unavoidable to create a single building platform for a dwelling and associated services, access and car parking on a site; (d) designing and locating dwellings and other structures to reduce future demands to clear or damage areas of significant indigenous biodiversity, for example to provide sunlight or protect property; (e) avoiding as far as practicable any changes in hydrology which could adversely affect indigenous biodiversity values; (f) implementing measures to maintain existing water quality and not increase the amount of sediment entering natural waterways, wetlands and groundwater; and (g) using techniques that minimise the effects of construction and development on vegetation and biodiversity and the introduction and spread of animal and plant pests. 	Refer above. Construction sites and works through these areas will be designed to minimise disruption as far as practicable.
Objective D9.3(8)	Manage the adverse effects from the use, maintenance, upgrade and development of infrastructure in accordance with the policies above, recognising that it is not always practicable to locate and design infrastructure to avoid significant ecological areas	Refer above.
Objective E1.2(2)	The mauri of freshwater is maintained or progressively improved over time to enable traditional and cultural use of this resource by Mana Whenua.	<p>Wet weather overflow mitigation is also required in the Northern Waitakere area to meet Regional Plan targets of no more than two events per discharge location per year in the separated network. Watercare needs to progress the development of overflow mitigation options, such as the proposed Northern Interceptor scheme, to achieve targeted levels of service. The proposed works will reduce the potential for overflows. This will in turn:</p> <ul style="list-style-type: none"> • Minimise potentially harmful pathogens reaching freshwater and coastal environments;

Reference	Full text	Assessment
		<ul style="list-style-type: none"> • Minimise the potential for adverse amenity effects on public areas and recreation values and • Assist in the restoration of the mauri of waterways and coastal waters.
Objective E3.2(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.	For this Project, where it is not possible to use trenched or trenchless technologies (e.g. to cross beneath a stream or gully) a pipe bridge has been used. This is the case at Manutewhau Reserve, West Harbour.
Policy E3.3(1)	<p>Avoid significant adverse effects, and avoid where practicable or otherwise remedy or mitigate other adverse effects of activities in, on, under or over the beds of lakes, rivers, streams or wetlands within the following overlays:</p> <ul style="list-style-type: none"> (a) Natural Stream Management Areas Overlay; (b) Natural Lake Management Areas Overlay; (c) Urban Lake Management Areas Overlay; (d) Significant Ecological Areas Overlay; and (e) Wetland Management Areas Overlay 	During construction, there will be a range of potential and actual adverse effects within the vicinity of the construction areas, but, with the adoption of proposed mitigation measures, any adverse effects on the values or sites included in the SEA overlays will be temporary in nature and can be appropriately managed.
Policy E3.3(6)	<p>Manage the impact on Mana Whenua cultural heritage that is identified prior to, or discovered during, development or land use by:</p> <ul style="list-style-type: none"> (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 (c) undertaking appropriate measures to avoid adverse effects, or where adverse effects cannot be avoided, effects are remedied or mitigated. 	<p>As noted above, protocols for the management of accidental discoveries of archaeological material have been provided in the draft conditions (refer also to Appendix F).</p> <p>Watercare have engaged with Mana Whenua throughout the development of the Project, with the proposed route avoiding as far as practicable any ancestral lands, sites, waahi tapu and other taonga identified as being of significance to tangata whenua.</p>
Policy E3.3(7)	<p>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:</p> <ul style="list-style-type: none"> (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: 	Refer above, and to Appendix A (Assessment of Alternatives)

Reference	Full text	Assessment
	<ul style="list-style-type: none"> (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. <p>(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.</p>	
Policy E3.3(9)	<p>Provide for the excavation, drilling, tunnelling, thrusting or boring or other disturbance, and the depositing of any substance in, on or under the bed of a lake, river, stream or wetland, where it complies with all of the following:</p> <ul style="list-style-type: none"> (a) there is no practicable alternative method or location for undertaking the activity outside the lake, river, stream or wetland; (b) the activity is required for any of the following: <ul style="list-style-type: none"> (i) as part of an activity designed to restore or enhance the natural values of any lake, river, stream or wetland, or any adjacent area of indigenous vegetation or habitat of indigenous fauna; (ii) to maintain and/or enhance public access to, over and along any lake, river, stream or wetland and associated margins; (iii) to provide access across a lake, river, stream or wetland; (iv) for the operation, use, maintenance, repair, development or upgrade of infrastructure; (v) to restore, maintain or improve access to wharves and jetties or mooring areas, or to maintain the navigation and safety of existing channels; (vi) to reduce the risk of occurrence or the potential adverse effects of flooding, erosion, scour or sediment depositing; (vii) for the reasonable use of production land; or 	Refer above, and to Appendix A (Assessment of Alternatives)

Reference	Full text	Assessment
	<p>(viii) to undertake mineral extraction activities and mitigation and following that, offsetting can be practicably implemented.</p> <p>(c) the disturbance 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.</p>	
Policy E3.3(15)	<p>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:</p> <ul style="list-style-type: none"> (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. 	<p>In some instances, earthworks will be required in riparian margins (including coastal edges). Erosion and sediment control measures will be implemented (TP90) for the duration of the land disturbance activities undertaken as part of the project. The measures are expected to prevent the discharge of sediment laden water to nearby waterbodies, particularly in areas on slopes and land subject to instability.</p> <p>We note that resource consents have not been applied for at this time because, commensurate with the “route protection” phase that the project has reached, only a concept level of design has been undertaken of the network and this is insufficient to inform those resource consent applications. The necessary resource consents (include those for coastal permits and earthworks) will be applied for at the time of detailed design of the network in the future.</p>
Policy E11.3(1)	<p>Avoid where practicable, and otherwise mitigate, or where appropriate, remedy adverse effects on areas where there are natural and physical resources that have been scheduled in the Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character.</p>	<p>During construction, there will be a range of potential and actual adverse effects within the vicinity of the construction areas, but, with the adoption of proposed mitigation measures, any adverse effects on the values or sites included in the Natural Heritage and Natural Resource overlays will be temporary in nature and can be appropriately managed.</p>
Policy E11.3(3)	<p>Manage the impact on Mana Whenua cultural heritage that are discovered undertaking land disturbance by:</p> <ul style="list-style-type: none"> (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 <p>undertaking appropriate measures to avoid adverse effects. Where adverse effects cannot be avoided, effects are remedied or mitigated.</p>	<p>Protocols for the management of accidental discoveries of archaeological material have been provided in the draft conditions (refer Appendix F)</p>
Objective E15.2(1)	<p>Ecosystem services and indigenous biological diversity values, particularly in sensitive environments, and areas of contiguous indigenous vegetation cover,</p>	<p>It is anticipated that, during construction it is likely that there will be adverse effects on the natural character of the coastal environment associated with construction activities (e.g. the establishment of construction sites, vegetation</p>

Reference	Full text	Assessment
	are maintained or enhanced while providing for appropriate subdivision, use and development.	removal, and permanent structures in the vicinity of the coastal environment). With the exception of the pump stations, most of these are considered to be temporary in nature. Effects upon terrestrial ecosystems from construction activities primarily relate to vegetation clearance. A range of measures are therefore proposed such as replanting, avoiding vegetation clearance during peak bird breeding season where practicable and salvaging lizards prior to clearance commencing
Policy E15.3(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.	Refer above.
Policy E15.3(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.	Refer above.
Policy 15.3(7)	Manage any adverse effects from the use, maintenance, upgrading and development of infrastructure in accordance with the policies in E15.3, recognising that it is not always practicable to locate or design infrastructure to avoid areas with indigenous biodiversity values.	Refer above.
Objective E16.2(1)	Trees in open space zones that contribute to cultural, amenity, landscape and ecological values are protected.	The proposed works will require the removal of areas of vegetation, individual and groups of trees, works within the dripline of trees, and associated pruning. Watercare will continue to consult with PSR on the works required and the proposed mitigation in open space zones.
Policy E16.3(2)	Manage trees within open space zones to protect their cultural, amenity, landscape and ecological values, while acknowledging that multiple uses occur in open space areas.	Refer above.
Objective E18.2(1)	The natural characteristics and qualities that contribute to the natural character of the coastal environment are maintained while providing for subdivision, use and development.	There will be temporary adverse effects on the coastal environment resulting from construction activities which may result in temporary adverse effects on the form of the coastal environment. However, once reinstated, it is considered that the Project will not result in adverse effects on integrity, form, functioning and resilience of the coastal environment. Vegetation within SEA_T_SEA_T_8319 at the eastern abutment of the Greenhithe Bridge supports suitable potential habitat for at least five indigenous lizard species, four of which have a National threat classification of 'At Risk'. Threat rankings for some of these species, particularly those 'At Risk', may increase over the next 20 years. It is noted that the forest gecko, copper skink and ornate skink have been recorded from SEA_T_8319. The vegetation

Reference	Full text	Assessment
		<p>also has the potential to support roosting and nesting habitat for a range of common native bird species.</p> <p>Technical Report D recommends that preclearance surveys for lizards and nesting birds be undertaken where they have been identified as potentially present, and that an Ecological Management Plan should be prepared to address the potential presence and management of geckos and /or skinks within these areas.</p> <p>Through the adoption of proposed mitigation measures, it is considered that the Project will be consistent with this objective.</p>
Policy E18.3(1)	<p>Manage subdivision, use and development of land adjoining scheduled outstanding natural character or high natural character areas that have a biophysical or visual linkage with the scheduled area to:</p> <ul style="list-style-type: none"> (a) avoid adverse effects on the natural characteristics and qualities that contribute to the natural character values of outstanding natural character areas; and (b) avoid significant adverse effects, and avoid, remedy or mitigate other adverse effects, on the characteristics and qualities that contribute to the natural character values of high natural character areas. 	Refer above.
Policy E18.3(3)	<p>Manage the effects of subdivision, use and development in the coastal environment to avoid significant adverse effects, and avoid, remedy or mitigate other adverse effects, on the characteristics and qualities that contribute to natural character values, taking into account:</p> <ul style="list-style-type: none"> (a) the location, scale and design of the proposed subdivision, use or development; (b) the extent of anthropogenic changes to landform, vegetation, coastal processes and water movement; (c) the presence or absence of structures, buildings or infrastructure; (d) the temporary or permanent nature of any adverse effects; (e) the physical and visual integrity of the area, and the natural processes of the location; (f) the intactness of any areas of significant vegetation, and vegetative patterns; (g) the physical, visual and experiential values that contribute significantly to the wilderness and scenic values of the area; 	Refer above.

Reference	Full text	Assessment
	<p>(h) the integrity of landforms, geological features and associated natural processes, including sensitive landforms such as ridgelines, headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs, streams, rivers and surf breaks;</p> <p>(i) the natural characteristics and qualities that exist or operate across mean high water spring and land in the coastal environment, including processes of sediment transport, patterns of erosion and deposition, substrate composition and movement of biota, including between marine and freshwater environments; and</p> <p>(j) the functional or operational need for infrastructure to be located in a particular area.</p>	
Objective E24.2(2)	The adverse effects of outdoor lighting on the environment and safety of road users are limited.	With respect to the design of any above ground structures (and associated lighting) refer to Technical Report F.
Policy E24.3(2)	Control the intensity, location and direction of artificial lighting to avoid significant glare and light spill onto adjacent sites, maintain safety for road users and minimise the loss of night sky viewing.	With respect to the design of any above ground structures (and associated lighting) refer to Technical Report F.
Objective E25.2(1)	People are protected from unreasonable levels of noise and vibration.	A number of noise and vibration mitigation measure will be set out in the Construction Noise and Vibration Management Plan. Other mitigations will include fitting mufflers to trucks, good site management, maintenance of equipment to a high level, the replacement of audible reversing alarms with visual or lower noise broadband audible reversing alarms, the use of noise barriers and through the increased vigilance of heavy equipment operators.
Objective E25.2(2)	The amenity values of residential zones are protected from unreasonable noise and vibration, particularly at night.	Refer above.
Policy E25.3(2)	Minimise, where practicable, noise and vibration at its source or on the site from which it is generated to mitigate adverse effects on adjacent sites.	Refer above.
Policy E25.3(10)	<p>Avoid, remedy or mitigate the adverse effects of noise and vibration from construction, maintenance and demolition activities while having regard to:</p> <p>(a) the sensitivity of the receiving environment; and</p> <p>(b) the proposed duration and hours of operation of the activity; and</p> <p>(c) the practicability of complying with permitted noise and vibration standards</p>	Refer above.
Objective E26.2.1(1)	The benefits of infrastructure are recognised.	The increasing urban development in the Service Catchment area requires additional wastewater conveyance and treatment infrastructure to service this growth. The construction and operation of the Project will therefore provide infrastructure that supports the economic and social wellbeing of the region.

Reference	Full text	Assessment
		<p>Watercare’s service objectives require development of resilient assets to meet required service delivery standards and foreseeable future needs. This includes providing sufficient capacity to convey and treat wastewater.</p> <p>Once completed the Project will facilitate the continued effective operation of the wastewater network generally, and provide capacity in the wastewater network for future growth and development in the Auckland region. This will also help to prevent further major wastewater overflows by providing appropriate infrastructure.</p> <p>Watercare will maintain and enhance the wastewater infrastructure for the northern Auckland Region by implementing the Project. This will ensure the long-term integrity for the expected population increase over the next 30 years.</p> <p>The proposed designation will safeguard the wastewater pipeline route, enabling these future communities to be serviced by the city’s sewage treatment facilities, controlling discharges and overflows – meeting community and freshwater health outcomes.</p>
Objective E26.2.1(2)	The value of investment in infrastructure is recognised.	Refer above.
Objective E26.2.1(3)	Safe, efficient and secure infrastructure is enabled, to service the needs of existing and authorised proposed subdivision, use and development.	<p>The designation will give Watercare the capability to undertake construction as things change in the network, and will give developers and Auckland Council certainty that critical infrastructure will be provided. This also provides assurance that the areas being developed will be serviced (or have the ability to be serviced/connected to), supporting residential and business growth.</p> <p>The provision of infrastructure to service growth in the area is essential in order to enable the people and communities of those areas to provide for their social and economic wellbeing and for their health and safety by providing for appropriate conveyance of sewage to the Rosedale WWTP.</p>
Objective E26.2.1(4)	Development, operation, maintenance, repair, replacement, renewal, upgrading and removal of infrastructure is enabled.	The NoRs will enable the development, operation, maintenance, and any repairs, replacements/renewals and upgrading necessary.
Objective E26.2.1(5)	The resilience of infrastructure is improved and continuity of service is enabled.	Once completed the Project will facilitate the continued effective operation of the wastewater network generally, and provide capacity in the wastewater network for future growth and development in the Auckland region.

Reference	Full text	Assessment
Objective E26.2.1(6)	Infrastructure is appropriately protected from incompatible subdivision, use and development, and reverse sensitivity effects.	<p>The proposed designation will safeguard the wastewater pipeline route, enabling these future communities to be serviced by the city's sewage treatment facilities, controlling discharges and overflows – meeting community and freshwater health outcomes.</p> <p>The designation provides a statutory mechanism to implement the works and protect from potential reverse sensitivity effects.</p>
Objective E26.2.1(9)	The adverse effects of infrastructure are avoided, remedied or mitigated.	During construction it is likely that there will be adverse effects on the natural character of the coastal environment. Adverse effects are associated with construction activities (e.g. the presence of the drilling rig and vegetation removal). These adverse effects are considered to be temporary and not significant, having regard to proposed mitigation. There are not considered to be any significant adverse effects on the natural character associated with permanent works.
Policy E26.2.2(1)	<p>Recognise the social, economic, cultural and environmental benefits that infrastructure provides, including:</p> <ul style="list-style-type: none"> (a) enabling enhancement of the quality of life and standard of living for people and communities; (b) providing for public health and safety; (c) enabling the functioning of businesses; (d) enabling economic growth; (e) enabling growth and development; (f) protecting and enhancing the environment; enabling the transportation of freight, goods, people; and (g) enabling interaction and communication 	<p>The Project constitutes an integrated and cost effective solution for the wastewater network, addressing existing issues within the network and providing sufficient capacity to provide for increased growth in the Service Catchment.</p> <p>Once completed, the Project will provide the following key benefits, which are seen as positive benefits:</p> <ul style="list-style-type: none"> a. The provision of capacity in the wastewater network for future growth and development in Auckland; b. Reducing the potential for untreated wastewater overflows from the network by providing appropriate infrastructure to service growth; c. Positive effects on public health and the environment through the continued effective operation of the wastewater network generally.
Policy E26.2.2(2)	<p>Provide for the development, operation, maintenance, repair, upgrade and removal of infrastructure throughout Auckland by recognising:</p> <ul style="list-style-type: none"> (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; 	Refer above.

Reference	Full text	Assessment
	<ul style="list-style-type: none"> (e) the need to quickly restore disrupted services; and (f) its role in servicing existing, consented and planned development. 	
Policy E26.2.2(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.	Refer above.
Policy E26.2.2(4)	<p>Require the development, operation, maintenance, repair, upgrading and removal of infrastructure to avoid, remedy or mitigate adverse effects, including, on the:</p> <ul style="list-style-type: none"> (a) health, well-being and safety of people and communities, including nuisance from noise, vibration, dust and odour emissions and light spill; (b) safe and efficient operation of other infrastructure; (c) amenity values of the streetscape and adjoining properties; (d) environment from temporary and ongoing discharges; and (e) values for which a site has been scheduled or incorporated in an overlay. 	Refer above.
Policy E26.2.2(5)	<p>Consider the following matters when assessing the effects of infrastructure:</p> <ul style="list-style-type: none"> (a) the degree to which the environment has already been modified; (b) the nature, duration, timing and frequency of the adverse effects; (c) the impact on the network and levels of service if the work is not undertaken; (d) the need for the infrastructure in the context of the wider network; and (e) the benefits provided by the infrastructure to the communities within Auckland and beyond. 	<p>With respect to points (a) to (e):</p> <ul style="list-style-type: none"> a. Refer to Section 6 and Section 10 of the AEE b. Refer to Section 3, 5 and 7, and the Technical Reports appended to the AEE c. Refer to Section 2 of the AEE d. Refer above
Policy E26.2.2(6)	<p>Consider the following matters where new infrastructure or major upgrades to infrastructure are proposed within areas that have been scheduled in the Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character:</p> <ul style="list-style-type: none"> (a) the economic, cultural and social benefits derived from infrastructure and the adverse effects of not providing the infrastructure; (b) whether the infrastructure has a functional or operational need to be located in or traverse the proposed location; 	<p>With respect to the following matters:</p> <ul style="list-style-type: none"> (a) Refer to Section 10.2 and 13 of the AEE; (b) Refer to Section 6 and Appendix A of the AEE; (c) As the Project is linear infrastructure, connections through such areas may be required; (d) Refer to Appendix A of the AEE; (e) An assessment of effects is included in Section 10 of the AEE; (f) Refer to Section 2 of the AEE. The Project will enable the planned growth and intensification of Auckland;

Reference	Full text	Assessment
	<ul style="list-style-type: none"> (c) the need for utility connections across or through such areas to enable an effective and efficient network; (d) whether there are any practicable alternative locations, routes or designs, which would avoid, or reduce adverse effects on the values of those places, while having regard to E26.2.2(6)(a) - (c); (e) the extent of existing adverse effects and potential cumulative adverse effects; (f) how the proposed infrastructure contributes to the strategic form or function, or enables the planned growth and intensification, of Auckland; (g) the type, scale and extent of adverse effects on the identified values of the area or feature, taking into account: <ul style="list-style-type: none"> (i) scheduled sites and places of significance and value to Mana Whenua; (ii) significant public open space areas, including harbours; (iii) hilltops and high points that are publicly accessible scenic lookouts; (iv) high-use recreation areas; (iv) natural ecosystems and habitats; and (v) the extent to which the proposed infrastructure or upgrade can avoid adverse effects on the values of the area, and where these adverse effects cannot practicably be avoided, then the extent to which adverse effects on the values of the area can be appropriately remedied or mitigated. (h) whether adverse effects on the identified values of the area or feature must be avoided pursuant to any national policy statement, national environmental standard, or regional policy statement. 	<ul style="list-style-type: none"> (g) Refer to Section 10 of the AEE; (h) Refer to Section 10 of the AEE.
Policy E26.2.2(8)	Encourage new linear infrastructure to be located in roads, and where practicable within the road reserve adjacent to the carriage way.	Where practicable, the proposed pipeline will be co-located within the road reserve while avoiding impacts on other network utilities. Watercare will continue to engage with network utility operators to confirm these locations.
Policy E26.2.2(11)	Provide flexibility for infrastructure operators to use new technological advances that: <ul style="list-style-type: none"> (a) improve access to, and efficient use of services; (b) allow for the re-use of redundant services and structures where appropriate; (c) result in environmental benefits and enhancements; and (d) utilise renewable resources. 	Given the long timeframe until construction, new technologies may become available. Notwithstanding this, it is considered that a reasonable degree of confidence can be had with regards to trenched and trenchless methods. This is demonstrated on the Project Drawings where anticipated construction methods are shown in different colours. It is considered that this establishes an effects envelope (i.e. trenched versus trenchless) with regards to the installation of pipelines. Overall if construction techniques change, they will be within the envelope of effects assessed in this Report.
Objective E30.2(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	Technical Report C notes that there is potential to encounter contaminated soil during the works, and that there is a very low to moderate risk for significant contamination to be encountered. Further testing to establish contamination

Reference	Full text	Assessment
	health and to enable land to be used for suitable activities now and in the future.	levels within sections of the designation where potentially contaminating activities have been identified will be undertaken once the location of excavation works has been established.
Policy E30.3(2)	<p>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:</p> <ul style="list-style-type: none"> (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. 	Refer above.
Objective H7.2(2)	The adverse effects of use and development of open space areas on residents, communities and the environment are avoided, remedied or mitigated.	<p>Permanent visual and amenity effects with public open spaces will predominantly result from the removal of vegetation and the presence of built structures (the pump station at No. 56 The Concourse, the pump stations within Wainoni Park, a pipe bridge (crossing Manutewhau Creek, and other aboveground air treatment facilities). Other surface features such as manhole covers, are proposed to sit flush within road corridors and open grass areas.</p> <p>Any potential adverse effects that do arise will be managed through the development and implementation of a Construction Management Plan (health and safety of communities), Landscape and Visual Management Plan (amenity values), and Reinstatement Plan (amenity values).</p> <p>Subject to the mitigation measures proposed, the majority of the adverse landscape and visual effects anticipated in the construction and operation</p>

Reference	Full text	Assessment
		phase of the Project can be managed and mitigated to result in low (less than minor) adverse effects overall.
Policy H7.3(4)	Enable the construction operation, maintenance, repair and minor upgrading of infrastructure located on open spaces	The NoRs will enable the construction operation, maintenance of infrastructure located on open spaces.
Objective H7.4.2(1)	The natural, ecological, landscape, Mana Whenua and historic heritage values of the zone are enhanced and protected from adverse effects of use and development.	During construction, there may be a range of potential and actual adverse effect. However, with the adoption of proposed mitigation measures, it is anticipated that any adverse effects on the values or sites will be temporary in nature and can be appropriately managed.
Objective H7.4.2(2)	Use and development complements and protects the conservation values and natural qualities of the zone.	Refer above.
Policy H7.4.3(1)	Enable appropriate use and development that conserves, protects and enhances the natural, landscape, and historic heritage values of the zone.	Refer above.
Policy H7.4.3(2)	Protect and enhance ecological values, including habitats, significant ecological areas and any unique features present within the zone.	<p>Technical Report D recommends that preclearance surveys for lizards and nesting birds be undertaken where they have been identified as potentially present, and that an Ecological Management Plan should be prepared to address the potential presence and management of geckos and /or skinks within these areas.</p> <p>Through the adoption of proposed mitigation measures, it is considered that the Project will be consistent with this objective.</p>
Policy H7.4.3(3)	Manage the use of the open space to protect and enhance Mana Whenua values, and enable appropriate activities which support and re-establish the relationship of Mana Whenua and their culture and traditions to their ancestral lands, water, sites, wāhi tapu and other taonga.	Refer above.
Policy H7.4.3(4)	Limit activities, buildings and structures to those necessary to maintain or enhance the use or values of the zone	Refer above, and to Technical Report F.
Policy H7.4.3(5)	Locate and design new buildings, structures and additions to: (a) complement the context, character and values of the zone; and (b) ensure that there is minimal disturbance to existing landform, vegetation and vulnerable habitats.	Refer above, and to Technical Report F.
Policy H7.4.3(7)	Require areas surrounding buildings, structures and parking areas to be landscaped to mitigate visual impacts.	Refer above.
Policy H7.5.3(2)	Maintain or enhance the natural character values of open spaces by retaining significant vegetation (where appropriate and practical) and through weed removal, new planting and landscaping.	<p>Refer above.</p> <p>A provision that plant species to be used should be appropriate to the area, and be chosen for site-specific conditions, has been included in the proposed conditions. Where possible, these will be eco-sourced.</p>

Reference	Full text	Assessment
Policy H7.5.3(4)	Limit buildings, structures and activities to those necessary to enhance people's ability to use and enjoy the open space for informal recreation.	Refer above.
Policy H7.5.3(5)	Locate and design buildings and structures to: <ul style="list-style-type: none"> (a) complement the open and spacious character, function and amenity values of the zone; (b) maintain public accessibility and minimise areas for exclusive use; and (c) protect any natural or historic heritage values. 	Refer above.
Policy H7.6.3(3)	Design and locate buildings and structures (including additions) to be compatible with the surrounding environment in which they are located, particularly residential environments, and to avoid or mitigate any adverse effects, including visual, dominance, overlooking and shading.	Refer above.