

2 November 2022

Hamilton City Council

For: Hamilton City Council

Email: s 9(2)(a)

CC - s 9(2)(a)

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Dear Mark Davey

## **FAST TRACKING THE ROTOKAURI GREENWAY CORRIDOR AND ROTOKAURI ARTERIAL**

### **1. INTRODUCTION**

- 1.1 As you know, Hounsell Holdings Limited (“HHL”) has contracted with Hamilton City Council to project manage the design and obtain resource consents for the Rotokauri Greenway Corridor (“RGC”), Rotokauri Arterial Road (“RAR”) and supplementary water services infrastructure (together the “Project”) through a private development agreement with HHL.
- 1.2 HHL is planning to lodge a request with the Ministry for the Environment to have the Project fast-tracked under the COVID-19 Recovery (Fast-track Consenting) Act 2020 (‘Fast-track Act’).
- 1.3 We understand that you may have already spoken to Adriaan Vlok from HHL and/or Fraser McNutt from Barker & Associates about the Project and fast tracking. We confirm that the application for fast track excludes housing and urban development. We intend to follow through with HCC’s PGU for the relevant development consents.
- 1.4 We have confirmed the various HCC & WRC consent triggers that would form the Fast Track Application. Please see **attachment A**
- 1.5 Works within the RGC that fall inside the designation are subject to the relevant NOR conditions and the corresponding Outline Plan process. This is a separate suite of work and process that falls outside of the fast track application.
- 1.6 In order to assist that application, we would like HCC to confirm that:
  - a. *HCC supports HHL seeking consents through the Fast-track Act;*
  - b. *All of the infrastructure that forms part of the Project will ultimately be vested in and operated by HCC, and all of the designs have to meet HCC’s specifications as per the PDA;*

- c. *The RAR is regionally significant infrastructure as it is one of the significant transport corridors as defined in Map 25 and 26; and*
- d. *The purpose of the RGC is stormwater collection, detention, and conveyance – all of which are aspects of public flood control.*

1.7 The purpose of this letter then, is to seek confirmation from you:

- (a) That HCC supports the application using the fast-track process; and
- (b) HCC agrees that the RGC and the RAR are ‘specified infrastructure’ under the National Policy Statement on Freshwater Management (“NPSFM”).
- (c) HCC confirms that HHL has been contracted on behalf of HCC to project manage the design and obtain resource consents for the RGC, RAR and supplementary water services infrastructure. While an agreement regarding construction of those assets has not yet been reached – all of the assets have to be designed to a specification that will enable HCC to either construct the Project itself or accept the assets being vested in HCC having been constructed by a third party (or a combination thereof). As a result the assets arising from construction of the Project will be owned and operated by HCC. HB: this confirmation is solely for the purpose of confirming that the consent applications are seeking authorisation to construct infrastructure which will ultimately be owned and operated by a ‘local authority’ for the purposes of the NPSFM definitions.

1.8 We would be happy to discuss any matters arising and look forward to hearing from you as soon as possible. For the purposes of fast tracking, we do not require a detailed response, just an acknowledgement of this letter, and confirmation of your support of fast tracking and that the Project is specified infrastructure.

1.9 In light of the above, in this letter we address the following:

- (a) The definitions provided in the National Policy Statement on Freshwater Management (“NPSFM”) (section 3);
- (b) Lifeline utility definitions (section 4);
- (c) Regionally significant infrastructure (section 5);
- (d) Public flood control (section 6)

## 2. **SUMMARY**

2.1 For the purposes of the NES-FW, the RAR and RGC are considered ‘specified infrastructure’, because:

- (a) The RAR under the NPS-FW is “infrastructure that delivers a service operated by a lifeline utility”, because:

- (i) The Civil Defence Emergency Management Act 2002 says that lifeline utilities provide for the disposal of storm water, as well as for road networks;
- (b) The RAR is also 'regionally significant infrastructure' under the NPS-FW, because:
  - (i) The Waikato Regional Policy statement states that 'significant transport corridors as defined in Map 25 and 26' are regionally significant infrastructure; and
  - (ii) The RAR is a 'specified future corridor' on Map 26.
- (c) The RGC is also designated for stormwater collection, detention and conveyance purposes and therefore also falls under the public drainage category.
- (d) The RGC is a designated corridor, administered by Hamilton City Council as the Requiring Authority.

### 3. NPS-FM DEFINITIONS

3.1 The NPSFM defines "specified infrastructure" as:

*"(a) infrastructure that delivers a service operated by a lifeline utility (as defined in the Civil Defence Emergency Management Act 2002)*

*(b) regionally significant infrastructure identified as such in a regional policy statement or regional plan*

*(c) any public flood control, flood protection, or drainage works carried out:*

*(i) by or on behalf of a local authority, including works carried out for the purposes set out in section 133 of the Soil Conservation and Rivers Control Act 1941; or*

*(ii) for the purpose of drainage by drainage districts under the Land Drainage Act 1908."*

*(emphasis added)*

### 4. LIFELINE UTILITY DEFINITIONS

4.1 We consider that the Project and its individual components are a lifeline utility, for the purposes of the NESF. The relevant definition from the NPS-FM is:

*"(a) infrastructure that delivers a service operated by a lifeline utility (as defined in the 'Act')."*

4.2 Under s4 of the Civil Defence Emergency Management Act 2002, "lifeline utility" means:

*"...an entity named or described in Part A of Schedule 1, or that carries on a business described in Part B of Schedule 1."*

- 4.3 Part B of Schedule 1 relates to entities that carry on certain business. The most relevant entities are:

*“(4) An entity that provides a waste water or sewerage network or that disposes of sewage or storm water..*

...

*(6) An entity that provides a road network (including State highways).”  
(emphasis added)*

- 4.4 Hamilton City Council obviously provides wastewater drainage, water supply and a road network and the RGC, RAR and water infrastructure will all ultimately be vested in Hamilton City Council prior to becoming operational.

## 5. REGIONALLY SIGNIFICANT INFRASTRUCTURE

- 5.1 It appears to us that the RAR is also, for the purposes of the NESF, ‘regionally significant infrastructure’. The relevant definition from the NPSM is:

*“(b) regionally significant infrastructure identified as such in a regional policy statement or regional plan.”*

- 5.2 The relevant Regional Policy Statement (“RPS”) is the Waikato RPS, which refers to a non-exhaustive list of examples which may be defined as ‘regionally significant infrastructure’. The most relevant example in this case is:<sup>1</sup>

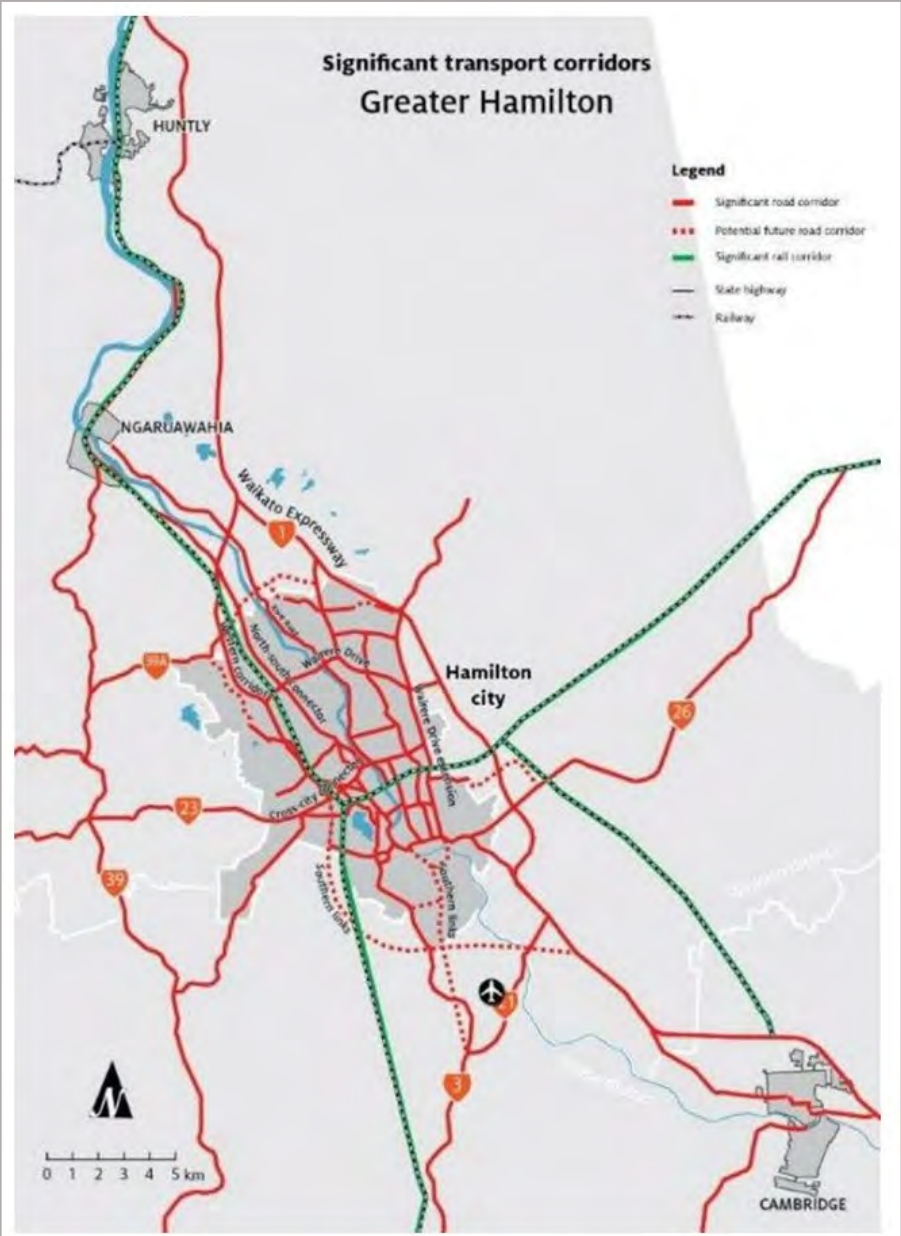
*“g. significant transport corridors as defined in Map 25 and 26”.*

- 5.3 Map 26 is included below, with a zoomed in extract and yellow highlighted section:<sup>2</sup>

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<sup>1</sup> “Waikato RPS - Part 1 Introduction and General Provisions”, Waikato Regional Council, (updated 19 December 2018), p10.

<sup>2</sup> Ibid, “Waikato RPS – Part 5 Appendices and Maps”, 5.2.8 p3.



Map 26: Significant transport corridors (Greater Hamilton)



5.4 It is our understanding that the RAR is the potential future road corridor indicated to the South/West of the Western corridor, and to the east of lake Rotokauri.

5.5 If this is the case, the RAR is 'regionally significant infrastructure' under the Waikato RPS. Therefore, it would be 'specified infrastructure' under the NPSFM.

**6. ROTOKAURI GREENWAY CORRIDOR IS PUBLIC FLOOD CONTROL**

6.1 We consider that the RGC public flood control. The relevant definition from the NPSFM is:

*"(c) any public flood control, flood protection, or drainage works carried out:*

*(i) by or on behalf of a local authority..."*

6.2 The RGC is listed as designation A114 in the Hamilton City Council District Plan.<sup>3</sup> Condition 1 of the designation<sup>4</sup> states that the purpose of the designation is for stormwater collection, detention and conveyance purposes – all of which relate to flood control, flood protection and drainage.

6.3 As a result, the RGC is 'specified infrastructure' for the purposes of the NESF.

<sup>3</sup> <https://hamilton.isoplan.co.nz/eplan/rules/0/24/0/4601/0/67>

<sup>4</sup> [https://isoplاندocs.s3-ap-southeast-2.amazonaws.com/figures/hamilton/1828/Designation\\_A114\\_amended\\_March22.pdf](https://isoplاندocs.s3-ap-southeast-2.amazonaws.com/figures/hamilton/1828/Designation_A114_amended_March22.pdf)

6.4 We hope that you share our views on the definition of the RAR and the RGC as 'specified infrastructure' for the purposes of the NESF. We are happy to discuss further with you if necessary.

Yours sincerely | Nāku noa, nā

**Barker & Associates Limited**

A handwritten signature in black ink, appearing to read 'Fraser McNutt', with a long horizontal flourish extending to the right.

**Fraser McNutt**

Partner

s 9(2)(a)

# Attachment 1 – Rotokauri Greenway Consent Requirements

## 1.0 Summary

Activity	Consents anticipated	Technical assessments required
<b>Regional consents</b>		
Temporary and permanent diversion of surface water including the Rotokauri Drain	<ul style="list-style-type: none"> <li>Discretionary Activity under WRP Rule 3.6.4.13</li> <li>Discretionary Activity under Regulation 45 of the NESFW</li> </ul>	<ul style="list-style-type: none"> <li>Hydrological/stormwater &amp; flooding including effects on Lake Rotokauri and the downstream receiving environment</li> <li>Groundwater / hydrogeology including effects on wetlands and settlement</li> <li>Aquatic and terrestrial (wetland) ecology including wetland delineation</li> <li>Erosion and scour</li> </ul>
Permanent damming of surface water (attenuation of flows in the attenuation basins)	<ul style="list-style-type: none"> <li>Controlled Activity under WRP Rule 3.6.4.9 (for offline damming of water)</li> <li>Discretionary Activity under WRP Rule 3.6.4.14 (for online damming of water)</li> <li>Discretionary Activity under Regulation 45 of the NESFW</li> </ul>	<ul style="list-style-type: none"> <li>Hydrological/stormwater &amp; flooding</li> <li>Groundwater / hydrogeology including effects on wetlands and effects associated with large dams</li> <li>Aquatic and terrestrial (wetland) ecology including wetland delineation</li> <li>Dam break risk (TBC)</li> </ul>
Permanent damming and diversion of groundwater (changes to groundwater flows resulting from creation of the greenway)	<ul style="list-style-type: none"> <li>Discretionary Activity under WRP Rule 3.6.4.13</li> <li>Discretionary Activity under Regulation 45 of the NESFW</li> </ul>	<ul style="list-style-type: none"> <li>Groundwater / hydrogeology including effects on surface water bodies/wetlands, other groundwater users, mobilisation of contaminants, and settlement</li> <li>Aquatic and terrestrial (wetland) ecology including wetland delineation</li> </ul>
Temporary water take (for dewatering/lowering of the groundwater table during construction)	<ul style="list-style-type: none"> <li>Controlled activity under WRP Rule 3.8.4.7 (drilling)</li> <li>Discretionary Activity under WRP Rule 3.3.4.24 (groundwater take)</li> <li>Discretionary Activity under WRP Rule 3.3.4.23 (net-zero surface water take) and/or Non-complying Activity under WRP Rule 3.3.4.26 (surface water take)</li> <li>Discretionary Activity under WRP Rule 3.5.4.5 (associated discharges)</li> <li>Discretionary Activity under Regulation 45 of the NESFW</li> </ul>	<ul style="list-style-type: none"> <li>Groundwater / hydrogeology including effects on surface water bodies/wetlands, other groundwater users, mobilisation of contaminants, aquifer cross-contamination, and settlement)</li> <li>Water quality and quantity</li> <li>Aquatic and terrestrial (wetland) ecology including wetland delineation</li> </ul>
Earthworks and cleanfill disposal	<ul style="list-style-type: none"> <li>Discretionary Activity under WRP Rule 5.1.4.13 (for soil disturbance and vegetation clearance outside of a high risk erosion area where the conditions outlined in Section 5.1.5 may not be met)</li> <li>Discretionary Activity under WRP Rule 5.1.4.15 (for soil disturbance and vegetation clearance within a high risk erosion area exceeding 1,000m<sup>3</sup> in volume and 2.0ha in area)</li> <li>Controlled Activity under WRP Rule 5.2.5.2 and/or Discretionary Activity under Rule 5.2.5.3 (for cleanfill in or outside of high risk areas)</li> <li>Discretionary Activity under Regulation 45 of the NESFW</li> </ul>	<ul style="list-style-type: none"> <li>Erosion and sediment effects</li> <li>Dust management</li> <li>Land stability</li> <li>Hydrological/stormwater &amp; flooding</li> <li>Groundwater / hydrogeology including effects on wetlands</li> <li>Terrestrial ecology (including lizards, bats, birds, wetlands/wetland delineation)</li> </ul>
Culverts	<ul style="list-style-type: none"> <li>Permitted Activity under WRP Rule 4.2.9.2</li> <li>Controlled Activity under WRP Rule 4.2.9.3 (where permitted activity standards cannot be met)</li> <li>Discretionary Activity under Regulation 71 of the NESFW</li> </ul>	<ul style="list-style-type: none"> <li>Hydrological/stormwater &amp; flooding</li> <li>Fish passage</li> <li>Aquatic ecology</li> <li>Erosion and sediment effects/water quality/erosion and scour</li> </ul>
Temporary coffer dams associated with diversion of surface water and culvert construction	<ul style="list-style-type: none"> <li>Controlled Activity under WRP Rule 3.6.4.17</li> </ul>	<ul style="list-style-type: none"> <li>Hydrological/stormwater &amp; flooding</li> <li>Fish passage</li> <li>Aquatic ecology</li> <li>Erosion and sediment effects/water quality/erosion and scour</li> </ul>
Geotechnical and groundwater investigations	<ul style="list-style-type: none"> <li>Controlled Activity under WRP Rule 3.8.4.7 (drilling)</li> <li>Discretionary Activity under WRP Rule 3.3.4.24 (groundwater take)</li> <li>Controlled Activity under WRP Rule 3.6.8.2 (well and aquifer testing discharges)</li> </ul>	<ul style="list-style-type: none"> <li>Groundwater / hydrogeology including effects on surface water bodies, other groundwater users, mobilisation of contaminants, and aquifer cross-contamination)</li> <li>Water quality and quantity</li> </ul>



Other consents and approvals		
Earthworks	<ul style="list-style-type: none"> <li>Hamilton City Council</li> <li>Rule 25.2.4.1h</li> </ul>	<ul style="list-style-type: none"> <li>Engineering Plans</li> </ul>
New Minor Arterial	<ul style="list-style-type: none"> <li>Hamilton City Council</li> <li>Restricted Discretionary Activity under Rule 25.14.3(a) and (b)</li> </ul>	<ul style="list-style-type: none"> <li>Broad Integrated Transport Assessment</li> </ul>
Works on potentially contaminated land	<ul style="list-style-type: none"> <li>Hamilton City Council</li> <li>Restricted Discretionary Activity under Regulation 10 of the NESCS</li> </ul>	<ul style="list-style-type: none"> <li>Supported by Detailed Site Investigation (Contamination)</li> <li>If required, Remedial Action Plan</li> </ul>
Works on land identified as high risk for archaeological sites	<ul style="list-style-type: none"> <li>Archaeological authority from Heritage NZ for any earthworks to the west of Exelby Road</li> </ul>	<ul style="list-style-type: none"> <li>Archaeology</li> </ul>
Capture and relocation of wildlife	<ul style="list-style-type: none"> <li>Wildlife permits from Department of Conservation will be required for capture and relocation of species during both investigation works and construction activities</li> </ul>	<ul style="list-style-type: none"> <li>Ecology</li> </ul>
Works within the designation	<ul style="list-style-type: none"> <li>Outline plan(s) required with staging to be confirmed during design</li> </ul>	

## 2.0 Consents under the Waikato Regional Plan

### 2.1 Temporary and permanent damming and diversion of surface water (Rotokauri Drain and other surface water bodies)

Rule	Rule text	Comment/assessment
<p><u>Rule 3.6.4.8</u> Permitted Activity Rule – Diversions and Discharges in Artificial Watercourses and Drainage Systems</p>	<p>Unless restricted by Rule 3.7.4.6, the diversion and any consequent discharge of water within an established artificial watercourse or drainage system, undertaken after the date of notification of this Plan is a permitted activity subject to the following conditions:</p> <ol style="list-style-type: none"> <li>The catchment area above the diversion shall not exceed two square kilometres.</li> <li>No discharge shall be made outside of the natural catchment of the drainage system.</li> <li>The activity shall be undertaken and structures maintained in a manner that does not increase adverse effects of flooding on any land or property owned or occupied by any person.</li> <li>The activity shall not disturb any archaeological site or waahi tapu as identified at the date of notification of this Plan, in any district plan, in the NZ Archaeological Association’s State Recording Scheme or by the Historic Place Trust except where Historic Places Trust approval has been obtained.</li> <li>In the event of any waahi tapu that is not subject to condition d) being identified by the Waikato Regional Council to the person undertaking the activity, the activity shall cease insofar as it may affect the waahi tapu. The activity shall not be recommenced without the approval of the Waikato Regional Council.</li> <li>Any discharge from construction works associated with the structure shall comply with the suspended solid standards as set out in Section 4.2.21.</li> <li>The structure shall provide for the safe passage of fish both upstream and downstream.</li> <li>Where the diversion occurs in a waterway classified as Indigenous Fisheries in the Water Management Class Maps the operator of the diversion shall notify the Waikato Regional Council of its location three weeks prior to the construction of the diversion.</li> <li>i. Any erosion occurring as a result of the activity shall be remedied as soon as practicable.</li> </ol>	<p>A key aspect of the project is the diversion of the Rotokauri Drain into the new Greenway Corridor. The Project will require a <b>permanent diversion as well as a series of temporary diversions</b> to facilitate a staged construction methodology.</p> <p>As noted above, the Rotokauri Drain could be considered an artificial watercourse; however, the catchment above the diversion exceeds 2km<sup>2</sup> (the Rotokauri Integrated Catchment Management Plan (ICMP) indicates that the entire catchment of the Rotokauri Drain is approximately 788 hectares in area1). The ICMP also indicates that historically the original, natural catchment of the system would have seen Lake Waiwhakareke and much of the Rotokauri Growth Cell draining to the Waikato River via wetlands around the margins of the lake and extending to the north rather than towards Lake Rotokauri. Therefore, Permitted Activity Rule 3.6.4.8 would be unlikely to apply regardless of the status of the watercourse.</p> <p>Therefore, diversion of the Rotokauri Drain will require consent as a <b>Discretionary Activity under Rule 3.6.4.13</b>.</p> <p>This also applies to any other diversion of water during construction or operation (such as diversion of groundwater).</p>
<p><u>Rule 3.6.4.13</u> Discretionary Activity Rule – Stopbanks, Diversions and any Associated Discharges of Water</p>	<p>Where the diversion and subsequent discharge of water does not comply with Rules 3.6.4.6, 3.6.4.7, 3.6.4.8, 4.2.9.1, 4.2.9.2 or 4.2.9.3 any:</p> <ol style="list-style-type: none"> <li>Damming or diversion of water by way of a stopbank, and</li> <li>Diversion of water, and</li> <li>The use, erection, reconstruction, placement, alteration or extension of any structure on or in the bed of a river or stream associated with the above activities that: <ol style="list-style-type: none"> <li>is undertaken after the date of notification of this Plan, or</li> <li>affects a Significant Geothermal Feature</li> </ol> </li> </ol>	

	<p>iii. does not occur in a cave system is a discretionary activity (requiring resource consent)</p>	
<p><u>Rule 3.6.4.17</u> Controlled Activity Rule – Cofferdam</p>	<p>The following activities:</p> <ol style="list-style-type: none"> <li>1. The temporary diversion of water, and</li> <li>2. The use, erection, reconstruction, placement, alteration or extension of a temporary diversion structure; and</li> <li>3. Any associated deposition of construction materials, and</li> <li>4. Any associated bed disturbance, and</li> <li>5. Any discharge of sediment associated with construction activities;</li> <li>6. in, on, under or over the bed of a river or lake for the purpose of maintaining an existing lawfully established structure are controlled activities (requiring resource consents) subject to the following standards and terms;             <ol style="list-style-type: none"> <li>a. The diversion structure shall be maintained in a structurally sound condition at all times.</li> <li>b. All construction materials and equipment shall be removed from the river or lake bed on the completion of the activity.</li> <li>c. No contaminants (including, but not limited to, oil, hydraulic fluids, petrol, diesel, other fuels, paint or solvents but excluding sediment) shall be released to water from the activity.</li> <li>d. The activity shall not disturb any archaeological site or waahi tapu as identified at the date of notification of this Plan, in any district plan, in the New Zealand Archaeological Association’s Site Recording Scheme, or by the Historic Places Trust, except where Historic Places Trust approval has been obtained.</li> <li>e. Any erosion occurring as a result of the structure shall be remedied as soon as practicable.</li> <li>f. Any structure built with materials not naturally present in the bed of the river shall be fixed in place to prevent it being washed away in the event of a flood.</li> <li>g. The entire structure shall be removed immediately after completion of the works that it was built to assist and the bed of the river or lake shall be reinstated to its original state.</li> <li>h. The Waikato Regional Council shall be notified of the commencement date of the works and of the removal date of the structure.</li> <li>i. The activity shall not affect Significant Geothermal Features.</li> </ol> </li> </ol>	<p>During construction, staging of diversion works will require the placement and use of temporary coffer dams and diversion structures as a <b>Controlled Activity under Rule 3.6.4.17</b>.</p>

*Information requirements for diverting of water*

<p>Section 8.1.2.7</p>	<ol style="list-style-type: none"> <li>a. Purpose for which water is to be diverted.</li> <li>b. Full description of existing works or works to be constructed and location of those works.</li> <li>c. Whether a qualified or experienced consultant is to be involved in the design and/or construction of the proposed works.</li> <li>d. Expected date of completion of any works to be constructed.</li> <li>e. The source of water.</li> <li>f. Description of the topography, soil type and vegetation, including vegetation that could be directly or indirectly affected by a change in water levels.</li> <li>g. Details of the diversion.</li> <li>h. What other options have been considered.</li> <li>i. What effects this activity will have on the environment.</li> </ol>	
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Effects to be addressed:  
Hydrological/groundwater effects (including those on Lake Rotokauri and any identified wetlands), water quantity, ecology, and hydraulics

2.2 Permanent damming of surface water (attenuation basins)

Rule	Rule text	Comment/assessment
<p><u>Rule 3.6.4.4</u> Permitted Activity Rule – Small Dams and Damming Water</p>	<ol style="list-style-type: none"> <li>1. The damming of water and its diversion, taking, and discharging related to its passage through, past or over the dam, in any off-stream area or ephemeral river or stream or artificial watercourse, and</li> <li>2. The use, erection, reconstruction, placement, alteration or extension of any associated structure in or on the bed of an ephemeral river or stream, where:</li> </ol>	<p>The Greenway Project includes attenuation of flows both within the Greenway (online attenuation) and prior to discharge into the Greenway (offline attenuation).</p>

	<ul style="list-style-type: none"> <li>i. the catchment area is less than one square kilometre (100 hectares), and</li> <li>ii. the maximum retained water depth in the pond is less than three metres, and</li> <li>iii. the dam retains not more than 20,000 cubic metres of water except that: <ul style="list-style-type: none"> <li>- the damming shall not affect Significant Geothermal Features</li> <li>- the dam shall not occur in a cave system</li> </ul> </li> </ul> <p>is a permitted activity subject to the following conditions:</p> <ul style="list-style-type: none"> <li>a. The dammed water is not a Natural State Water Body as identified in the Water Management Class Maps.</li> <li>b. The dammed water shall not raise water levels on neighbouring properties.</li> <li>c. Any erosion or scour as a result of the dam and associated discharges shall be remedied as soon as practicable.</li> <li>d. The damming or discharge of water from the dam shall not increase the potential for land instability.</li> <li>e. A spillway must be constructed to prevent the dam being overtopped, and the spillway shall be designed to pass the probable maximum flood.</li> <li>f. The spillway shall be constructed on underlying parent material.</li> <li>g. The activity shall not disturb any archaeological site or waahi tapu as identified at the date of notification of this Plan, in any district plan, in the NZ Archaeological Association’s Site Recording Scheme or by the Historic Places Trust except where Historic Places Trust approval has been obtained.</li> <li>h. In the event of any waahi tapu that is not subject to condition g) being identified by the Waikato Regional Council to the person undertaking the activity, the activity shall cease insofar as it may affect the waahi tapu. The activity shall not be recommenced without the approval of the Waikato Regional Council.</li> <li>i. The structure shall be maintained in a structurally sound condition at all times.</li> <li>j. Any discharge from construction works associated with the structure shall comply with the suspended solid standards as set out in Section 4.2.21.</li> </ul>	<p>Offline attenuation/damming (ie where an attenuation pond is provided for future stormwater flows prior to discharge into the main Greenway) will in some instances meet the requirements of <b>Permitted Activity Rule 3.6.4.4</b>.</p> <p>However, although management procedures will be put in place to seek compliance with the suspended solids standards outlined in Section 4.2.21; there may be times where the suspended solids concentrations are not achieved and therefore consent is should be sought on a precautionary basis as a <b>Controlled Activity under Rule 3.6.4.9</b>.</p> <p>In addition, there are five structures along the Greenway at road crossings (including the under construction Te Witnei Drive) that may meet the definition of a large dam. This will be subject to the development of detailed design but these structures will require consent as either as a <b>Controlled Activity under Rule 3.6.4.9</b> (where they are offline) or a <b>Discretionary Activity under Rule 3.6.4.14</b> (where they are online, as below).</p> <p>Online attenuation/damming (ie where an attenuation basin is provided on the Rotokauri Drain) could potentially meet the requirements of <b>Controlled Activity Rule 3.6.4.9</b>; however, it is recommended that the Rotokauri Drain is treated as an intermittent/perennial stream (heavily modified watercourse) and therefore consent would be required as a <b>Discretionary Activity under Rule 3.6.4.14</b>.</p>
<p><u>Rule 3.6.4.9</u> Controlled Activity Rule – Offstream Damming and Damming Ephemeral Streams and Damming of Artificial Watercourses</p>	<p>Unless authorised by Rule 3.6.4.4, the damming of water in any off-stream area, ephemeral river or stream or artificial watercourse, and any associated:</p> <ul style="list-style-type: none"> <li>1. Diversion, taking, and discharging of water related to the passage of water through, past, or over the dam, or</li> <li>2. Use, erection, reconstruction, placement, alteration or extension of any associated structure in or on the bed of an ephemeral river or stream;</li> </ul> <p>is a controlled activity (requiring resource consent) subject to the following standards and terms:</p> <ul style="list-style-type: none"> <li>a. The dammed water shall not raise water levels on neighbouring properties.</li> <li>b. Any erosion or scour as a result of the dam and associated discharges shall be remedied as soon as practicable.</li> <li>c. Spillways or other mechanisms shall be provided so that the dam can safely pass the probable maximum flood.</li> <li>d. The activity shall not disturb any archaeological site or waahi tapu as identified at the date of notification of this Plan, in any district plan, in the NZ Archaeological Association’s State Recording Scheme or by the Historic Place Trust except where Historic Places Trust approval has been obtained.</li> <li>e. In the event of any waahi tapu that is not subject to standard and term d) being identified by the Waikato Regional Council to the person undertaking the activity, the activity shall cease insofar as it may affect the waahi tapu. The activity shall not be recommenced without the approval of the Waikato Regional Council.</li> <li>f. The structure shall be maintained in a sound condition.</li> <li>g. The diversion and discharge does not affect Significant Geothermal Features.</li> <li>h. The dam does not occur in a cave system.</li> </ul>	
<p><u>Rule 3.6.4.14</u> Discretionary Activity Rule – New Dams/Damming of Water</p>	<p>Except as provided for by Rules 3.6.4.4, 3.6.4.9, 3.6.4.10 and 3.6.4.12 the following activities, if undertaken after the date of notification of this Plan:</p> <ul style="list-style-type: none"> <li>1. Damming of water and associated diversion, taking and discharging of water related to the passage of water through, or past or over the dam</li> <li>2. The use, erection, reconstruction, placement, alteration of extension of any structure in or on the bed of a river or stream associated with the above activities provided they do not:</li> </ul>	

	<ul style="list-style-type: none"> <li>a. occur in any perennial river or stream that is classified as Natural State in the Water Management Class Maps</li> <li>b. affect Significant Geothermal Features</li> </ul> <p>is a discretionary activity (requiring resource consent)</p>	
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*Information requirements for diverting of water*

Section 8.1.2.6	<ul style="list-style-type: none"> <li>a. Purpose for which water is to be dammed.</li> <li>b. Full description of existing works, or works to be constructed, and the location of the works.</li> <li>c. Whether a qualified and experience consultant is to be involved in the design and or construction of the proposed works.</li> <li>d. Expected date of completion of any works to be constructed.</li> <li>e. Source of water.</li> <li>f. Description of the topography, soil type and vegetation, including vegetation that could be directly or indirectly affected by a change in water levels.</li> <li>g. Sketch plan or design of dam.</li> <li>h. What other options have been considered.</li> <li>i. What effects this activity will have on the environment</li> </ul>	
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Effects to be addressed:  
Hydrological/groundwater effects (including those on Lake Rotokauri and any identified wetlands), water quantity, ecology, and hydraulics

2.3 Permanent damming and diversion of groundwater

Rule	Rule text	Comment/assessment
<p><u>Rule 3.6.4.13</u> Discretionary Activity Rule – Stopbanks, Diversions and any Associated Discharges of Water</p>	<p>Where the diversion and subsequent discharge of water does not comply with Rules 3.6.4.6, 3.6.4.7, 3.6.4.8, 4.2.9.1, 4.2.9.2 or 4.2.9.3 any:</p> <ul style="list-style-type: none"> <li>1. Damming or diversion of water by way of a stopbank, and</li> <li>2. Diversion of water, and</li> <li>3. The use, erection, reconstruction, placement, alteration or extension of any structure on or in the bed of a river or stream associated with the above activities that: <ul style="list-style-type: none"> <li>i. is undertaken after the date of notification of this Plan, or</li> <li>ii. affects a Significant Geothermal Feature</li> <li>iii. does not occur in a cave system;</li> </ul> </li> </ul> <p>is a discretionary activity (requiring resource consent).</p>	<p>The greenway corridor will permanently lower the local water table, therefore requiring consent for a groundwater diversion. In the absence of a more specific rule. this is assessed as a <b>Discretionary Activity under Rule 3.6.4.13.</b></p>

*Information requirements for diverting of water*

Section 8.1.2.7	<ul style="list-style-type: none"> <li>a. Purpose for which water is to be diverted.</li> <li>b. Full description of existing works or works to be constructed and location of those works.</li> <li>c. Whether a qualified or experienced consultant is to be involved in the design and/or construction of the proposed works.</li> <li>d. Expected date of completion of any works to be constructed.</li> <li>e. The source of water.</li> <li>f. Description of the topography, soil type and vegetation, including vegetation that could be directly or indirectly affected by a change in water levels.</li> <li>g. Details of the diversion.</li> <li>h. What other options have been considered.</li> <li>i. What effects this activity will have on the environment.</li> </ul>	
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Effects to be addressed:  
Groundwater levels, groundwater inflow, mobilisation of contaminants, surface water effects, ecological and cultural

2.4 Temporary water takes during construction for dewatering / lowering of the groundwater table

Rule	Rule text	Comment/assessment
<b>Drilling (dewatering spears)</b>		
<p><u>Rule 3.8.4.6</u> Permitted Activity Rule – Temporary Drilling Below the Water Table</p>	<p>Except where classified as a non-complying activity by Rule 3.8.4.9, the drilling of holes below the water table is a permitted activity subject to the following conditions:</p> <ol style="list-style-type: none"> <li>a. Holes drilled shall be sealed and abandoned within two days of the completion of drilling.</li> <li>b. Holes drilled shall be at least 100 metres from any water supply well.</li> <li>c. Holes drilled shall be sealed and managed such that leakage of water or contaminants to or from the ground surface is prevented.</li> <li>d. Holes drilled shall be sealed and abandoned in a manner that prevents cross contamination between different water bodies, or changes in water pressure.</li> <li>e. The activity shall not disturb any archaeological site or waahi tapu as identified at the date of notification of this Plan, in any district plan, in the NZ Archaeological Association’s Site Recording Scheme, or by the Historic Places Trust except where Historic Places Trust approval has been obtained.</li> <li>f. In the event of any waahi tapu that is not subject to condition e) being identified by the Waikato Regional Council to the person undertaking the activity, the activity shall cease insofar as it may affect the waahi tapu. The activity shall not be recommenced without the approval of the Waikato Regional Council.</li> <li>g. Within any geothermal system, the depth of any holes drilled shall not be greater than 250 metres vertically down from the well head.</li> </ol>	<p>Dewatering during construction to lower the groundwater table or maintain a dry environment within excavations may be undertaken using spears. Spears are typically in place longer than two days and therefore require consent as a <b>Controlled Activity under Rule 3.8.4.7.</b></p>
<p><u>Rule 3.8.4.7</u> Controlled Activity Rule – Drilling Below the Water Table</p>	<p>The drilling of holes or wells below the water table where the hole or well is not permitted by, or does not comply with, Rule 3.8.4.6 and which is not classified as a non-complying activity by Rule 3.8.4.9, is a controlled activity (requiring resource consent) subject to the following standards and terms:</p> <ol style="list-style-type: none"> <li>a. All drilled holes/wells shall be constructed, maintained and/or abandoned so that they shall not cause cross-contamination between hydraulic units (aquifers) in any water including ground water and geothermal water.</li> <li>b. Holes drilled shall be at least 100 metres away from and Significant Geothermal Feature and shall not be into geothermal water within a Protected or Research Geothermal System.</li> <li>c. All holes/wells shall be managed and maintained such that leakage of water or contaminants to or from the ground surface is prevented.</li> <li>d. Materials used for well construction shall be of such quality and strength to enable the well to be completed without casing or seal leakage during construction or subsequent well operation.</li> <li>e. Wells used for potable water supply shall be located at least 30 metres from any on-site sewage disposal system.</li> <li>f. Wells used for water supply purposes, shall be located at least 50 metres from a lake or stream, and 100 metres from Mean High Water Springs.</li> <li>g. A log for each drilled hole/well shall be forwarded to the Waikato Regional Council within two months of completion of drilling. Each log shall show: <ol style="list-style-type: none"> <li>i. the location of the hole/well</li> <li>ii. date of completion</li> <li>iii. duration of drilling</li> <li>iv. depth and diameter of the hole/well</li> <li>v. the method of drilling</li> <li>vi. full construction details</li> <li>vii. the subsurface geology</li> <li>viii. results of any tests undertaken during drilling, including permeability, temperature and water quality</li> <li>ix. a site diagram.</li> </ol> </li> <li>h. The activity shall not disturb any archaeological site or waahi tapu as identified at the date of notification of this Plan, in any district plan, in the NZ Archaeological Association’s Site Recording Scheme, or by the Historic Places Trust except where Historic Places Trust approval has been obtained.</li> </ol>	

	<p>i. In the event of any waahi tapu that is not subject to standard and term g) being identified by the Waikato Regional Council to the person undertaking the activity, the activity shall cease insofar as it may affect the waahi tapu. The activity shall not be recommenced without the approval of the Waikato Regional Council.</p> <p>Waikato Regional Council reserves control over the following matters:</p> <ul style="list-style-type: none"> <li>i. Measures to avoid, remedy or mitigate the adverse effects of the activity on soil and water quality.</li> <li>ii. Measures to avoid, remedy or mitigate the effects on other users of water.</li> <li>iii. Monitoring, sampling and analysis requirements.</li> <li>iv. The location and depth of drilling.</li> <li>v. Any measures necessary to rehabilitate the land following the completion of the activity.</li> <li>vi. Measures to avoid, remedy or mitigate the effect of the activity on areas of significant indigenous vegetation and significant habitats of indigenous fauna.</li> <li>vii. The requirements for bonds to ensure appropriate control and abandonment of deep geothermal wells.</li> <li>viii. Measures taken to remove wastes introduced to the hole/well during drilling and construction.</li> </ul>	
<b>Information requirements for drilling</b>		
<p>Section 8.1.2.9 Drilling</p>	<ul style="list-style-type: none"> <li>a. Name of drilling contractor.</li> <li>b. Site and location of bore.</li> <li>c. Site plan indicating property boundaries.</li> <li>d. Details of the proposed works including: <ul style="list-style-type: none"> <li>i. bore hole diameter (millimetres)</li> <li>ii. bore casing diameter (millimetres)</li> <li>iii. bore depth (metres)</li> <li>iv. casing depth (metres)</li> <li>v. casing materials</li> <li>vi. screen materials</li> <li>vii. aquifer (if known).</li> </ul> </li> <li>e. Proposed well yield.</li> <li>f. Purpose of bore.</li> </ul>	
<p>Effects to be addressed: Refer to matters of control</p>		
<b>Water take for dewatering/lowering of the groundwater table to allow construction activities (from spears/sumps)</b>		
<p><u>Rule 3.3.4.14</u> Permitted Activity Rule – Temporary Takes</p>	<p>The taking of up to 150 cubic metres of water per day (calculated on a net take basis for surface water takes) for no more than five days per annum from any river or aquifer is a permitted activity subject to the following standards and terms:</p> <ul style="list-style-type: none"> <li>a. The net rate of the take, assessed in combination with all other authorised water takes, shall not exceed 100 percent of the primary allocable flows for catchments specified in Table 3-5.</li> <li>b. For groundwater takes the well is not within 600 metres of the coastal marine area and the total rate of the take in combination with all other takes from the aquifer does not exceed the Sustainable Yield if listed in Table 3-6.</li> <li>c. The intake structure shall comply with the screen and velocity standards as set out in the Water Management Class for that water body (see Chapter 3.2 of this Plan) and with the provisions in Rule 4.2.10.1 of this Plan.</li> <li>d. This rule shall not apply when water restrictions are in place in accordance with Standard 3.3.4.27.</li> <li>e. Written notice of the location, time and duration of take shall be provided to the Waikato Regional Council 10 working days before works commence.</li> </ul>	<p>Any water take during construction (be it surface or ground water) is likely to exceed 5 days per annum and therefore this rule cannot be complied with.</p>



<p><u>Rule 3.3.4.24</u> Discretionary Activity Rule – Groundwater Takes</p>	<p>The taking of groundwater that, when assessed in combination with all other authorised takes from the same aquifer:</p> <ol style="list-style-type: none"> <li>1. Is a supplementary take, temporary take or well and aquifer testing take that does not comply with Rules 3.3.4.12, 3.3.4.14 or 3.3.4.15; or</li> <li>2. Is a non-qualifying s14(3)(b) take described by Policy 10 c); or</li> <li>3. Does not exceed the Sustainable Yield if listed in Table 3-6; or</li> <li>4. Is from an aquifer that is not listed in Table 3-6; or</li> <li>5. Is for domestic or municipal supply takes where a water management plan is provided that meets the requirements of Method 8.1.2.2 of this Plan.</li> </ol> <p>is a discretionary activity (requiring resource consent)</p>	<p>Where dewatering during construction to lower the groundwater table or maintain a dry environment within excavations is undertaken using spears, the take is classified as a groundwater take and therefore would require consent as a <b>Discretionary Activity under Rule 3.3.4.24.</b></p>
<p><u>Rule 3.3.4.23</u> Discretionary Activity Rule – Surface Water Takes</p>	<p>The taking of surface water that:</p> <ol style="list-style-type: none"> <li>1. Is a non-qualifying s14(3)(b) take described by Policy 8 c) or</li> <li>2. Is a supplementary take or a temporary take described by Policy 8 d), or</li> <li>3. Except as provided for by Rules 3.3.4.17, 3.3.4.18 and 3.3.4.19, is a take that when assessed in combination with all other authorised water takes (all calculated on a net take basis), exceeds the primary allocable flow but is less than the combined primary and secondary allocable flows in Table 3-5, or</li> <li>4. Is an existing take described by Policy 7(e); or</li> <li>5. Is a zero net take described by Policy 7(f); or</li> <li>6. Is a new take for domestic or municipal supply described by Policy 7(g) and Policy 9(d); or</li> </ol> <p>is a discretionary activity (requiring resource consent) subject to ... standards and terms</p>	<p>Where dewatering during construction to lower the groundwater table or maintain a dry environment within excavations is undertaken from a sumped area or base on an excavation, the take is classified as a surface water take.</p> <p>If the total take volume is synchronously discharged, WRC may be able to consider the take a “net zero” take and consent would be required as a <b>Discretionary Activity under Rule 3.3.4.23</b> otherwise, consent would be required as a <b>Non-Complying Activity under Rule 3.3.4.26.</b></p>
<p><u>Rule 3.3.4.26</u> Non-Complying Activity Rule - Water Takes</p>	<p>Except as provided in Rules 3.3.4.17, 3.3.4.18, 3.3.4.19, 3.3.4.20, 3.3.4.23, 3.3.4.24 and 3.3.4.25 and the takes described by Policy 6 the taking of groundwater or surface water (surface water calculated on a net take basis) that:</p> <ol style="list-style-type: none"> <li>1. Is for a surface water take which when assessed in combination with all other authorised water takes exceeds the combined primary and secondary allocable flows in Table 3-5; or</li> <li>2. Is for a surface water harvesting take which when assessed in combination with all other authorised surface water harvesting water takes exceeds the limits set in Policy 20 b); or</li> <li>3. Is for a groundwater take which exceeds the Sustainable Yields (if listed) in Table 3-6, or</li> <li>4. Is for domestic or municipal supply and a water management plan developed in accordance with Method 8.1.2.2 has not been provided to the Waikato Regional Council and to the Waikato River Iwi within whose rohe the take is located.</li> </ol> <p>is a non-complying activity (requiring resource consent)</p>	
<p><i>Information requirements for water takes</i></p>		
<p>Section 8.1.2.1</p>	<ol style="list-style-type: none"> <li>a. The location of the take.</li> <li>b. The purpose for which water is to be taken including the proposed crop/pasture type, reflecting rotational crop requirements.</li> <li>c. Define the maximum volume of water to be taken as a minimum per day and per year.</li> <li>d. The rate at which water is to be taken.</li> <li>e. The source of water.</li> <li>f. Any associated discharges used to offset the cumulative allocation effects of the taking of water.</li> <li>g. Identification of alternative water sources including, groundwater, water harvesting and water reuse and provide an assessment of how these may minimise adverse effects, including those on existing and foreseeable future users.</li> <li>h. Intake screening.</li> <li>i. The identity and location of other neighbouring abstractors.</li> <li>j. What effects this activity will have on the environment.</li> <li>k. The proposed method of recording water use and reporting to Waikato Regional Council.</li> <li>l. In the case of an application for the replacement of an existing resource consent:             <ul style="list-style-type: none"> <li>- a demonstrated continued need for the volume and rate of water applied for based on water use records, recognising seasonal and crop rotational factors,</li> </ul> </li> </ol>	

	<ul style="list-style-type: none"> <li>- any enforcement action taken by Council, and</li> <li>- use of best industry practice.</li> </ul> <p>m. In the case of an application for domestic or municipal supply a water management plan prepared as detailed in method 8.1.2.2 shall be provided with all resource consent applications made in accordance with 3.3.3 Policy 9 and Rules 3.3.4.18, 3.3.4.21, 3.3.4.23, 3.3.4.24 and 3.3.4.26.</p> <p>n. Details, including distribution extent, of any other properties to which water is to be supplied from this take.</p> <p>o. In the case of an application for domestic or municipal supply details shall be provided of any existing or proposed riparian fencing and planting necessary to mitigate adverse effects of the take</p>	
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Effects to be addressed:

Effects on aquifer sustainability, other bore users, and surface water bodies (including wetlands), mobilisation of contaminants, ecological and cultural effects

**Discharge from dewatering/lowering of the groundwater table to allow construction activities (from spears/sumps)**

<p><u>Rule 3.5.4.4</u> Permitted Activity Rule – Discharges of Water to Water – General Rule</p>	<p>Except as expressly provided for by other rules in this Plan any discharge of water (excluding geothermal water), into water is a permitted activity subject to the following conditions:</p> <ul style="list-style-type: none"> <li>a. There shall be no adverse effect on water quality of the receiving water body.</li> <li>b. Any adverse erosion effects occurring as a result of the discharge to be remedied as soon as practicable.</li> <li>c. There shall be no adverse effects from increased water levels downstream of the discharge point.</li> <li>d. The Waikato Regional Council shall be notified in writing of the discharge, its volume, contaminant concentrations and the water quality of the receiving water body 10 working days prior to the discharge commencing.</li> </ul>	<p>Discharge of water or sediment-laden water from temporary dewatering activities is not otherwise provided for in the plan, therefore is likely to require consent as a <b>Discretionary Activity under Rule 3.5.4.5.</b></p>
<p><u>Rule 3.5.4.5</u> Discretionary Activity Rule – Discharges – General Rule</p>	<p>Any discharge of a contaminant into water, or onto or into land, in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water, that is not specifically provided for by any rule, or does not meet the conditions of a permitted or a controlled activity rule in this Plan, is a discretionary activity (requiring resource consent).</p>	

*Information requirements for discharges*

<p>Section 8.1.2.5</p>	<ul style="list-style-type: none"> <li>a. Purpose for which the consent is sought.</li> <li>b. Maximum volume of the discharge.</li> <li>c. The rate at which waste is to be discharged.</li> <li>d. What treatment the waste will receive prior to discharge.</li> <li>e. How the volume discharged will be minimised.</li> <li>f. How the contaminant loading of the discharge will be minimised.</li> <li>g. What happens to any sludge or solid waste that may be generated.</li> <li>h. The characteristics of the waste to be discharged.</li> <li>i. What effect the discharge will have on the receiving environment, including the effect on the purpose of water management classes in Section 3.2.3 of the Plan.</li> <li>j. The site location and point of discharge.</li> <li>k. The extent to which the discharge will comply with Policy 1 in Chapter 6.1 of this Plan, with regard to objectionable odour and particulate matter effects.</li> <li>l. What or whether alternative methods of discharge and treatment have been considered.</li> </ul>	
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Effects to be addressed:

Water quality and quantity, ecological effects, erosion and scour

2.5 Earthworks (including soil disturbance, vegetation clearance, and cleanfill)

Rule	Rule text	Comment/assessment
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Soil disturbance and vegetation clearance		
<p><u>Rule 5.1.4.11</u> Permitted Activity Rule – Soil Disturbance, Roading and Tracking and Vegetation Clearance</p>	<ol style="list-style-type: none"> <li>1. Unless otherwise provided for by Rules 5.1.4.14, 5.1.4.15, 5.1.4.16 or 5.1.4.17, soil disturbance, roading and tracking, and vegetation clearance and any associated deposition of slash into or onto the beds of rivers and any subsequent discharge of contaminants into water or air;</li> <li>2. Any roading and tracking activities associated with the installation of bridges or culverts permitted by Rules 4.2.8.1, 4.2.9.1 and 4.2.9.2, within 20 metres of that bridge or culvert and any associated deposition of slash into or onto the beds of rivers and any subsequent discharge of contaminants into water or air;</li> <li>3. Vegetation clearance of planted production forest as planted at the date upon which this Plan becomes operative</li> </ol> <p>are permitted activities subject to the conditions in Section 5.1.5.</p>	<p>Although management procedures will be put in place to seek compliance with the conditions outlined in Section 5.1.5; there may be times where the suspended solids concentrations specified in Section 5.1.5 o) may not be achieved and therefore consent is sought on a precautionary basis as a <b>Discretionary Activity under Rule 5.1.4.13.</b></p>
<p><u>Rule 5.1.4.13</u> Discretionary Activity Rule – Soil Disturbance, Roading and Tracking and Vegetation Clearance</p>	<ol style="list-style-type: none"> <li>1. Any soil disturbance, roading and tracking, and vegetation clearance and any associated deposition of slash into or onto the beds of rivers and any subsequent discharge of contaminants into water or air that does not comply with the conditions of Permitted Activity Rule 5.1.4.11;</li> <li>2. Soil cultivation within two metres of the bed of a river or lake that does not comply with Rule 5.1.4.12;</li> </ol> <p>are discretionary activities (requiring resource consent).</p>	
<p><u>Rule 5.1.4.14</u> Controlled Activity Rule – Soil Disturbance, Roading and Tracking and Vegetation Clearance, Riparian Vegetation Clearance in High Risk Erosion Areas</p>	<p>Except as restricted by Rule 5.1.4.16, the following activities, occurring in any continuous 12 month period and located in a high risk erosion area:</p> <ol style="list-style-type: none"> <li>1. Roading and tracking activities between 100 and 2,000 metres in length, or</li> <li>2. Soil disturbance activities between 250 and 1,000 cubic metres in volume (solid measure), or</li> <li>3. Soil disturbance activities between 0.2 and 2.0 hectares in area, or</li> <li>4. Soil disturbance activities resulting in a cut slope batter exceeding three metres in vertical height over a cumulative distance between 30 and 120 metres in length, or</li> <li>5. Vegetation Clearance of between one and five hectares with the exclusion of planted production forests, plant pests as specified in the Waikato Regional Council’s Regional Pest Management Strategy and vegetation clearance adjacent to a Natural State water body as shown on the Water Management Class Maps</li> <li>6. Vegetation clearance which is within five metres on either side, of the banks of a water body excluding an ephemeral stream, and which is between 50 to 100 metres in length per kilometre of that water body, with the exclusion of planted production forests and vegetation in riparian margins adjacent to planted production forest, riparian enhancement and replanting programmes and plant pests as specified in the Waikato Regional Council’s Pest Management Strategy.</li> <li>7. Vegetation clearance within five metres on either side of the banks of a water body excluding an ephemeral stream of greater than 50 metres in length per kilometre of that water body of: <ol style="list-style-type: none"> <li>a. Planted production forest (except as provided for in Rule 5.1.4.11(3) and/or vegetation in riparian margins adjacent to planted production forest; or</li> <li>b. Vegetation associated with riparian enhancement programmes.</li> </ol> </li> <li>8. Any roading and tracking activities associated with the installation of a bridge or culvert controlled by Rules 4.2.8.2 and 4.2.9.3, within 20 metres of that bridge or culvert;</li> </ol> <p>and any associated deposition of slash into or onto the beds of rivers and any subsequent discharge of contaminants into water or air are controlled activities (requiring resource consent) subject to the standards and terms as specified in Section 5.1.5.</p>	<p>Much of the earthworks associated with construction of the Greenway Corridor will be within 10m of the existing Rotokauri Drain and therefore on land that meets the definition of a high risk erosion area (HREA). These earthworks are likely to exceed 1,000m<sup>3</sup> in volume and 2.0ha in area. Vegetation clearance may also exceed 100m per km of the Rotokauri Drain. Therefore, consent will be required as a <b>Discretionary Activity under Rule 5.1.4.15.</b></p>
<p><u>Rule 5.1.4.15</u> Discretionary Activity Rule – Soil Disturbance, Roading, Tracking, Vegetation Clearance, Riparian Vegetation Clearance in High Risk Erosion Areas</p>	<p>Except as restricted by Rule 5.1.4.16 the following activities, occurring in any continuous 12 month period and located in a high risk erosion area:</p> <ol style="list-style-type: none"> <li>1. Roading and tracking activities exceeding 2,000 metres in length</li> <li>2. Soil disturbance activities exceeding 1,000 cubic metres in volume (solid measure)</li> <li>3. Soil disturbance activities exceeding two hectares in area</li> <li>4. Soil disturbance activities resulting in a cut slope batter exceeding three metres in vertical height over a cumulative distance exceeding 120 metres in length</li> <li>5. Vegetation clearance exceeding five hectares with the exclusion of planted production forests (except those restricted by Rule 5.1.4.16), and plant pests as specified in the Waikato Regional Council’s Regional Pest Management Strategy</li> </ol>	

	<ol style="list-style-type: none"> <li>6. Riparian vegetation clearance which is within five metres on either side of the banks of a perennial water body which exceeds 100 metres in length per kilometre, with the exclusion of planted production forests, riparian enhancement programmes and plant pests as specified in the Waikato Regional Council's Regional Pest Management Strategy</li> <li>7. Any riparian vegetation clearance within five metres of a Natural State water body as shown on the Water Management Class Maps except:             <ol style="list-style-type: none"> <li>a. that which is required as part of the construction of a walking track no greater than two metres width, and</li> <li>b. the control of plant pests as specified in the Waikato Regional Council's Regional Pest Management Strategy</li> </ol> </li> <li>8. Any activity specified in Rules 5.1.4.14 and 5.1.4.16, that does not comply with the conditions and standards and terms in Section 5.1.5; and any associated deposition of slash into or onto the beds of rivers and any subsequent discharge of contaminants into water or air are discretionary activities (requiring resource consent).</li> </ol>	
<b>Information requirements for soil disturbance and vegetation clearance</b>		
Section 8.1.4.1	<ol style="list-style-type: none"> <li>a. Volume, area, length and batter height of the proposed activity.</li> <li>b. The proposed start and completion times of the activity.</li> <li>c. Description of the topography, soil type and vegetation.</li> <li>d. What effects the activity will have on the environment including:             <ol style="list-style-type: none"> <li>i. the potential effects on soil erosion, slope stability, adjacent water bodies and water quality,</li> <li>ii. the extent to which the activity will adversely affect areas of significant indigenous vegetation and significant habitats of indigenous fauna,</li> <li>iii. the extent to which the activity will affect sites of significance to tangata whenua as Kaitiaki,</li> <li>iv. the extent to which the activity will affect neighbouring properties,</li> <li>v. the extent to which the activity will affect any lawfully established structure,</li> <li>vi. the effects on the uses and values of adjacent water bodies,</li> <li>vii. the effects on uses and values of adjacent water bodies as identified in the Regional Coastal Plan.</li> </ol> </li> <li>e. The design and construction methods to be used.</li> <li>f. The method of vegetation clearance to be used.</li> <li>g. Methods to control water and sediment run-off from the site.</li> </ol>	
<u>Effects to be addressed:</u>		
Erosion and sediment control, land stability, ecological, dust, archaeological and cultural		
<b>Cleanfill Disposal</b>		
<u>Rule 5.2.5.4</u> Permitted Activity Rule – Small Scale Cleanfill Disposal Outside of High Risk Locations	<p>The discharge of cleanfill onto or into land and any subsequent discharge of contaminants into water or air when occurring outside of:</p> <ol style="list-style-type: none"> <li>1. A high risk erosion area</li> <li>2. A floodplain of a river</li> <li>3. The catchment of, or within 10 metres of, whichever is the lesser, a sink hole or cave entrance</li> <li>4. Any wetlands that are areas of significant indigenous vegetation and/or significant habitats of indigenous fauna</li> <li>5. A significant geothermal feature</li> </ol> <p>and where the total volume of cleanfill does not exceed 2,500 cubic metres per annum, is a permitted activity subject to conditions</p>	<p>This project is largely a cut-based project and there is no identified need for the import of cleanfill material at the stage. Cut material to be re-used as fill within the project is managed under the soil disturbance rules above.</p> <p>However, some imported fill may be required so it is prudent to review the cleanfill rule. In addition, there will be a need to dispose of the excess cut material - whether this is undertaken within the bounds of this consent or not is a matter for detailed design.</p>
<u>Rule 5.2.5.5</u> Controlled Activity Rule – Large Scale Cleanfill Disposal outside High Risk Locations	<p>The discharge of cleanfill onto or into land and any subsequent discharge of contaminants into water or air that does not comply with Rule 5.2.5.4 when occurring outside of:</p> <ol style="list-style-type: none"> <li>1. A high risk erosion area</li> <li>2. A floodplain of a river</li> <li>3. The catchment of, or within 10 metres of, whichever is the lesser, a sink hole or cave entrance</li> <li>4. Any wetlands that are areas of significant indigenous vegetation and/or significant habitats of indigenous fauna</li> <li>5. A significant geothermal feature</li> </ol> <p>is a controlled activity (requiring resource consent) subject to standards and terms</p>	<p>Much of the earthworks associated with construction of the Greenway Corridor will be within 10m of the existing Rotokauri Drain and therefore on land that meets the definition of a high risk erosion area (HREA). Therefore, cleanfill disposal may be required both within and outside high risk locations.</p> <p>On this basis consent may be required as a <b>Controlled Activity under Rule 5.2.5.2 and/or a Discretionary Activity under Rule 5.2.5.6.</b></p>

<p><u>Rule 5.2.5.6</u> Discretionary Activity Rule – Cleanfill Disposal in High Risk Locations</p>	<p>The discharge of cleanfill onto or into land and any subsequent discharge of contaminants into water or air in a manner that does not comply with Rules 5.2.5.4 and 5.2.5.5 is a discretionary activity (requiring resource consent).</p>	
<p><i>Information requirements for cleanfill sites</i></p>		
<p>Section 8.1.4.3</p>	<ul style="list-style-type: none"> <li>a. Volume, area, length and batter height of the proposed activity.</li> <li>b. The proposed start and completion times of the activity.</li> <li>c. Description of the topography, soil type and vegetation.</li> <li>d. What effects the activity will have on the environment including: <ul style="list-style-type: none"> <li>i. the potential effects on soil erosion, slope stability (including the potential to exacerbate preexisting deep seated land instability), adjacent water bodies and water quality,</li> <li>ii. the extent to which the activity will adversely affect areas of significant indigenous vegetation and significant habitats of indigenous fauna9,</li> <li>iii. the extent to which the activity will affect sites of significance to tangata whenua as Kaitiaki,</li> <li>iv. the extent to which the activity will affect neighbouring properties,</li> <li>v. the extent to which the activity will affect any lawfully established structure.</li> <li>vi. the extent to which the activity will affect any cave system, wetland or geothermal feature,</li> <li>vii. the extent to which the discharge will comply with the requirements of Policy 1 in Chapter 6.1 of this Plan with regard to objectionable effects from particulate matter,</li> <li>viii. the effects on the uses and values of adjacent water bodies,</li> <li>ix. the effects on uses and values of adjacent water bodies as identified in the Regional Coastal Plan.</li> </ul> </li> <li>e. The design and construction methods to be used.</li> <li>f. Methods to control water and sediment run-off from the site.</li> <li>g. The characteristics and sources of the material to be received at the site, and the measures to ensure that the material meets the definition of cleanfill or overburden in this Plan.</li> <li>h. An assessment of the acid drainage potential of the material.</li> <li>i. Methods to control airborne particulate matter.</li> <li>j. j. Any measure necessary to rehabilitate the land following the completion of activity</li> </ul>	
<p><u>Effects to be addressed:</u> Erosion and sediment control, land stability, ecological, dust, archaeological and cultural</p>		

## 2.6 Geotechnical and groundwater investigations

Rule	Rule text	Comment/assessment
<p><b>Drilling</b></p>		
<p><u>Rule 3.8.4.6</u> Permitted Activity Rule – Temporary Drilling Below the Water Table</p>	<p>Except where classified as a non-complying activity by Rule 3.8.4.9, the drilling of holes below the water table is a permitted activity subject to the following conditions:</p> <ul style="list-style-type: none"> <li>a. Holes drilled shall be sealed and abandoned within two days of the completion of drilling.</li> <li>b. Holes drilled shall be at least 100 metres from any water supply well.</li> <li>c. Holes drilled shall be sealed and managed such that leakage of water or contaminants to or from the ground surface is prevented.</li> <li>d. Holes drilled shall be sealed and abandoned in a manner that prevents cross contamination between different water bodies, or changes in water pressure.</li> <li>e. The activity shall not disturb any archaeological site or waahi tapu as identified at the date of notification of this Plan, in any district plan, in the NZ Archaeological Association’s Site Recording Scheme, or by the Historic Places Trust except where Historic Places Trust approval has been obtained.</li> </ul>	<p>There will be a need to facilitate further groundwater and geotechnical investigation and monitoring to obtain additional information and to monitor the impact of the works on groundwater levels. This will occur prior to works, during works, and post-works.</p> <p>Bores used for investigations and monitoring are not typically able to be filled within two days and are therefore a <b>Controlled Activity under Rule 3.8.4.7.</b></p>

	<ul style="list-style-type: none"> <li>f. In the event of any waahi tapu that is not subject to condition e) being identified by the Waikato Regional Council to the person undertaking the activity, the activity shall cease insofar as it may affect the waahi tapu. The activity shall not be recommenced without the approval of the Waikato Regional Council.</li> <li>g. Within any geothermal system, the depth of any holes drilled shall not be greater than 250 metres vertically down from the well head.</li> </ul>
<p><u>Rule 3.8.4.7</u> Controlled Activity Rule – Drilling Below the Water Table</p>	<p>The drilling of holes or wells below the water table where the hole or well is not permitted by, or does not comply with, Rule 3.8.4.6 and which is not classified as a non-complying activity by Rule 3.8.4.9, is a controlled activity (requiring resource consent) subject to the following standards and terms:</p> <ul style="list-style-type: none"> <li>a. All drilled holes/wells shall be constructed, maintained and/or abandoned so that they shall not cause cross-contamination between hydraulic units (aquifers) in any water including ground water and geothermal water.</li> <li>b. Holes drilled shall be at least 100 metres away from and Significant Geothermal Feature and shall not be into geothermal water within a Protected or Research Geothermal System.</li> <li>c. All holes/wells shall be managed and maintained such that leakage of water or contaminants to or from the ground surface is prevented.</li> <li>d. Materials used for well construction shall be of such quality and strength to enable the well to be completed without casing or seal leakage during construction or subsequent well operation.</li> <li>e. Wells used for potable water supply shall be located at least 30 metres from any on-site sewage disposal system.</li> <li>f. Wells used for water supply purposes, shall be located at least 50 metres from a lake or stream, and 100 metres from Mean High Water Springs.</li> <li>g. A log for each drilled hole/well shall be forwarded to the Waikato Regional Council within two months of completion of drilling. Each log shall show: <ul style="list-style-type: none"> <li>i. the location of the hole/well</li> <li>ii. date of completion</li> <li>iii. duration of drilling</li> <li>iv. depth and diameter of the hole/well</li> <li>v. the method of drilling</li> <li>vi. full construction details</li> <li>vii. the subsurface geology</li> <li>viii. results of any tests undertaken during drilling, including permeability, temperature and water quality</li> <li>ix. a site diagram.</li> </ul> </li> <li>h. The activity shall not disturb any archaeological site or waahi tapu as identified at the date of notification of this Plan, in any district plan, in the NZ Archaeological Association’s Site Recording Scheme, or by the Historic Places Trust except where Historic Places Trust approval has been obtained.</li> <li>i. In the event of any waahi tapu that is not subject to standard and term g) being identified by the Waikato Regional Council to the person undertaking the activity, the activity shall cease insofar as it may affect the waahi tapu. The activity shall not be recommenced without the approval of the Waikato Regional Council.</li> <li>j. Waikato Regional Council reserves control over the following matters: <ul style="list-style-type: none"> <li>i. Measures to avoid, remedy or mitigate the adverse effects of the activity on soil and water quality.</li> <li>ii. Measures to avoid, remedy or mitigate the effects on other users of water.</li> <li>iii. Monitoring, sampling and analysis requirements.</li> <li>iv. The location and depth of drilling.</li> <li>v. Any measures necessary to rehabilitate the land following the completion of the activity.</li> <li>vi. Measures to avoid, remedy or mitigate the effect of the activity on areas of significant indigenous vegetation and significant habitats of indigenous fauna.</li> <li>vii. The requirements for bonds to ensure appropriate control and abandonment of deep geothermal wells.</li> <li>viii. Measures taken to remove wastes introduced to the hole/well during drilling and construction.</li> </ul> </li> </ul>

*Information requirements for drilling*

Section 8.1.2.9	<ul style="list-style-type: none"> <li>a. Name of drilling contractor.</li> <li>b. Site and location of bore.</li> <li>c. Site plan indicating property boundaries.</li> <li>d. Details of the proposed works including: <ul style="list-style-type: none"> <li>i. bore hole diameter (millimetres)</li> <li>ii. bore casing diameter (millimetres)</li> <li>iii. bore depth (metres)</li> <li>iv. casing depth (metres)</li> <li>v. casing materials</li> <li>vi. screen materials</li> <li>vii. aquifer (if known).</li> </ul> </li> <li>e. Proposed well yield.</li> <li>f. Purpose of bore.</li> </ul>	
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Effects to be addressed:

Refer to matters of control

**Temporary groundwater takes for investigations**

<p><u>Rule 3.3.4.15</u> Permitted Activity Rule - Well or Aquifer Testing</p>	<p>The taking of groundwater for well or aquifer testing purposes (including water with a temperature in excess of 30 degrees Celsius) is a permitted activity subject to the following conditions:</p> <ul style="list-style-type: none"> <li>a. No test or tests for a well shall exceed a pumping period in excess of three days in duration.</li> <li>b. The rate of take shall not exceed 2,500 cubic metres or 2,500 tonnes per day.</li> <li>c. The site of the activity shall not be within 100 metres of a Significant Geothermal Feature except for those features that are Recent Sinter or Hydrothermal Eruption Craters containing no geothermal pools or discharging geothermal features in which case the take shall not be located within 20 metres of the feature.</li> <li>d. The Waikato Regional Council shall be notified in writing at least one week in advance of tests with a pumping period in excess of 24 hours.</li> <li>e. Records of the pump test(s) shall be kept by the owner, detailing flow rates, draw downs, and any information analysis. Copies shall be forwarded to the Waikato Regional Council within one month of completion.</li> <li>f. Where the temperature of the water taken exceeds 30 degrees Celsius the following additional information shall be provided in writing to the Waikato Regional Council within one month of completing testing: <ul style="list-style-type: none"> <li>i. location of take and discharge</li> <li>ii. geological log</li> <li>iii. well/aquifer test results</li> <li>iv. map of any deviated drilling</li> <li>v. temperature/pressure profiles</li> </ul> </li> </ul>	<p>Should pump testing be required, the groundwater take rules will apply.</p> <p>Pump testing can be completed as a Permitted activity under Rule 3.3.4.15 if the duration of the take does exceed three days. In order to gain better and more accurate data it is common to undertake week long tests would require consent as a <b>Discretionary Activity under Rule 3.3.4.24.</b></p>
<p><u>Rule 3.3.4.24</u> Discretionary Activity Rule – Groundwater Takes</p>	<p>The taking of groundwater that, when assessed in combination with all other authorised takes from the same aquifer:</p> <ol style="list-style-type: none"> <li>1. Is a supplementary take, temporary take or well and aquifer testing take that does not comply with Rules 3.3.4.12, 3.3.4.14 or 3.3.4.15; or</li> <li>2. Is a non-qualifying s14(3)(b) take described by Policy 10 c); or</li> <li>3. Does not exceed the Sustainable Yield if listed in Table 3-6; or</li> <li>4. Is from an aquifer that is not listed in Table 3-6; or</li> <li>5. Is for domestic or municipal supply takes where a water management plan is provided that meets the requirements of Method 8.1.2.2 of this Plan.</li> </ol> <p>is a discretionary activity (requiring resource consent)</p>	

*Information requirements for water takes*

Section 8.1.2.1	<ul style="list-style-type: none"> <li>a. The location of the take.</li> <li>b. The purpose for which water is to be taken including the proposed crop/pasture type, reflecting rotational crop requirements.</li> </ul>	
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	<ul style="list-style-type: none"> <li>c. Define the maximum volume of water to be taken as a minimum per day and per year.</li> <li>d. The rate at which water is to be taken.</li> <li>e. The source of water.</li> <li>f. Any associated discharges used to offset the cumulative allocation effects of the taking of water.</li> <li>g. Identification of alternative water sources including, groundwater, water harvesting and water reuse and provide an assessment of how these may minimise adverse effects, including those on existing and foreseeable future users.</li> <li>h. Intake screening.</li> <li>i. The identity and location of other neighbouring abstractors.</li> <li>j. What effects this activity will have on the environment.</li> <li>k. The proposed method of recording water use and reporting to Waikato Regional Council.</li> <li>l. In the case of an application for the replacement of an existing resource consent: <ul style="list-style-type: none"> <li>• a demonstrated continued need for the volume and rate of water applied for based on water use records, recognising seasonal and crop rotational factors, any enforcement action taken by Council, and use of best industry practice.</li> </ul> </li> <li>m. In the case of an application for domestic or municipal supply a water management plan prepared as detailed in method 8.1.2.2 shall be provided with all resource consent applications made in accordance with 3.3.3 Policy 9 and Rules 3.3.4.18, 3.3.4.21, 3.3.4.23, 3.3.4.24 and 3.3.4.26.</li> <li>n. Details, including distribution extent, of any other properties to which water is to be supplied from this take.</li> <li>o. In the case of an application for domestic or municipal supply details shall be provided of any existing or proposed riparian fencing and planting necessary to mitigate adverse effects of the take on the water body. Details on proposed riparian fencing and planting shall be provided in the form of a Riparian Vegetation Management Plan having regard to Standard 3.3.4.28</li> </ul>	
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Effects to be addressed:

Effects on aquifer sustainability, other bore users, and surface water bodies, mobilisation of contaminants, ecological and cultural effects

**Well and Aquifer Testing Discharges**

<p><u>Rule 3.5.8.1</u> Permitted Activity Rule – Well and Aquifer Discharges</p>	<p>The discharge of water (including geothermal water) from well or aquifer testing into water, and/or onto or into land is a permitted activity subject to the following conditions:</p> <ul style="list-style-type: none"> <li>a. The discharge shall not cause visually noticeable iron flocculation in the receiving waters.</li> <li>b. Any discharge to water shall comply with the suspended solids standards as set out in Section 3.2.4.5.</li> <li>c. The duration of the discharge shall not exceed three days.</li> <li>d. The discharge shall not result in flooding on any downstream property.</li> <li>e. Any erosion occurring as a result of the discharge shall be remedied as soon as practicable.</li> <li>f. The discharge shall not cause a temperature change of more than three degrees Celsius at any point downstream greater than three times the stream width at the point of discharge.</li> <li>g. There shall be no discharge to any Significant Geothermal Feature</li> </ul>	<p>Should pump testing be required, the well and aquifer testing discharge rules will apply.</p> <p>Discharges associated with pump testing can be completed as a Permitted activity under Rule 3.5.8.1, if the duration of the discharge does exceed three days. In order to gain better and more accurate data it is common to undertake week long tests which default to the <b>Controlled Activity Rule 3.6.8.2</b>.</p>
<p><u>Rule 3.5.8.2</u> Controlled Activity Rule – Well and Aquifer Testing Discharges</p>	<p>The discharge of water (including geothermal water) from well or aquifer testing into water, or onto land that does not comply with Rule 3.5.8.1 is a controlled activity (requiring resource consent) subject to the following standards and terms:</p> <ul style="list-style-type: none"> <li>a. The discharge shall comply with the suspended solids standards as set out in Section 3.2.4.5.</li> <li>b. There shall be no discharge to any Significant Geothermal Feature.</li> </ul> <p>Waikato Regional Council reserves control of the following matters:</p> <ul style="list-style-type: none"> <li>i. The quality and temperature of the discharge.</li> <li>ii. The rate/volume and duration of the discharge.</li> <li>iii. Measures to avoid, remedy or mitigate the effects on downstream water levels.</li> <li>iv. Measures to ensure that there is no associated erosion or scour at the point of discharge.</li> <li>v. Location of the discharge</li> </ul>	

*Information requirements for well and aquifer testing discharges*

<p>Section 8.1.2.5</p>	<ul style="list-style-type: none"> <li>a. Purpose for which the consent is sought.</li> </ul>	
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	<ul style="list-style-type: none"> <li>b. Maximum volume of the discharge.</li> <li>c. The rate at which waste is to be discharged.</li> <li>d. What treatment the waste will receive prior to discharge.</li> <li>e. How the volume discharged will be minimised.</li> <li>f. How the contaminant loading of the discharge will be minimised.</li> <li>g. What happens to any sludge or solid waste that may be generated.</li> <li>h. The characteristics of the waste to be discharged.</li> <li>i. What effect the discharge will have on the receiving environment, including the effect on the purpose of water management classes in Section 3.2.3 of the Plan.</li> <li>j. The site location and point of discharge.</li> <li>k. The extent to which the discharge will comply with Policy 1 in Chapter 6.1 of this Plan, with regard to objectionable odour and particulate matter effects.</li> <li>l. What or whether alternative methods of discharge and treatment have been considered.</li> </ul>	
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Effects to be addressed:  
Refer to matters of control

## 2.7 Culverts

Rule	Rule text	Comment/assessment
<p><b>Rule 4.2.9.1</b> Permitted Activity Rule – Catchments Not Exceeding Five Hectares</p>	<p>Unless controlled by Rule 4.2.5.1 the following activities:</p> <ol style="list-style-type: none"> <li>1. The use, erection, reconstruction, placement, alteration or extension of a culvert, and associated bed disturbances, in or on the bed of a river for catchments not exceeding five hectares upstream of the culvert, and</li> <li>2. The subsequent diversion and discharge of water through the culvert, and</li> <li>3. Any discharge of sediment associated with construction activities, and</li> <li>4. The associated deposition of construction materials</li> </ol> <p>are permitted activities subject to the following conditions:</p> <ol style="list-style-type: none"> <li>a. Any such culvert shall be designed so that a two percent annual exceedance probability (1 in 50 year) flood event shall not cause any increase in upstream water levels which causes flooding on neighbouring properties.</li> <li>b. Culverts shall be designed to safely overtop without causing structural failure, or include a spillway, to ensure safe passage of flood flows where the two percent annual exceedance probability flood flow will overtop the embankment over the culvert.</li> <li>c. The structure shall not cause:               <ol style="list-style-type: none"> <li>i. water depth upstream to exceed three metres, and</li> <li>ii. the water level immediately upstream to exceed the water level immediately downstream by more than three metres</li> </ol> </li> <li>d. The structure shall not be located in any permanently flowing water body or in the headwaters of any river identified for Natural State purposes in the Water Management Class Maps of this Plan.</li> <li>e. The activity shall not disturb any archaeological site or waahi tapu as identified at the date of notification of this Plan, in any district plan, in the NZ Archaeological Association’s Site Recording Scheme, or by the Historic Places Trust except where Historic Places Trust approval has been obtained.</li> <li>f. In the event of any waahi tapu that is not subject to condition e) being identified by the Waikato Regional Council to the person undertaking the use, erection, reconstruction, placement, extension or alteration, the activity shall cease insofar as it may affect the waahi tapu. The activity shall not be recommenced without the approval of the Waikato Regional Council.</li> <li>g. The construction works shall comply with the suspended solids discharge standards as set out in Section 4.2.21.</li> <li>h. Any erosion occurring as a result of the structure or diversion and discharge of water shall be remedied as soon as practicable.</li> <li>i. No discharge shall be made outside of the natural catchment.</li> <li>j. This Rule shall not apply to activities located in, on, under or over the bed of a river or lake that is a Significant Geothermal Feature.</li> </ol>	<p>Four new culverts are required for construction of the Greenway. Each is designed and sized to accommodate a 1 in 100 year flow. There is an existing Exelby Road culvert which is not proposed to be modified.</p> <p>Any erection, replacement or alteration of a culvert will require consent depending on the catchment size and the ability to meet the permitted suspended solids standards. It is unlikely that the project will be able to meet suspended solids at all time throughout works, so a conservative approach would be applied.</p> <p>Each culvert will be assessed but are likely to a <b>Controlled Activity under Rule 4.2.9.3</b> (catchments less than 500 Ha)</p>

<p><u>Rule 4.2.9.2</u> Permitted Activity Rule – Culverts for Catchments Not Exceeding 100 Hectares</p>	<p>Unless controlled by Rule 4.2.9.1 and Rule 4.2.5.1 the following activities:</p> <ol style="list-style-type: none"> <li>1. The use, erection, reconstruction, placement, alteration or extension of a culvert, and associated bed disturbance, in or on the bed of a river or lake for a catchment area not exceeding one square kilometre (100 hectares) upstream of the culvert, and</li> <li>2. The subsequent diversion and discharge of water through the culvert, and</li> <li>3. Any discharge of sediment associated with construction activities; and</li> <li>4. The associated deposition of construction materials</li> </ol> <p>are permitted activities subject to the following conditions:</p> <ol style="list-style-type: none"> <li>a. Any such culvert shall be designed so that a two percent annual exceedance probability (1 in 50 year) flood event shall not cause any increase in upstream water levels which causes flooding on neighbouring properties.</li> <li>b. The structure shall provide for the safe passage of fish both upstream and downstream.</li> <li>c. There shall be no obstruction of debris that causes flooding on neighbouring properties.</li> <li>d. The culvert invert shall be submerged when water is flowing.</li> <li>e. Culverts shall be designed to safely overtop without causing structural failure, or include a spillway to ensure safe passage of flood flows where the two percent annual exceedance probability flood flow will overtop the embankment over the culvert.</li> <li>f. The structure shall not cause;             <ol style="list-style-type: none"> <li>i. water depth upstream to exceed three metres, and</li> <li>ii. the water level immediately upstream to exceed the water level immediately downstream by more than three metres.</li> </ol> </li> <li>g. The construction works shall comply with the suspended solids discharge standards as set out in Section 4.2.21.</li> <li>h. This Rule does not apply within a Natural State water body as identified in the Water Management Class Maps of this Plan.</li> <li>i. All equipment and surplus construction materials shall be removed from the river or lake bed and the floodplain on the completion of that activity.</li> <li>j. No contaminants (including, but not limited to, oil, hydraulic fluids, petrol, diesel, other fuels, paint or solvents, but excluding sediment) shall be discharged to water from the activity.</li> <li>k. The owner of the structure shall inform the Waikato Regional Council in writing, at least 10 working days prior to commencing construction, of the location of the structure and whether that structure is located within a flood control or drainage scheme managed by the Waikato Regional Council or a territorial authority.</li> <li>l. The activity shall not disturb any archaeological site or waahi tapu as identified at the date of notification of this Plan, in any district plan, in the NZ Archaeological Association’s Site Recording Scheme, or by the Historic Places Trust except where Historic Places Trust approval has been obtained.</li> <li>m. In the event of any waahi tapu that is not subject to condition l) being identified by the Waikato Regional Council to the person undertaking the use, erection, reconstruction, placement, extension or alteration, the activity shall cease insofar as it may affect the waahi tapu. The activity shall not be recommenced without the approval of the Waikato Regional Council.</li> <li>n. Any erosion occurring as a result of the structure or diversion and discharge of water shall be remedied as soon as practicable.</li> <li>o. No discharge shall be made outside of the natural catchment.</li> <li>p. This rule shall not apply to activities located in, on, under or over the bed of a river or lake that is a Significant Geothermal Feature.</li> </ol>
<p><u>Rule 4.2.9.3</u> Controlled Activity Rule - Culverts for Catchment Areas Not Exceeding 500 Hectares</p>	<p>Any activity unable to comply with Rules 4.2.9.1 or 4.2.9.2 or unless controlled by Rule 4.2.5.1, the following activities:</p> <ol style="list-style-type: none"> <li>1. The use, erection, reconstruction, placement, alteration or extension of a culvert, and associated bed disturbance, in or on the bed of a river or lake for a catchment area exceeding 100 hectares but not exceeding 500 hectares upstream of the culvert, and</li> <li>2. The subsequent diversion and discharge of water through the culvert, and</li> <li>3. Any discharge of sediment associated with construction activities; and</li> <li>4. The associated deposition of construction materials</li> </ol> <p>are controlled activities (requiring resource consent) subject to the following standards and terms:</p> <ol style="list-style-type: none"> <li>a. Any such culvert shall be designed so that a two percent annual exceedance probability (1 in 50 year) flood event shall not cause any increase in upstream water levels which causes flooding on neighbouring properties.</li> <li>b. The structure shall provide for the safe passage of fish both upstream and downstream in water bodies classified as Significant Indigenous Fisheries and Fish Habitats</li> <li>c. There shall be no obstruction of debris that causes flooding on neighbouring properties.</li> </ol>



	<ul style="list-style-type: none"> <li>d. This Rule does not apply within a Natural State water body as identified in the Water Management Class Maps of this Plan.</li> <li>e. All construction materials and equipment shall be removed from the river or lake bed and the floodplain on the completion of that activity.</li> <li>f. No contaminants (including, but not limited to, oil, hydraulic fluids, petrol, diesel, other fuels, paint or solvents, but excluding sediment) shall be discharged to water from the activity.</li> <li>g. The activity shall not disturb any archaeological site or waahi tapu as identified at the date of notification of this Plan, in any district plan, in the NZ Archaeological Association’s Site Recording Scheme, or by the Historic Places Trust except where Historic Places Trust approval has been obtained.</li> <li>h. Any erosion occurring as a result of the structure and diversion and discharge shall be remedied as soon as practicable.</li> <li>i. No discharge shall be made outside of the natural catchment.</li> <li>j. This rule shall not apply to activities located in, on, under or over the bed of a river or lake that is a Significant Geothermal Feature.</li> </ul> <p>Waikato Regional Council reserves control over the following matters:</p> <ul style="list-style-type: none"> <li>i. The invert level of the culvert.</li> <li>ii. Measures to provide for the safe passage of fish both upstream and downstream when the culvert is located in water bodies not classified as Significant Indigenous Fisheries and Fish Habitat.</li> <li>iii. Techniques for ensuring safe passage of flood water (spillway requirements).</li> <li>iv. Measures to control the effect on the activity of areas of significant indigenous vegetation and significant habitats of indigenous fauna<sup>27</sup>.</li> <li>v. Measures to prevent damage to riparian vegetation or soil.</li> <li>vi. The design and location of the culvert.</li> <li>vii. The potential effects on bed and bank stability and water quality.</li> <li>viii. Measures to control the effect of the activity on upstream or downstream properties.</li> <li>ix. Measures to control the effects of the activity on any lawfully established structures.</li> <li>x. Measures to control suspended solids discharges.</li> <li>xi. Measures to avoid, remedy or mitigate adverse effects on the natural character of the beds of rivers and lakes.</li> <li>xii. Measures to ensure consistency with criteria as set out in any applicable Water Management Class in this Plan.</li> <li>xiii. Effects on any waahi tapu or other taonga from the activity.</li> <li>xiv. Effects on the relationship of tangata whenua and their culture and traditions with the site and any waahi tapu or other taonga affected by the activity.</li> <li>xv. xv. Effects on the ability of tangata whenua to exercise their kaitiaki role in respect of any waahi tapu or other taonga affected by the activity</li> </ul>	
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*Information requirements for culverts*

<p>Section 8.1.3.1</p>	<ul style="list-style-type: none"> <li>a. A description and plan of the structures’ dimensions, including an assessment of any percentage change in the size of the structure.</li> <li>b. The expected construction period.</li> <li>c. A description of the proposed method of construction including: <ul style="list-style-type: none"> <li>i. the material to be used to erect or place, or extend, alter or reconstruct the structure,</li> <li>ii. the equipment to be used,</li> <li>iii. a construction plan.</li> </ul> </li> <li>d. Description of the site, nature of the river or lake bed and banks, and vegetation.</li> <li>e. An assessment of the environment effects of the activity including: <ul style="list-style-type: none"> <li>i. the potential effects on bed and bank stability,</li> <li>ii. the extent to which the activity will adversely affect areas of significant indigenous vegetation and significant habitats of indigenous fauna<sup>2</sup>,</li> <li>iii. the extent to which the activity will adversely affect the natural character of the water body,</li> <li>iv. the extent to which the activity will affect neighbouring or downstream properties,</li> <li>v. the extent to which the activity will affect any other lawfully established structure,</li> <li>vi. the extent to which the activity affects tangata whenua values,</li> </ul> </li> </ul>	
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	<ul style="list-style-type: none"> <li>vii. the effects on the uses and values of the water body.</li> <li>f. Evidence that the owner of the river or lake bed has authorised the structure to be built.</li> <li>g. The extent to which the activity will affect navigation safety.</li> <li>h. All mooring applications must include the following information: <ul style="list-style-type: none"> <li>i. Contact details of applicant,</li> <li>ii. General location of the mooring (i.e. name of the bay in a lake),</li> <li>iii. GPS location of mooring,</li> <li>iv. Draft, beam and length of vessel,</li> <li>v. Type of vessel (launch/yacht etc),</li> <li>vi. Written comment from harbourmaster (if applicable) on the navigation safety implications of the mooring,</li> <li>vii. Alternative locations considered,</li> </ul> </li> <li>viii. An assessment of any actual or potential affects that the activity may have on the environment,</li> <li>ix. ix. Consultation with potentially affected local iwi, owners of legal mooring structures within 75 metres and landowners.</li> </ul>	
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Effects to be addressed:

Water quality (erosion and sediment control), ecological, hydrological, archaeological and cultural

### 3.0 Consents under National Environmental Standards for Freshwater

Rule	Rule text	Comment/assessment
<b>Construction of specified infrastructure</b>		
<u>Regulation 45</u> Discretionary activities	<p>(1) Vegetation clearance within, or within a 10 m setback from, a natural wetland is a discretionary activity if it is for the purpose of constructing specified infrastructure.</p> <p>(2) Earthworks or land disturbance within, or within a 10 m setback from, a natural wetland is a discretionary activity if it is for the purpose of constructing specified infrastructure.</p> <p>(3) Earthworks or land disturbance outside a 10 m, but within a 100 m, setback from a natural wetland is a discretionary activity if it—</p> <ul style="list-style-type: none"> <li>a) is for the purpose of constructing specified infrastructure; and</li> <li>b) results, or is likely to result, in the complete or partial drainage of all or part of the natural wetland.</li> </ul> <p>(4) The taking, use, damming, diversion, or discharge of water within, or within a 100 m setback from, a natural wetland is a discretionary activity if it is for the purpose of constructing specified infrastructure.</p>	<p>A complete wetland delineation survey has not been undertaken; however, the nature of the groundwater conditions in the area means it is likely that wetland habitat will exist within 100m of the greenway corridor. The works include earthworks that are likely to result in lowering of groundwater (which could result in drainage of these wetland areas) and well as take, use, damming, diversion, and discharge of water. Therefore consent will be required as a Discretionary Activity under Regulation 45 of the NESFW for a number of activities associated with the project.</p>

Effects to be addressed:

Wetland delineation, groundwater/hydrogeology, ecology, cultural

<b>Culverts</b>		
<u>Regulation 70</u> Permitted Activities	<p>(1) The placement, use, alteration, extension, or reconstruction of a culvert in, on, over, or under the bed of any river or connected area is a permitted activity if it complies with the conditions.</p> <p>Conditions</p> <p>(2) The conditions are that—</p> <ul style="list-style-type: none"> <li>a) the culvert must provide for the same passage of fish upstream and downstream as would exist without the culvert, except as required to carry out the works to place, alter, extend, or reconstruct the culvert; and</li> <li>b) the culvert must be laid parallel to the slope of the bed of the river or connected area; and</li> <li>c) the mean cross-sectional water velocity in the culvert must be no greater than that in all immediately adjoining river reaches; and</li> <li>d) the culvert’s width where it intersects with the bed of the river or connected area (s) and the width of the bed at that location (w), both measured in metres, must compare as follows: <ul style="list-style-type: none"> <li>i. where <math>w \leq 3</math>, <math>s \geq 1.3 \times w</math>;</li> <li>ii. where <math>w &gt; 3</math>, <math>s \geq (1.2 \times w) + 0.6</math>; and</li> </ul> </li> </ul>	<p>The culverts proposed may meet the permitted activity requirements of Regulation 70; however, it is conservatively assessed that these structures will require consent as a Discretionary Activity under Regulation 71. Any application should specifically consider the listed information requirements.</p>

	<ul style="list-style-type: none"> <li>e) the culvert must be open-bottomed or its invert must be placed so that at least 25% of the culvert's diameter is below the level of the bed; and</li> <li>f) the bed substrate must be present over the full length of the culvert and stable at the flow rate at or below which the water flows for 80% of the time; and</li> <li>g) the culvert provides for continuity of geomorphic processes (such as the movement of sediment and debris).</li> <li>h) Information requirements</li> </ul> <p>(3) See also regulations 62 and 63 for information requirements that apply to the permitted activity (unless the activity is use).</p>	
<p><u>Regulation 71</u> Discretionary Activities</p>	<p>1) The placement, use, alteration, extension, or reconstruction of a culvert in, on, over, or under the bed of a river is a discretionary activity if it does not comply with any of the conditions in regulation 70(2).</p> <p>Conditions required in resource consent</p> <p>(2) A resource consent granted for the discretionary activity must impose the conditions required by—</p> <ul style="list-style-type: none"> <li>a) regulations 62 and 63 (information about structures and passage of fish and about culverts), unless the activity is use; and</li> <li>b) regulation 69 (monitoring and maintenance).</li> </ul>	
<p><u>Regulation 62</u> Requirement for all activities: information about structures and passage of fish</p>	<p>(1) This regulation applies to any activity that—</p> <ul style="list-style-type: none"> <li>a) is the placement, alteration, extension, or reconstruction of any of the following structures in, on, over, or under the bed of any river or connected area: <ul style="list-style-type: none"> <li>i. a culvert:</li> <li>ii. a weir:</li> <li>iii. a flap gate (whether passive or non-passive):</li> <li>iv. a dam:</li> <li>v. a ford; and</li> </ul> </li> <li>b) is a permitted activity, or a class of activity that requires a resource consent, whether under this subpart or otherwise.</li> </ul> <p>(2) The information specified in this regulation must be collected and provided to the relevant regional council, together with the time and date of its collection, within 20 working days after the activity is finished,—</p> <ul style="list-style-type: none"> <li>a) for a permitted activity; or</li> <li>b) as a condition of a resource consent granted for the activity, for another class of activity.</li> </ul> <p>(3) The information is—</p> <ul style="list-style-type: none"> <li>a) the type of structure:</li> <li>b) the geographical co-ordinates of the structure:</li> <li>c) the flow of the river or connected area (whether none, low, normal, or high):</li> <li>d) whether the water is tidal at the structure's location:</li> <li>e) at the structure's location,— <ul style="list-style-type: none"> <li>i. the width of the river or connected area at the water's surface; and</li> <li>ii. the width of the bed of the river or connected area:</li> </ul> </li> <li>f) whether there are improvements to the structure to mitigate any effects the structure may have on the passage of fish:</li> <li>g) whether the structure protects particular species, or prevents access by particular species to protect other species:</li> <li>h) the likelihood that the structure will impede the passage of fish:</li> <li>i) visual evidence (for example, photographs) that shows both ends of the structure, viewed upstream and downstream.</li> </ul>	

<p><u>Regulation 64</u> Requirement for weir activities: information about weirs</p>	<p>(1) This regulation applies to any activity that—</p> <ul style="list-style-type: none"> <li>a) is the placement, alteration, extension, or reconstruction of a culvert in, on, over, or under the bed of any river or connected area; and</li> <li>b) is a permitted activity, or a class of activity that requires a resource consent, whether under this subpart or otherwise.</li> </ul> <p>(2) The information specified in this regulation must be collected and provided to the relevant regional council, together with the time and date of its collection, within 20 working days after the activity is finished,—</p> <ul style="list-style-type: none"> <li>a) for a permitted activity; or</li> <li>b) as a condition of a resource consent granted for the activity, for another class of activity.</li> </ul> <p>(3) The information is—</p> <ul style="list-style-type: none"> <li>a) the culvert’s asset identification number, if known:</li> <li>b) whether the culvert’s ownership is— <ul style="list-style-type: none"> <li>i. held by the Crown (for example, the Department of Conservation), a regional council, a territorial authority, the New Zealand Transport Agency, or KiwiRail Holdings Limited; or</li> <li>ii. held publicly by another person or organisation; or</li> <li>iii. held privately; or</li> <li>iv. unknown:</li> </ul> </li> <li>c) the number of barrels that make up the culvert:</li> <li>d) the culvert’s shape:</li> <li>e) the culvert’s length:</li> <li>f) the culvert’s diameter or its width and height:</li> <li>g) the height of the drop (if any) from the culvert’s outlet:</li> <li>h) the length of the undercut or erosion (if any) from the culvert’s outlet:</li> <li>i) the material from which the culvert is made:</li> <li>j) the mean depth of the water through the culvert:</li> <li>k) the mean water velocity in the culvert:</li> <li>l) whether there are low-velocity zones downstream of the culvert:</li> <li>m) the type of bed substrate that is in most of the culvert:</li> <li>n) whether there are any remediation features (for example, baffles or spat rope) in the culvert:</li> <li>o) whether the culvert has wetted margins:</li> <li>p) the slope of the culvert:</li> <li>q) the alignment of the culvert:</li> <li>r) the numbers of each other type of structure to which this subpart applies, or of wingwalls or screens, on the culvert:</li> <li>s) if there is any apron or ramp on the culvert, the information required by regulation 68 for each of them.</li> </ul>	
<p><u>Regulation 69</u> Condition of resource consent for activities: monitoring and maintenance</p>	<p>(1) This regulation applies to any activity that—</p> <ul style="list-style-type: none"> <li>a) is the placement, use, alteration, extension, or reconstruction of any of the following structures in, on, over, or under the bed of any river or connected area: <ul style="list-style-type: none"> <li>i. a culvert:</li> <li>ii. a weir:</li> <li>iii. a flap gate (whether passive or non-passive):</li> <li>iv. a dam:</li> <li>v. a ford; and</li> </ul> </li> <li>b) is a class of activity that requires a resource consent, whether under this subpart or otherwise.</li> </ul> <p>(2) A resource consent granted for the activity must impose conditions that—</p> <ul style="list-style-type: none"> <li>a) require monitoring and maintenance of the structure that is sufficient to ensure that its provision for the passage of fish does not reduce over its lifetime; and</li> <li>b) require a plan for that monitoring and maintenance that includes— <ul style="list-style-type: none"> <li>i. how the monitoring and maintenance will be done; and</li> </ul> </li> </ul>	

	<ul style="list-style-type: none"> <li>ii. the steps to be taken to avoid any adverse effects on the passage of fish; and</li> <li>iii. the steps to be taken to ensure that the structure’s provision for the passage of fish does not reduce over its lifetime; and</li> <li>iv. how often, as specified by the consent authority, the information must be provided under paragraph (c) (for the purposes of reassessing the structure’s effect on the passage of fish); and</li> <li>v. a process for providing that information; and</li> <li>c) require an updated version of the information relating to the structure that was required for the original resource consent to be provided to the consent authority at the following times: <ul style="list-style-type: none"> <li>i. at the intervals required by the plan; and</li> <li>ii. (ii) each time a significant natural hazard affects the structure.</li> </ul> </li> </ul>	
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## 4.0 Consents under the Hamilton City District Plan

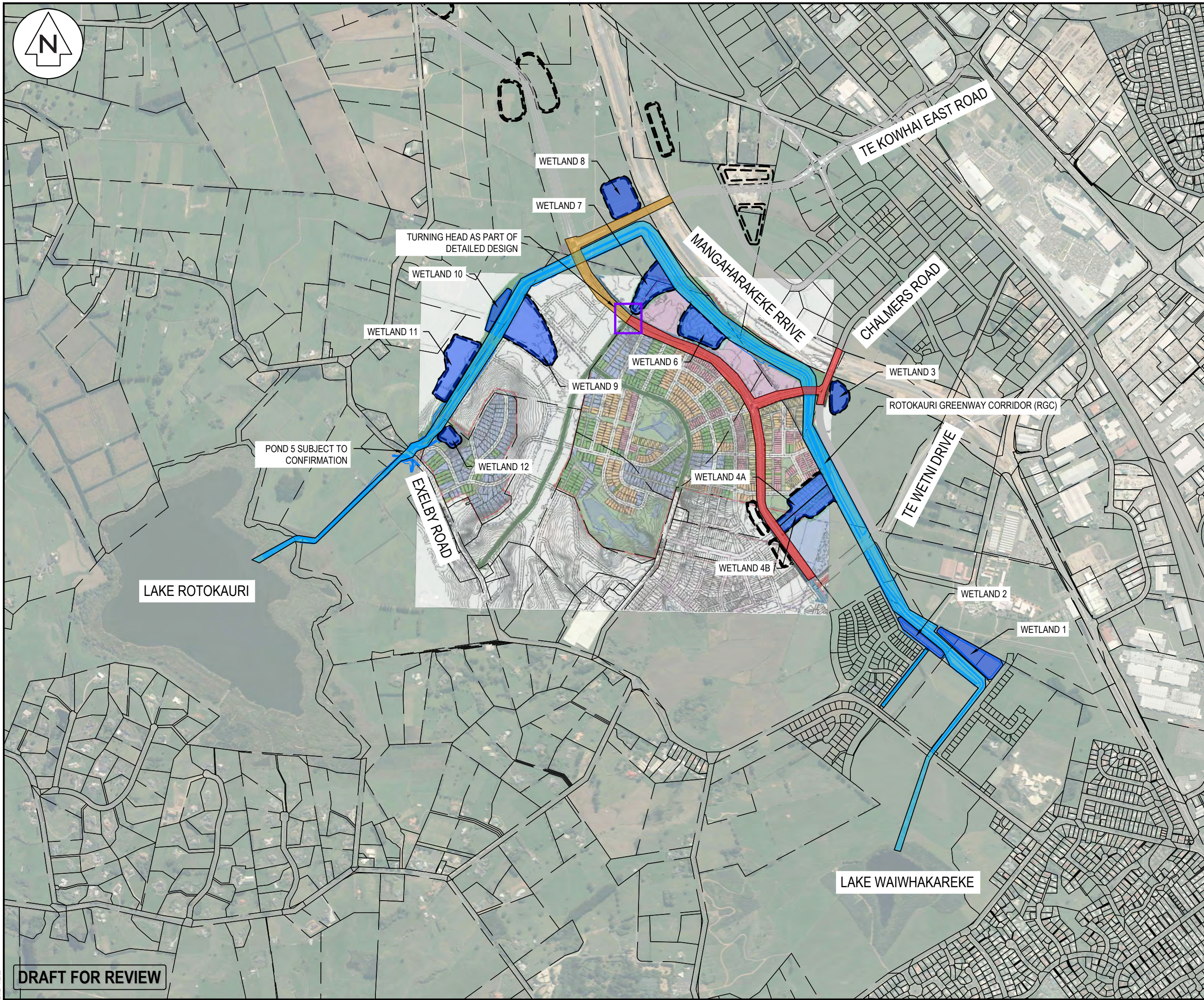
### 4.1 Earthworks

Rule	Rule text	Comment								
Rule 25.2.4.1h	<p>Earthworks volumes must not exceed the following maximums in any single activity or cumulative activities in any calendar year following commencement of earthworks activities:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #1a522a; color: white;"> <th style="width: 40%;">Activity</th> <th style="width: 60%;">All Other Zones</th> </tr> </thead> <tbody> <tr> <td>Earthworks associated with any activity requiring building consent (including associated site works)</td> <td>Unlimited</td> </tr> <tr> <td>Earthworks associated with subdivision</td> <td>1000m<sup>3</sup></td> </tr> <tr> <td>All other earthworks</td> <td>1000m<sup>3</sup></td> </tr> </tbody> </table>	Activity	All Other Zones	Earthworks associated with any activity requiring building consent (including associated site works)	Unlimited	Earthworks associated with subdivision	1000m <sup>3</sup>	All other earthworks	1000m <sup>3</sup>	To be assessed as a <b>Restricted Discretionary Activity</b> .
Activity	All Other Zones									
Earthworks associated with any activity requiring building consent (including associated site works)	Unlimited									
Earthworks associated with subdivision	1000m <sup>3</sup>									
All other earthworks	1000m <sup>3</sup>									

### 4.2 Minor Arterial

Rule	Rule text	Comment
Rule 25.14.3(a) and (b)		<p>To be assessed as a <b>Restricted Discretionary Activity</b>.</p> <p>Requires a Broad Integrated Transport Assessment.</p>





- Notes
1. Plan is interpretive only based on PDA. Refer PDA for full scope of works.
  2. Wetlands locations and sizes are indicative only. Subject to final design.
  3. Boundaries are subject to final survey.

Legend

	EX BDY
	ARTERIAL - DETAILED DESIGN
	ROAD - CONCEPT DESIGN
	ROTKAURI GREENWAY CORRIDOR (RGC) - DETAILED DESIGN
	WETLANDS - DETAILED DESIGN

Rev	Description	By	Date
A	INFORMATION	JZ	07/22
Survey	-	-	-
Design	-	-	-
Drawn	JZ	07/22	
Checked	JH	07/22	

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Project  
**ROTKAURI GREENWAY CORRIDOR AND ARTERIAL FOR HOUNSELL HOLDINGS**

Title  
**PROJECT SCOPE PLAN 1**

Project no.	PROMO
Scale	-
Cad file	C-120.DWG
Drawing no.	C120
Rev	<b>A</b>

**DRAFT FOR REVIEW**

DATE: 12/01/22