

South Rail – Drury and Paerata Station Projects

Appendix D – Permitted Activity Table

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Version 1

Prepared for KiwiRail Holdings Limited by Te Tupu Ngātahi

Appendix D: Permitted Activities Table

Relevant rule / regulation	Relevant Permitted Standards	Comment
COVID-19 Recovery (Fast-Track Consenting) Act 2020 (COVID-19 Act)		
<p>Schedule 4, Part 2</p> <p>Under section 30 of the COVID-19 Act (criteria for work on infrastructure), Schedule 4 of the Act applies where KiwiRail Holdings Limited carry out work on existing infrastructure along the rail. These override any similar activities within the relevant plan or proposed plan and the NES:Soil for works on existing infrastructure, provided they are not listed as discretionary, non-complying or prohibited activities. However, the COVID-19 Act does not override the NES:FW.</p> <p>The parts of works undertaken on existing rail infrastructure (i.e. the railway line and associated culverts) are generally permitted as long as the standards are met.</p>		
<p>Clause 12</p> <p>1. Unless excluded by section 32, and subject to clause 11, any activity for the operation, maintenance, replacement, or minor upgrade of existing infrastructure is a permitted activity if the activity complies with the permitted activity standards in subpart 2</p> <p>2. In this clause, minor upgrade means any of the following activities:</p> <p>a) the provision of a safety barrier:</p> <p>b) fencing and obstacle clearance:</p> <p>c) the safety upgrade of an intersection or a level crossing (including to add signals, a</p>	<p>Subpart 2 – Section 13</p> <p>Ground disturbance – Earthworks (including diversion, damming, and discharge of sediment-laden water)</p> <p>1. For any earthworks activity, an erosion and sediment control plan must be—</p> <p>a) prepared by a suitably qualified person with at least 5 years' experience in erosion and sediment control; and</p> <p>b) served with the notice of intention to local authorities that is required by clause 9; and</p> <p>c) implemented in accordance with industry best practice that reflects the scale of the activity and associated earthworks.</p> <p>2. Industry best practice includes the measures and procedures specified within the Erosion and Sediment Control Guidelines for State Highway Infrastructure.</p> <p>3. The agency carrying out the work must—</p> <p>a) determine whether an authority is required to modify or destroy an archaeological site (see sections 44, 56, and 62 of the Heritage New Zealand Pouhere Taonga Act 2014); and</p> <p>b) if no authority is required, prepare an accidental discovery protocol in advance of earthworks activity and apply the protocol if archaeological material is uncovered; and</p> <p>c) if an authority is required, obtain it.</p> <p>4. Sediment originating from the earthworks activity must, to the extent possible, be managed on site to ensure that it does not, after reasonable mixing, give rise to any of the following effects in the receiving waters:</p>	<p>This applies to earthworks related to existing rail infrastructure, that are not within 25m of a natural wetland or 50m of a river</p> <p>An Erosion and Sediment Control Plan has been prepared by a suitably qualified person with at least 5 years' experience for both stations and implemented in accordance with industry best practice.</p> <p>Notice will be served prior to works.</p> <p>An authority to destroy, damage or modify any previously unrecorded archaeological sites, that may be encountered within the extent of the Projects may be sought under Section 44 of the Heritage New Zealand Pouhere Taonga Act 2014. This will be applied for during the detailed design stage.</p>

<p>roundabout, a turning bay, or safety improvements for pedestrians or cyclists):</p> <p>d) the strengthening or replacement of a bridge, including abutments:</p> <p>e) a minor upgrade or replacement of a culvert:</p> <p>f) road widening for safety works:</p> <p>g) the upgrade or maintenance of a drainage network:</p> <p>h) the upgrade or maintenance of a footpath or shared-use path:</p> <p>i) the sealing of a road:</p> <p>j) the provision of a noise wall or barrier:</p> <p>k) the construction of a retaining structure in connection with any other minor upgrade</p>	<p>a) the production of conspicuous oil or grease films, scums, or foams, or floatable or suspended materials:</p> <p>b) a decrease of more than 20% in visual clarity:</p> <p>c) any emission of objectionable odour:</p> <p>d) making fresh water unsuitable for consumption by farm animals:</p> <p>e) more than minor adverse effects on aquatic life.</p> <p>5. All measures to minimise the generation and discharge of sediment from the earthworks activity must—</p> <p>a) be implemented, to the extent that is practicable, before the works commence; and</p> <p>b) include actions to minimise the area of open ground at any time and avoid, where practicable, any earthworks during winter months (June, July, and August); and</p> <p>c) remain in place until the earthworks activity has been completed and the area of earthworks has stabilised in accordance with the Erosion and Sediment Control Guidelines for State Highway Infrastructure.</p> <p>6. Earthworks must not—</p> <p>a) occur within 25 metres of any part of a natural wetland; or</p> <p>b) cause an adverse effect on any part of a natural wetland; or</p> <p>c) occur within 50 metres of a river in a statutory acknowledgement area without the consent of the relevant iwi authorities; or</p> <p>d) occur within 50 metres of identified īnanga spawning areas during īnanga spawning periods.</p> <p>7. In this clause, Erosion and Sediment Control Guidelines for State Highway Infrastructure means the document of that name as published by the New Zealand Transport Agency.</p>	
	<p>Subpart 2 – Section 14</p> <p><i>Geotechnical boreholes (including groundwater monitoring)</i></p> <p>1. The drilling of boreholes must comply with NZS 4411:2001 Environmental standard for drilling of soil and rock.</p> <p>2. Drilling must not occur at a location, or at a depth, or in a way that may affect any drinking-water supply.</p> <p>3. A bore/well log form must be submitted to the relevant unitary authority or regional council within 1 month of the bore being constructed.</p>	<p>Bores for geotechnical investigation are permitted when associated with the minor upgrade of existing rail infrastructure.</p>

	<p>4. The bore must be decommissioned, in accordance with NZS 4411:2001 Environmental standard for drilling of soil and rock, as soon as practicable after the investigation and monitoring are completed.</p>	
	<p>Subpart 2 – Section 15</p> <p><i>Groundwater discharge for dewatering and construction</i></p> <ol style="list-style-type: none"> 1. Groundwater discharge arising from dewatering and construction must not be from, into, or onto contaminated or potentially contaminated land that is identified under the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011. 2. The discharge must not be from or into a natural wetland. 3. The discharge must not cause, or increase any adverse effects from, flooding. 	<p>Any groundwater discharge will not be from a natural wetland. However, at Paerata, the discharge will be to a stream that runs through a downstream natural wetland, therefore indirectly discharging to a natural wetland.</p> <p>The discharge is considered insignificant and so will not cause flooding.</p> <p>A DSI will be undertaken prior to any earthworks. This will confirm whether the land is contaminated.</p>
	<p>Subpart 2 – Section 16</p> <p><i>Temporary and permanent bridges and culverts</i></p> <ol style="list-style-type: none"> 1. Any structure in the coastal marine area must not cause a hazard to safe navigation. 2. If the works include a temporary or permanent bridge or culvert, the activity must not disturb a river or lake bed to a depth or an extent greater than that required to undertake the activity. 3. A temporary bridge must not remain in place for any longer than is necessary to undertake the works. 4. All permanent structures must be designed, installed, and maintained to ensure there are no increased flooding effects. 5. Subclause (6) applies if a construction activity results in any change, in size or extent, to the structure of any permanent bridge, abutment, or culvert. 6. Records of the change and the associated flow calculations must be provided to the relevant unitary authority or regional council within 10 working days after the construction activity ends. 	<p>This applies to minor culvert upgrades, including replacements.</p> <p>All culvert upgrades have been considered under Volume 4, Assessment of Stormwater Effects and will not increase flooding impacts.</p>

	<p>Subpart 2 – Section 17</p> <p><i>Fish passage</i></p> <ol style="list-style-type: none"> 1. All works that involve the temporary disturbance of a watercourse must be undertaken outside of relevant fish spawning periods, unless that precaution is deemed unnecessary or impracticable by a person with a post-graduate degree in freshwater ecology or a similar qualification. 2. Proposals for works to ensure fish passage must be referred to all of the relevant bodies described in clause 5(1) at least 10 working days before the works commence, to enable feedback to be sought (see clause 5(3)). 3. Fish passage and kōura passage must be provided at all times while works occur in watercourses, unless a temporary restriction of no more than 48 hours is required for construction or maintenance activities. 4. Salvage and relocation of indigenous fish, kākahi/freshwater mussels, and kōura/freshwater crayfish must be undertaken for any stream diversions or dewatering and must be placed in the same waterway. 5. In-stream structures must be designed and maintained to meet the minimum design standards for fish passage, as specified in the New Zealand Fish Passage Guidelines (NIWA Client Report No. 2018019HN, April 2018). 	<p>Fish passage is unable to be provided in extended culverts due to the constraints of the existing structure.</p> <p>All new and replacement culverts will comply.</p>
	<p>Subpart 2 – Section 18</p> <p><i>Biosecurity risks</i></p> <p>The agency undertaking the works must take all appropriate measures to—</p> <ol style="list-style-type: none"> a) prevent the spread of pest plants and unwanted organisms, including the organism that causes kauri dieback disease; and b) avoid the spread of pests in areas covered by a pest management plan that is developed by a unitary authority or regional council. 	<p>The Paerata Wetland Offset/Compensation Restoration Plan and Drury Central Stream Offset/Compensation Restoration Plan will include a programme of establishment and post establishment protection and maintenance (fertilising, weed removal/spraying, replacement of dead/poorly performing plants, watering to maintain soil moisture, maintenance programme of five years.</p>

	<p>Subpart 2 – Section 19</p> <p>Vegetation</p> <ol style="list-style-type: none"> 6. Any new planting must be of non-invasive species. 7. Revegetation must be of species naturally occurring within the ecological district and eco-sourced, unless— <ol style="list-style-type: none"> a) it is not possible to comply with that obligation; or b) there are sound ecological reasons to plant exotics. 8. Plant species selected must take into account the habitat requirements of affected fauna. 9. Vegetation must not be removed if it is identified in the relevant plan as significant indigenous vegetation, or as a significant habitat of indigenous fauna or a natural wetland. 10. The maximum volume of earthworks within a significant natural area or significant ecological area, as identified in the relevant plan, must not exceed 40 cubic metres. 11. Vegetation clearance activities must be completed in accordance with good arboricultural practice. 12. Trees identified in a schedule to a relevant plan or proposed plan as having significant value must not be removed. 13. Trimming and maintenance of a scheduled tree that is identified in the relevant plan may be undertaken only to enable the ongoing provision of existing infrastructure. 14. In this clause, vegetation clearance means the disturbance, cutting, burning, clearing, damaging, destruction, or removal of vegetation. 	<p>Planting will be native, eco-sourced, non-invasive species (conditioned through the stream enhancement management plan).</p> <p>The Project ecologists have not identified any areas of significant vegetation or habitat within the Project sites.</p> <p>No notable trees are located within the Project sites.</p>
	<p>Subpart 2 – Section 20</p> <p>General contaminant management</p> <ol style="list-style-type: none"> 1. There must be an emergency spill prevention plan in place to prevent spills and to contain and manage any release of contaminants from equipment being used for the activity. 2. The plan must be served with the notice of intention to local authorities that is required by clause 9. 3. The provisions of the plan must be complied with at all times for the duration of the project. 4. A copy of the plan must be held on site at all times and be made immediately available in response to any request from an enforcement officer. 5. All construction equipment and materials must be removed on the completion of works. 	<p>A DSI will be undertaken prior to any earthworks. This will confirm whether the land is contaminated. Contamination management will be described in the CEMP.</p>

	<p>6. The following must not take place in, or within 10 metres of, any location where fuel can enter a water body:</p> <ol style="list-style-type: none"> a) cleaning or refuelling of machinery or equipment: b) storage of fuel. 	
	<p>Subpart 2 – Section 21</p> <p><i>Transport, disposal, and tracking of soil and other materials removed</i></p> <ol style="list-style-type: none"> 1. The site investigation for the piece of land must— <ol style="list-style-type: none"> a) be undertaken in accordance with Contaminated Land Management Guidelines No 5; and b) be reported on in accordance with Contaminated Land Management Guidelines No 1. 2. A copy of the report of the site investigation must be provided to the relevant unitary authority or regional council within 2 months after the investigation is completed. 3. For sites where soils are identified as containing contaminants above background levels, a site management plan must be— <ol style="list-style-type: none"> a) prepared and implemented by a suitably qualified practitioner with experience in the management of contaminated sites; and b) prepared in accordance with Contaminated Land Management Guidelines No 1; and c) either— <ol style="list-style-type: none"> i. served with the notice of intention to local authorities that is required by clause 9; or ii. made available to the relevant territorial authority and unitary authority or regional council within 10 working days before the works commence. 4. Soil taken away from the piece of land in the course of the activity must be disposed of at a facility authorised to receive soil of that kind. 5. Records of the volume of soil and other materials deposited, and where they were deposited, must be maintained and made available on request to the relevant territorial authority and unitary authority or regional council within 10 working days of the date of the request. 6. In this clause,— <p><i>Contaminated Land Management Guidelines No 1</i> means the <i>Contaminated Land Management Guidelines No. 1: Reporting on Contaminated Sites in New Zealand</i> (Ministry for the Environment, reference ME 1071)</p> 	<p>A DSI will be undertaken prior to earthworks and contamination management will be described in the CEMP.</p>

	<p>Contaminated Land Management Guidelines No 5 means the <i>Contaminated Land Management Guidelines No. 5: Site Investigation and Analysis of Soils</i> (Ministry for the Environment, reference ME 1073).</p>	
	<p>Subpart 2 – Section 22</p> <p><i>Discharge of dust to land and air</i></p> <ol style="list-style-type: none"> 1. The discharge of dust must be managed in accordance with the Good Practice Guide for Assessing and Managing Dust (Ministry for the Environment, reference ME 1277), including minimising the discharge of dust to any site containing a sensitive activity. 2. In this clause, sensitive activity means any of the following activities as they are defined in chapter J of the Auckland Unitary Plan Operative: <ol style="list-style-type: none"> a) an activity sensitive to aircraft noise: b) an activity sensitive to air discharges: c) an activity sensitive to hazardous facilities and infrastructure: d) an activity sensitive to noise: e) an activity sensitive to the National Grid. 	<p>Suitable dust management measures will be implemented in accordance with the CEMP for the Project and are anticipated to include:</p> <ol style="list-style-type: none"> a) Water carts to minimise dust during earthworks; b) Covered trucks hauling material onto and offsite; and c) Mulching and top soiling of exposed earthworks.
	<p>Subpart 2 – Section 23</p> <p><i>Construction noise and vibration</i></p> <ol style="list-style-type: none"> 1. For works within 100 metres of a sensitive activity, a construction, noise, and vibration management plan must be prepared by a suitably qualified and experienced person and implemented before the start of the works. 2. The purpose of the plan is to provide a framework for the development and implementation of methods to avoid, remedy, or mitigate adverse construction noise and vibration effects. 3. The plan must be— <ol style="list-style-type: none"> a) prepared in accordance with NZS 6803:1999 Acoustics—Construction noise; and b) served with the notice of intention to local authorities that is required by clause 9. 4. In this clause, sensitive activity— <ol style="list-style-type: none"> a) means residential, educational, community, health care, or visitor accommodation; and b) includes (without limitation)— <ol style="list-style-type: none"> i. dwellings: ii. schools: iii. marae: iv. hotels and motels: v. residential care facilities. 	<p>A CNVMP will be prepared by a suitably qualified and experienced person and implemented before the start of the works.</p>

	<p>Subpart 2 – Section 24</p> <p>Construction signage</p> <p>Signage may only be used if—</p> <ul style="list-style-type: none"> a) it is required by any enactment; or b) it gives safety or security instructions or information; or c) it provides information or directions in relation to works. 	<p>Construction signage has not been confirmed at this stage, however, will meet the permitted criteria.</p>
	<p>Subpart 2 – Section 25</p> <p>Lighting</p> <p>Any new permanent lighting must comply with AS/NZS 1158:2005 Lighting for roads and public spaces.</p>	<p>Lighting has not been confirmed at this stage, however, will meet the permitted criteria.</p>
	<p>Subpart 2 – Section 26</p> <p>Temporary activities (for example, office facilities, contractor laydown areas, and storage yards)</p> <p>Construction yards must be designed and located in a manner that will—</p> <ul style="list-style-type: none"> a) minimise their visibility from occupied dwellings; and b) minimise risk of contaminant run-off to receiving water bodies. 	<p>Construction yard details will be provided prior to construction.</p>
	<p>Subpart 2 – Section 28</p> <p>Noise attenuation walls and structures</p> <p>The height of a noise attenuation wall or structure must not exceed 3 metres.</p>	<p>Noise attenuation wall or structures have not been confirmed at this stage, however, are permitted if they do not exceed 3m.</p>
	<p>Subpart 2 – Section 36</p> <p>Monitoring</p> <ol style="list-style-type: none"> 1. The agency undertaking the works must keep evidence of compliance with the relevant standards applied by this schedule on the completion of the works. 2. The relevant consent authority may request a copy of all or part of the evidence. 3. The agency must comply with the request within 10 working days after the date on which they receive it. 	<p>Monitoring will be undertaken.</p>

AUP:OP Regional Resource Consents

Table E3.4.1 Activity Table

Activities in, on, under or over the bed of lakes, rivers, streams (including intermittent stream) and wetlands

<p>E3.4.1 (A2)</p> <p><i>Activities involving planting and the associated diversion of water</i></p> <p>Conservation planting complying with the standards in E3.6.1.2</p>	<p>E3.6.1.1 General Standards</p> <ol style="list-style-type: none"> 4. The activity must not, after reasonable mixing, result in any of the following effects in receiving waters: <ol style="list-style-type: none"> a) the production of conspicuous oil or grease films, scums or foams, or floatable or suspended materials; b) any conspicuous change in the colour or visual clarity; c) any emission of objectionable odour; d) the rendering of fresh water unsuitable for consumption by farm animals; and e) any significant adverse effects on aquatic life 5. The activity must not result in an increase of existing flood levels up to and including the 1 per cent annual exceedance probability (AEP) flood plain on land or structures other than that owned or controlled by the person undertaking the activity 6. The activity must not result in more than minor erosion or land instability 7. Machinery must not sit directly on the wetted cross-section of the bed at the time of the work 8. Explosives must not be used in the bed 9. Mixing of construction materials and refuelling or maintenance of equipment must not occur within 10m of the bed and best site management practice must be used to avoid contaminant discharging into the water 10. The activity must not destroy, damage or modify any sites scheduled in the Historic Heritage Overlay or the Sites and Places of Significance to Mana Whenua Overlay 11. The activity must not prevent public access along the lake, river, stream or wetlands. <p>Standard E3.6.1.2</p> <ol style="list-style-type: none"> 1. The plant must be a non-invasive species in aquatic conditions 2. Plantings must be species native to the area unless it is not practicable to do so 3. The plant must not be a pest in a pest management strategy prepared under the Biosecurity Act 1993 or declared as an unwanted 	<p>Drury Central Station</p> <p>Native planting will occur along the riparian area of the Hingaia Tributary as part of the offset planting for the reclamation of Flanagan Tributary (refer to Volume 4: Assessment of Effects on Ecology).</p> <p>This planting will unlikely be in, on, under or over the river, and will meet all the relevant standards.</p> <p>Paerata Station</p> <p>Native planting will likely occur within Wetland 2 (refer to Volume 4: Assessment of Effects on Ecology) at Paerata as part of the offset planting for the reclamation of Wetland 1.</p> <p>The purpose of this planting is for conservation for ecological value and will not comprise invasive or pest plant species.</p> <p>This planting will meet all the relevant standards.</p>
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	organism by a chief technical officer constituted under the same act	
<p>E3.4.1 (A14)</p> <p><i>Activities involving disturbance and associated sediment discharge</i></p> <p>Pest plant removal complying with the standards in E3.6.1.8</p>	<p>E3.6.1.1 General Standards (listed above)</p> <p>Standard E3.6.1.4</p> <ol style="list-style-type: none"> 1. All disturbance activities must not: <ol style="list-style-type: none"> a) divert any part of the lake, river or stream to a new course; b) result in the infilling of the existing bed; and c) lead to the instability of the bank in the immediate vicinity 2. Best practice erosion and sediment control measures must be implemented 3. Any materials used must not be toxic to aquatic organisms 4. Debris or other material must not be re-deposited in the bed of the lake, river or stream, or within the one per cent annual exceedance probability (AEP) floodplain 5. The bed must be restored to a profile that does not inhibit water flow or prevent fish passage upstream or downstream in waterbodies that contain fish <p>Standard E3.6.1.8</p> <ol style="list-style-type: none"> 1. The disturbance activity must comply with the standards in E3.6.1.4 above 2. The eradication or removal of the plant must comply with an approved pest management plan 3. Prior to the activity starting the Council must be advised of the start and completion dates of the works 4. Where monitoring is required as part of an approved pest management strategy, the Council must be provided with a copy of the monitoring information collected 	<p>Drury Central and Paerata Station</p> <p>Pest plant removal is likely to occur as part of improving the ecological value of the Hingaia Tributary at Drury Central Station and Wetland 2 at Paerata Station for the purposes of offset.</p> <p>This pest plant removal will meet all the relevant standards.</p>
<p>E3.4.1 (A23)</p> <p><i>Works on structures lawfully existing on or before 30 September 2013 and the associated bed disturbance or depositing any substance, diversion of water and incidental temporary damming of water</i></p>	<p>E3.6.1.1 General Standards (listed above)</p> <p>Standard E3.6.1.10</p> <ol style="list-style-type: none"> 1. All works on existing structures must comply with all of the following standards: <ol style="list-style-type: none"> a) during the activity bed disturbance upstream or downstream of the structure must not exceed 10m either side, excluding the length of the structure; b) best practice erosion and sediment control measures must be used to minimise any discharge of sediment, including sediment impounded behind an existing structure; 	<p>Drury Central Station</p> <p>Extension of the existing culvert carrying the Hingaia Tributary under the rail line (from 52m to 60m long). The western side of this culvert/outlet is to be extended to accommodate the platforms. Replacing the existing portion is</p>

<p>Replacement, upgrading or extension of existing structures complying with the standards in E3.6.1.12</p>	<p>c) debris or other material must not be re-deposited elsewhere in the bed of the lake, river or stream, or within the one per cent annual exceedance probability (AEP) flood plain;</p> <p>d) the activity must not cause more than minor bed erosion, scouring or undercutting immediately upstream or downstream; and</p> <p>e) the activity must not compromise the structural integrity of the structure</p> <p>Standard E3.6.1.12</p> <ol style="list-style-type: none"> 1. The activity must comply with the standards in E3.6.1.10 above 2. Structure length must comply with all of the following requirements: <ol style="list-style-type: none"> a) the total length of any extended structure must not exceed 30m measured parallel to the direction of water flow. This includes the length of any existing structure and the proposed extension but excludes erosion or scour management works; and b) any required erosion or scour management works must not exceed 5m in length, either side of the extended structure. Such works protruding into the bed do not require a separate consent as they are authorised under this rule 3. Construction material and ancillary structures must be removed from the bed following completion of the activity. 4. Other than provided for by another rule, the activity must not increase the height or storage capacity of any existing dam 5. The structure must not prevent the passage of fish upstream and downstream in waterbodies that contain fish 6. Temporary restrictions to fish passage may occur to enable construction work to be carried out. 	<p>permitted as it was built in 1970.</p> <p>Fish passage is unable to be provided in extended culverts due to the constraints of the existing structure.</p> <p>Paerata Station</p> <p>The existing Ø600mm, 110m long pipe at Paerata is being replaced with a Ø1050mm pipe of the same length.</p> <p>There are no culvert extensions proposed.</p>
<p>E3.4.1 (A24)</p> <p><i>Works on structures lawfully existing on or before 30 September 2013 and the associated bed disturbance or depositing any substance, diversion of water and incidental</i></p>	<p>E3.6.1.1 General Standards (listed above)</p> <p>Standard E3.6.1.10 (listed above)</p> <p>Standard E3.6.1.13</p> <ol style="list-style-type: none"> 1. The activity must comply with the standards in E3.6.1.10 above 2. The structure must be removed from the bed as far as practicable 3. Any remaining sections must not be a hazard to public access, navigation or health and safety 	<p>Drury Central Station</p> <p>N/A</p> <p>Paerata Station</p> <p>There is an existing culverted intermittent stream that sits beneath the site of the proposed stormwater wetland. This was piped privately for reclamation prior to 30</p>

<p><i>temporary damming of water</i></p> <p>Demolition or removal of existing structures complying with the standards in E3.6.1.13</p>	<ol style="list-style-type: none"> 4. The bed must be restored to a profile that does not inhibit water flow or prevent the passage of fish upstream and downstream in waterbodies that contain fish 5. For removal of a dam or weir: <ol style="list-style-type: none"> a) the modification must not commence until as much of the impounded sediment as is practicable has been removed from behind the structure; and b) best practice endeavours must be used to minimise the discharge of sediment impounded by the structure. 	<p>September 2013 and was likely permitted under the Auckland Council Regional Plan: Air, Land and Water (Rule 7.5.35).</p> <p>The pipe will be removed and replaced with the stormwater wetland and associated infrastructure.</p> <p>The removal of structures will meet all the relevant standards.</p>
<p>E3.4.1 (A34)</p> <p><i>New structures and the associated bed disturbance or depositing any substance, reclamation, diversion of water and incidental temporary damming of water</i></p> <p>Erosion control structure less than 30m in length when measured parallel to the direction of water flow complying with the standards in E3.6.1.14</p>	<p>E3.6.1.1 General Standards</p> <p>Standard E3.6.1.14</p> <ol style="list-style-type: none"> 1. Structure length must comply with all of the following: <ol style="list-style-type: none"> a) the total length of any extended structure must not exceed 30m measured parallel to the direction of water flow. This includes the length of any existing structure and the proposed extension but excludes erosion or scour management works; b) any required erosion or scour management works must not exceed 5m in length, either side of the extended structure. Such works protruding into the bed do not require a separate consent as they are authorised under this rule; and c) a new structure must not be erected or placed in individual lengths of 30m or less where this would progressively encase or otherwise modify the bed of a river or stream. 2. During construction bed disturbance upstream or downstream of the structure must not exceed 10m either side, excluding the length of the structure 3. The structure must not prevent the passage of fish upstream and downstream in waterbodies that contain fish, except that temporary restrictions to fish passage may occur to enable construction work to be carried out 4. The structure must not cause more than minor bed erosion, scouring or undercutting immediately upstream or downstream 5. Construction material and ancillary structures must be removed from the bed following completion of the activity 6. Other than provided for by another rule, the activity must not increase the height or storage capacity of any existing dam 	<p>Drury Central and Paerata Station</p> <p>Erosion control structures such as rip rap aprons will be utilised at outflows.</p> <p>These will be less than 30m in length and be constructed in accordance with Auckland Council Stormwater Code of Practice guidance.</p> <p>The erosion control structures will meet all the relevant standards.</p>

	<p>7. The 1per cent annual exceedance probability (AEP) flood shall be accommodated by the structure and/or by an overland flow path without increasing flood levels up stream or downstream of the structure, beyond the land or structures owned or controlled by the person undertaking the activity</p> <p>8. Calculation of flow rates will be made using the Auckland Council Technical Publication 108: Guideline for stormwater runoff modelling in the Auckland Region, April 1999.</p>	
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<p>E3.4.1 (A39)</p> <p><i>New structures and the associated bed disturbance or depositing any substance, reclamation, diversion of water and incidental temporary damming of water</i></p> <p>Stormwater or wastewater outfall complying with the standards in E3.6.1.14</p>	<p>E3.6.1.1 General Standards</p> <p>Standard E3.6.1.14 (listed above)</p>	<p>Drury Central Station</p> <p>Piped stormwater outfalls to the Hingaia Tributary from the Drury Central interchange site via a wetland, will be constructed downstream of the headwall in accordance with Auckland Council Stormwater Code of Practice guidance.</p> <p>Paerata Station</p> <p>Piped stormwater outfalls to the Whangapouri Tributary from the Paerata interchange via a wetland, will be constructed in accordance with Auckland Council Stormwater Code of Practice guidance.</p> <p>The stormwater outfalls will meet all the relevant standards.</p>
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Table E7.4.1 Activity Table

<p>E7.4.1 (A36)</p> <p><i>Drilling and Use of holes and bores</i></p> <p>Holes for:</p>	<p>Standard E7.6.1.16</p> <p>1. The drilled hole or bore must not be in a Wetland Management Areas Overlay</p> <p>2. The drilled hole or bore must not be for the taking groundwater except for the removal of a sample(s) for groundwater quality analysis</p>	<p>Drury Central and Paerata Station</p> <p>Bores and the drilling of holes will be required for geotechnical investigation and a</p>
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<ul style="list-style-type: none"> • geotechnical investigation; • mineral exploration; • mineral extraction; • geological investigation; • contaminated site investigation; or • down-hole seismometers 	<p>3. The drilling of the hole or bore must not destroy, damage or modify any places scheduled in the Historic Heritage Overlay.</p> <p>Standard E7.6.1.17</p> <ol style="list-style-type: none"> 1. All applications must meet the standards in E7.6.1.16 above 2. Other than for holes or bores for down-hole seismometers, stormwater disposal and down-hole heat exchangers, the drilled hole or bore must be decommissioned within three months of the start of drilling 3. Before being decommissioned, the drilled hole or bore must be secured so that contaminants cannot enter the ground through the hole or bore. 4. Where more than one aquifer is penetrated, the drilled hole or investigation bore must be decommissioned on completion of the drilling investigation and the drilled hole or bore secured so there is no hydraulic connection between the aquifers 5. The drilling, construction and decommissioning of the hole or bore must comply with section 1 and 2 of New Zealand Standard on the Environmental Standard for Drilling of Soil and Rock (NZS 4411:2001), except that bores for stormwater disposal need not be constructed and maintained to prevent the authorised disposal of surface water entering the bore 	<p>Detailed Site Investigation for contamination, prior to earthworks.</p> <p>The drilling and use of holes and bores will meet all the relevant standards.</p>
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Table E25.4.1 Activity table

Noise and vibration

<p>E25.4.1 (A1)</p> <p>Activities that comply with all the relevant permitted activity standards</p>	<p>E25.6.1 General Standards</p> <ol style="list-style-type: none"> 1. Noise levels arising from activities must be measured and assessed in accordance with the New Zealand Standard NZS 6801:2008 Measurement of environmental sound and the New Zealand Standard NZS 6802:2008 Acoustics - Environmental noise except where more specific requirements apply 2. The application of an adjustment for noise containing special audible characteristics in terms of Appendix B4 Special Audible Characteristics in New Zealand Standard NZS 6802:2008 Acoustics – Environmental noise may apply to the A weighted level for any measurement but an adjustment must not be applied to any level measured in the 63Hz and 125Hz octave bands 3. The noise from any construction work activity must be measured and assessed in accordance with 	<p>Operational Noise:</p> <p>Drury Central and Paerata Station</p> <p>Noise modelling undertaken for the Final Build show operational noise levels will comply with the relevant standards. Therefore, consent is not required for operational noise.</p> <p>Construction Noise:</p> <p>Drury Central</p> <p>The construction noise criteria are predicted to</p>
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the requirements of New Zealand Standard NZS6803:1999 Acoustics – Construction noise. Construction work is defined in New Zealand Standard NZS6803:1999 Acoustics – Construction noise

4. The noise limits of the Plan do not apply to emergency service sirens and callout sirens during emergency situations
5. Where more than one standard applies that requires insulation of a noise sensitive space from an external noise source, the standards must be applied cumulatively
6. Where standards are provided for specific activities, the zone interface standards and the zone standards do not apply to that activity.

Operational Noise

Standard E25.6.8

Noise levels in the Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone or the Business – Mixed Use Zone

1. The noise (rating) level and maximum noise level arising from any activity in the Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone or the Business – Mixed Use Zone measured or assessed as the incident level on the façade of any building on any other site in the Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone or the Business – Mixed Use Zone must not exceed the limits in Table E25.6.8.1 Noise levels in the Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone or the Business – Mixed Use Zone below:

Table E25.6.8.1 Noise levels in the Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone or the Business – Mixed Use Zone

Time	Business – City Centre Zone	Business – Metropolitan Centre Zone	Business – Town Centre Zone	Business – Mixed Use Zone
7am - 11pm	65 dB LAeq	65 dB LAeq	65dB LAeq	65dB LAeq
11pm – 7am	60dB LAeq 65dB at 63 Hz LAeq 60dB at 125 Hz LAeq 75dB LAfmax	60dB LAeq 65dB at 63 Hz LAeq 60dB at 125 Hz LAeq 75dB LAfmax	55dB LAeq 60dB at 63 Hz LAeq 60dB at 125 Hz LAeq 75dB LAfmax	55dB LAeq 60dB at 63 Hz LAeq 60dB at 125 Hz LAeq 75dB LAfmax

The 63 Hz and 125 Hz octave band limits do not apply to fixed mechanical plant.

Standard E25.6.19

1. The noise (rating) and maximum noise level from any activity in the business zones must not exceed the levels in Table E25.6.19.1 Noise levels at the

be exceeded at 16 receivers if noisy activities occur at the boundary.

Noise at the remaining properties will be permitted.

Paerata Station

The construction noise criteria are predicted to be exceeded at two residential receivers if noisy activities occur on the designation boundary.

Noise at the remaining properties will be permitted.

Construction Vibration:

Drury Central

Cosmetic building damage criteria will likely be exceeded at 236 Great South Road during Stage One of station construction and 67 Waihoehoe Road during interchange construction.

The amenity criteria will likely be exceeded at 280 Great South Road and three other buildings.

Vibration at the remaining properties will be permitted.

Paerata Station

The buildings at 912 and 913 Paerata Road may receive vibration levels above the amenity criterion of 2 mm/s PPV during the daytime.

There are no anticipated exceedances of the

business zone interface when measured within the boundary of a site in a residential zone or within the notional boundary of property in a rural zone.

cosmetic building damage criteria.

Vibration at the remaining properties will be permitted.

Table E25.6.19.1 Noise levels at the business zone interface

Time	Noise level
Monday to Saturday 7am-10pm	55dB L _{Aeq}
Sunday 9am-6pm	
All other times	45dB L _{Aeq} 60dB L _{eq} at 63 Hz 55dB L _{eq} at 125 Hz 75dB L _{Afmax}

- These noise limits in Standard E25.6.19(1) above do not apply to any of the following:
the noise from vehicles moving on roads controlled by Auckland Council or Auckland Transport

Construction Noise

Standard E25.6.27

- Noise from construction activities in all zones except the Business – City Centre Zone and the Business – Metropolitan Centre Zone must not exceed the levels in Table E25.6.27.1
Construction noise levels for activities sensitive to noise in all zones except the Business – City Centre Zone and the Business – Metropolitan Centre Zone when measured 1m from the façade of any building that contains an activity sensitive to noise that is occupied during the works.

Table E25.6.27.1 Construction noise levels for activities sensitive to noise in all zones except the Business – City Centre Zone and the Business – Metropolitan Centre Zone

Time of week	Time Period	Maximum noise level (dBA)	
		L _{eq}	L _{max}
Weekdays	6:30am - 7:30am	60	75
	7:30am - 6:00pm	75	90
	6:00pm - 8:00pm	70	85
	8:00pm - 6:30am	45	75
Saturdays	6:30am - 7:30am	45	75
	7:30am - 6:00pm	75	90
	6:00pm - 8:00pm	45	75
	8:00pm - 6:30am	45	75
Sundays and public holidays	6:30am - 7:30am	45	75
	7:30am - 6:00pm	55	85
	6:00pm - 8:00pm	45	75
	8:00pm - 6:30am	45	75

- Noise from construction activities in all zones except the Business – City Centre Zone and the Business – Metropolitan Centre Zone must not exceed the levels in Table E25.6.27.2
Construction noise levels for noise affecting any other activity when measured 1m from the façade of any other building that is occupied during the works.

Table E25.6.27.2 Construction noise levels for noise affecting any other activity

Time Period	Maximum noise levels Leq dBA
7:30am – 6:00pm	75
6:00pm – 7:30am	80

3. For a project involving a total duration of construction work that is less than 15 calendar days, the noise levels in Table E25.6.27.1 Construction noise levels for activities sensitive to noise in all zones except the Business – City Centre Zone and the Business – Metropolitan Centre Zone and Table E25.6.27.2 Construction noise levels for noise affecting any other activity above shall be increased by 5dB in all cases.
4. For a project involving a total duration of construction work that is more than 20 weeks the noise limits in Table E25.6.27.1 Construction noise levels for activities sensitive to noise in all zones except the Business – City Centre Zone and the Business – Metropolitan Centre Zone and Table E25.6.27.2 Construction noise levels for noise affecting any other activity above shall be decreased by 5dB in all cases.

Construction Vibration

Standard E25.6.30

1. Construction and demolition activities must be controlled to ensure any resulting vibration does not exceed: (a) the limits set out in German Industrial Standard DIN 4150-3 (1999): Structural vibration – Part 3 Effects of vibration on structures when measured in accordance with that Standard on any structure not on the same site; and (b) the limits in Table E25.6.30.1 Vibration limits in buildings in any axis when measured in the corner of the floor of the storey of interest for multi-storey buildings, or within 500mm of ground level at the foundation of a single storey building.

Table E25.6.30.1 Vibration limits in buildings

Receiver	Period	Peak Particle Velocity Limit millimetres/second
Occupied activity sensitive to noise	Night-time 10pm to 7am	0.3 mm/s
	Daytime 7am to 10pm	2 mm/s
Other occupied buildings	At all times	2 mm/s

2. Works generating vibration for three days or less between the hours of 7am to 6pm may exceed the limits in Table E25.6.30.1 Vibration limits in buildings above, but must comply with a limit of 5mm/s peak particle velocity in any axis when measured in the corner of the floor of the storey of interest for multi-storey buildings, or within 500mm

	<p>of ground level at the foundation of a single storey building, where: (i) all occupied buildings within 50m of the extent of the works generating vibration are advised in writing no less than three days prior to the vibration-generating works commencing; and (ii) the written advice must include details of the location of the works, the duration of the works, a phone number for complaints and the name of the site manager.</p> <p>3. Permanently installed stationary vibrating, reciprocating and rotating machinery and all piping, ducting and other equipment attached to such machinery must be installed and maintained so that any resulting vibration does not exceed the limits of Table E25.6.30.2 Vibration levels for stationary machinery when measured in any occupied room of any building on another site or in any occupied unit under different ownership from the source of the vibration. Vibration must be measured in accordance with ISO 2631-2:2003 Mechanical vibration and shock – Evaluation of human exposure to whole body vibration – Part 2: Vibration in buildings (1Hz to 80Hz):</p> <p>Table E25.6.30.2 Vibration levels for stationary machinery</p> <table border="1" data-bbox="507 1055 1066 1218"> <thead> <tr> <th>Affected occupied building or area</th> <th>Time of day</th> <th>Maximum vibration level in root mean square velocity (mm/s) between 8 and 80Hz</th> </tr> </thead> <tbody> <tr> <td>Noise sensitive spaces</td> <td>7am-10pm</td> <td>0.20</td> </tr> <tr> <td>Bedrooms and sleeping areas only within activities sensitive to noise</td> <td>10pm-7am</td> <td>0.14</td> </tr> </tbody> </table> <p>4. For vibration levels applying to work within the road, refer to E25.6.29</p>	Affected occupied building or area	Time of day	Maximum vibration level in root mean square velocity (mm/s) between 8 and 80Hz	Noise sensitive spaces	7am-10pm	0.20	Bedrooms and sleeping areas only within activities sensitive to noise	10pm-7am	0.14	
Affected occupied building or area	Time of day	Maximum vibration level in root mean square velocity (mm/s) between 8 and 80Hz									
Noise sensitive spaces	7am-10pm	0.20									
Bedrooms and sleeping areas only within activities sensitive to noise	10pm-7am	0.14									

Table E26.3.3.1 Activity table

Network utilities and electricity generation and vegetation management

<p>E26.3.3.1 (A76)</p> <p><i>Operation, maintenance, renewal, repair, construction and removal of network utilities and electricity generation facilities and minor infrastructure upgrading</i></p> <p>Vegetation alteration or removal</p>	<p>Standard E26.3.5.2</p> <ol style="list-style-type: none"> 1. Must not include trees over 6m in height, or 600mm in girth unless their removal is otherwise permitted by a rule in this Plan 3. Must not result in the removal of more than 50m² of vegetation within a coastal area or riparian area not identified as a significant ecological area 4. Must not result in the removal of more than 20m² of vegetation within the legal road or the formation width of the road in the Waitakere Ranges Heritage Area Overlay 5. Must not result in the removal of more than 500m² of vegetation within the legal road or the formation width of the road in a rural zone 	<p>Drury Central Station</p> <p>Approximately 40 trees/tree groups have been identified within the Project site.</p> <p>Of these, two individual trees and four tree groups have been identified as protected.</p> <p>The remaining trees meet the permitted threshold and therefore are able to</p>
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	<p>6. Must not result in the removal of more than 250m² of vegetation outside the legal road or the formation width of the road in a rural zone</p> <p>7. Vegetation alteration or removal from a significant ecological area must be for the purpose of:</p> <p>a) the operation, maintenance, renewal, repair or removal of network utilities or electricity generation facilities or minor infrastructure upgrading and not result in the removal of more than 20m² of vegetation, except within the formation width of the road; or</p> <p>b) the operation, maintenance, renewal, repair or removal of network utilities or electricity generation facilities or minor infrastructure upgrading and must be undertaken in any of the following:</p> <p>(i) within the formation width of existing roads, except where Standard E26.3.5.2(4) applies; or (</p> <p>(ii) within 1m of the network utility, or existing access track; or</p> <p>(iii) in accordance with the Electricity (Hazards from Trees) Regulations 2003; or</p> <p>c) maintaining the safety of the network utility and must be undertaken in any of the following:</p> <p>(i) within state highway designations as at 30 September 2013; or (</p> <p>(ii) within railway designations as at 30 September 2013;</p> <p>d) installing a service connection and must not result in the removal of more than 10m² of vegetation</p> <p>8. Tree trimming or alteration of trees must comply with the following standards:</p> <p>a) the maximum branch diameter must not exceed 50mm;</p> <p>b) no more than 10 per cent of live growth of the tree is removed in any one calendar year;</p> <p>c) the trimming or alteration must retain the natural shape, form and branch habit of the tree;</p> <p>d) trimming or alteration must meet accepted modern arboricultural practice.</p>	<p>be removed without resource consent.</p> <p>Paerata Station</p> <p>Approximately 14 groups of trees have been identified within the Project site.</p> <p>Of these, three trees have been identified as protected.</p> <p>The remaining trees meet the permitted threshold and therefore are able to be removed without resource consent.</p>
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Table E36.4.1 Activity table

<p>E36.4.1(A24)</p> <p><i>Activities in the 1 per cent annual</i></p>	<p>Standard E36.6.1.7</p> <p>1. Surface parking areas and vehicle entry and exit points to above ground parking areas in the 1 per cent annual exceedance probability (AEP)</p>	<p>Drury Central Station</p> <p>This is a permitted activity as long as the carpark experiences not</p>
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<p><i>exceedance probability (AEP) floodplain</i></p> <p>Surface parking and above ground parking areas in the 1 per cent annual exceedance probability (AEP) floodplain, that comply with Standard E36.6.1.7</p>	<p>floodplain must be located where the depth of flood waters in a 1 per cent annual exceedance probability (AEP) event does not exceed 200mm above ground level.</p>	<p>more than 200mm (depth) of flooding in the 1% AEP rainfall event. The carpark has been lifted out of the floodplain through earthworks and is above the 1% AEP floodplain as modelled in the Hingaia Stream catchment flood model.</p> <p>Paerata Station</p> <p>This is a permitted activity as long as the carpark experiences not more than 200mm (depth) of flooding in the 1% AEP rainfall event. The carpark is not located within a 1% AEP floodplain allowing this requirement to be met.</p>
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Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NES:FW)

<p>Clause 38</p> <p>Restoration of natural wetlands</p>	<p>Permitted Activities</p> <ol style="list-style-type: none"> 1. Vegetation clearance within, or within a 10m setback from, a natural wetland is a permitted activity if it— <ol style="list-style-type: none"> a) is for the purpose of natural wetland restoration; and b) complies with the conditions. 2. Earthworks or land disturbance within, or within a 10 m setback from, a natural wetland is a permitted activity if it— <ol style="list-style-type: none"> a) is for the purpose of natural wetland restoration; and b) complies with the conditions. 3. The taking, use, damming, diversion, or discharge of water within, or within a 100 m setback from, a natural wetland is a permitted activity if it— <ol style="list-style-type: none"> a) is for the purpose of natural wetland restoration; and b) complies with the conditions. <p>Conditions</p> <ol style="list-style-type: none"> 4. The conditions are that— <ol style="list-style-type: none"> a) the activity must comply with the general conditions on natural wetland activities in regulation 55; and 	<p>Paerata Station</p> <p>Native planting and earthworks will likely occur in proximity to and within Wetland 2 (refer to Volume 4: Assessment of Effects on Ecology) at Paerata as part of the offset planting for the reclamation of Wetland 1.</p> <p>This will meet all the relevant standards.</p>
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	<p>b) if the activity is vegetation clearance, earthworks, or land disturbance, the activity must not occur over more than 500 m² or 10% of the area of the natural wetland, whichever is smaller.</p> <p>5. However, the condition in subclause (4)(b) does not apply if the earthworks or land disturbance is for planting.</p>	
<p>Clause 70</p> <p>Culverts</p>	<p>Permitted activities</p> <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> <p>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</p> <p>b) the culvert must be laid parallel to the slope of the bed of the river or connected area; and</p> <p>c) the mean cross-sectional water velocity in the culvert must be no greater than that in all immediately adjoining river reaches; and</p> <p>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:</p> <p>(i) where $w \leq 3$, $s \geq 1.3 \times w$;</p> <p>(ii) where $w > 3$, $s \geq (1.2 \times w) + 0.6$; and</p> <p>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</p> <p>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</p> <p>g) the culvert provides for continuity of geomorphic processes (such as the movement of sediment and debris)</p>	<p>Drury Central Station</p> <p>The potential additional 86m / 110m culvert (Ø2100mm) under the rail line and Great South Road embankments (for the purpose of providing additional flood capacity during a flood event) is permitted as this section of stream is already piped/reclaimed.</p> <p>The extension of the existing culvert up to 60m under the rail will not meet the permitted standards.</p> <p>Paerata Station</p> <p>The 110m culvert (Ø1050mm) replacement under the railway will meet the permitted standards.</p> <p>The two new culverts under the proposed accessway will contain ephemeral flowpaths and therefore these standards are not relevant.</p>