TE TUPU NGĀTAHI
SUPPORTING GROWTH

South Rail – Drury and Paerata Station Projects

Appendix E – Ngāti Tamaoho CIA Recommendations and Project Response

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Version 1

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WAKA KOTAHI NZ TRANSPORT AGENCY

New Zealand Government

Ngāti Tamaoho Key Matters Ngāti Tamaoho confirmed the desire to not attach their full CIA to the application, this document sets out the project's response to the recommendations in the CIA		
Category	**Summary of Criteria / Key Points**	**Project Team Response**
Kaitiakitanga "This knowledge of the workings of the environment and the perceptions of humanity as part of the natural and spiritual world is expressed in the concept of mauri and kaitiaki. As Kaitiaki it is our responsibility to speak for and protect those who cannot speak for themselves"	Kaitiakitanga includes a holistic environmental management approach which provides for the following: • Restoration of damaged ecological systems • Restoration of ecological harmony • Ensuring that resources and their usefulness increases • Reducing risk to present and future generations • Providing for the needs of present and future generations	The Project will require the removal of the Flanagan Tributary at Drury Central, a small stream which has been modified into a swale along Flanagan Road. To offset these effects, the larger nearby Hingaia Tributary will be enhanced through native planting and habitat creation. Similarly, a small area of wetland within a paddock and currently accessible to stock at Paerata will be reclaimed. A nearby wetland within NoR P-S will be enhanced through native planting and habitat creation. These offset features will be enhanced and will be protected from future urban development. Further, public access to these areas will generally be improved. Therefore, individually these resources and their usefulness will increase. The Projects will result in no net loss of ecological benefit (refer to Volume 4: Assessment of Effects on Ecology and sections 10.7 and 17.7 of this AEE). The ecology offset areas for the reclamation of Flanagan tributary at Drury Central and Wetland 1 at Paerata, 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 three years (in the case of Drury Central) and five years (in the case of Paerata). In the short term although trees protected under the AUP:OP will be removed, these will be replaced (at a minimum of a two to one ratio) so that the impact is lessened as the new trees grow to maturity. In general, the Projects offer a more sustainable way to travel and is focussed on efficiently serving the urban environment anticipated for both present and future generations. This will have a positive impact on the environment as reductions in vehicle air emissions (N02 and PM10) are also predicted to decrease as a consequence of the shift away from low occupancy vehicles.

Water / wai "Water is the life giver of all things from the source to the mouth of the sea all things are joined as one"	It is imperative that nothing adversely impacts the mauri of the resource and consequently the mana, wellbeing and health of the people. The key is not altering the mauri to the extent that it is no longer recognisable as a healthy component, considering: • The act of discharging wastewater, including untreated stormwater, into natural water • Both point source and nonpoint source pollution • Ngāti Tamaoho does not accept that because a natural waterway has been previously straightened by previous landowners, that it becomes a drain, this water still has mauri • Ngāti Tamaoho do not accept that because an area of wetland or stream has become degraded through past land use that this becomes the base line. It is possible to restore and enhance any degraded waterway through the development process • Ngāti Tamaoho aspires to have waters that are drinkable, swimmable, and fishable	Earthworks will be undertaken using sediment and erosion control measures to protect the waterways. A Final Erosion and Sediment Control Plan (which will include flocculation management details, should flocculant treatment be proposed for use on site) will be prepared by a Suitably Qualified and Experienced Person (Provisional Erosion and Sediment Control Plans are provided in Volume 4 of this AEE). An assessment undertaken by a stormwater expert is attached in Volume 4 and summarised in sections 10.10 and 17.10 of this AEE. It concludes that stormwater quality will be maintained through the use of a stormwater wetland and/or raingardens, utilising Auckland Council's Guidance Document 005: Erosion and Sediment Control (GD05, 2016). There is no direct discharge of any waste into waterways. The Project has also considered future development in designing stormwater with the whole catchment and climate change in mind. A Detailed Site Investigation will be undertaken prior to works as part of a Contaminated Land Management Plan which will identify any contaminants in the soil to enable remediation. This will further remove the risk of contamination entering waterways. The Project technical experts, including Manawhenua who were involved throughout the assessment of alternatives, have identified features such as wetlands and streams in the Drury Central and Paerata areas and efforts were made through the Alternatives Assessment process to avoid and minimise the impact on these features in addition to reducing the amount of earthworks required (refer to Appendix A). As described above, due to the need to balance the presence of waterbodies with operational design constraints, it is necessary to reclaim the Flanagan Tributary at Drury Central and the wetland at Paerata to enable the works. The ecological effect of this has been addressed through sections 10.7 and 17.7, and appropriate offset has been proposed which will increase the native plant species within the Project areas, improve and protect higher quality landscape features and ensure no net loss of ecological value.

Sustainable Development "Sustainable development is the organising principle for meeting human development goals while at the same time sustaining the ability of natural systems to provide the natural resources and ecosystem services upon which the economy and society depend."	Ngāti Tamaoho believe, that all new development should in some, if not most ways, be self-reliant and self-sustainable. This includes consideration of: • Retention of landscapes, cultural, visual and archaeological, enhancement of streams, bush areas, flora and fauna. • Stormwater management alongside the natural water process • The separation of clean roof water from contaminated road runoff • The provision of roof tanks • Ngāti Tamaoho promotes the use of the new GD01 and GD04 storm water guidelines as an appropriate means, to support the mitigation of storm water issues.	The rail stations at Drury Central and Paerata are being provided as lead infrastructure, ahead of planned development, in order to enable housing and development. In general, the Projects offer a more sustainable way to travel and is focussed on efficiently serving the urban environment anticipated for both present and future generations. This will have a positive impact on the environment as reductions in vehicle air emissions (N02 and PM10) are also predicted to decrease as a consequence of the shift away from low occupancy vehicles. Manawhenua will be invited to participate in the development of the Urban and Landscape Design Management Plan (ULDMP) to provide input into relevant cultural landscape and design matters. The details of the building materials, stormwater devices to be utilised will be addressed at detailed design. An assessment undertaken by a stormwater expert is attached in Volume 4 and summarised in sections 10.10 and 17.10 of this AEE. It concludes that stormwater quality will be maintained through the use of a stormwater wetland and/or raingardens, utilising Auckland Council's Guidance Document 005: Erosion and Sediment Control (GD05, 2016). There is no direct discharge of any waste into waterways. The Project has also considered future development in designing stormwater with the whole catchment and climate change in mind. A Detailed Site Investigation as part of a Contaminated Land Management Plan will be undertaken prior to works, during detailed design, which will identify any contaminants in the soil to enable remediation. This will further remove the risk of contamination entering waterways.
Treatment of Contaminants "Water and water quality is such an important part of life for all, and as such new approaches to treating contaminated road runoff and storm water in general are constantly being looked into and methods becoming more natural"	• The mixing of clean roof water runoff and contaminated road water is considered a wasted resource, and often the cause of storm water devices becoming inundated during heavy rainfall, leading to further pollution and erosion of natural waterways • Often sediments in stormwater ponds are re-suspended during heavy rainfall, and so can become mobile again • The treatment train approach is promoted as current best practice • Ngāti Tamaoho promotes the regeneration of any wetland • Ngāti Tamaoho expects all cess-pits to at least be fitted with a stormwater 360 litter trap or enviro-pod • The reference to and addition of the GD01 storm water guidelines is promoted	

Groundwater Recharge "Groundwater recharge is vital to retain base flows within streams, and to keep aquifers recharged. In some areas [depending on soil type] rainwater can take between 1-100 years to seep down into aquifer]. Stream base recharge does not take so long"	• Piping of any water flow causes higher peak flows, and lower base flows. Up to 25% impervious cover of any site reduces base flow by 50%. Up to 50% and over of impervious cover of an area negates the ability for stream base flow recharge • Maunga and Tuff rings are a direct avenue for groundwater recharge, it is therefore imperative that they are not built upon or modified • Our aquifers are being constantly relied upon as a source of water supply	Stormwater impacts on peak flows are anticipated to be low at Drury Central and will reduce through stormwater devices at Paerata. This is described in the Assessment of Stormwater Effects in Volume 4. There were no maunga or tuff rings identified within the sites. There is no water take proposed as part of these Projects. The groundwater effects in the anticipated future environment have been considered to be low. Refer to the Assessment of effects on Groundwater and Ground Settlement in Volume 4 and sections 10 and 17 of this AEE for further detail.
Native Trees and Plants "Native trees and biodiversity are what make New Zealand unique. Prior to the arrival of Europeans, native trees were abundant, and used only following Karakia [prayer] and for specific purposes. To Mana Whenua these old trees were Tupuna Taonga, living entities that commanded respect"	• Each tree has to be individually protected if not within a covenant • Ngāti Tamaoho believes that all trees over 200 years old should be automatically protected. • Ngāti Tamaoho support and promote the use of "eco-sourced" or "whakapapa sourced" trees and plants within their rohe. This also promotes the return of the native bird and insect species • Ngāti Tamaoho does not support the use of chemical pesticides to eradicate pest plants. In most circumstances weed species can be removed by hand or with the use of organic herbicide	The Alternatives Assessment (refer to Appendix A of the AEE) describes how areas of significant biodiversity / vegetation were avoided during the decision-making process for the locations of the stations. A tree survey has been undertaken within each proposed designation; however, the ages of the trees listed are unknown. This is recorded in the Assessment of Effects on Arboriculture in Volume 4 of this AEE. All trees protected under the AUP:OP to be removed will be replaced at a minimum two for one ratio. KiwiRail have recommended that Manawhenua are invited to participate in the development of the ULDMP to provide input into relevant cultural landscape and design matters.

Landscapes "Landscapes are of particular value to Ngati Tamaoho. They are part of who we are and define history. It is imperative that our landscapes are identified and preserved. This includes view shafts and hilltops, tuff rings and ridge lines"	• In order to achieve sight lines and protection of ridgelines and hilltops, height restrictions, and setbacks may need to be implemented • Tuff rings are an important part of the landscapes, they are not only outstanding geological features worthy of protection but are a valuable source of groundwater recharge • Flood plains and reclaimed swamps are also an integral part of our landscape. They all at one time were wetlands/swamps that not only performed great ecological benefit but were also a valuable source of food. These areas should be retained and returned to their natural state • Streams, tributaries, estuaries, coastlines, springs, all form part of the cultural landscape and their preservation, protection and enhancement is paramount. A 20-meter setback is promoted for all stream, estuarine and coastal edges • Ngāti Tamaoho promotes the use of park edge roads around streams and coastal/estuarine environments • Ngāti Tamaoho promotes the provision of a visual presence in the landscape through signage, artwork and pou.	The stations are not located on ridgelines or hilltops and any buildings are unlikely to intercept any of the sightlines mapped in the AUP:OP. However, building design is still to be confirmed through detailed design. There are no tuff rings within the proposed designations. The Project technical experts have identified wetlands and streams in the Drury Central and Paerata areas and efforts were made through the Alternatives Assessment process to avoid these features and minimise earthworks (refer to Appendix A). The Project technical experts, including Manawhenua who were involved throughout the assessment of alternatives, have identified features such as wetlands and streams in the Drury Central and Paerata areas and efforts were made through the Alternatives Assessment process to avoid and minimise the impact on these features in addition to reducing the amount of earthworks required (refer to Appendix A). However, due to the need to balance the presence of such features with operational design constraints, it is necessary to reclaim the Flanagan Tributary at Drury Central and the wetland at Paerata to enable the works. The design of the stations have sought to reduce adverse effects where possible. The remaining effects have been addressed through sections 10.7 and 17.7 - Ecology of this AEE. Where relevant, offset has been proposed which will increase the native plant species within the Project areas, improve and protect higher quality landscape features and ensure no net loss of ecological value. A Stream Enhancement and Management Plan at Drury Central and a Wetland Restoration and Enhancement Plan at Paerata will be prepared which will achieve no net loss in ecological value. Up to 20m of riparian planting width will be provided along the Hingaia Tributary. At Paerata, the Wetland Restoration and Enhancement Plan will include measures to protect the wetland from development, so it is protected in perpetuity (such as covenants).

Ngāti Tamaoho Recommendations	
Recommendation	**Response**
• We recommend ongoing meaningful engagement and the availability to be able to add an addendum to this CIA if any issues with concept design or agreed outcomes are not met. • We recommend Paerata have the two culverts upgraded fit for purpose. • We recommend the clothing of papatuanuku in a native palette, the banks of the waterways daylighted are important for water quality and sustain the flora and fauna in the waterways. • We recommend any proposed new wetlands to have forbays for maintenance, a small portion be apportioned off for treatment if it is consented as per say. • We recommend new culvert under SH22, riparian planting of the areas immediately around these assets. • We recommend treatment train approach to all discharge and runoff. • We recommend fish passage for Drury. • We recommend habitat retain and improve the stream corridor. • We recommend a Weed and Pest management Strategy • We recommend avoidance of all wetlands where possible. • We recommend Fish Management Plan • We recommend an Authority to Explore around the proposed Paerata Station and an ongoing management plan for the Archaeology. • We recommend a moko moko management plan around Drury West and Paerata. • Ngāti Tamaoho propose having an MOU with AT/NZTA (Te Tupu Ngātahi/Supporting Growth, in recognition of the ongoing meaningful engagement that will need to take place with the growth and intensification of housing and roading not just in the south.	Manawhenua will be involved in the station design and construction phases and to develop mechanisms to avoid or mitigate effects on manawhenua values, such as through monitoring and mitigation measures and opportunities for expression through design. KiwiRail have recommended a number of conditions that will guide ongoing input from Manawhenua while also allowing the integration of Manawhenua views into the construction and design process (refer to Appendix C of this AEE for a full list of conditions). The relevant conditions are summarised below: • Engagement is enabled through the establishment of a kaitiaki Manawhenua engagement forum (or similar) to provide for an on-going role in the design and construction of the Projects until completion of construction. • The condition for the ULDMP requires that Manawhenua are invited to participate in its development to provide input into relevant cultural landscape and design matters. • The requirement for a Cultural Monitoring Plan prepared in collaboration with Manawhenua. The watercourse and associated culvert to the north of Paerata Station is not affected by the works. However, the existing culvert to the south, under the railway line, will be upgraded and extended. The remaining culvert will be upgraded in future to accommodate the four tracking for the railway line, but is not within the extent of this Project. The majority of vegetation lost will be exotic species. Any stormwater devices (including wetlands and raingardens) will be constructed in accordance with Auckland Council Guidance Document 2017/001 Stormwater Management Devices in the Auckland Region (GD01). The stormwater design will be confirmed at detailed design, where a treatment train approach is not precluded. A programme of establishment and post establishment protection and maintenance for the offset planting (fertilising, weed removal/spraying, replacement of dead/poorly performing plants, watering to maintain soil moisture) will be implemented. The Project technical experts have identified wetlands and streams in the Drury Central and Paerata areas and efforts were made through the Alternatives Assessment process to avoid these features and minimise earthworks where possible (refer to Appendix A). A Native Fish Capture and Relocation Plan will be prepared prior to the start of construction. While no significant heritage features have been identified at either Project site, prior to earthworks, KiwiRail obtain a General Archaeological Authority to modify or destroy potential archaeological sites that may be encountered within the Drury Central Station Project extent from HNZPT under Section 44(a) of the Heritage New Zealand Pouhere Taonga Act 2014. An Archaeological Management Plan will also be developed through this process. As this will be undertaken under a separate Act (Section 44(a) of the Heritage New Zealand Pouhere Taonga Act 2014), this has not been conditioned.