# Submission of the Kāpiti Coast District Council on the MacKays to Peka Peka Expressway Proposal

# 10<sup>th</sup> August 2012

- TO: The Environmental Protection Authority MacKays to Peka Peka Expressway Proposal Private Bag 63002 Wellington 6140 (Emailed to: mackays@epa.govt.nz)
- And The New Zealand Transport Agency (Attn: Dean Ingoe) PO Box 5084, Lambton Quay Wellington 6145 (Emailed to: <u>dean.ingoe@nzta.govt.nz</u>)

#### Submitter details

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# 1. THE COUNCIL'S SUBMISSION

- 1. This is the submission of the Kāpiti Coast District Council (the Council) as per Council resolution KCDC 12/08/244 on 9 August 2012.
- 2. The Council makes this submission on the Notice of Requirement (NoR) and Resource Consent Applications lodged with the Environmental Protection Authority (EPA) by the New Zealand Transport Authority (NZTA) for the MacKays to Peka Peka Expressway Proposal (the Proposal).
- 3. This submission relates to all parts of the NoR and resource consent applications for the Proposal.
- 4. The Council supports the Proposal in part because, while it supports the proposed Expressway, it also seeks further information, refinements, or more appropriate conditions in relation to some aspects of the Proposal. The Council's position is therefore 'support in part' <u>subject to</u> the inclusion of further information refinements, or conditions that deliver the outcomes sought in this submission.
- 5. The Council believes that the issues raised in this submission are capable of resolution prior to the Board's decision through the provision of additional information and/or through conferencing sessions, together with the provision of appropriate conditions.
- 6. The Council wishes to appear at the forthcoming hearing in support of this submission.

# 2. STRUCTURE OF THIS SUBMISSION

- 7. The Council's submission addresses effects on the natural environment before commenting on other effects of the Proposal. It concludes with comments on the statutory planning aspects of the Proposal. Topics are covered in the following order:
  - (a) Ecological effects (terrestrial and freshwater)
  - (b) Groundwater
  - (c) Hydrology and stormwater
  - (d) Sediment control and erosion
  - (e) Contaminated land
  - (f) Noise and vibration
  - (g) Urban form and design
  - (h) Traffic effects
  - (i) Cycleway, walkway and bridleway
  - (j) Social effects
  - (k) Landscape and visual effects
  - (1) Effects on the Council's utilities, services and water supply
  - (m) Cultural/tangata whenua
  - (n) Statutory planning.

- 8. For each topic the Council presents its comments using the following structure (where applicable).
  - (a) Areas of support
  - (b) Outstanding issues
  - (c) Outcome sought (grouped under the following categories):
    - (i) issues requiring further assessment/information now;
    - (ii) issues requiring further assessment/information before construction can commence;
    - (iii) design aspects that need to be altered in order for the Proposal to be supported; and
    - (iv) conditions requiring more detail in order to deliver the Proposal's anticipated outcomes.

#### 3. BACKGROUND

- 9. The proposed Expressway is approximately 16 kilometres in length, and traverses the Kāpiti Coast District between MacKays Crossing and Peka Peka. It comprises two lanes of traffic in each direction, connections with local roads at four interchanges, new local roads and access roads to maintain local connectivity and an additional crossing of the Waikanae River.
- 10. NZTA entered into an Alliance contract to facilitate the delivery of the project.
- 11. The Council resolved on 25 February 2010 to work within the formal Alliance structure so that it could advocate for and reach outcomes for the community. The Council became a member of the Alliance subject to the following conditions:
  - (a) agreement by the Alliance members to the establishment of formal project objectives that set out the guiding principles for the development of the project;
  - (b) the Council's right to withdraw following any decision by the NZTA Board to overrule a decision or recommendation of the Project Alliance Board;
  - (c) protocols being adopted by the Alliance which recognise and allow for the Council's duty to work in a transparent manner with the community and tangata whenua; and
  - (d) the Council having no liability for project costs.
- 12. The Council adopted a set of formal objectives, negotiated with the NZTA as the basis for joining the Alliance and became a member of the Alliance in September 2010. The Alliance Board then adopted the objectives agreed with the NZTA as the formal guiding objectives for the MacKays to Peka Peka Project. These objectives form the *Guiding Objectives for the Project Alliance Board* and are included in Appendix A of the Assessment of Environmental Effects (AEE).

- 13. The Council's view is that, within the parameters of the overall Expressway concept, the Alliance has committed to achieving best practice across a range of disciplines. However, there remain specific areas for improvement, which are addressed in this submission.
- 14. The application to construct the proposed Expressway has been lodged by NZTA. The Council is not a party to the application to construct, operate and maintain the proposed Expressway and its role in the Board of Inquiry process is as a submitter.
- 15. The Council supports the Proposal to construct the Expressway, subject to resolution of the specific matters raised in this submission. In particular, it supports a second route through the district to facilitate the separation of local and through traffic and the provision of a second Waikanae River crossing. The Council believes that the MacKays to Peka Peka Expressway needs to be considered in light of the recent decision to grant planning approvals for the Transmission Gully route, as that project will deliver expressway traffic into the district that, in the absence of an improved roading solution for Kāpiti, is likely to create traffic congestion. The challenge of providing an improved State Highway option, supported by a major local arterial road through the Kāpiti District, has been discussed for many decades now and, prior to the Expressway proposal, the Council obtained a designation for a Western Link Road and was advancing that project. The Council therefore supports providing the community with certainty over how a roading solution will be achieved.

# 4. ECOLOGICAL EFFECTS

#### **TERRESTRIAL ECOLOGY**

#### Support

- 16. The following aspects of the proposal are supported by the Council, subject to the comments that follow.
- 17. The route has been designed to avoid ten significant wetlands and six areas of regenerating bush. The avoidance of the destruction of these wetlands and habitats is strongly supported.
- 18. The use of stormwater wetlands for treatment of run-off is supported. However, as raised in previous Council submissions on the project, artificial stormwater wetlands are not a replacement for the destruction of naturally formed wetlands and should not be used as mitigation for the effects on natural wetlands.
- 19. The Council supports NZTA's assessment of the significance of the North Island fernbird population and of the likelihood of adverse effects, and the proposal to conduct research on the fernbird prior to construction.

20. The requirement for ecological planting to be integrated with landscape planting is supported.

## Proposed ecological offset ratio

- 21. The route will have significant adverse effects on a number of wetlands and areas of riparian vegetation and regenerating forest. The AEE estimates that the project will result in the destruction of 5.6 hectares of indigenous vegetation, which is made up of 1.8 hectares of wetlands and 3.8 hectares of indigenous forest.
- 22. The AEE downplays the ecological significance of wetlands and indigenous vegetation affected by the project. The Terrestrial Ecology Report does, however, acknowledge that the long-term hydraulic effects on wetlands near the expressway remain uncertain (including tolerances for fluctuating groundwater levels) and proposes a monitoring regime.
- 23. Wetlands that will be adversely affected include Raumati Manuka wetland, southern and northern Otaihanga wetlands and El Rancho wetland. The Otaihanga North wetland will be the most affected. These wetlands are of regional ecological significance. In addition over 13 hectares of mixed native and exotic rush dominated wetlands lie within the footprint of the Proposal. These areas of wetland provide buffer areas to other wetlands, as well as important hydrological values within the dune systems.
- 24. The Proposal will also adversely affect six areas of regenerating bush, including kanuka forest at Otaihanga and Raumati Roads, and broadleaved forest at Ngarara and Tuku Rakau, and riparian forest on the Waikanae River and Kakariki stream. There is already significant loss of indigenous vegetation within the Foxton Ecological District, which means these areas have significant ecological value.
- 25. The proposed mitigation in the AEE for the destruction of wetlands and regenerating bush within the footprint of the Proposal includes revegetation planting of 7.6ha, including 5.4 ha of wetland restoration. Mitigation for the destruction of wetland habitat is proposed to include wetland buffer planting, translocation of wetland plants, and setting aside wetland areas within the designation. To cover the shortfall of wetland mitigation within the designation, mitigation will also include restoration of wetlands in the former Waikanae oxidation ponds, now part of the Pharazyn Reserve. It should be noted that the management plan for the Pharazyn Reserve is under review.
- 26. A ratio of 3:1 is proposed in the AEE for wetlands and 2:1 for regenerating bush and riparian forest to arrive at the total area of revegetation and restoration. The Council understands that these offset ratios are less than used elsewhere in New Zealand and not consistent with international practice. The Council has adopted an offset model in its own consenting processes with the methodology requiring a significantly higher offset ratio than NZTA proposes to use for the Expressway.

- 27. The offset calculations do not fully acknowledge the extent of loss of indigenous vegetation within the Foxton Ecological District, the threatened nature of remaining indigenous vegetation within the landscape, and the national importance of wetlands under the New Zealand Biodiversity Strategy and, in particular, the importance of remaining vegetation within the Foxton Ecological District. The Council therefore considers that the offset ratios proposed in the application remain insufficient to compensate adequately for those ecosystems that will be destroyed by the Proposal.
- 28. The Council notes that international best practice requires any mitigation works to be located as close as possible to the affected area, and to achieve no net loss (and preferably a net gain) of biodiversity, and to use an adequate compensation ratio for mitigation planting and restoration to offset residual adverse effects. The Council suggests that this is best done by using a suitable offsets model.

- 29. Conditions are needed to specify:
  - (a) the utilisation of a biodiversity offsets model to calculate the level of mitigation required; and
  - (b) an offset ratio of at least double that proposed within the AEE for wetlands and bush.

(See also our comment below on the need to take into account the impact of the Proposal on the hydrology of wetlands when calculating mitigation and restoration.)

#### Additional impacts on the hydrology of wetlands

- 30. In addition to the loss of natural wetlands, the construction of the Expressway is likely to have adverse effects on water levels and the hydrology of wetlands along the route. Wetlands that will be potentially affected include Raumati wetland, Otaihanga wetlands and Ngarara wetland. There will be downstream impacts of sediment and stormwater discharge on the Te Harakeke/Kawakahia wetland (a large wetland that provides significant habitat for nationally threatened species), and the Waikanae estuary. (Note that impacts on freshwater species are discussed under the freshwater section of this submission.)
- 31. 'Adaptive Management', consisting of monitoring, assessment of results and adaptation of operations to reduce adverse effects to acceptable levels, is proposed in the Application as a key protective mechanism for wetlands, waterways and estuaries.
- 32. The application states that the long-term hydraulic effects on wetlands located in close proximity to the proposed Expressway remain uncertain. Independent, best practice monitoring over an appropriate time frame is

therefore essential, and some further action if the monitoring shows it to be necessary. The Council considers that this must be longer than the 12 months currently proposed if the adaptive management model or process is to work properly.

33. The Council notes that groups such as the Friends of the Waikanae River and the Nga Manu Trust have a particular interest in wetlands, riparian systems and associated hydrology. Monitoring information should therefore be made available to them for review prior to finalising of monitoring reports.

#### **Outcome sought**

- 34. Further information is needed to provide certainty about the effectiveness of sediment control measures for the Te Harakeke/Kawakahia wetland, and for other significant waterways such as the Waikanae River. (See also related outcomes sought under the sediment control and erosion section of this submission.)
- 35. Monitoring information should be required to be made available to interested community groups such as the Friends of the Waikanae River and the Nga Manu Trust for comment prior to finalising reports.
- 36. Appropriate conditions are needed to:
  - (a) Ensure that the potential adverse impacts on the hydrology of wetlands within and adjacent to the proposed route are avoided or minimised, and included within any calculation of mitigation and restoration for the Proposal;
  - (b) Provide additional protection and restoration of wetlands and buffers both within and outside of the designation;
  - (c) Ensure that adaptive management follows international best practice including, for example, providing for independent long-term monitoring of planted and restored wetland areas, waterways and estuaries and other mitigation works;
  - (d) Ensure independent, best practice monitoring of the long-term hydraulic effects on wetlands located in close proximity to the proposed Expressway over an appropriate time frame, and certainly longer than the 12 months proposed; and
  - (e) Require further action to address any issues identified by the monitoring.

#### Effects on indigenous flora and fauna (and their habitat)

37. The footprint of the Proposal will have an impact on habitat for the threatened North Island fernbird (which is classified as 'At Risk – Declining') between Ngarara Wetland and Kakariki Stream. This is a highly

significant population, and is one of only two populations in the southern North Island. Fernbird are susceptible to habitat destruction and the impacts of animal predators. There are also other wetland bird species such as bittern and spotless crake present within the wetlands in the Proposal's footprint. Impacts on these habitats and other indigenous fauna (e.g. native lizard populations) and flora (e.g. dwarf mistletoe) have not been adequately considered and need to be addressed.

#### **Outcome sought**

- 38. Prior to construction, greater analysis is needed of the impacts on wetland bird species (including Fernbird) and other indigenous fauna (e.g. native lizard populations) and flora (e.g. dwarf mistletoe) so that an appropriate mitigation response can be developed.
- 39. Appropriate conditions are required to ensure that:
  - (a) the adverse effects on the North Island fernbird and other indigenous fauna and flora will be avoided and minimised, *including* any adverse effects on their habitat; and
  - (b) animal pest control (in particular for mustelids, rats, feral cats) is required as part of any mitigation package for adverse effects on indigenous fauna and wetland habitats.

#### Pest control for ecological and restoration plantings

40. The Council notes that control of animal and plant pests will be vital to the long-term success of plantings for ecological restoration and that appropriate pest control is therefore essential, in particular control is needed for possums, rabbits and other pest browsers.

# **Outcome** sought

41. Appropriate pest control for plantings associated with ecological restoration needs to be specified in the conditions, particularly for possums, rabbits and other pest browsers.

#### Legal protection and maintenance of proposed mitigation planting

42. The Council is also concerned that the proposed mitigation planting and restoration does not appear to have been afforded any permanent legal protection. This needs to be addressed in the proposed conditions.

- 43. Conditions are needed to:
  - (a) provide permanent legal protection for mitigation and restoration areas within the designation (and also for any mitigation/restoration areas that may be proposed outside the designation);
  - (b) require appropriate maintenance periods for wet and dry swales, revegetation and riparian planting, etc. that follow best international practice (and are for longer than the proposed three years); and
  - (c) require monitoring of the success of the mitigation planting and restoration areas, including follow-up action if required.

# **FRESHWATER ECOLOGY**

#### Support

- 44. About three kilometres of stream habitat will be lost because of the Proposal. The Council supports NZTA's proposals to mitigate the adverse effects of bridging and culverts by restoring riparian margins for prescribed distances from the works. The Council also supports the proposed methodology for stream diversions, although there is some lack of detail (e.g about the significant diversion of the Muaupoko Stream) and there appears to be a shortfall in the length of stream restoration proposed as mitigation for loss.
- 45. The Council supports the provision for a suitably qualified ecologist to be involved in the design and the key construction phase of all the in stream works in perennial and intermittent streams, including temporary and permanent culverts.

#### **Consideration of upstream ecology**

46. The approach to avoiding or mitigating the effects of the Expressway on freshwater ecology is generally good. However, it is too focused on the local environment (i.e. where the Expressway will be located) and does not adequately consider the upstream ecology where the ecological condition of freshwater bodies is well above average (such as the Kakariki Stream). Consideration of the upstream ecology is important because most New Zealand native fish move upstream and downstream during their life cycle (by swimming up as whitebait and floating down as eggs). Any discharge of nutrients, sediment, or chemicals into a stream can act as a barrier to this movement; particularly the upstream movement of whitebait because fish sense chemicals and swim away. If this occurs they will not colonise upstream and stock levels may decline.

47. An appropriate condition is needed to ensure that construction works do not occur in or adjacent to streams during whitebait season (generally August to November).

## Stream diversions

- 48. There are potential adverse effects on waterways through bridging, culverting and diversion. Nine stream diversions totalling 1,525 metres are proposed in perennial or intermittent streams. The proposed diversions consist of replacing straight channelised farm drains, and diversions to the Muaupoko, Waimeha and Kakariki Streams. A total of 2,016 metres of new stream habitat is proposed connecting proposed Expressway works to stormwater pond outlets and to existing watercourses.
- 49. Opportunities for mitigation of diverted stream length need to be demonstrated and assurance provided that any new stream habitat appropriately mitigates for loss of or modification of habitat elsewhere.
- 50. There is heavy reliance on 'adaptive management' to mitigate adverse ecological effects on freshwater ecology. The efficacy of 'adaptive management' as the principal means of avoiding, remedying or mitigating potential adverse effects on wetlands, waterways and estuaries needs to be clearly demonstrated and clearly linked to robust monitoring over an appropriate time period. Potential effects could be either upstream or downstream and these areas should be monitored, not only for the Kakariki Stream but also for other stream diversions.

#### **Outcome sought**

- 51. Further information is sought to provide assurance that the new lengths of stream will provide adequate mitigation, including detail on appropriate riparian planting. These details should be included in consent conditions.
- 52. Appropriate conditions are needed to ensure that adaptive management will follow international best practice and, for example, provide for independent long-term monitoring of planted wetland, waterways and estuaries and other mitigation works.

#### Effects on the Waikanae River (including amenity effects)

53. The works in the Waikanae River and at the confluence of the Muaupoko Stream will have unavoidable adverse effects requiring extensive mitigation, and significant work is needed to develop mitigation that will augment the restoration of the river corridor. The application provides insufficient detail on the effects in this area and more careful thought needs to be given to how adverse effects can be mitigated, including how to integrate works associated with the Expressway with flood protection works managed by the Greater Wellington Regional Council.

- 54. Mitigation for adverse effects on the Waikanae River and the Muaupoko Stream needs to be in accordance with key planning documents such as *A Strategy for Restoring the Waikanae River Corridor's Indigenous Ecological Value*<sup>1</sup>, the *Waikanae River Environmental Strategy*,<sup>2</sup> and with the views of local iwi and stakeholders such as the Kāpiti Ecological Restoration Management Trust and the Friends of the Waikanae River.
- 55. Adverse effects on the environment and amenity of the Waikanae River and corridor also need to be mitigated.
- 56. Consideration also needs to be given to any effects on the spring at the confluence of the Muaupoko Stream and the Waikanae River.<sup>3</sup> This spring is also of spiritual significance to iwi.<sup>4</sup>

- 57. Further information is needed on the detail of adverse effects on the Waikanae River and the Muaupoko Stream; further information (and potentially assessment) is then needed to ensure that these effects can be mitigated, including how to integrate works associated with the Expressway with flood protection works managed by the Greater Wellington Regional Council.
- 58. Conditions are needed to ensure that adverse effects on the environment and amenity of the Waikanae River and the Muaupoko Stream and corridor are adequately mitigated.
- 59. Mitigation for adverse effects on the Waikanae River and the Muaupoko Stream should be in accordance with the key planning documents and stakeholder views as listed above.

# 5. GROUNDWATER

60. The Council notes that there are close links between the groundwater and ecological sections of the AEE/application, and similarly between the corresponding parts of this submission.

# Support

61. The Council supports the proposed water level monitoring for pre-project and post-construction water level monitoring, However, the processes and methodologies for mitigation and monitoring of hydrological/

<sup>&</sup>lt;sup>1</sup> Dr Geoff Park, 1999, for Wellington Regional Council and Kapakapanui

<sup>&</sup>lt;sup>2</sup> Andre Visser, 1999, for Wellington Regional Council and Kāpiti Coast District Council

<sup>&</sup>lt;sup>3</sup> The Council notes that this spring is referred to in the Environment Court Decision for the Western Link Road, refer Te Runanga O Ati Awa Ki Whakarongotai Inc v KCDC (2002) 8 ELRNZ 265.

<sup>&</sup>lt;sup>4</sup> Te Runanga o Ati Awa ki Whakarongotai Inc, Cultural Impact Assessment, Technial Report 12 of the AEE, section 4.5; The Takamore Trust, Cultural Impact Assessment, Technical Report 11 of the AEE, section 7.4.

hydrogeological disturbance of wetland ecosystems require refinement and expansion.

## **Outstanding issues**

- 62. Adverse ecological effects of the Proposal on the shallow groundwater environment and groundwater-dependent ecosystems (wetlands) in close proximity to the Expressway route are not well understood. The nature and magnitude of effects on shallow groundwater flows and levels remain uncertain, particularly on a local scale. There may be significant hydrological disturbances to some high-value wetlands. It is also likely that effects will develop over a long period of time, post construction, since groundwater systems can take a considerable time to adjust to disturbances (often years). The Council is particularly concerned about potential long-term effects on groundwater and groundwater-dependent ecosystems.
- 63. The Council has concerns relating to the baseline monitoring and hydrological characterisation of wetlands. The natural hydrological regimes of vulnerable high-value wetlands have not been characterised individually. This makes it difficult to evaluate the sensitivity (or resilience) of these systems to predicted or actual changes in groundwater levels, flows and hydrological regime. The monitoring methodologies proposed in the application generally need refinement and, in particular, more intensive, proactive monitoring in vulnerable areas is required. Monitoring is also required for a very much longer period than the three years proposed in the application, particularly given potential long term effects on groundwater.
- 64. A good baseline understanding of the natural hydrological functioning of important wetlands is critical to designing effective mitigation measures, as well as a mitigation strategy that does not inadvertently damage the ecosystem. Baseline wetland monitoring is proposed in the AEE but appears too brief (12 months) to adequately characterise wetland hydraulic functioning.
- 65. The potential damming and drawdown effects on the shallow groundwater flow regime (both during and post construction) have been assessed through modelling to be negligible. The groundwater effects AEE (Technical Report 25) acknowledges that this modelling cannot provide an exact understanding of effects, and provides a general guide only. As previously identified in Council comments to NZTA, more detailed predictive and uncertainty modelling is needed to determine a range of effects within specific areas, although a degree of uncertainty will remain.
- 66. In contradiction to the findings of the groundwater effects chapter of the AEE, the Ecological Impact Assessment (Technical Report 21, Volume 3 (Chapter 5)) concludes that there is a risk of significant adverse effects in three wetlands in close proximity to the alignment, and a moderate effect is possible in another two due to hydrological disturbance. The report states that small reductions in water level (>5-10cm) have the potential to result in significant adverse effects. Modelling predicts such effects at up to 200m

from the Expressway, albeit with a large degree of uncertainty, and such effects could therefore extend further away. The Council supports the more conservative findings and views of the ecological impact assessment.

- 67. The AEE predicts significant hydrological disturbance to some high-value wetlands resulting in potential ecological impacts. This, together with the uncertainties associated with the groundwater modelling, justifies a precautionary approach and requires a robust monitoring and mitigation strategy, particularly during the post-construction/operational phase.
- 68. Better recognition of the changing hydrological regime is needed in the Groundwater Level Management Plan (GWMP), along with improvements of the triggers for action. There is no reference in the GWMP to the recommendations in the Ecological Impact Assessment or the Ecological Management Plan which deal specifically with wetland hydrological disturbances resulting from groundwater level effects. The GWMP and the Ecological Management Plan (EMP) therefore need to be better integrated.

#### **Outcome sought**

- 69. The following information, assessment and response are needed:
  - (a) The hydrological regime of each high-value wetland needs to be characterised in order to set critical thresholds to trigger mitigation actions, and to design effective mitigation methodologies;
  - (b) The GWMP and the EMP need to be better integrated; and
  - (c) The proposed mitigation options in the GWMP need to address properly the long term post-construction hydrological disturbances to wetlands (in addition to the current focus on the construction phase effects).
- 70. Before construction, a wetland hydrology study specific to each high ecological value wetland should be completed and extended baseline monitoring should commence. Any associated recommendations should then be implemented at the earliest opportunity. This needs to be reflected in the conditions.
- 71. Appropriate conditions are needed to:
  - (a) Ensure long term on-going post construction monitoring;
  - (b) Provide a formal role for the Council to have input into and review of the monitoring programme, alongside NZTA and the Greater Wellington Regional Council; and
  - (c) Specify that construction methodologies adjacent to vulnerable wetlands must be designed to avoid wetland disturbance and adverse effects on hydrology.

72. The decision and conditions need to reflect the more conservative findings and views of the ecological impact assessment in the AEE, rather than the findings of groundwater effects. The uncertainties associated with the groundwater modelling require a precautionary approach.

# 6. HYDROLOGY AND STORMWATER

#### Support

- 73. The Council strongly supports the following approach to mitigating the effects of the proposed expressway on stormwater and surface hydrology (so long as the approach is specified in appropriate conditions):
  - (a) Mitigation of increased peak flow discharge by attenuation in swales and wetlands to no more than 80% of pre-Expressway peak flows;
  - (b) Mitigation of the filling of existing floodplain storage by the creation of offset storage areas and attenuation of peak flows in wetlands and swales;
  - (c) Mitigation of increased flood levels by the attenuation in the swales and wetlands, provision of offset storage areas and design of low head culverts;
  - (d) Mitigation of increased scour and erosion of watercourses by providing attenuation of flows in swales and wetlands and rip rap protected culverts and outlets at bridges;
  - (e) Mitigation of adverse water quality effects by the use of swales and wetlands to treat stormwater prior to discharge; new open channel drains are also designed to resemble natural streams with natural stream beds, riparian planting and refuges; and,
  - (f) Mitigation of effects on fish passage by the inclusion of fish friendly features in the design and designing new open channel drains to resemble natural streams with natural stream beds, riparian planting and refuges.

#### **Outstanding issues**

- 74. The location of the final operational designation is undecided at this point in time. The Council seeks assurance that the final operational design will fully incorporate the requirements of the offset storage and ecological offset areas to ensure that these mitigation works can continue to function an ongoing basis.
- 75. Recent design refinements (although cognisant of hydraulic neutrality) mean that the modelling that was done to confirm hydraulic neutrality during

previous stages has become out of date. The modelling therefore needs to be updated to confirm the latest design.

76. In rural catchments where flood plains have not been mapped the Council seeks assurance that the construction of the embankments does not adversely affect upstream properties in flood events by increasing the water level. Clarification is also needed about how mitigation will work in relation to a number of specific areas (as outlined in the following paragraph).

#### **Outcome sought**

- 77. The Council seeks confirmation about proposed mitigation in relation to:
  - (a) Culvert 8 and proposed offset storage at Poplar Avenue: confirmation is needed that the impact on QE Park is less than minor, including confirmation from the Greater Wellington Regional Council;
  - (b) Culvert 11 Drain 7 North Culvert: clarification is required of the culvert size at this location;
  - (c) Culvert 14 Mazengarb Culvert and Wetland 5: mitigation needs to be provided to fully address any adverse effects;
  - (d) Culvert 21 Drain 7 North Culvert: clarification is required of the culvert size at this location;
  - (e) Muaupoko Stream: confirmation is needed that the impact of potential loss of storage is less than minor on upstream properties;
  - (f) Culvert 25.3 Isolated Catchment at Chainage 12100m: mitigation needs to be provided to address fully any adverse effects; and
  - (g) Offset Storage Area North of Peka Peka Road: mitigation needs to be provided to fully address any adverse effects.
- 78. Appropriate conditions are needed to specify that the approach to mitigating the effects of the proposed expressway on stormwater and surface hydrology will be as follows:
  - (a) Mitigation of increased peak flow discharge by attenuation in swales and wetlands to 80% 100% of pre-Expressway peak flows;
  - (b) Mitigation of the filling of existing floodplain storage by the creation of offset storage areas and attenuation of peak flows in wetlands and swales;
  - (c) Mitigation of increased flood levels by the attenuation in the swales and wetlands, provision of offset storage areas and design of low head culverts;

- (d) Mitigation of increased scour and erosion of watercourses by providing attenuation of flows in swales and wetlands and rip rap protected culverts and outlets at bridges;
- (e) Mitigation of adverse water quality effects by the use of swales and wetlands to treat stormwater prior to discharge; new open channel drains are also designed to resemble natural streams with natural stream beds, riparian planting and refuges; and
- (f) Mitigation of effects on fish passage by the inclusion of fish friendly features in the design and designing new open channel drains to resemble natural streams with natural stream beds, riparian planting and refuges.
- 79. The hydraulic modelling used by NZTA needs to be updated to confirm that recent design requirements will deliver the stated outcomes, and to confirm that the expressway to be designed and constructed in a manner that:
  - (a) Conforms to the Council's stormwater requirements and associated accepted best practice, in particular the Stormwater Management Strategy and policy of on-site hydraulic neutrality;
  - (b) Ensures that the flow of stormwater and ground water from the hills to the coast (east-west) is not impeded; and,
  - (c) Ensures that the natural flows in wetlands are not impeded.
- 80. In relation to Culvert 17 Landfill Drain Culvert and Offset Storage Area Wetland 6A, it is important to ensure that the existing ground is not disturbed to create additional storage as this area is functioning as an informal treatment device for the groundwater draining from the old landfill. (See comments in contaminated land section of this submission).
- 81. A condition is needed to ensure that the final operational designation fully incorporates the requirements of the offset storage and ecological offset areas so that these mitigation works can continue to function on an ongoing basis.

# 7. SEDIMENT CONTROL AND EROSION

#### **Support**

82. The Council supports the areas identified for particular attention in relation to sediment control and erosion (i.e. Waikanae River, Te Harakeke/Kawakahia Wetland including its tributaries, the Waimeha Estuary and Wharemauku Stream Estuary). However, several other wetlands are also of value and warrant closer attention.

# **Outstanding issues**

- 83. The Council questions the location of the long term stormwater wetland at the toe of the Otaihanga Landfill and discharge of sediment from decanting bunds into wetland during construction (see comments on contaminated land below).
- 84. The assumption of 95% efficiency for all sediment retention measures for the duration of the project through a variety of storm events appears overstated. Also, the discussion of potential effects/sediment yield needs to be more clearly linked to the assessment of ecological impacts (Technical Report 26) where there appears to be little discussion of sediment yield.

# **Outcome sought**

- 85. The Erosion and Sediment Control Plan needs to include appropriate erosion and sediment control measures for the following wetlands (i.e. in addition to those already specified): El Rancho/Takamore Trust Wetland, Raumati Wetland (between Poplar Avenue and Raumati Road, and the Otaihanga Wetland (adjacent to Otaihanga Landfill).
- 86. Appropriate conditions are needed to ensure that stream works (e.g. river bed /bank re-profiling) do not adversely affect ecology in the long term by creating a wider, shallow low flow profile, particularly in association with Waikanae River.

# 8. CONTAMINATED LAND

#### **Support**

87. The Council supports NZTA's approach to assessment and management of soils as set out in section 4.7.1 and 4.7.2 of the Assessment of Land and Groundwater Contamination Effects (Technical Report 23), particularly in regard to the disposal or treatment/stabilisation of any contaminated fill, and seeks that this approach be reflected in the conditions. The Council expects that any reuse of contaminated fill will be managed to best practice international standards.

#### **Outstanding issues**

- 88. The application states that changes in contaminant migration from the Otaihanga Landfill as a result of proposed Expressway construction are negligible, and are not likely to increase the environmental risk from this contamination. However, the Council is concerned that the applicant has understated the effect of the Expressway on leachate discharging from Otaihanga Landfill.
- 89. The Expressway truncates the Otaihanga wetlands, thus reducing the amount of wetland available for treatment. Although it is understood that the area will not be used post-construction for stormwater treatment, any disturbance

of the area, changes in ground or surface water levels (however insignificant) or discharge of sediment during construction will further impede the wetland's efficiency as a natural treatment facility. Culverts are proposed to link the truncated wetland. While this may be necessary to ensure the health of the downstream section, the culverts could create a route for leachate to migrate off site.

- 90. The application does not appear to consider how the leachate discharging from the landfill may have an adverse impact on the environment if these culverts are installed, or if the wetland is altered in any way. There is also no discussion of the possibility of contaminants leaching from the soils into ground/surface water during pre-loading of this area (plan CV-EW-106). Any adverse effects on landfill management and associated leachate treatment need to be avoided.
- 91. A solution needs to be sought in consultation with the Council that satisfies both parties, and does not unduly limit the Council's future treatment options. The solution should also consider additional mitigation for the leachate treatment / treatment system beyond the current reliance on discharging to the landfill drain.
- 92. There is no discussion of the potential impact of exceedances identified in sediment and surface water sampling of the three wetlands and the landfill drain, particularly if contaminants are re-mobilised due to changes in wetland treatment efficiencies. The assessment of environmental effects relates solely to contaminants present in groundwater and the modelled proposition that constructing the proposed Expressway is not likely to increase the environmental risk associated with this contamination.
- 93. There appear to be inconsistencies between Technical Report 23 Assessment of Land and Groundwater Contamination Effects and other documents in the AEE. For example, Technical Report 23 identifies two properties that require further investigation prior to construction, while the Land and Groundwater Contamination section of the AEE states that "no sites are recommended for further investigation".
- 94. It should be acknowledged that the Contaminated Soils and Groundwater Management Plan is a living document that will require updating (with the necessary approval) throughout the project. The Council should have a role in this process together with the Greater Wellington Regional Council.

#### **Outcome sought**

95. Further investigation is needed to evaluate the risk posed to human health and the environment based on the current level of knowledge regarding the presence of contaminants in the vicinity of the Otaihanga Landfill, particularly with the main construction yard and project office establishing at the site.

- 96. Prior to construction, an appropriate drainage and leachate management plan needs to be developed and certified for the landfill land, rather than risking transferring leachate off site.
- 97. Appropriate conditions are needed to:
  - (a) ensure ongoing monitoring of risks to human health and the environment associated with the presence of contaminants in the vicinity of the project's main construction yard and project office; and
  - (b) provide the Council with a role in the on-going monitoring of contamination effects.

#### 9. NOISE AND VIBRATION

#### **Support**

- 98. The Council acknowledges that the overall approach to minimising noise and vibration effects of new and altered roads on the environment appears to be appropriate, although there remain significant issues associated with the assessment of operational noise effects and the methodology and criteria set out in the New Zealand Standard NZS6806:2010 *Acoustics Traffic Noise New & Altered Routes*.
- 99. There will be a number of construction noise and vibration effects, which need to be avoided or mitigated appropriately, especially regarding proposed night time construction activities affecting residential sites. Ongoing traffic noise effects are generally less than for construction; however these effects will be enduring and must therefore be mitigated appropriately.
- 100. This section discusses construction noise effects before addressing operational noise effects. (Note that noise effects are also discussed under the social effects section of this submission.)

#### **CONSTRUCTION NOISE EFFECTS**

#### **Construction noise and vibration (including night-time noise)**

- 101. The application documents clearly indicate the potential for significant noise to be received at sensitive residential sites during construction works, particular for areas near construction yards. For example, the forecasted construction night-time noise and vibration exceedences near the Te Moana Road construction site are of concern and appropriate mitigation is required. Some bridges are also likely to require night-time construction to reduce the traffic impacts on major local roads.
- 102. The Council considers that the proposed mitigation for construction noise and vibration can be improved significantly. Steps such as constructing proposed bunds and barriers early in the project will assist in screening noise

during construction phase in areas where operational traffic noise barriers are planned. Construction noise and vibration needs to be monitored throughout the construction period and appropriate mitigation implemented where necessary.

#### **Outcome sought**

- 103. Appropriate conditions are needed to:
  - (a) Ensure that night-time construction noise affecting residents is no higher than necessary (preferably compliant with the night-time limits of NZS6803:1999).
  - (b) In addition to (a) above, provide for acoustic barriers to be established early in the Proposal, prior to the main construction works to assist in screening noise during the construction phase.
  - (c) Ensure that construction noise and vibration is monitored at appropriate sites and times with appropriate mitigation implemented where monitoring shows it is necessary.
  - (d) Require minimum setbacks in peaty soil sites and for other hard surfaces that avoid high levels of vibration being received at nearby receiver sites.

#### **Construction vibration standards**

- 104. The vibration criteria used by NZTA to assess vibration effects appear targeted at building damage as opposed to annoyance of people. It is unclear what is proposed to mitigate the risk of potential effects on human health from vibration effects associated with construction activities. Construction vibration effects are proposed to be controlled via:
  - (a) Construction Environmental Management Plan (CEMP); and
  - (b) Construction Noise and Vibration Management Plan (CNVMP) as included in draft in Appendix F of the CEMP.

#### **Outcome sought**

105. The conditions should require the CNVMP to ensure that the first instance of each high-vibration machine is accompanied by vibration measurements, as appropriate, to assess compliance with the Proposal criteria, and build up a site-specific profile of risk contours for each operation.

#### Construction vibration effects associated with peaty soils

106. The application does not appear to address the issue of minimum set backs which are needed to avoid high levels of vibration at close receiver sites. NZTA's experts undertook vibration measurements during the 'peat trial' works undertaken by the Proposal's construction and geotechnical experts undertaken at 155 Greenhill Road, Peka Peka on 31st May, 1st June and 3rd June 2011 involving:

- (a) a 21 tonne excavator (undertaking various operations for testing purposes);
- (b) a 28 tonne wheeled dozer driving back and forth, spreading and compacting sand; and
- (c) a 14 tonne vibrating roller.
- 107. These measurements were conducted specifically to obtain vibration profile data in the specific saturated peat soil type relevant to the proposed Expressway. The findings (Section 5.5.1 of Technical Report 18) indicate management methods (equipment operator precautions to avoid weight-shifting operations) and minimum setbacks in peaty soil sites will be needed to avoid high levels of vibration being received at nearby receiver sites. These matters do not appear to have been addressed in the CNVMP.
- 108. In addition, it is noted that no peat vibration tests were conducted using motor scrapers or off-road trucks which were said to be unavailable at the time of testing. The assessment of vibration risk would be enhanced by considering the results of testing of these types of machinery in addition to the types tested.

#### Outcome sought

109. Peat vibration tests need to be conducted using motor scrapers and off-road trucks (which were said to be unavailable at the time of testing) to guide appropriate mitigation. The results of this work should be reflected in conditions.

#### **OPERATIONAL NOISE EFFECTS**

#### Application of the New Zealand Standard (NZS6806:2010)

- 110. NZS6806:2010 sets criteria for road traffic noise from roads, as well as providing a consistent methodology for the assessment and mitigation of that noise. The noise criteria contained in the Standard have been developed taking into account health effects associated with noise, the effects of noise levels on people and communities, affordability considerations, and the potential benefits of new and altered roads to people and communities.
- 111. Assessment of traffic noise under NZS6806:2010 is undertaken at locations referred to as *Protected Premises & Facilities* (PPFs) which defines how the NZTA Traffic Noise AEE assesses traffic noise effects at noise sensitive locations. PPFs include buildings used for residential activities but do not include residential accommodation in commercial or industrial premises or premises that are not yet built. NZS6806:2010 requires traffic noise to be

assessed at (or close to) PPFs which means open space sites and reserves are not protected (with the exception of land within 20 metres of a teaching classroom at schools and childcare facilities).

- 112. The Proposal involves a combination of traffic noise associated with new and modified roads, thus the criteria applying under NZS6806:2010 are for both new and altered roads which occur in the vicinity of linkages to the existing roading network.
- 113. Section 6 of NZS 6806:2010 describes the noise criteria applicable to road traffic noise from new and altered roads. The basis of these noise criteria set out in NZS6806:2010 is the concept that the best practicable option (BPO), as contained in the RMA, should be used to mitigate road traffic noise effects. The BPO concept is used to identify the most efficient noise mitigation option.
- 114. There are two sets of criteria in the Standard: one set for altered roads and another for new roads. Both sets of criteria include three categories – Category A, which provides the best option for reducing noise, and Categories B and C, which allow higher levels of noise. Wherever possible, Category A should be achieved. Where this is not possible then Category B should apply, and where achievement of neither Category A nor Category B is possible, then Category C should apply. The Council is particularly concerned by the number of properties identified in the AEE as Category B.
- 115. Page 17 of Technical Report 15 states:

"Utilisation of NZS6806 "Acoustics – Road-traffic noise – New and altered roads" to assess the Project's road-traffic noise impacts will result in reasonable noise levels for all affected residents in the vicinity of the Project."

The Council considers that this statement needs to be evaluated against some of the views of Boards of Inquiry held in relation to:

- (a) State Highway 20 Waterview (Auckland) Board of Inquiry decision: the summary of some statements made by the Waterview Board are less than complimentary regarding the approach of NZS6806:2010.
- (b) Transmission Gully Board of Inquiry decision: NZTA promoted the use of NZS6806:2010 as an appropriate method for assessing traffic noise associated with this new route, and recommended conditions closely based on this Standard. The decision for Transmission Gully records that the Board was satisfied that controlling noise levels to the Category A criteria of the Standard would preserve adequate levels of amenity. However, it had reservations about the noise levels permitted by Category B criteria. These comments could well apply to the Mackays to Peka Peka route.

116. Issues have arisen in relation to assessing PPFs under NZS6806:2010 that involves adopting Statistics NZ definitions for urban/rural areas. This classification affects the width of the area over which noise effects at PPFs need to be investigated under NZS6806:2010. Statistics NZ area definitions are at odds with zoning in the Kāpiti Coast District Plan (**District Plan**). PPFs assessment locations defined as per NZS68906:2010 mean that PPFs located between 100 metres and 200 metres from the proposed alignment would only rarely ever be assessed, yet potential effects on PPFs located beyond 100 metres may be significant within in the "new" parts of the route located in rural areas (District Plan) which naturally have lower ambient sound levels.

#### Outcome sought

117. The use of NZ Standard NZS6806:2010 Acoustics: Traffic Noise - New & Altered Routes as the basis of the assessment of traffic noise needs to be assessed in order to determine whether or not operational noise effects have been adequately assessed, and whether the proposed mitigation is appropriate. Use of the standard needs to be evaluated against the views expressed by previous Boards of Inquiry in recent decisions on roading projects. Consideration also needs to be given as to whether the District Plan provisions for noise from new roads may be more applicable and appropriate than NZS6806:2010 in some circumstances. The conditions will need to be modified where these reviews identify shortcomings in the project's management of noise.

#### Vibration criteria for on-going Expressway operation

- 118. There is limited comment in the application about the number of properties that will be affected by ambient vibration once the Expressway is operational. There is likely to be some vibrations detectable at some residential locations due to the new Expressway, especially at night when people are particularly sensitive to vibration (due to reduced background vibration levels).
- 119. Adequate monitoring and investigations will be needed once the Expressway is operational to assess this potential adverse effect. The Council also expects that appropriate mitigation measures will be proposed where vibration criteria are found to be exceeded, or where any inadequacies are identified in the vibration prediction model.

#### **Outcome sought**

120. Conditions are needed to provide for appropriate on-going monitoring of vibration associated with the Expressway once it is operational, including a requirement for mitigation responses where necessary.

#### Lack of relief for noise from the existing highway

121. The application claims a benefit from reduced noise associated with the current State Highway 1 but this does not appear to be demonstrated in any meaningful way.

## **Outcome sought**

122. Information should be provided to support the stated (but currently unsupported) benefit from reduced noise associated with current State Highway 1.

#### Protection of amenity and other outstanding issues

- 123. The noise assessment methods used in the application are based around protecting PPFs as distinct from property. There are potential noise impacts on amenity within public and open space areas which are not considered by the NZS6806:2010.
- 124. It is not clear whether the assessment considers all sensitive areas and recognises local expectation and recreation areas.

# **Outcome sought**

- 125. Further assessment is needed of:
  - (a) the adverse effects of construction and operational noise on amenity values; and
  - (b) operational noise effects for properties 100-200 metres from the alignment (as they may experience significantly increased noise levels, such as 5 to 7 dBA or more); provision then needs to made in conditions for appropriate mitigation of any effects identified.
- 126. It would also be useful for the conditions to require monitoring of noise and vibration at properties up to 200 metres from the alignment once the Expressway is operational, with mitigation to be provided where the need is identified.
- 127. Clarification is also needed as to whether the assessment considers all sensitive areas and recognises local expectations, particularly in relation to recreational areas.

## **10. URBAN FORM AND DESIGN**

- 128. The Council is of the strong view that the Expressway must:
  - (a) be consistent with existing Council Community Outcomes and the Council's Development Management Strategy, Sustainable Transport Strategy and Cycle, Walkways and Bridleways Strategy;
  - (b) recognise and respect the wider existing and planned urban and rural contexts;
  - (c) minimise pressures for urban expansion beyond the identified urban growth areas;
  - (d) maintain and enhance the pre-eminence and economic viability of the District's existing major town centres as social, employment, retail and passenger transport nodes;
  - (e) minimise severance of communities and mitigate the effects of severance.
- 129. The proposed Expressway and its location create significant severance effects (see further comment below in section on social effects assessment). In terms of wider community amenity impacts, the Proposal will have impacts on connectivity and loss of natural character, effects that will experienced equally by everyone in the District. The proposed expressway creates a strong division in the following areas:
  - (a) Leinster Avenue;
  - (b) severance of east and west between Kāpiti Road and Mazengarb Road;
  - (c) division of east and west at Te Moana Road with the intersection forming a visual and physical barrier between the village and beach communities; and
  - (d) the Expressway will create a sense of separation between the Coastal and Inland communities of the District.

#### Support

- 130. The Council therefore strongly supports the following components of NZTA's proposal:
  - (a) the provision of a full interchange at Kapiti Road and at Te Moana Road. These provide for improved internal access and connectivity;

- (b) the provision of half interchanges at Poplar Avenue and at Peka Peka. The latter in particular reduces development pressures in that area;
- (c) the alignment north of Leinster Avenue. This helps reduce severance for the local communities, protects valuable indigenous systems north of Poplar Avenue and avoids unacceptable effects on Queen Elizabeth Park;
- (d) the provision of a pedestrian/cycle facility parallel to the Expressway, including its off-road component where it is not possible to achieve it immediately adjacent to the Expressway; and
- (e) provision for east-west pedestrian/cycling connections north of Leinster Avenue and south of Raumati Road and between Kapiti Road and Mazengarb Road.

#### State Highway 1 and accessibility to town centres

- 131. The Council sees the future design and condition of the State Highway as an integral part of the Expressway Project, if it proceeds. Any revocation process for the State Highway needs to ensure that all safety and design matters are met and that the road is fit for purpose as an arterial route which passes through two centres.
- 132. It is also important to ensure that impacts on businesses and the District's town centres are addressed as part of the Proposal. Existing town centres (Paraparaumu and Waikanae) have a value exceeding the sum of their parts in terms of their role as community centres and in the provision of services. Any weakening of existing integrated town centres would have negative effects in terms of civic amenity, perceived safety and sense of place. The risk is that existing businesses in existing town centres will close and put at risk the integrated public transport, social and economic objectives for the two centres.
- 133. Impacts on Kapiti Road also need to be considered, particularly in relation to traffic flows on and off the Expressway in so far as they facilitate (or hinder) accessibility to the Paraparaumu town centre and to the Airport. (See further comment on this issue, including outcomes sought, under the Traffic Effects section of this submission.)

#### **Outcome sought**

134. Appropriate conditions are needed to ensure that if the State Highway 1 is transferred from a national highway to a local arterial road (i.e. at the time of revocation) the road is designed and funded in consultation with the Council, and appropriately addresses safety and other critical issues including best practice amenity and accessibility.

# **Restriction of Development Pressures at Interchanges**

- 135. Expressway interchanges tend to attract commercial, particularly retail activities to locate around them. The Council has a clear policy of consolidation of such activity around its town centres as a way of reducing adverse environmental, social and economic effects. Clarification is needed that no vehicle access or road links will be provided by NZTA within one kilometre of any Expressway access point to any land use activity other than as agreed with the Council, particularly at Te Moana Road, Peka Peka Road and Poplar Avenue. This is essential to prevent sporadic and unplanned commercial activity outside existing town centres; reliance solely on District Plan zoning is inadequate to achieve this outcome.
- 136. The issue of directional signage is important to Council, including signage to key destinations such as the Airport and Southwards Car Museum.

# **Outcome sought**

- 137. A condition to ensure no vehicle access or road links will be provided by NZTA within one kilometre of any Expressway access point to any land use activity other than as agreed with the Council, particularly at Te Moana Road with agreement to be achieved prior to any decision being reached.
- 138. Further information is needed on detailed signage, particularly to significant local destinations.

#### Future east/west road linkages

- 139. There are three east/west crossing points which are either required in principle, or where actual requirements are already established, and the Council is open to deferring their construction for a period of time.
- 140. These are:
  - (a) North of Leinster Avenue, Raumati South: The Council is of the view that provision of an east/west connection at Leinster Avenue, Raumati South for all or some modes is essential for wider community connectivity and to mitigate the severance effects created by the Expressway.
  - (b) Ferndale Road, Waikanae: The need for an east/west crossing at or near Ferndale Road is a proven necessity and a proposed connection is clearly set out in the Ngarara Structure Plan in the operative District Plan. The area of land it links is a major part of the low impact urban development area provided for under the District Plan for further urban development. The linkage is essential to the planned connectivity through the area.

(c) Ngarara Road (north) which is a paper road crossing with an existing rural zoning. It is essential that the capacity for this crossing is retained.

#### **Outcome sought**

141. A condition is needed to set out a clear process for providing future connections at Leinster Avenue, Ferndale Road and Ngarara Road (north).

#### Access to Nga Manu and to SH1

142. In the Waikanae North/ Ngarara Road are, the Application provides for a local road bridge from Ngarara Road across the Expressway to link to Nga Manu and adjacent properties to the extension to Smithfield Road severed by the Expressway. The District Plan provides for an east/west linkage from SH1 through to Ngarara Road. There is a benefit in achieving a linkage to Nga Manu which is consistent with the long term planned linkage design. The Council is prepared to fund part of the linkage, net of the amount that would be incurred by the applicant for the currently proposed point of connection.

#### **Outcome sought**

143. A condition is needed requiring provision of access to Nga Manu which is consistent with the District Plan provisions (to be part funded each by NZTA and KCDC, as per this submission).

#### **Pedestrian overbridges**

144. The Council seeks greater certainty on the design and placement of pedestrian overbridges, including the process through which the final placement and local road network connectivity will occur. The Council wishes to have a role in ensuring the best outcome, from a community need and use, and from a design perspective. The Council also seeks assurance that the costs of local network connections to the pedestrian overbridges form part of the Proposal, and not just the cost of the bridges themselves.

#### **Outcome sought**

145. Prior to construction, greater certainty is needed on the design and placement of pedestrian overbridges and involvement of the Council in that design process, including the process through which the final placement and local road network connectivity will occur.

#### **Road bridges**

146. Bridge configuration (under and over) and design as set out in the application, including architectural detailing of bridge side walls, pier design and treatment of the local road environment under the bridges are supported, with the exception of the design at Mazengarb Road. Council wishes to

ensure that these designs are continued through to construction and is aware of the potential for them to be compromised through subsequent design processes.

147. At Mazengarb Road the current design provides for high retaining walls for the approach to the bridge crossing with poor sight lines and a sense of enclosure. The Council considers this approach to be inconsistent with CPTED<sup>5</sup> design and urban design principles. The Council is strongly opposed to this solution and is of the view that it needs to be reviewed and a new solution provided.

#### **Outcome sought**

- 148. The Council strongly seeks that the integrity of the current bridge configuration/design is retained and seeks consultation with NZTA prior to any further changes to the current design.
- 149. Design improvements are needed at Mazengarb Road to address the issues raised above. The Council seeks consultation with NZTA on these improvements.

# **11. TRAFFIC EFFECTS**

# Levels of service on local roads

- 150. The *Guiding Objectives for the Project Alliance Board* (Appendix A of the AEE) have driven the design philosophy for the Proposal. Guiding objective 3 (b) states: 'that level of Service C is achieved at the intersections between the Expressway and the local network'. The test year is specified as 2026.
- 151. The Council considers it important not simply to consider levels of service at the immediate point where Expressway off-ramps 'land' on the local road; and that consideration needs to cover the levels of service adjacent to that point, including for particular turning movements for side road traffic, as this relates to the functioning of the whole road network. There continues to be uncertainty in relation to the forecast of acceptable future operational conditions on the local network. Of particular concern is local network performance on Kāpiti Road between Arawhata Road and Te Roto Drive. The Council understands that the AEE traffic modelling in this area has assumed a new road connection at Ihakara Street to the airport while assuming traffic growth projections for the airport are at a lower level than that which would apply if the Ihakara Street connection is provided.
- 152. Kāpiti Road is the single busiest local road on the Kāpiti Coast. It is Council's view in the face of the above uncertainty that operational problems are expected to occur on Kāpiti Road between Milne Drive and the Expressway and at the Arawhata/Kāpiti Road junction. Council is currently of the view that four lanes are required on Kāpiti Road between the Expressway and Milne Drive to avoid excessive congestion as a result of the

<sup>&</sup>lt;sup>5</sup> Crime preventation through environmental design.

Expressway opening. It is of the view that this should be part of the Proposal, unless independent traffic modelling can show otherwise.

- 153. The Council also suggests that the application should be modified to include a signal controlled road connection at Milne Drive and at Arawhata Rd into the Paraparaumu town centre. Without any modification the Arawhata/Kāpiti junction will operate at a very low level of service (F) and would also be unsafe. (The Council understands that a signalised intersection has been assumed in all NZTA designs and assessments to date.)
- 154. The Council believes that this uncertainty can be resolved by more independent traffic modelling which provides for an acceptable design parameters around associated pedestrian movements and clearly models against scenarios which do not assume an Ihakara Street connection.
- 155. The Council considers that this should be done as part of the Proposal.

#### **Outcome sought**

- 156. Further independent modelling of the effects of the Expressway on the functioning of Kāpiti Road should be undertaken in order to identify works needed to achieve Level of Service C at and, in particular but not limited to locations at and adjacent to where the Expressway joins Kāpiti Road, with the identified works being included as part of the project.
- 157. As a minimum, an appropriate condition is needed to require the four laning of Kāpiti Road between the Expressway and Milne Drive as part of the Proposal, and a signal controlled road connection at the Arawhata Road/ Kāpiti Road intersection.
- 158. An appropriate condition is needed to ensure that, if the level of service between the opening of the Expressway and 2026 on Kāpiti Road and the connecting local network is less than that predicted by the NZTA, remedial action and improvements will be undertaken by the NZTA, in consultation with the Council.

#### Intersections/roundabouts, local road links

159. The Council does not support the use of roundabouts on Te Moana Road. The Council considers that traffic signals would provide a much more suitable solution in that location. A controlled intersection would create a much safer pedestrian and cycle crossing point than an uncontrolled roundabout where vehicles are likely to exit the Expressway at considerable speed. This is particularly important given that Te Moana Road is a main thoroughfare from the Waikanae beach community to local schools, shops and services, and vice versa. School children and older cyclists, as well as horse riders, frequently use this route. Traffic signals would also help to reduce the intersection footprint and restore view shafts along Te Moana Road towards the beach community. 160. For pedestrian movement, the Council seeks explicit confirmation of the access management restrictions likely to be sought or required along both sides of Kāpiti Road and also anywhere else where traffic signals are included e.g. minimum pedestrian crossing phase times must be specified. Insufficient detail is provided in the application to assess effects on local crossings (bridges and underpasses) in terms of width/headroom for future access, services, drainage and pedestrian security.

#### **Outcome sought**

- 161. The Council considers that it is essential that the design is modified to provide for signalised Expressway ramp connections with Te Moana Road.
- 162. Prior to construction, details of local crossings (bridges and underpasses) in terms of width/headroom for future access, services, drainage and pedestrian security need to be provided to and certified by the Council.
- 163. The Council seeks explicit confirmation of the access management restrictions likely to be sought or required along both sides of Kāpiti Road and also anywhere else where traffic signals are included (e.g. minimum pedestrian crossing phase times must be specified).

#### Traffic flow, safety and other issues during construction

164. It is critical that during construction, safe, adequate and convenient facilities for local movements by all transport modes are provided (including facilities on both sides of the road for pedestrians and cyclists). Twenty four hour access also needs to be provided for all emergency services through construction work areas. Key concerns include impacts of construction traffic on Te Moana Road, which has a high level of amenity and quiet natural character, Otaihanga Road and other important local routes.

#### **Outcome sought**

- 165. The Construction Traffic Management Plan needs to be amended to provide for safe, adequate and convenient facilities for local movements by all transport modes (pedestrian, cycle, vehicle) and for twenty four hour access for all emergency services through construction work areas, particularly around the Otaihanga construction yard, along Otaihanga Road and on Te Moana Road.
- 166. The Construction Traffic Management Plan should also provide for restitution proposals for impacts on local roads to be agreed by the Council prior to any construction works being undertaken.
- 167. The above matters should be reflected in conditions.

# 12. CYCLEWAY, WALKWAY AND BRIDLEWAY (CWB)

#### Support

- 168. The Council seeks a well designed off-road (i.e. separate from the Expressway) pedestrian/cycle/bridle way that promotes user safety and enjoyment, and provides good connectivity through the District (particularly to services, schools and amenity/recreational facilities).
- 169. The Council strongly supports the provision of:
  - (a) A continuous segregated pedestrian/cycle facility (separate from the Expressway), including its off-road component where it is not possible to achieve it immediately adjacent to the Expressway;
  - (b) A pedestrian/cycle bridge between Kāpiti Road and Mazengarb Road; and
  - (c) A pedestrian/cycleway through Queen Elizabeth Park, although the application is not clear that this facility forms part of the current project.

#### **Further Detail Required**

- 170. The Council is of the view that the overall proposed off-road cycleway/walkway system is of good quality and is generally well-designed. More detailed information is needed in relation to some particular aspects such as:
  - (a) details/specifications for pedestrian and cycle access under or over bridges where the Expressway crosses local roads, rivers and streams;
  - (b) an analysis of the need for lighting, sightlines, restrictions on vegetation in the detailed design of the cycleway/walkway; and
  - (c) Detail on signage, particularly at intersections.
- 171. The Council also seeks assurance that the integrity of non-vehicular modes and amenity provision relative to vehicle lane requirements will be maintained through construction. Vehicle lanes are currently supported by minimum dimensions; however other modes such as pedestrians are currently subject to ambiguous qualitative statements rather than minimum dimensions.

#### **Outcome sought**

172. Conditions specifying standards for CWB design at local road and river/stream crossings, and appropriate minimum dimensions for non-vehicular modes, as indicated above.

173. Clarity is needed in the conditions on the design for the two additional pedestrian/cycle bridges that will be undertaken through the outline plan process and therefore have no detail provided in the plan sets.

# **CWB** facilities through Queen Elizabeth Park

174. The application is unclear as to whether the proposed pedestrian/cycleway through Queen Elizabeth Park forms part of the Proposal or whether it is outside the scope of the AEE. Treatment is also required to improve the substandard shoulder on the state highway northbound lane between MacKays Crossing and Poplar Avenue to provide adequate space for on road cycling.

#### **Outcome sought**

175. The Council seeks confirmation through conditions that a pedestrian/cycleway through Queen Elizabeth Park will be provided by NZTA in association with the Expressway project and completed within the first two years after construction of the Expressway commences.

# **13. SOCIAL EFFECTS**

176. The area the proposed Expressway route passes through is made up of a string of distinct communities – Raumati, Paraparaumu and Paraparaumu Beach, Waikanae, Waikanae Beach, Otaihanga and Peka Peka. The nature of the District means that people often travel to other areas for services and activities and the importance of access and transport to services is identified in the Council's Community Outcomes. Access to services is particularly important for vulnerable groups and those that are transport disadvantaged. This includes older people, people with disabilities, young people and families with young children. More than 24% of the Kāpiti's population is over 65 years (for Waikanae this climbs to 35%), while 25% of the District's population is under 19 years.

#### **Support**

- 177. The Council supports the following aspects of the Proposal, insofar as they help to address some of the severance effects of the Expressway:
  - (a) full interchanges at Kāpiti Road and Te Moana Road;
  - (b) CWB facilities; and
  - (c) east-west local road and cycle/pedestrian crossings, including proposed future east-west crossings (See Section on Urban Form and Design).
- 178. An extensive analysis of formal and informal east/west connections was undertaken at the early stages of the work for the urban design analysis. The Council commends the applicants for this work; however, it would have been

useful to see this analysis linked more explicitly to the social impact assessment.

## **General comment**

- 179. The Council is concerned that the Social Impact Assessment (SIA) is inadequate in terms of its methodology, and lacks evidence or data to support its conclusions (e.g. no comparative scale of effects is provided). It also considers that the measures proposed as part of the mitigation package (communication, community liaison and monitoring) are simply part of good operational practice, and do not constitute adequate mitigation.
- 180. The SIA indicates that social impact assessment frameworks have been used, including those used by the International Association for Impact Assessment (IAIA) and NZTA, but it then goes on to assess the Proposal under different themes and the former frameworks are not referred to again. No reference is made to NZTA's own work and general initiatives in this area, such as NZTA's current review on community cohesion and community severance.<sup>6</sup>
- 181. The definition of severance used in the SIA is inadequate. The Council recommends using the definition recommended to NZTA in its own review of community cohesion and severance:

Separation from facilities, services and social networks they wish to use within their community, changes in comfort and attractiveness of areas; and/or people changing travel patterns due to the physical, traffic flow and/or psychological barriers created by transport corridors and their use.<sup>7</sup>

# Inadequate analysis of social impacts & associated cumulative effects

- 182. The SIA Technical Report notes that the assessment takes "particular regard of vulnerable groups" and refers to the emphasis placed by the IAIA on the importance of considering vulnerable groups when undertaking social impact assessment. However, the Council is concerned that no specific assessment has been undertaken (under any of the SIA themes) of vulnerable groups (children and young people, older people, etc). For example, it is particularly important that an assessment is undertaken of the ability of vulnerable groups to use the Kapiti Road and Te Moana Road interchanges safely and confidently.
- 183. There is little or no fine-grained description and discussion of particular communities (e.g. school communities, organised sport communities, neighbourhood geographic communities directly affected by the project, e.g. Makarini Street and environs). It is important to evaluate the social impacts

<sup>&</sup>lt;sup>6</sup> Quigley, R. And Thornley, L (2011). Literature Review on Community Cohesion and Community Severance: Definitions and indicators for transport planning and monitoring. Quigley and Watts: Wellington.
<sup>7</sup> Ibid.

on vulnerable groups in Makarini Street and the surrounding environs as social impacts will be high in this area.

- 184. No detail or discussion is provided of service catchments such as schools, health services and whether they are neighbourhood, local, district and regional and therefore how they might be affected by the construction and operation of an expressway.
- 185. The assessment of the cumulative effects of impacts associated both with construction and operation of the road is inadequate. There is no quantitative assessment of who has been or who will be displaced, apart from those properties that have been or will be acquired by NZTA. Because there is no recognition of disruption/displacement, apart from directly affected properties, there is no assessment of subsequent impacts following on from disruption to neighbourhoods or businesses.
- 186. The failure to assess cumulative effects is of particular concern in relation to Makarini Street and environs where significant cumulative impacts in relation to severance, connectivity, noise, vibration, dust, visual, amenity and disruption are not properly assessed. The nature and scale of the proposed Expressway means that these effects will be significantly greater than they would have been for a major arterial road.

# Outcome sought

- 187. Greater analysis is needed of:
  - (a) the social impacts on Makarini Street and the surrounding environs (where social impacts will be high), including an assessment of cumulative impacts in relation to severance (using an improved definition of severance), connectivity, noise, vibration, dust, visual, amenity, and disruption;
  - (b) the ability of vulnerable groups to to use the Kapiti Road and Te Moana Road interchanges safely and confidently; and
  - (c) the cumulative social effects of the both the construction and operational phases of the project.
- 188. Appropriate mitigation of the above effects is sought via conditions.

#### Inadequate assessment of the social impacts of construction

189. Specific and significant construction social impacts are not quantified (for example, truck movements in relation to activity nodes such as schools, Saturday sport venues, Coastlands, Waikanae Town Centre, etc.).

# **Outcome sought**

190. Greater analysis is needed of the social impacts of construction of the project.

191. Identified impacts need to be appropriately avoided or minimised; for example, through conditions requiring that construction vehicle movements are kept to a minimum close to community activity nodes, on key construction routes such as Otaihanga Road, and/or at particular times of the day or week. The conditions should also require appropriate management plans to address construction impacts, including those associated with construction traffic.

#### Inadequate assessment of social and health effects of noise and vibration

- 192. The flow on (or cascade) social and health effects of noise and vibration, particularly during construction, do not appear to have been considered (see further comments later in this submission in the noise and vibration section of this submission). For example, it is unclear what steps are proposed to mitigate the risk of potential effects on human health from construction activities, such as the vibration effects associated with construction.
- 193. Also, it appears that no health assessment has be undertaken, although models exist that could have been applied. Nor has there been a safety audit or assessment, which means there is no evidence for statements that the new expressway "will bring about significant improvements in road safety". Similarly there is a lack of evidence for the statement predicting a "positive impact in relation to the health/wellbeing of local residents", or other unsupported statements about a potential reduction in crime because of lighting on the new Expressway. This latter claim is particularly noticeable given the lack of discussion about the use of CPTED principles in the design and maintenance of walkways and cycleways.

#### **Outcome sought**

- 194. Greater analysis is needed of the social and health impacts of construction on residents, particularly those living in close proximity to the two major interchanges at Kapiti Road and Te Moana Road.
- 195. An audit is needed of the wider health, wellbeing and safety impacts of the Proposal and the Council needs to have a formal role in analysing the outcomes and consequent mitigation.
- 196. Appropriate mitigation of any effects as identified by these analyses is sought via conditions.

#### Ability of the Paraparaumu Medical Centre to continue to operate

197. The Council is concerned that the Paraparaumu Medical Centre on Kapiti Road will be unable to function, because of very poor/difficult access (during and post construction), noise, vibration, and dust. Noise and vibration effects are likely to prevent the viable operation of a medical practice (e.g. the ability to undertake consultations, use stethoscopes, etc). The configuration of the Kapiti Road interchange means that post-construction access will be very difficult for users of the Medical Centre (the elderly, sick, etc). NZTA needs to explore suitable mitigation options to address both construction and long-term effects on the Medical Centre.

198. While this Centre is a private facility, given the limited range of public health medical services on the Kapiti Coast, it is important from a community health point-of-view that this large centre which provides services to a very large older population is able to function.

#### **Outcome sought**

- 199. The conditions should require NZTA to mitigate adequately any noise, vibration and dust effects, as well as access effects, in relation to the Paraparaumu Medical Centre on Kapiti Road. This could include relocating the Medical Centre if necessary.
- 200. Once the Expressway is constructed (and if the Medical Centre is not permanently relocated) any ongoing adverse effects on the Medical Centre need to be avoided or mitigated, including any effects associated with reduced/poor access to the Centre.

# 14. LANDSCAPE & VISUAL EFFECTS

#### **Support**

- 201. The Council supports the following aspects of the landscape design:
  - (a) the general assessment of landscape character;
  - (b) the provision of large areas of planting to provide mitigation in terms of screening and softening expressway infrastructure. This planting is separate from the planting for ecological mitigation and off-set and Council considers that the Proposal does show the high quality and commitment made to design at the beginning of the design process;
  - (c) plant selection is generally well thought through;
  - (d) proposed trials to assess planting needs and methodology for conditioning the sand/peat substrate;
  - (e) use of earthworks to moderate/mitigate visual effects of noise wall structures adjacent to the Expressway;
  - (f) the loss of dune and wetland landscapes is minimised within the constraints of the four lane Expressway Proposal;
  - (g) generally the dune form is respected in views towards the Expressway although the slopes facing the expressway maintain a standard gradient;

- (h) the construction process is well considered and detailed for landscape and visual effects, particularly for earthworks; and
- (i) the use of earthworks to moderate/mitigate the visual effects of wall structures is good, providing that the accompanying planting is sustainable and impacts on neighbouring properties are appropriately addressed.

#### Landscape works: Maintenance Standards and Monitoring

- 202. It is Council's view that the proposed maintenance period for soft landscape works is not long enough in this challenging coastal environment. Minimum performance based specifications are needed (e.g. % canopy cover, % survival, etc) over an appropriate time frame and a monitoring programme is required on a five-year basis (i.e. 5, 10, 15, 20 years, etc) to ensure that planting and maintenance standards are maintained. Pest control is also required on on-going basis, with an annual check against pest plants becoming established (e.g. gorse and blackberry).
- 203. It is not at all clear who is responsible for long term maintenance, an issue that is particularly important for the mass planting around major interchanges such as Kāpiti and Te Moana Roads, as well as at the gateway areas of Peka Peka and Raumati South. Associated with this is the need for all planted areas whether for ecological or amenity purposes to have a clear legal status, such that NZTA maintenance and monitoring is not impeded by ambiguous legal status of relevant land. NZTA needs to show clearly that it is responsible for the long term maintenance of these areas and has the legal capacity to do so.
- 204. Many of the proposed water retention, storage and overflow areas have hard, geometric outlines and are highly visible from local roads and walkways; e.g. at Kāpiti Road and in the Nga Manu/Smithfield areas. It is desirable that these features be improved where possible.
- 205. Little detail is provided on the structure and form of some of the proposed noise walls.
- 206. The assessment of effects on the Wharemauku Basin appears to underestimate effects on landscape character.

#### **Outcome sought**

- 207. Appropriate conditions are needed to:
  - (a) require minimum performance based specifications are needed (e.g. % canopy cover, % survival, etc) over an appropriate time frame;

- (b) ensure on-going monitoring and reporting to Council on a five-year basis (i.e. 5, 10, 15, 20 years+, etc) to ensure that planting and maintenance standards are maintained;
- (c) provide for on-going pest control, with an annual check against pest plants becoming established; and
- (d) clarify the applicant's responsibility for on-going maintenance of soft and hard landscaping works.
- 208. Prior to construction, more design and riparian planting is needed to establish the future natural character around the Wharemauku Stream.
- 209. For hard landscape works more detail is needed prior to construction on:
  - (a) the structure of the noise walls (e.g. what are 'clear panels'); certainty is needed that best practice structures will be used (rather than straight board fences); and
  - (b) the proposed noise fences and bunds and their impacts on neighbouring residential properties (e.g. shading, etc).
- 210. Certification of the design and details to be provided above would provide greater certainty about the achievement of appropriate landscaping outcomes.

#### Amenity and visual amenity

- 211. Further consideration is needed in relation to the following amenity impacts associated with the Proposal. (Note: this section also relates to comments in this submission on Social Effects.)
  - (a) Resident impacts:
    - there are cumulative effects arising from loss of views in some areas, changes in immediate landscape, noise, lighting, shading, loss of privacy due to adjacent CWB route, shading/loss of sun and loss of connectivity;
    - (ii) there are streets (e.g. Conifer Grove, Milne Drive, Matai Road, Makarini Street) where the same group of residents lose amenity in a number of areas (visual, light, privacy, etc);
    - (iii) there is a lack of detailed assessment of visual amenity impacts on clusters of affected properties and further consideration is needed of loss of existing views, impact of short-term construction views (for up to 24 months) and impact of views towards the Expressway including noise bunds (particularly the back side of bunds), fences and vegetation.

- (b) Construction impacts
  - (i) The loss of amenity during the construction period falls particularly on a small number of residents, some of whom also have long term effects: loss of views during preloading, noise and environmental quality i.e. loss of air quality during construction period with sand and peat earthworks, movement of material during pre-loading, etc.
- (c) Community impacts and severance (see in comments in the Social Impacts section this submission).
- 212. Section 7(c) of the RMA requires the maintenance and enhancement of amenity values. The Council notes that the assessment of amenity impacts is spread over a number of disciplines and assessments with the overall result that assessment of the effects is diluted, particularly with regard to cumulative individual resident effects.
- 213. The Council considers that:
  - (a) effects on visual amenity are high, particularly in areas with high natural or landscape values (Waikanae River, Wharemauku Basin) and at interchanges with high visibility (Kāpiti Road and Te Moana Road);
  - (b) in terms of visual amenity of the expressway in the wider landscape, the effects at Peka Peka, both north and south, are underestimated. The Expressway is open rural land with low dunes and is potentially visible from adjacent properties, the existing State Highway 1 and residents living on the hills to the east;
  - (c) in some cases the visual impacts of large stormwater retention areas could be softened/improved.

- 214. Further assessment is needed of the cumulative amenity and visual amenity effects (during both construction and operational phases) arising from loss of views, changes in immediate landscape, noise, lighting, shading, loss of privacy due to adjacent CWB route, shading/loss of sun and loss of connectivity, etc; particularly in Makarini Street and environs where the same group of residents lose amenity in a number of areas (visual, light, privacy etc).
- 215. Appropriate conditions are needed to mitigate cumulative amenity and visual amenity effects.

#### Coastal land forms and natural character

- 216. The biophysical summary in Technical Report 7 notes: "the proposed Expressway traverses 16km of undulating dune and peatland landscape" but considers that Expressway does not lie within the coastal environment. The Council's review shows the following factors that point to the Expressway being within the coastal environment:
  - (a) high presence of natural coastal landforms, indigenous vegetation and patterns in the landscape up to the escarpments;
  - (b) connections to the coastal foredune systems are strong and relatively unmodified, especially around Ngarara and Peka Peka; and
  - (c) coastal influences as they affect indigenous systems and natural landforms are clearly expressed.
- 217. This is important because of the value that section 6(a) of the RMA places on the natural character of the coastal environment, and also because it affects the applicability of the New Zealand Coastal Policy Statement.
- 218. Section 6(b) of the RMA requires the protection of outstanding natural features and landscapes from inappropriate use. Given that the assessment notes that effects would be severe on the Waikanae River, more detail is required in terms of mitigation planting and maintenance in order to retain and strengthen the natural character of the area<sup>8</sup>.

#### **Outcome sought**

- 219. There needs to be an assessment of the Proposal in the context of the New Zealand Coastal Policy Statement and the coastal environment, followed by conditions requiring any alterations to the Proposal that are being necessary as a result of that assessment.
- 220. The Council seeks that the visual effects on the Waikanae River, as an Outstanding Landscape listed in the District Plan, be mitigated by additional planting (without compromising the floodplain capacity). This should be required through conditions.

<sup>&</sup>lt;sup>8</sup> As correctly noted in the statutory assessment, the Waikanae River is identified as an Outstanding Natural Landscape (**ONL**) in the District Plan. The Council has reviewed the Outstanding Natural Features (ONF) and investigated Significant Amenity Landscapes (**SAL**) as a result of the proposed RPS. This is currently a draft report for the District Plan review which is being currently being reviewed by Tangata whenua and will undergo public consultation in September. There is an additional ONL proposed along the alignment associated with the dunes and wetlands around Ngarara road, including the area of the fernbird habitat, but there are no further SALs identified by this report along the route.

# 15. EFFECTS ON COUNCIL'S WATER SUPPLY, UTILITIES & SERVICES

#### **Functioning of Council's Infrastructure**

221. The Council wishes to ensure that the building of the Expressway does not preclude providing services and utilities to ratepayers in the future.

#### **Outcome sought**

222. The Council seeks a condition requiring NZTA to ensure that existing services, including water supply, are able to function properly during construction of the expressway and once the road is operational.

#### **Existing and Future Council Water Reticulation Services**

- 223. The Council has plans to utilise the existing Western Link Road designation corridor to install bulk water services (water and wastewater) in the medium term from each source to link to the Council's water reticulation networks. The Council wishes to ensure that construction of the Proposal will not constrain these plans in any way.
- 224. The scale and nature of the services the Council plans to provide are as follows:
  - (a) a raw water supply pipeline from bores south of the Waikanae River to Te Moana Road;
  - (b) a treated water supply line to augment Council's existing network running from Waikanae to Paraparaumu;
  - (c) a second waste water rising main from Waikanae to Paraparaumu; and
  - (d) a treated water supply line from Waikanae to Peka Peka Road.
- 225. There are major Council pipe lines that cross the designation, which will need to be replaced in ducts prior to (or at the time of) construction of the embankment along the Expressway.
- 226. The Council understands that the NZTA are looking at providing a five metre wide services corridor to cater for all utility services that will generally follow the proposed CWB. The Council requires three metres of the proposed services corridor to be specifically for water and wastewater services.

- 227. The Council also needs to be confident that its existing water supply bores, wells and pipes will not be compromised by the Proposal. In particular, the Council wishes to ensure that:
  - (a) the Expressway north of Smithfield Road avoids any impacts on the Council's water supply bores (Bores K7 and Kb12); and
  - (b) construction of the Expressway at Te Moana Road (including the proposed interchange and/or traffic signals) avoid any adverse effects on the Council's water supply bore K10, including the ability to access this bore for servicing.

- 228. The Council seeks provision of sufficient space along the Expressway corridor for it to provide existing and future council water and waste water services.
- 229. The Council seeks a condition requiring that the proposed utility service corridor include a three metre minimum buried pipe services corridor to allow for maintenance and upgrades to the Council's water and waste water pipe lines, and any associated works.
- 230. The Council seeks a condition requiring that the project avoid adversely affecting the Council's water supply bores (and the Council's ability to service those bores).
- 231. The Council seeks a condition to ensure that Council pipe lines that cross the designation will be replaced and placed in a duct prior to (or at the time of) construction of the embankment along the Expressway.

# Potential effects of construction bores on Council's future water supply programme

- 232. The Council understands that a maximum supply of 800 cubic metres (m<sup>3</sup>) per day is proposed for construction of the Expressway, although the volume of water required in winter months is expected to be lower (due to wet weather). It is anticipated that up to nine deep water bores will be constructed as part of the Proposal. These will be spaced along the Expressway alignment as follows: Poplar Avenue; Raumati Road; Ihakara Street; Kāpiti Road; Mazengarb Road; Waikanae River; Te Moana Road; Ngarara Road; and Peka Peka Road. In addition to water from these bores, water will be sourced from sediment retention devices.
- 233. The Council is concerned about potential effects of deep bores (proposed for construction purposes) on the Council's municipal water supply borefield in times of drought over the construction period. In addition, any effects of the Proposal on wetlands need to avoid adverse effects on the ability to recharge the Council's borefield.

234. The Council seeks avoidance or mitigation of effects on the water available for the municipal water supply, for example by conditions requiring monitoring of ground water and appropriate trigger levels at which the take must reduce or cease.

#### The Expressway construction yard at the Otaihanga landfill site

- 235. The Proposal plans to locate the largest construction yard next to Otaihanga Resource Recovery Facility (**ORRF**) on Council landfill land. It would be fully fenced, as the landfill is still operational and the public enters the landfill through the ORRF. This yard will be in place for the full length of the construction period. The site plan for the construction yard includes part of the landfill leachate drain and the access to the ORRF from Otaihanga Road. (Note that issues associated with the leachate drain are addressed in the Contaminated Land section of this submission.)
- 236. The Council considers that:
  - (a) there needs to be continuous and safe access for residents to the ORRF and the landfill from Otaihanga Road;
  - (b) there needs to be an alternative solution for the access of dog club members (after hours) via the club's separate gate/road next to the ORRF entrance (which appears to be incorporated into the construction yard);
  - (c) care must be taken in providing access from Otaihanga Road to the yard to ensure that any damage to the dune and associated vegetation is fully reinstated post construction;
  - (d) traffic management is a source of concern because Otaihanga Road provides access to the main waste facilities in the Kāpiti District and is therefore heavily used by the local community; and
  - (e) access to the CNZ site from Otaihanga Road for green waste dropoff also needs to be taken into account when assessing speed and safety.

#### Outcome sought

237. The Council seeks a solution, supported by appropriate conditions, that addresses the issues raised above before construction commences.

# 16. CULTURAL / TANGATA WHENUA

#### Support

- 238. The Council acknowledges that NZTA has worked hard to establish and maintain an ongoing relationship with both the Takamore Trust (**Trust**) and Te Rūnanga o Āti Awa ki Whakarongotai Inc (**Runanga**) since June 2010.
- 239. The Council supports the cultural impact assessments (CIA) submitted by the Takamore Trust and Te Rūnanga o Āti Awa ki Whakarongotai Inc on behalf of tangata whenua (submitted as Technical Reports 11 and 12, Volume 3 of the AEE).
- 240. The Council's specific recommendations to the NZTA have focused, and continue to focus, on the following:
  - (a) appropriate resourcing tangata whenua to engage effectively with the process at all levels;
  - (b) implementation of the actions identified in the report "*Takamore Cultural Heritage Precinct – Restoring the Mauri*"; and
  - (c) supporting Māori landowners through the processes associated with the project.
- 241. Specific areas that the Council supports include:
  - (a) Incorporation of an accidental discovery process into the project;
  - (b) The development of the mitigation package entitled; 'Takamore Cultural Heritage Precinct – Restoring the Mauri' (although the Council has yet to sight this work in detail);
  - (c) The approach to monitoring in which both tangata whenua groups have expressed their desire to work alongside and within the monitoring work; and
  - (d) The Trust's acknowledgement of the efforts that NZTA has gone to in addressing its concerns (e.g. the straightening of the dog leg that dissected the registered waahi tapu area so that the realigned route will no longer traverse the registered waahi tapu area, to the satisfaction of the Trust).
- 242. The Council supports Te Āti Awa ki Whakarongotai who are the kaitiaki of their rohe and the Takamore Trustees who have jurisdiction of the Takamore Cultural Precinct and believes they should be actively supported to exercise their duties and obligations as kaitiaki.

# Other issues

- 243. The Trust has indicated that it expects an ongoing relationship and high level of engagement in the NZTA's decision making processes concerning activities in this area. The Council supports this request. This could be done through:
  - (a) participation in decision-making and ongoing input into the project;
  - (b) assistance to tangata whenua to review all management plans associated with the Expressway;
  - (c) support for iwi observers for the duration of the project (for example, for participation in archaeological discovery processes); and,
  - (d) provision for tangata whenua to provide support for Māori Land owners.
- 244. The Council suggests that this support could be incorporated into the mitigation package 'Takamore Cultural Heritage Precinct Restoring the Mauri', which has been designed to address the impacts of the expressway on the Takamore Precinct.
- 245. The Council suggests that the tangata whenua values expressed through the two Cultural Impact Assessments be applied across all technical reports; e.g. to stormwater, landscaping, ecological and other areas.

#### **17. STATUTORY PLANNING**

#### **Support**

- 246. The Council generally supports the following planning-specific matters, while noting that its support is conditional on any relevant adverse effects being managed by appropriate, robust, certain and enforceable conditions that achieve the outcomes sought in this submission, which will in some cases require amendment to conditions as currently proposed. The Council considers that its planning concerns are capable of being addressed through the Inquiry process. The matters generally supported are:
  - (a) NZTA's broad identification of documents that are relevant to the assessment of effects on the environment under sections 104 and 171 of the Resource Management Act 1991 (**RMA**).<sup>9</sup>
  - (b) the proposed waiver of a requirement for an outline plan, and the management of the Proposal via the use of management plans (this

<sup>&</sup>lt;sup>9</sup> Contained in sections 4 and 5 (pages 66-90) of NZTA's Assessment of Environmental Effects Report. As discussed below, however, the Council also considers that NZCPS is relevant to this Proposal.

method, in particular, will require amendment to current conditions to give greater certainty to the Council and community about the design of the Proposal);

- (c) the NZTA's assessment of the Proposal in relation to the National Policy Statement for Freshwater Management 2011 (NPSFW) and National Policy Statement for Electricity Transmission 2008 (NPSET);
- (d) NZTA's assessment of the proposal in relation to the National Environmental Standards (**NES**) for Air Quality, Sources of Drinking Water, and Electricity Transmission Activities ; and
- (e) NZTA's conclusion that the Proposed Regional Policy Statement for the Wellington Region (**Proposed WRPS**) is considered to have greater weight than the operative WRPS.
- 247. The Council also supports the general approach of conditions (relying on references to plan sets and management plans to deliver the Proposal's details), subject to comments made below.

# NZTA's assessment of planning matters

- 248. The earlier sections of this submission discuss gaps in or differing conclusions in relation to various aspects of NZTA's assessment of effects of the Proposal. Given that NZTA's planning assessment of the Proposal (against Part 2 of the RMA and the relevant national and regional statutory planning documents) relies on its assessment of effects, any updated conclusions about the effects as a result of the matters raised in this submission will need to be carefully applied to the planning assessment.
- 249. The Council expects that changes to conditions, including those changes sought in this submission, should be able to resolve any issues identified through this planning assessment.
- 250. The main areas where reassessment is likely to be needed are noted below.
- 251. The assessment of regional form and function for Proposed WRPS policies relies on an economic assessment (Chapter 29, Volume 2) that is very light and does not look in depth at local economic effects.
- 252. The conclusion that the Proposal is consistent with all regional policy statement objectives needs reconsideration because there is currently insufficient certainty about traffic effects, noise effects, social and economic effects to conclude that the Proposal is consistent with the RPS's Urban Form Objectives.
- 253. The Waikanae River is identified as an outstanding natural feature or landscape in the District Plan and as a water body with regionally important amenity and recreational values in the Regional Freshwater Plan. However,

the Proposal discounts the effects on the Waikanae River because there is an existing designation for a bridge across the river as part of the Western Link Road. The Council seeks additional mitigation planting is required in this area, as indicated earlier in this submission.

- 254. The assessment against the District Plan fails to consider all the relevant objectives and policies of the plan. For example, the assessment does not consider policies for some zones that are within the proposed designation. The assessment identifies objectives but does not give any specific detail demonstrating that the project is consistent with the objectives in most cases. This assessment appears to assume that if effects are managed as set out in the management plans and conditions, that this will ensure consistency with the objectives and policies of the District Plan. This is not necessarily the case and an assessment against objectives and policies needs to be undertaken in a considered and robust manner prior to reaching a decision on the Notice of Requirement.
- 255. The Council is concerned about the adequacy of assessment against Part 2 of the RMA. The assessment is based on the technical assessments, which Council considers do not, in some cases, adequately address a number of social, economic and environmental effects. Amendments need to be made to the conditions and further assessment needs to be undertaken in order to be able to assess that the local adverse effects have been addressed sufficiently for the purpose of the RMA and achieve sustainable management. In particular:
  - (a) in relation to sustaining the potential of natural and physical resources, the assessment is limited to a transport focus and does not consider town centres such as Waikanae as a physical resource;
  - (b) the comment on soils does not acknowledge that the footprint of a four-lane road will use up a significant area of land and soils, including some highly versatile soils; and
  - (c) in terms of water the assessment focuses on water quality only and the perceived benefits relating to the treatment of runoff from a road that is to be constructed. The water quality effects are at best neutral rather than positive as suggested in the assessment.
- 256. The assessment assumes that the route is not in the coastal environment and is therefore inconsistent with the research the Council has commissioned to meet this requirement of its review of the District Plan. This is relevant to the NZCPS, the Proposed WRPS and section 6(a) of the RMA. The assessment against section 6 matters does not address areas of high natural character in the coastal environment.
- 257. The assessment's frequent use of the words "in so far as practicable", in relation to section 6 matters requiring preservation or protection, leaves doubt about whether that preservation or protection will actually be achieved.

258. In relation to the draft conditions, the Council requests that conditions currently lacking sufficient detail to provide certainty are amended.

## **Outcome sought**

259. The Proposal needs more careful and detailed assessment against the planning documents and RMA Part 2 provisions noted above once gaps and issues with the effects assessment are resolved, with consequent design changes and conditions where necessary to reflect this assessment.

# Conditions

- 260. Throughout this submission the Council has sought outcomes in relation to specific topics that involve the inclusion of or amendment to certain conditions. The Council does not reproduce these requests here, but reiterates their importance. The Council considers that the planning matters discussed above support the need for these new or amended conditions.
- 261. Although supportive of the general approach of conditions, the Council is concerned that general references to management plans and plan sets in the conditions may not provide sufficient certainty to achieve the outcomes sought by the Council. The specific wording of conditions DC.1 and G1 (which make the regulatory link between conditions and plans) allow substantial flexibility in terms of the Proposal's final design, in that they only require construction to be in general accordance with the plan sets and management plans. The Council recognises that some flexibility is necessary, but is concerned that the draft conditions allow too much flexibility and therefore leave too much uncertainty.

#### **Outcome sought**

- 262. The Council seeks amendments to the conditions to provide certainty that the outcomes indicated in the application and AEE will in fact be implemented and will not be compromised during the construction phase.
- 263. These amendments will likely include providing more detail in the conditions (rather than in the management plans), ensuring that the conditions require compliance with the management plans, and a certification role for the Council in relation to management plans.
- 264. The Council reiterates its earlier requests for conditions that address the topic-based issues raised in this submission.
- 265. The Council seeks clearer requirements to provide information (especially monitoring information) to the Council throughout the process.
- 266. The Council also seeks such consequential changes to conditions that are rendered necessary by the outcomes sought by the Council.