



Statement of Rachelle McBeth, Senior Environmental Planner, New Plymouth District Council

To Hearing Commissioner Stephen Daysh

In consideration of the proposed Notice of Requirement and resource consent application for the Mt Messenger Bypass (DSN17/44711 & LUC18/47193)

9 October 2018

1. I wish to comment on a number of matters that were identified in my s42A report dated 18 May 2018, my supplementary report dated 30 July 2018, on evidence provided through the course of this hearing and on developments to the ELMP and designation conditions while the hearing has been adjourned.
2. My recommendations on the NOR to construct and operate the Mt Messenger Bypass, and resource consent to disturb potentially contaminated soil, are informed by a number of technical experts; some of them are here today to answer questions the Commissioner may have. Mr Harwood is available for legal questions. Present with prepared statements are Wildlands ecologists (Mr Shaw, and Dr Martin). They are available to answer questions. Mr Doherty has provided a written statement (attached) and is available via audio link should the Commissioner wish to further explore the issues he has raised. Mr Allison (geotechnical engineer), Ms Knowles (hazardous substances and NESCS), Mr Bain (landscape and natural character matters) and Mr McCurdy (historic heritage) are also available via audio link.
3. I will first consider the assessment of alternatives and cultural effects, then together with Wildlands, will consider the ecological effects and the package proposed to address these effects, then I will address process issues and conditions. I will conclude with a recommendation on whether, in my opinion, the NOR should be confirmed, withdrawn, altered or subject to conditions.

Assessment of alternatives

Sections 171(1)(b) and 171(1)(c) analysis

4. NZTA's legal submissions appear to misunderstand the position outlined in my s42A report regarding s171(1)(c) (see paras 248 – 253). My assessment under s171(1)(c) was not seeking to revisit the adequacy of consideration of alternatives under s171(1)(b). The matters under paragraphs (b) and (c) are related but distinct where (b) is a process test and (c) is a merits test. Being satisfied that adequate consideration to alternatives has been carried out under (b) does not automatically satisfy that the work and designation proposed are 'reasonably necessary' under (c).
5. My reservations under (c) were on the basis that a number of questions remained unanswered as to the merits of the proposed option against an online option. I do not contest that an upgrade to the existing road over Mt Messenger is reasonably necessary to achieve the NZTAs objectives, however I questioned whether it is reasonably necessary

for the proposed upgrade to take place beyond the existing designation boundaries. There is an option to meet the Requiring Authority's objectives within the existing designation footprint, and the reasons for the selection of an offline route had not been clearly demonstrated when I prepared my May report.

6. In my s42A supplementary report I stated that further information had been provided by Mr Roan and Mr Symmans and reviewed by Mr Russell, and I now accept the landslide feature to be a strong basis for the selection of an offline route. However, a number of other matters remained unaddressed, which are identified in my s42A supplementary and detailed in Appendix B of the supplementary report (letter from Mr Doherty dated 30 July 2018). The Commissioner asked NZTA witnesses questions about these matters and the outstanding matters have reduced. However, Mr Doherty has unresolved concerns in relation to the offline route compared to the online route. Mr Doherty has set these out in writing in the attached letter dated 15 August 2018.
7. My current view is that the MCA process could have been carried out differently in some aspects and a different decision could have been reached. No route selected in this area is going to be without challenging environmental effects and without significant costs, including an on-line route. Notwithstanding Mr Doherty's residual concerns and conclusions as to the outcome of the alternatives assessment, I concur with paragraph 250 of the legal submissions which state that the test is not whether the selected option is the 'best'. Having heard the NZTA witnesses during the hearing I am now satisfied that the route selected is appropriate in terms of S171(1)(c). Due to the geotechnical issues and cost/route security issues with an online route option – I consider there to be a reasonable basis to seek an alteration to the designation beyond the existing designation boundaries.
8. There is still an issue however as to whether the effects of that choice are appropriately addressed for the purposes of s 171(1), particularly in relation to ecological, cultural and other issues.

Recreation effects

9. Regarding Mr Milliken's supplementary statement of 28 September 2018, where he presents a plan and some detail around the upgrading proposed for the carparking area to access the Kiwi Road Track, I consider the spaces shown in Mr Milliken's Appendix 2 demonstrate an improved carparking arrangement for users of the Kiwi Rd track which appropriately addresses potential effects of the project on users of the Kiwi Track. The formation does not raise any concerns regarding visual or other effects, being simply a levelling and surfacing of an area which is currently free of vegetation and of uneven ground. In providing the indicative carpark layout to the hearing, the requirement for this carparking area to be included in Condition 7 as being subject to an Outline Plan can be removed.

Cultural effects

Engagement with Maori

10. Greg Carlyon for Te Korowai, in para 55 of his planning evidence, considers that the Agency's approach to consult primarily with Te Runanga o Ngati Tama, and my acceptance of this approach in the S42A report, assumes singular kaitiaki status for the area and marginalises Te Korowai. I refer to my earlier comments that I consider NZTA have cast a wide net through their public consultation process where they sought to gather views from any person with an interest in the project. However consultation and

engagement are not the same thing and Mr Carlyon identified that consultation with an 'iwi authority' is an absolute bottom line whereas engagement with all Maori, including at the hapu and whanau level, is appropriate.

11. I agree with Mr Carlyon that Part 2 provisions addressing cultural effects are not limited to iwi authorities, but it is my view that NZTA have provided opportunities for all Maori to engage. Following receipt of the Te Korowai submission, NZTA went to lengths to ensure that Te Korowai members (as submitters to the designation and resource consents) were provided with copies of project information and were provided opportunities to engage, via Ngati Tama hui-a-iwi. I am aware that NZTA took measures to be satisfied that Te Korowai were specifically invited to hui-a-iwi also attended by NZTA, whereby engagement occurred.
12. I accept that it would be difficult for NZTA, given the timing and recent formation of Te Korowai, and the challenges associated with engaging with iwi members when legal proceedings relating to the runanga governance were ongoing; I accept the approach taken by NZTA and in my view, the Agency has recognised and provided for cultural values of members of the iwi beyond the Ngati Tama Runanga members who were the main points of contact. I do not consider that Te Korowai have been marginalised.
13. I consider the matters raised by Te Korowai in their legal and planning witness submissions are relevant to the consideration of cultural effects of the project, and to the assessment of the NOR under Part 2 of the RMA. Whereas Mr Dixon, when questioned by the Commissioner, indicated his view that full weighting should be applied to the Ngati Tama runanga submission, I consider considerable weight can be given to the runanga's submission, but some weight should also be given to submissions of other Maori. I note there are areas of common ground present between the Runanga and Te Korowai submissions, such as cultural expression, use of timber and road naming as outlined in paragraphs 56-58 and 64 of Mr Allen White's submission, which are reflected in proposed designation condition 4a (KFG).
14. I am also satisfied that NZTA has meaningfully sought to engage with Poutama, having met with them on numerous occasions, provided information in a timely manner, and having contributed financially towards the preparation of the report prepared by Bruce Stirling.
15. I wish to make the following comments on two matters raised during Poutama's presentation; the Poutama Iwi Plan and Poutama's status as an Iwi Authority.

Poutama Iwi Plan

16. The Poutama Iwi Plan document was considered by the Environment Court in *Nga Hapu o Poutama v Taranaki Regional Council* [2013] NZEnvC 254. That case concerned an appeal against Taranaki Regional Council's decision to grant resource consent to remediate an existing length of highway embankment and to reconstruct a further length of this same embankment above the Tongaporutu Estuary on State Highway 3. The Environment Court considered the document at paragraphs 90 and 91 of the decision. The Court found that it was not required to consider it under section 104(1)(b) but that it may be appropriate to consider it under section 104(1)(c).
17. A similar approach is appropriate for the NoR. While section 171(1) does not require you to consider the Poutama Iwi Plan, it is open for you to consider it as an "other matter" under section 171(1)(d), if you considered it was relevant to the issues and useful to assist with your consideration of the NoR and the potential effects on Poutama.

Poutama's status as an Iwi Authority

18. Te Puni Kokiri's (TPK) directory of Iwi and Maori Organisations (Te Kahui Mangai) includes Poutama as an "Other Iwi Authority". TPK describes Other Iwi Authorities in the following way:

"The term "iwi authority" is defined in the RMA only for the purposes of that Act. An iwi authority is not, therefore, necessarily the same thing as other representative iwi organisations recognised by the Crown. Consequently entry as an "Other Iwi Authority" does not in itself specifically imply formal Crown recognition of that group as an iwi, nor formal recognition by the Crown of that "iwi authority" to act on behalf of that iwi."

19. While this description is somewhat ambiguous, assuming Poutama is an Iwi Authority on the basis of Te Kahui Mangai, the next question is what is the significance of that position under section 171? Section 171 requires you to assess the "effects on the environment" and your assessment is subject to Part II of the RMA. Cultural effects are an effect on the environment (see the definition of "environment"). Additionally, under section 6(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga is a matter of national importance that must be recognised and provided for. Section 7 also requires you to recognise and provide for kaitiakitanga.

20. The RMA defines kaitiakitanga as "the exercise of guardianship by the tangata whenua of an area in accordance with tikanga Maori in relation to natural and physical resources, and includes the ethic of stewardship". The RMA in turn defines "tangata whenua" as "in relation to a particular iwi, means the iwi, or hapu, that holds mana whenua over that area". The definition of "iwi authority" in the RMA is "the authority which represents an iwi and which is recognised by that iwi as having authority to do so".

21. Although it is understood that Poutama's status as an Iwi or an Iwi Authority appears to be disputed by Ngati Tama, as well as neighbouring Ngati Maru and Ngati Maniapoto, Poutama have asserted that they are tangata whenua and, on the face of it, TPK's recognition as an "Other Iwi Authority" appears to support that assertion. Therefore, it is open for you to conclude that Poutama are tangata whenua that could exercise kaitiakitanga over the areas identified on the TPK website in terms of section 7 of the RMA.

22. However, what weight should be given to the matters raised by Poutama in relation to the potential effects on it by the proposal depends on the evidence. In the context of this application, considerations could also include other Iwi Authorities' ownership and ability to control the affected land.

23. I am supportive of the proposal to establish the Kaitiaki Forum Group as proposed in the conditions, which allow for involvement of people beyond Te Runanga o Ngati Tama, but in my view it is appropriate that the runanga is central to this group.

Ecological effects

24. The comments I make in relation to the ecological effects of the proposed designation are relevant to the assessment of the proposal against numerous provisions of the RMA.

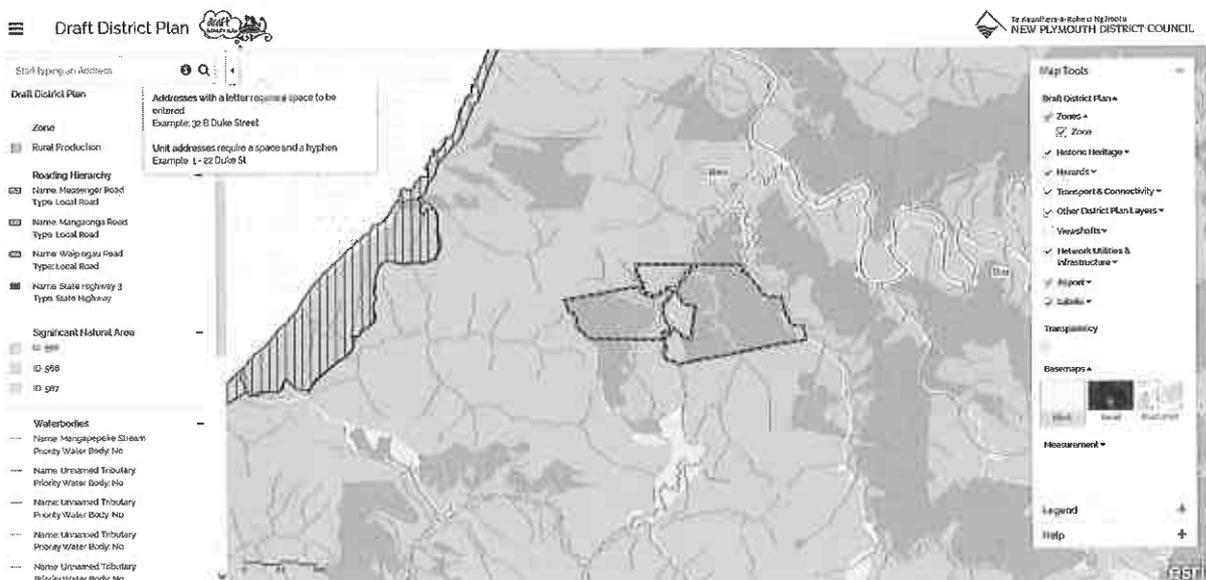
- **Section 31(b)(iii)** – NPDC's responsibility to control the actual or potential effects of use, development, or protection of land for the purpose of the maintenance of indigenous biological diversity.
- **Section 171(1)(a)** – when considering a requirement and any submissions received, a territorial authority must, subject to Part 2, consider the effects on the environment of allowing the requirement, having particular regard to any relevant provisions of policy statements and plans.

The policies and objectives of relevant policy statement and plans have been assessed in earlier reports and I do not intend to go over them again but given DOCs legal and planning analysis of whether the proposal is consistent with Policy 16.1 and 16.2 of the District Plan, I note:

- Objective 16 seeks *“To sustainably manage and where practical enhance indigenous vegetation and habitat.”*
- Policy 16.1 states that land use development and subdivision should not result in adverse effects on the sustainable management of and should enhance where practical significant natural areas. In the ‘Reasons’ for this policy, at:
 - para 5, it states *“this policy seeks to ensure these areas [SNA’s] are sustainably managed rather than preserved. In a practical sense this means that subdivision use and development can occur adjacent to or within these areas provided that the character and natural processes of the ecosystem are able to continue”*.
 - para 8 states *“The greatest threat to these areas is their loss or reduction in quality through infestation by pests and grazing stock.”*
- Policy 16.2 states that *“land use development and subdivision should not result in adverse effects on and should enhance where practical the quality and intrinsic values of indigenous vegetation and habitat”*

This policy would apply to all indigenous vegetation and habitats within the district, whether or not they have not been identified as SNA. I concur with the analysis at paragraphs 16-20 of Ms Ongley’s legal submissions dated 7 August 2018, that District Plan policies and objectives which refer to areas of significant indigenous biodiversity should apply to the project footprint even where areas are not listed in Appendix 21 of the District Plan, on the basis that these areas meet the SNA significance criteria. I also agree with Ms Ongley that the District Plan currently is deficient in terms of protections expected under S6(c). District Plan overlay rules only apply to SNAs which are listed on a schedule.

I refer to para 293 of NZTAs legal submissions, where it states that no SNAs are affected. I noted Mr Allen as saying there was no SNA intended for the Draft District Plan, in relation to the Pascoe property. The following screen shot from the Draft District Plan shows the vegetated areas of the Pascoe farm that our District Planning Team propose to be included as SNA. The proposed areas have been field checked as part of the District Plan Review and have been demonstrated to meet significance criteria.



Therefore, the Pascoe land is not presently subject to the SNA overlay, but it has been identified to contain values which meet the District Plan significance criteria. I simply make this point as a matter of clarification and I note that regardless of the operative status of the SNA overlay, the Agency's approach has centred on the flora and fauna within the project footprint having ecological values which they seek to sustainably manage.

- I also note under **Section 171(1B)** Council may only consider positive effects resulting from measures proposed or agreed to by the RA; a matter raised by Ms Ongley and responded to by Mr Ryan with the invitation to provide some conditions for the Agency to consider.
 - (To continue the list of RMA provisions relevant to the assessment of the ecological effects, under) **Part 2**
 - **Section 5** – the need to safeguard the life-supporting capacity of ecosystems is imbedded within the purpose and principles of the RMA
 - **Section 6(c)** – requires that the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna be recognised and provided for as a matter of national importance
 - Other matters under **Section 7(d), (f) and (g)** require that particular regard be had to the intrinsic value of ecosystems, maintenance and enhancement of the quality of the environment and any finite characteristics of natural resources.
25. In my view, the proposed clearance of indigenous vegetation would be consistent with the above District Plan policies and objectives and RMA provisions, provided a sustainable management approach is taken, where effects are minimised, and the qualities of the wider ecosystem are enhanced.
26. The proposal seeks to achieve sustainable management of ecological resources through: route selection (avoidance); restoration works (remediation) and other onsite mitigation; and management of pest and livestock threats over an area of 3650ha in perpetuity (mitigation, offset and compensation). This approach has merit, in my view, as a meaningful response to the ecological effects of the proposal, providing that a robust framework is in place which is well implemented. I consider this could be achieved through appropriate designation conditions and in reliance of adhering to the ELMP, subject to some changes to the ELMP and conditions from their current state.
27. Mr McGibbon's evidence has described the objective of NZTAs ecology team, which as stated in paragraph 14 of his supplementary evidence, "has been to develop a Restoration Package that has a high likelihood of generating positive, biologically diverse, and enduring ecological outcomes, greater in terms of net benefit than the residual effects caused by the Project." NZTA have offered a 3650ha PMA and any residual unavoided, unremedied or unmitigated effects are proposed to be offset and/or compensated by the PMA. Mr Singers and Mr McGibbon consider the core areas of the PMA are more than sufficient to generate positive biodiversity gains. Throughout the review, submission and hearing processes, Wildlands, DOC and other submitters have expressed doubt as to whether the package will deliver on the aim of 'no net loss' in biodiversity, and the package has evolved to respond to many of the concerns raised throughout the process.
28. It would appear the numerous ecologists who have provided evidence at this hearing generally accept the approach taken in the ELMP and that the measures proposed in perpetuity adequately address effects on many (but indeed not all) flora and fauna values. Prior to the adjournment of the hearing in August, despite the PMA providing a significant level of offset and/or compensation, and indeed for many species delivering positive

effects, Wildlands and DOC had remaining serious concerns regarding the possible detrimental effects of the project on bats.

29. In my s42A report, I stated that I found it difficult to reconcile the desired outcome of net gain in biodiversity with the potential mortality of Threatened-Nationally Critical long-tailed bats or At Risk herpetofauna and avifauna. In August, when the hearing was adjourned, Wildlands had concerns regarding the potential for bat mortality with the reduced VRP measures, and also concerns with the lack of certainty as to whether the PMA would provide positive outcomes for bats when it was not known whether maternity roosts were located in the PMA. Similarly, Mr O'Donnell highlighted that the effects of the project are uncertain but potentially catastrophic for long-tailed bats because felling of breeding trees or roosts during road construction may lead to extinction of the Mt Messenger bat population. This begs the question; if the local population becomes extinct, what impact would that have on the national population? Wildlands may have some comments on that.
30. We have heard from Mr Chapman (for the Agency), Mr O'Donnell (for DOC) and Council's own advice from Wildlands, that radio-tracking would be the best way to inform the degree of effect on bats resulting from clearing habitat within the project footprint – whether that be a loss of maternity roosts (possible given the level of bat activity recorded at dusk and dawn) or the effect of loss of foraging habitat (which is a reduced effect less likely to result in catastrophic effects on the local population). Whether it is one or both of these effects, NZTA ecologists consider the PMA measures will compensate for effects on bats.
31. Having heard throughout the hearing about the challenges associated with establishing baseline data for bats, herpetofauna and invertebrates I appreciate it would be difficult to determine precisely what it would take to achieve the goal of no net loss in biodiversity and subsequently whether this goal has been achieved. As Wildlands can explain, the application of the offsetting model is problematic, as is the detection and salvage of threatened bats, lizards and invertebrates due to a range of factors.
32. I discussed in my s42A report, my support for the application of the effects management hierarchy – to firstly seek to avoid, remedy, mitigate effects, and where that is not possible to offset and compensate adverse effects. The earlier proposed VRP provisions had greater emphasis on the avoidance and minimisation end of the effects management hierarchy, however the currently proposed approach has significantly reduced provision for avoiding and minimising effects on bats and herpetofauna, and it relies more heavily on offset and compensation. This appears to be at odds with Section 3.1 of the most recent version of the ELMP which outlines the effects management hierarchy, however I understand there to be a general acceptance among expert ecologists that taking a compensatory approach is appropriate.
33. Since serving the NOR, the Agency has expanded the PMA from 560ha to 3650ha. While I consider the Agency is offering a significant package to address ecological and biodiversity effects, there are some concerns I wish to inform the Commissioner of, regarding whether the package will deliver the outcomes intended for bats and other species. I will outline some of these then ask Wildlands to provide their technical expertise.
34. Wildlands previously reported that studies have shown positive effects to bats where pest control has occurred over an area greater than 3000ha. However, 3000ha is not a magic number, rather it requires the presence of maternal roosts within the PMA and effective pest management over that 3000ha area, to result in positive effects for bats.
35. Having listened to Mr O'Donnell, I further understand that a 5000ha PMA, as requested by DOC in the absence of radio tracking data, may increase the likelihood of, but not

guarantee, positive effects for bats, as it may increase the likelihood that there are maternal roosts within the PMA. Assurance of the claim of positive effects for bats could only be provided if the presence of maternal roosts in the PMA was demonstrated.

36. Prior to the adjournment, I turned my mind to whether some flexibility can be written into conditions to allow for the identification of maternal roosts within the PMA, and if none are able to be identified in the proposed area, then alternative measures be considered. I understood from hearing their submission that DOC would be satisfied with a 3650ha PMA if maternal roosts were known to be within this area OR a 5000ha PMA be provided.
37. Prior to the hearing being adjourned, I asked the Agency to consider conditions requiring that radio-tracking be carried out within the first stage of works, over the appropriate months (October to March) prior to substantial vegetation clearance taking place, to obtain data which demonstrates the location of maternity roosts, which may be used to determine the location for a PMA and potentially assist avoidance of felling roost trees. Since the adjournment this has been a key focus for Council's discussions with the Agency, including expert teleconferencing involving Wildlands bat, vegetation and offsetting experts.
38. NZTA has accepted that there is need for better data regarding the location of long-tail bat maternity roosts. Wildlands and I have carefully considered the Agency's proposed conditions. We are generally supportive of what is now proposed if the proposed PMA is adjacent to, or in the same lowland forest complex, as the project footprint. We but wish to ensure conditions achieve the proposed outcomes and are not so inflexible that the PMA is carelessly deferred to the Waitaanga Valley. Although Scenario 4 of Condition 30 appears to be a reasonable back-up option for the PMA with regards to bats, we view it as considerably less desirable than land within the Study Area, particularly from the perspective of 'like-for-like' and 'proximity' principles for biodiversity offsetting and compensation. If the Waitaanga Valley option is selected there will be no mitigation for the loss of lowland semi-coastal forest, and mitigation plantings along the route will be difficult to establish, and unlikely to persist in the long term.
39. Wildlands have also some comments about these principles as well as that of 'additionality' with regards to inclusion of the existing pest control area at Paranihi in the PMA. Some comfort has been provided through the hearing that if the area shown in the ELMP/PMP comprising Ngati Tama and DOC land is not appropriate or selected, there are other options. Wildlands will discuss the suitability of Paranihi and Waitaanga Forest for inclusion in the PMA.

Herpetofauna

40. Since the hearing adjournment, the Agency has proposed a change in approach to managing effects on herpetofauna. Although a proposed plan remains within the ELMP to salvage and relocate herpetofauna during construction, the previously proposed 1 hectare predator fenced area is no longer included. Instead the budget of \$200,000 previously allocated for the predator free enclosure would be provided as compensation to DOC in accordance with proposed designation condition 29b. Condition 29b(ii) and (iii) are, in my view, drafted in such a way as to allow the Council to be satisfied that the compensation will be successful in achieving its intended purpose of benefitting herpetofauna. I would encourage the selection of project(s) funded under Condition 29b relevant to the local area or at Lake Rotokare, where specified types of salvaged lizards are intended to be relocated to. Wildlands will discuss their views on this approach and whether the proposed compensation is adequate to address effects on herpetofauna.

Freshwater ecology/offset

41. With regard to freshwater ecology, this is an area with some overlap between regional and district councils and matters such as fish passage and sedimentation are covered by the TRC consent applications so I will not comment on those matters, but I do comment on the adequacy of the offset proposed, as calculated by the application of the SEV model. Mr Hamill has calculated a streamlength which has been peer reviewed and supported by Dr Neale, and was a focus of the evidence of Dr Dridan for DOC who held a different view regarding the adequacy of the offset required. There is a level of disagreement between DOC and NZTA regarding the SEV. I can confirm that Mr Goldwater, freshwater ecology specialist for Wildlands, is satisfied with the offset as calculated by Mr Hamill.

Now I will ask Wildlands to provide their statement.

Land ownership and rights to carry out PMP

42. In my s42A report I expressed concerns regarding the lack of land ownership or established legal rights to carry out planting and the in perpetuity commitment to the PMA and riparian planting. The Commissioner alluded to a condition precedent option, which has merit. The Commissioner may consider the condition suggested by DOC last week:

Condition 32(a)(1) Construction Works shall not commence until evidence of the legal agreements and/or other authorisations necessary to allow, in perpetuity, the requiring authority to enter onto land outside the boundaries of the designation to carry out, continue and maintain all the measures set out in the ELMP, including the restoration, riparian planting and pest management measures. This shall also include appropriate access to such sites, for the purposes of undertaking those measures.

43. What has come through in the hearing is that in addition to the land currently proposed for the PMA, there are two areas which may be suitable and available – land owned by Ngati Tama and an alternative area of DOC land known to contain bats, being the Waitaanga Forest. So while the concern about lack of land ownership and legal rights has not been resolved, there is some degree of certainty that there is suitable land which could be used for offsetting/compensation, that the land has a reasonable likelihood to contain maternal bat roosts, and that the owners would happily receive the Agency's assistance to manage pests on that land. It is important that certainty of timing around securing land ownership/access rights is addressed in the conditions.
44. I understand the Ngati Tama Runanga and Te Korowai support Parininihi inclusion in the PMA. I note from paragraph 44 of Mr Greg White's evidence (July 2018) that Ngati Tama have reservations about an in perpetuity term to any agreement to carry out pest management at Parininihi. Should Parininihi be included in the PMA, I consider it acceptable to be on the basis of a long-term and renewable agreement between the runanga and NZTA; in the event that the agreement is not renewed at the end of its term and the Confirmed PMA needed to be altered, this could be carried out under proposed designation condition 11 which sets the process for material amendments to management plans.

Conditions comments

45. Since finalising the S42A report I have taken part in condition 'page turns' with Mr Roan, and since the hearing adjournment we have continued to discuss conditions. This has

resulted in the evolution, refinement and improvement of proposed conditions, where I have sought a “tightening” of the effect of the conditions to create greater certainty as to environmental outcomes and to ensure that Council is able to monitor clear conditions, and without its enforcement obligations being undermined.

Are the management plans now fulsome and able to be approved through the hearing?

46. In my s42A supplementary, I considered that while I could support the notion of fulsome management plans being approved by the Commissioner through the hearing, the CLMP, CEMP and ELMP were not ready to be approved. I now consider that the CLMP and CEMP are in a form where I support them being approved through the hearing.
47. With regard to the ELMP, there are some details that remain matters of disagreement. Given the level of detail contained in the ELMP, and the extensive discussions that have occurred between the Agency/DOC and Council experts, we are at the point where numerous issues have been worked through at a forensic level; we are down to a relatively small number of matters which I will outline shortly. They tend to be subject of different expert opinions.
48. Overall, I consider the ELMP to be a well-considered mitigation, offsetting and compensation package which is a valid and informed response to the adverse environmental effects generated by the proposal. The content of the management plans have been well debated and I am supportive of the process proposed by the Agency that the Commissioner finalises the content of the management plans through the hearing. However, Wildlands have presented a list which contains suggested changes that I recommend be made to the ELMP prior to it being finalised. On this list there may be some matters the Commissioner would make a decision on. If the Commissioner considers changes are required, a condition would be needed requiring the ELMP be changed to include specific changes and the Council would need to check these specifics are included (without a full review of the ELMP provisions or effectiveness).

Conflict resolution process outlined in Condition 14 of the proposed designation conditions

49. During Mr Roan’s evidence, the Commissioner questioned the vires of the condition and Mr Roan stated that he is aware of cases where such a condition had been used elsewhere, including within the environment court context. While I am not aware of such cases, and I understand the Requiring Authority intend to address this in closing, I have reconsidered the condition and confirm I am comfortable with it. Mr Roan and I have discussed replacing ‘mediator’ with ‘arbiter’ or ‘expert’. In my view, with the result being a decision being issued, arbiter is a correct term, but I am comfortable with the term ‘expert’ as the conditions are currently worded. Our discussions and refinement of the condition have narrowed the purpose of the conflict resolution process to the *content* of the management plans, rather than their *implementation* (so as not to undermine Council’s enforcement role). Mr Roan and I have discussed that the expert or likely facilitator of any conflict resolution would be someone such as a Hearing Commissioner who would have the ability to engage expertise, and the costs associated with resolving the disagreement would be paid for by the Requiring Authority as provided for in the final designation condition. I believe the Council and Requiring Authority would seek to manage any conflicts without the use of this mechanism, but I am supportive of the use of this condition to provide the Requiring Authority with certainty on timing.

Preparatory Works and Establishment Works

50. We discussed earlier during the hearing the difficulties I foresaw regarding preparatory works being distinguished from establishment and construction works, and I noted concerns around allowing vegetation clearance to occur outside the ELMP requirements. I am pleased to see that the Agency has now struck out the 'preparatory works' definition and the earlier proposed Condition 12 which allowed for preparatory works. I then turn my attention to 'Establishment Works' which remain defined and include vegetation clearance; I note in my reading of the conditions now, that the Establishment Works provisions do not allow for works such as vegetation clearance to occur outside the management plan requirements. In summary I am supportive of the removal of the earlier proposed 'preparatory works' provisions and am comfortable with the currently proposed use of 'establishment works'.

Restoration planting

51. Restoration planting is not considered a construction work although landscaping is. I have discussed with Mr Roan some concerns I have regarding the potential for confusion in monitoring completion of construction works and completion of restoration works. Specific restoration planting is separated from landscaping in Condition 29a(ii) and newly proposed condition 43 seeks to make it clearer what work needs to be completed when, in relation to the timeframe for the new road becomes operational. Condition 43 addresses my concerns.

52. Condition 29a(ii) requires restoration planting to take place within 3 years of the completion of construction works and provides for some exceptions. The exceptions leave uncertainty as to the timing of completion of restoration planting and I questioned Mr Roan why three years would be required. Typically Council seeks conditions requiring planting to take place within the first planting season following completion of works, however three years is required to enable local seed sourcing and growth of appropriate plants to be large enough for establishment. Council's main concern is that planting occurs without being forgotten, so providing there are clear controls on timing I accept a longer timeframe given the scale of replanting required and the importance of using locally sourced seeds.

Riparian planting

53. Condition 29g(ii) requires riparian planting but I consider certainty over timing is lacking. I suggest similar wording to Condition 29a(ii) for restoration planting, that Condition 29g be expanded to state:

(iv) Riparian planting shall be completed within three planting seasons of the Completion of Construction Works, unless natural conditions during Construction Works result in poor seed production, or poor seed condition and adversely limits seedling propagation for indigenous plant species, in which case completion would be delayed to reflect the availability of suitable seedlings. The Requiring Authority shall notify the Planning Lead (or Nominee) when the riparian plantings have been completed.

(v) Should there be a delay in the completion of riparian planting due to the availability of suitable seedlings as described in (iv) above, the Requiring Authority shall provide the Planning Lead (or Nominee) with an amended timeframe, which shall not exceed three planting seasons, and shall complete the planting as soon as reasonably possible within the agreed timeframe, informing the Planning Lead (or Nominee) when planting is complete.

Completion of Construction Works

54. Completion of Construction Works is defined at the front of the proposed designation conditions and includes a list of construction activities. I have discussed with Mr Roan that the Council would wish to ensure that all landscaping, fencing and planting of riparian and restoration areas are carried out as quickly as reasonably possible and if the NOR is confirmed, seek certainty within conditions as to timing.
55. To avoid confusion around monitoring designation conditions, I recommended to Mr Roan that Completion of Construction Works be a milestone subject to agreement with the Council, which would then provide clear triggers for when restoration planting and a range of other requirements included in conditions are required to be completed by. A number of conditions refer to 'completion of construction works' and I think using this as a milestone would be very useful. I note that NZTA have accepted my suggestion and have included a condition in this regard (Condition 43), but I also note 43b removes the certainty I sought by leaving the completion date open. In my view more certainty is required in this condition, and I suggest that 43b be expanded to state:

If Completion of Construction Works is to occur more than six months following the operation of the new State highway commencing, the Requiring Authority shall notify the Planning Lead (or Nominee) of the expected date for Completion and Construction Works. This date shall be no less than 18 months following the operation of the new road.

Ecological performance targets to be stated in conditions

56. In my s42A report I stated that performance targets stated in the ELMP should be stated as conditions, a position shared by Wildlands and DOC. Following the Commissioners questioning of Mr Roan about conditions, I recommended to Mr Roan and Ms Ongley that an attached schedule to the conditions could allow for a tidier condition suite than listing the numerous targets within the body of conditions. DOC then drafted their conditions on this basis, which I support. This would allow for clear direction within conditions, without unwieldy conditions, and also mean that performance targets are not able to be altered within a management plan review process under Conditions 10 & 11. I note in Mr Inger's planning evidence for DOC he removes the performance measures from the actual condition (Condition 29 of the NZTA's designation condition document) on the basis that they may be unnecessary because the info is contained in Schedule 1. I also understand Mr Roan's intention to separate the outcomes sought and performance measures into the condition and use schedule 1 to set out the overarching objectives, performance measures and monitoring requirements. As long as relevant performance measures are within the conditions (which include schedule 1) rather than buried in the larger ELMP which may be reviewed under conditions 10/11, I consider DOC and NZTAs approaches to be equally acceptable.

Ecological Review Panel

57. I support the provision of the Ecological Review Panel under Condition 33, intended to provide the Council with expert advice. However, I consider Condition 33a(ii) should be expanded to include: review of the Ecological Constraints Map (required under Condition 28A); review of compliance with (Condition 29) requirements for ecological mitigation and biodiversity offset and compensation measures in accordance with the ELMP; and review of the bat monitoring report and establishment of the PMA (Condition 30). In my view Condition 33 should allow for the Planning Lead to seek assistance from the Ecological Review Panel for review of any ecological matter relating to the ELMP and PMP, and to assist the Planning Lead to be satisfied that; a) the intent of these management plans, and b) compliance with ecological conditions, are being achieved.

Shoulder width in the tunnel

58. In Mr Doherty's attached letter dated 15 August 2018, he notes that he has not sighted the safety audit that Mr Boam referred to during questioning on 1 August and he continues to have concerns regarding the proposed 1.2m wide shoulders in the tunnel. I agree with Mr Doherty that an independent safety audit of the tunnel design should be provided to demonstrate the tunnel is safe for cyclists and all other tunnel users. I have provided a designation condition in this regard and am pleased to see the Agency has adopted this (as Condition 41a).

Lighting of new intersections

59. Proposed condition 40 relates to operational lighting at the tie-in points with the existing state highway to the bypass, and assumes the existing road will become local road. If these are not to become local road intersections (and I will discuss the future status of the existing road shortly), to reduce effects on nocturnal fauna and rural character (albeit the effect on rural character is not significant), I would recommend they do not be marked with lights. I consider it appropriate to address this matter following a decision on revocation. However I do agree with the need to prioritise road safety, and consider that if lighting is necessary, that Condition 40 be altered to state:

Lighting shall only be installed at the tie-ins points with the existing SH3 following a decision on revocation under the Land Transport Management Act 2003, if it is considered necessary by the Requiring Authority based on the future use of the road. Any lighting at the tie-ins points with the existing SH3 and the tunnel shall be designed and screened to minimise the amount of light overspill and illumination received at residential dwellings and to reduce adverse effects on bats and other nocturnal fauna. The Requiring Authority shall:

- (a) Demonstrate that all lighting designed in accordance with "Road lighting Standard AS/NZS1158"; and
- (b) Provide written verification to the Planning Lead from an ecologist that the lighting has been designed to reduce adverse effects on nocturnal fauna.

Response to State highway revocation issue

60. This issue was addressed in paras 82 – 85 of NZTA's opening legal submissions. Through the hearing we have heard from Te Korowai that the existing road be returned to Ngati Tama, and in my S42A supplementary report I advised that NPDC is not convinced that the existing road becoming a local road to be maintained at considerable cost and little benefit would be sought by the Council. While I acknowledge there is some uncertainty over the future ownership and use of the existing road, and that the revocation process is required to be undertaken, my view is that revocation and its implications is a potential effect which can be raised and addressed through the RMA process, as noted in my supplementary report dated 30 July 2018.
61. The definition of effect is concerned directly with the natural and physical resources and the environment in which they exist,^[1] and includes consequential effects. Consequential effects related to physical resources include effects on the existing State highway, and an effect of the proposed new designation (if implemented and once constructed) is that the old road is no longer required as a state highway, traffic volumes fall and the road is likely

[1] *Manos v Waitakere City Council* [1994] NZRMA 353 at page 4.

to be vested in the Council (possibly parts of it could be vested in other persons). The Board of Inquiry decision on Transmission Gully in 2012 is an authority on this matter.

62. In that decision, where NZTA sought to construct a new state highway to replace the existing State Highway 1, several participants raised concerns about the revocation of state highway status. NZTA considered that if the proposal went ahead, the traffic on the existing State Highway 1 would drop significantly and substantial sections of the road would no longer be required as state highway, such that the state highway classification would be revoked. The sections of road would then be vested in either Kapiti Coast District Council (KCDC) or Porirua City Council. KCDC raised concerns about the revocation of the State highway status and sought assurance that the road would be safe and fit for its new purpose when it was vested in the KCDC. KCDC sought a condition that required consultation on the treatment measures.
63. The Board concluded that the revocation was a foreseeable outcome of the establishment of the new route. Its occurrence was dependent on NZTA recommending to the Secretary of Transport for the state highway status to be revoked, and the Secretary accepting that recommendation. Evidence proved that such revocation was likely to occur. The Board found.^[3]:

That revocation of SH1 falls within the definition of effect contained in s3(e) of the RMA....*any potential effect of high probability.*

64. The Board did not accept NZTA's submission that the Board could not impose a condition requiring works to be carried out on portions of the current highway/coastal route, whose State highway status might be revoked as a consequence of the development. It said that.^[3]:
65. A consent authority is entitled to impose conditions on confirmation of a notice of requirement or grant of a resource consent. To be valid, those conditions must satisfy the Newbury tests.^[2]
66. NZTA's obligation to comply with such a condition (if one was imposed) arises out of its status as a requiring authority or consent holder whose designation is subject to conditions. That condition might have a constraining effect on how NZTA might exercise rights and powers under its legislation but that cannot limit a consent authority's (or the Board's) powers to impose valid conditions under the RMA
67. I therefore do not agree with paragraph 85 of the legal submissions which states that the potential revocation is not a matter for the Commissioner to address in these proceedings. I consider there is jurisdiction for the Commissioner to consider the issue. The issue will however be what conditions are reasonable and appropriate. Paragraph 85 states: "the Transport Agency has initiated a process with NPDC to establish what will happen to the bypassed section of SH3, including consultation as to the potential revocation of State highway status under the LTMA. This process will address ongoing access requirements for existing landowners with access off this section of highway, as well as exploring options to allow for the adaptive reuse of the existing Mt Messenger tunnel."

[2] Newbury District Council v Secretary of State for the Environment [1981] AC 578 (HL).

[3] Draft Report and Decision of the Board of Inquiry into the Transmission Gully Proposal dated 30 April 2012 at 147.

68. Given the above intentions, and in recognition that future access implications are an effect of the NOR, I recommend the following conditions:

Status of existing road no longer needed as state highway

- a) Prior to any decision being made on the future status of the existing road over Mt Messenger, the Requiring Authority shall:
 - i) consult with New Plymouth District Council's Manager Transportation and all owners and occupiers of land adjoining the bypassed road, and other parties with access rights or other interests in the affected area, about options to ensure that access is provided to the affected properties, assets and interests and that such access is suitable for its future use; and
 - ii) provide a report on the outcomes of the consultation to NPDC for the purpose of ensuring that NPDC is fully informed of the views of the affected persons and interests, and of the Requiring Authority's intended response to that consultation.
- b) Before any part or parts of the existing road's State highway status is revoked and any parts of the bypassed route are vested in any person or the Council, the Requiring Authority shall carry out the necessary works to ensure the existing road is (and any alternative new accessways are) fit for its future use.
- c) The Requiring Authority shall have particular regard to the likely the ongoing maintenance costs of the existing road and any alternative new accessways before making a decision as to what type of surface treatment will be fit for its future use.
- d) The Requiring Authority shall maintain the bypassed route (and any alternative new accessways) for five years following revocation of its State highway status, to a standard consistent with its decisions in (b) and (c) above.

Lapse date

69. NZTA submitted at paragraph 276 of the legal submissions that there was no ability to impose a lapse period because it was an alteration to a designation and because s181(2) does not incorporate s184 which sets the lapse period. I do not agree with this. Section 181(2) requires a change to a designation to be processed and considered in the same way as a new NoR unless the change is sufficiently minor that it can be approved under s181(3). The absence of a reference to s184 in s181(2) is not material, because a new NoR under s168 does not expressly refer to or incorporate s184 either. It would be extraordinary if a change to a NoR sat in the planning document and was able to be rolled over without modification without a lapse period. A lapse period should be specified in respect of the designation and work if the alteration is confirmed.

Conclusion

70. The principle area of substance in contention, in my opinion, relates to ecological effects and the details of the effects management package. This is relevant in terms of the statutory tests of Part 2 of the RMA: Section 5 – the need to safeguard the life-supporting capacity of ecosystems; Section 6(c) – requires that the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna be recognised and provided for as a matter of national importance; Other matters under Section 7(d), (f) and (g) require that particular regard be had to the intrinsic value of ecosystems, maintenance and enhancement of the quality of the environment and any finite characteristics of natural resources.

71. I have set out below the questions I have turned my mind to in trying to reach a conclusion as to whether the projects adverse ecological and biodiversity effects are addressed, in particular in relation to s6(c):

Are effects on individual species avoided, remedied, mitigated, offset or compensated?

- For some species, yes, but there may be some losers. The success of intended measures for addressing effects on significant trees, bat habitat and bats are not certain. We do not have enough information about bats, herpetofauna or invertebrates based on limited survey results but the Agency's new proposed bat conditions represent a significant effort to generate benefits to bats.

Are effects on ecosystems adequately avoided, remedied, mitigated, offset or compensated?

- Largely, but I have residual concerns regarding the ratio for restoration planting, because what is being removed is of higher ecological value than what it is being replaced with. Overtime the restoration areas will become more increasingly valuable and naturalised, but to get to the same level of ecosystem functioning would take many decades for younger vegetation, or centuries, for mature emergent trees, as Wildlands can confirm.

Is the project likely to achieve its stated outcome of no net loss in biodiversity?

- It is very problematic to measure this using the biodiversity offsets model, so compensation is relied upon.

Is the ecological effects management package, particularly the 3650ha PMA, sufficient compensation?

- Yes, provided there are maternal roosts within the PMA and the area is in lowland forest in close proximity to the project footprint.

If the PMA does not result in positive effects on bats, are the ecological and biodiversity benefits for other species enough to say that there is no net loss in biodiversity?

- No, biodiversity is the diversity of species, so benefits to species which are not threatened only goes so far. The possible extinction of a local population of a critically threatened species (long-tailed bats) would be, in my opinion, a significant effect of the project that in my view should be given considerable weight. There needs to be sufficient certainty that a local extinction will not result from the project, or that neighbouring populations will increase over time through the PMA, to conclude that the project will result in no net loss in biodiversity.

Given the agreement that the project footprint is likely to affect bat habitat that is significant for the purposes of s6(c), if the project does not recognise and provide for threatened bats and other indigenous fauna, is the project consistent with the sustainable management purpose of the Act, despite the worst case risk of local extinction of a critically threatened species?

- I recognise that the questions above are not the statutory tests and the ultimate question is whether the project is consistent with sustainable management as defined in Section 5 of the RMA. Prior to the adjournment of the Hearing in August, I was of the view that if the Requiring Authority is not prepared to increase measures to ensure positive effects on bats (or to demonstrate that no maternal roosts exist within the project footprint), then it would be difficult to conclude that the proposal recognises and provides for the protection of habitats of indigenous fauna in relation to bats (unless significant weight is given to the Agency's evidence and little weight to Wildlands and DOCs evidence). However, the changes made to the conditions since adjournment are significant and I commend the Agency for including conditions relating to radio-

tracking of bats. I also recognise that the proposal will have significant positive effects, and the compensation package is likely to lead to a range of positive effects for a number of indigenous species.

72. On a broader level, I consider the following features of the project are significant:

- Providing regionally significant infrastructure, improving route security and resilience of Taranaki's key route to the north;
- Supporting growth and development of the region, which is supported by, among other relevant plans and policies, "Tapuae Roa: Make Way for Taranaki": Taranaki Regional Economic Development Strategy (August 2017), which identifies improvement of Taranaki's northern gateway as a "*one-off regional game-changer*";
- Delivering health and safety outcomes for the users of SH3;
- Appropriately managing health and safety risks associated with construction;
- Mitigating the effects of natural hazards on people, property, infrastructure and the environment, and improving resilience to significant risks from natural hazards;
- Recognising and providing for tangata whenua values;
- Social benefits resulting from improved connectivity including enhanced employment opportunities with increased liveability;
- Natural character and ecological benefits from planting valley floors and riparian margins;
- Sustainable management of freshwater resources; and
- The large PMA providing ecological benefits and benefits for biodiversity, providing the area is well determined and the ELMP is well implemented.

73. While I acknowledge the serious social impact on Mr and Mrs Pascoe, and the challenging environmental effects resulting from the significant vegetation clearance and works within and near waterways, as well as cultural effects and a range of other effects, on balance, I consider the NOR, with the suggested conditions as amended by the recommendations in my report, is consistent with the purposes and principles of sustainable management under s5 of the RMA. Further, I consider the Requiring Authority and the Council have recognised and provided for the relevant 'matters of national importance' under s6, and have had particular regard to the relevant s7 'other matters'. In my view, a recommendation can be made under S171 of the RMA, on the basis that all matters required by that section to be considered have been considered, and my recommendation is that the NOR be confirmed subject to conditions under s171(2).

Rachelle McBeth
Senior Environmental Planner
New Plymouth District Council
9 October 2018

14 August 2018

Rachelle McBeth
Senior Environmental Planner - Consents
New Plymouth District Council
Private Bag 2025
New Plymouth 4342
Dear Rachelle

**SH3 Mt Messenger Bypass
Peer Review of the Notice of Requirement for Resource Consent
Remaining Concerns**

I, Graeme Keith Doherty, CPEng, ME (Transp), NZCE (Civil), CMENZ, attended the Hearing for the Notice of Requirement (NoR) for the Mt Messenger Bypass application on behalf of the New Plymouth District Council (NPDC). I attended sessions of the Hearing on Wednesday the 1st of August to Friday the 3rd of August and was present when the following experts presented their summary of evidence on behalf of the applicant, The New Zealand Transport Agency (NZTA).

- Opening statements from legal Counsel on behalf of the NZTA;
- Peter Anthony Roan (Assessment of Alternative options: MCA Process)
- Robert Craig Napier (Transport Agency Project Manager) via audio link;
- Kenneth John Boam (Project Design) via audio link;
- Bruce Symmans (Geotechnical Matters);
- Peter Terence McCombs (Traffic and Transport);
- Hugh John Milliken (Project Construction);

I had previously provided a letter to NPDC, dated 30 July 2018, where I had raised questions for the experts to answer. The Commissioner asked questions related to my letter.

On Thursday the 9th of August I received a request from Rachelle McBeth (NPDC) to provide a written statement setting out any concerns that still remain.

The following are my concerns that still remain.

Opening Statements by Legal Counsel of the NZTA

With regard to changes to the Application from supplementary evidence around the costs of a new bridge north of the tunnel portal, and the compensation and offsetting costs and funding of environmental mitigation, my remaining concerns are covered under the heading *Assessment of Alternate Routes* below.

Peter Anthony Roan

Mr Roan stated that, with the exception of the ecology and community criteria, the same criteria were used for both the longlist and shortlist MCA process. Mr Roan omitted to say that the transport sub-criteria were different. The shortlist MCA used a sub-criteria called "Effects on traffic during construction" within the "Transport" criteria, which was not a sub-criteria of the longlist MCA. My question from my letter dated 30 July 2018 related to paragraph 91 of Mr Roan's statement of evidence remains unanswered. My concerns related to this are covered under the heading *Assessment of Alternate Routes* below.

Robert Craig Napier

When questioned by the Commissioner about the key matters that were considered when deciding on the choice of Option E from the MCA process, Mr Napier replied that the key matters were centred about

making a long term investment that achieves long term resilience without residual risks with cost not being the most critical. My remaining concerns are covered under the heading *Assessment of Alternate Routes* below.

Kenneth John Boam

I have not sighted the safety audit undertaken in September 2017. Acknowledging that it was later stated in the Hearing that cyclists could use the safety tunnel, this raises concerns for cyclists on the opposite side of the road from the safety tunnel having to cross the state highway to gain access to the safety tunnel and after egressing the tunnel. This solution requires full reliance on cyclists using the safety tunnel, which I do not think will occur.

I also note that during the Hearing, the use of electronic warning signs and variable speed limits was put forward as mitigation, which would automatically activate when cyclists were approaching the tunnel portals. I support this design amendment but my concerns related to the shoulder width within the tunnel correlated to the safety of cyclists remain.

I acknowledge that the NZTA will investigate an appropriate safety solution, which will be independently peer reviewed, but I am concerned that the safety of cyclists may be compromised by the cost of enlarging the tunnel bore to create a wider shoulder. In assessing the shoulder width and safety of cyclists, I strongly encourage the NZTA and independent safety auditor to give appropriate consideration to the effects of wind on cyclists within the tunnel (either from passing vehicles or naturally occurring high winds outside the tunnel), the position of adjacent side protection barriers and safety tunnel wall and determine either the safe speed of vehicles in the tunnel correlated to a shoulder width of 1.2m or provide a wider shoulder.

Bruce Symmans

Mr Symmans responded to a question from the Commissioner as to whether the cost of a fill embankment in lieu of a bridge south of the tunnel portal for Option Z would be less than a bridge. Mr Symmans responded that there would be very little cost difference between the two. In consultation with my colleague Mr Russell Allison, we do not agree with Mr Symmans. My remaining concerns are covered under the heading *Assessment of Alternate Routes* below.

Peter Terence McCombs

In answer to a question from the Commissioner to give an opinion on the standards adopted by the NZTA in determining the shoulder width in the tunnel, Mr McCombs described these standards as "gentlemen's guidelines". I am concerned that standards that have been produced over multiple decades, through considerable amounts of research both internationally and in New Zealand, whose primary function is to prevent harm to road users, are described as this.

I disagree with Mr McCombs' opinion related to the shoulder width within the tunnel and have still not seen any evidence from a qualified road safety auditor who is experienced in understanding the importance of aligning individual geometric elements of a road to create a safe operating environment.

Hugh John Milliken

The Commissioner asked Mr Milliken questions about the construction costs for Options Z and E. Mr Milliken responded that the current difference is \$189M of which \$112M is for the retaining wall across the landslide north of the tunnel to meet the operational requirements of the NZTA. Mr Milliken stated that \$77M of extra cost was the result of managing the interactions between the existing state highway users and the construction of Option Z. I am still concerned that the construction costs of Option Z have been over-estimated. I base this concern on the overall quantum of earthworks moved (as stated in the

shortlist report) being 1.25M CuM less for Option Z, the plan area of the works being over 10 Ha less for Option Z and the programmed construction period being 1 year less for Option Z compared to Option E (as stated by Mr Milliken in his summary of evidence). I accept the figure of \$112M for the retaining wall. In setting aside the cost of the retaining wall, and taking into account the above comparison of the two options, I do not accept that the overall construction cost of Option Z is \$77M more than Option E. I have included these concerns in *Assessment of Alternate Routes* below.

The question stated in my letter of 30 July relates to the outturn costs for Option E. The Commissioner did not ask this question and I am concerned that when considering the total outturn cost of Option E as currently presented, which is inclusive of all offsetting and compensation costs, it has a much higher outturn cost than submitted by the Applicant. I have included these concerns in *Assessment of Alternate Routes* below.

Assessment of Alternate Routes

Counsel for the NZTA, in responding to a question from the Commissioner related to funding of the PMA, responded that the NZTA have a maintenance budget to provide for pest management in perpetuity. In reviewing the Transport Agency's maintenance activity classes, there is an activity class WC 121 Environmental Maintenance, but pest management on the scale proposed is not an example of a qualifying activity. Examples of qualifying activities are predominantly associated with snow clearing, vegetation control, litter collection, removal of rocks and minor slip material, maintenance of rest areas etc. Pest management activities such as removal of noxious weeds within the road reserve and pest refuges within roadside berms and unsealed shoulders are also qualifying activities. The 3,650 Ha area for the proposed PMA is unprecedented in scale and the majority of the PMA is not inside the road reserve. I am concerned that the use of funds for pest management from the National Land Transport Fund (NLTF) on this scale is not aligned to the purpose of the National Land Transport Fund and Land Transport Management Act. This leads to the concern that the PMA might not be funded in perpetuity.

With regard to the choice of Option E as the option under consideration within the NoR, this choice was made in August 2017 (refer to the NZTA Board minutes of August 2017). Subsequent to that decision, there has been significant refinement work on mitigating the effects of Option E, which has continued after the lodgement of the NoR application, the most significant being geotechnical investigations and via supplementary evidence, the most significant being the provision of a PMA.

In making that decision in August 2017, Mr Napier noted in his summary of evidence that residual risk and resilience were the key considerations. Since that time, the geotechnical work indicates that Options E and Z, if designed to the same standard, would overall achieve similar levels of residual risk and resilience. In consultation with my colleague, Mr Allison, Option Z has fewer large cuts and therefore the residual risk to the road user from rockfall would be lower than for Option E. Additionally, after constructing the retaining wall across the landslide, the residual risk to Option Z is lower than previously thought as the chances of a significant seismic event occurring is lower than a rockfall event, noting the large cut batters for Option E.

With regard to Mr Roan's evidence about the MCA process and my question related to para 91 of his statement of evidence and Mr Milliken's evidence, I remain concerned that the effects on traffic from construction activities for Option Z have been over-estimated as have the associated construction costs.

Noting the timing of the decision to adopt Option E, the higher quantum of work to construct Option E (as described above), concerns about over-estimation of the construction costs of Option Z (as above), accounting for new information that is now available through supplementary evidence (as above), and noting that the assessment of alternative routes is not time-bound, I think the NZTA should review its decision to adopt Option E rather than Option Z. After considering the supplementary evidence and summary statements, I consider the outturn cost of Option Z is similar to Option E if applying the same ratios as mitigation for all offsetting and compensation as described in evidence by the applicant, with Option Z requiring a significantly less area for construction.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Graeme Doherty', with a stylized flourish at the end.

Graeme Doherty

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**BEFORE THE TARANAKI REGIONAL COUNCIL AND NEW PLYMOUTH
DISTRICT COUNCIL**

MT MESSENGER BYPASS PROJECT

In the matter of the Resource Management Act 1991

and

In the matter of applications for resource consents, and
a notice of requirement by the NZ
Transport Agency for an alteration to the
State Highway 3 designation in the New
Plymouth District Plan, to carry out the
Mt Messenger Bypass Project

**STATEMENT OF EVIDENCE OF WILLIAM SHAW AND TIMOTHY MARTIN
ON BEHALF OF NEW PLYMOUTH DISTRICT COUNCIL**

8 October 2018

INTRODUCTION

1. Prior to the hearing adjournment, Wildlands undertook comprehensive reviews of information provided by the Applicant in October 2017 (pre-lodgement), December 2017, February 2018, May 2018, and July 2018, along with at least two rounds of comments on the draft ELMP and a round of teleconferencing between our specialists and relevant Alliance specialists. In each of these written reviews we provided many comments and suggestions and indicated various areas of serious deficiency.
2. Prior to adjournment of the hearing, key issues were identified in relation to:
 - Lack of appropriate data for the biodiversity offsets model.
 - Long-tailed bats.
 - Significant trees.
 - The size of the proposed Pest Management Area.
 - Ecological conditions.
 - The ELMP.
3. Subsequent to adjournment of the hearing, the following has occurred:
 - A further round of phone and/or physical meetings took place between vegetation specialists and bat specialists.

- Wildlands provided a tabulated summary of progress with review of the ELMP to the Alliance on 17 September 2018.
 - Supplementary evidence was provided by the Transport Agency on 28 September 2018. Relevant evidence was provided by Roger MacGibbon, Simon Chapman, and Peter Roan.
 - The supplementary evidence of 28 September 2018 was accompanied by a revised tracked version of the Ecology and Landscape Management Plan (200 pages).
 - Further changes were made to the ELMP and circulated by the Transport Agency on 5 October 2018.
 - Wildlands' specialists have reviewed the revised ELMP and the evidence provided by Roger MacGibbon, Simon Chapman, and Peter Roan.
4. An overview is provided below of the current 'state of play'. It must be noted that the timeframes for our review have been very compressed, with a number of staff being on leave to be with their families during the school holidays.

LOCATION OF THE 'INTENDED' PMA

5. The PMA should be located to address, as much as possible, the adverse effects of the proposal in a 'like-for-like' manner. As such, the location of 'the Intended PMA' proposed by Mr MacGibbon in Paragraphs 50-53 is appropriate. We agree with the reasons set out in Paragraph 53(a) of Mr MacGibbon's evidence.
6. In principle, inclusion of the Paraninihi area (1,335 hectares) is supported, although there seems to be little evidence of the potential removal of Department of Conservation funding for the existing pest control programme in this area, which could be interpreted as meaning that the overall 'additional' PMA area is 3,650 hectares less 1,335 hectares, i.e. 2,315 hectares. Overall, however, permanent funding of the work at Paraninihi in perpetuity is positive.

SIZE OF THE PMA

7. Determination of the exact extent of the PMA is not an exact 'science' but needs to ensure that potential adverse effects are likely to be addressed. Based on the representation of coastal and semi-coastal forest in the 'Intended PMA', and the diversity of habitats and species present, the extent of the 'Intended PMA' is probably appropriate.

ALTERNATIVE PMA

8. An 'Alternative PMA' is described in Mr MacGibbon's evidence (Paragraphs 60-63). At Paragraph 62 Mr MacGibbon notes that this site, in Waitaanga Conservation Area, contains "less coastal vegetation". Waitaanga is an inland site that actually contains no coastal vegetation. Because the ecological mitigation should be based on the principle of 'like-for-like', the 'Intended PMA' is a much better option.
9. One possible approach, subject to the findings of the further bat survey work to be undertaken, would be to undertake bat protection and enhancement work at Waitaanga and to continue to undertake other work within the 'Intended PMA'. If the alternative PMA was to be selected, additional measures would be required to address adverse ecological effects, as pest control at Waitaanga cannot address the loss of the forest types present within the project footprint.

LIZARD MITIGATION

10. In principle, the current proposal by the applicant is positive. We find it interesting, however, that the scale of mitigation has been determined by an untested approach based on the costs of a pest exclusion fence and eradication of pests. This cost basis does not appear to include any management or monitoring over the life of a pest-free enclosure, which could have been operated for a longer period than originally proposed by the Applicant (12 years).

EDGE EFFECTS

11. The applicant has provided a calculation of net change in forest edge. This calculation includes 7,900 metres of new forest edge due to vegetation clearance. The calculations are not accompanied by a map, so cannot be verified. The calculation of net increase of forest edge, of 605 metres, appears to assume that plantings adjacent to the cleared forest edge establish to seal that edge, which will be dependant on control of pest animals, and at some sites is likely to take many decades. Regardless of plantings alongside cleared forest edges, there will be permanent edge effects where earthwork cuts adjacent to forest are unable to be planted. The applicant does not adequately recognise forest edge effects in its mitigation package, including additional loss of forest trees due to enhanced mortality and wind throw on the forest edge, or the creation of more favourable habitats for invasive species, such as vespid wasps.

OUTSTANDING ISSUES WITH THE ELMP

12. The revised ELMP has not been reviewed again in full due to time constraints. However there remain many outstanding issues and these are recorded in the ELMP review document attached.
13. Some key examples of issues that have not been resolved are described below.
14. There is still a lack of clarity regarding the application of the significant tree criteria to select only 11 species and 17 individual trees (an approach that we do not support), including:
 - a. Species on the Applicant's list of 11 significant tree species, that are present in the footprint, and not included in the list of the 17 significant trees to be felled (e.g. maire tawake).
 - b. The Applicant's definition of rarity given that species such as matai, tōtara, or hinau can meet the rarity criterion, but other species that are Nationally Threatened do not (e.g. maire tawake).
15. The proposed outcome monitoring for vegetation will not assess the full objectives of pest control, and does not adhere to best practice. For example seedling ratio indices will only be used to assess the regeneration of tawa; this will exclude a wide range of browse sensitive species from the monitoring, such as large-leaved coprosma species. Similarly, for the condition of the canopy, browse-vulnerable canopy species such as northern rata have been excluded from foliar browse index monitoring.
16. In Section 9.5.3.2 the use of the vegetation monitoring data to determine the success of the offset has been deleted. Instead it states that the proposed pest control will meet the objectives. Given the importance of pest control in the Applicant's mitigation package to offset ecological loss, outcome monitoring must be used to determine the success, or failure, of the offset. The performance measure for establishment of significant tree plantings is confusing, and not adequate to ensure success. The current wording states "90% survival six years following planting with all seedlings having been planted for at least two years" It is unclear if the minimum time that trees need to persist before survival is assessed is two years or six years. Survival at two years post planting is not a good indication of long term survival and establishment. During teleconferences with the Applicant it was agreed that a conservative growth height measure would also be included in the performance measure, but this is not

included as part of the performance measure. The revised ELMP only refers to “visible signs of recent growth”. There are inconsistencies for the bat radio-tracking methods between the supplementary evidence of Mr Chapman (28 September 2018) and the revised ELMP. For example for the trapping methods in the supplementary evidence it states that eight harp traps and four to six mist nets will be used, whereas in the ELMP (Section 5.7.1.4) trapping effort is less, with eight harp traps, and two to three mist nets, if required, to be used.

17. Mr Chapman, in his supplementary evidence, dated 28 September 2018, states that roosts found during radio-tracking will be subject to VRPs (Paragraph 20). In the revised ELMP (Section 5.7.1.6) it states that reporting will include the locations of maternal and solitary roosts, then, in Section 5.7.2, it states that VRPs will only be applied to all trees that are maternity roosts. As it is presently written, the ELMP conflicts with the evidence of Mr Chapman, and solitary roosts identified by radiotracking, if they occur in the project footprint, could be felled without any measures to reduce bat mortality.
18. Control of vespulid wasps is only proposed to occur along the road edges during the construction period. This has been raised in previous reviews of the ELMP by Wildlands, and remains a point of disagreement. The negative effect of introduced social *Vespula* wasps on New Zealand’s natural ecosystems is well documented. As they are diurnal, vespulid wasps require sunshine to maximise their foraging efficiency so are particularly abundant on sunny forest and shrubland edges. The creation of a roadway is quickly followed by vespulid wasps which will exploit the available resources of the newly created forest edge. These wasps will also penetrate a reasonable distance into the forest searching for and exploiting resources such as native invertebrates and honeydew. This has negative flow on effects to the forest invertebrates and their natural predators such as birds and bats. These effects will be long term, but the Applicant only proposes to address this adverse effect for a few years during construction.
19. There is no strategy outlined in the ELMP to cover the eventuality that the Waitaanga Conservation Area is selected as the alternative PMA. If Waitaanga is selected, additional mitigation actions that would be required should include, but not necessarily be limited to, the following:
 - Pest control within forest mitigation plantings at Mount Messenger, in perpetuity (including areas of swamp forest)

- Additional plantings to offset the loss of semi-coastal lowland forest, focusing on the species that are present at Mount Messenger and absent or scarce from Waitaanga
- Any additional pest control required to benefit populations of indigenous fauna that are present at Mount Messenger and absent or scarce at Waitaanga.

MANAGEMENT PLAN CERTIFICATION

20. As addressed in the evidence of Mr Roan, the Department of Conservation has sought that all management plans should be subject to approval by the Council, through a certificate process.
21. As noted above, the ELMP is an all-encompassing 200 page document, with the latest version provided on 28 September and followed by further changes on 5 October 2018. This has not enabled a fully comprehensive review of all provisions in the ELMP. Because of this, it is our view that the Council should retain the right to final certification. This should not be seen as being an opportunity to 're-litigate' the Plan, rather an opportunity to ensure that nothing has been overlooked. We note, for example, in Paragraphs 57 and 58 of Mr Roan's evidence, he states that ecological constraints mapping has not been completed and that this work will be completed this summer. No doubt other issues will arise during completion of this and other work.

CONCLUSION

22. This is a major project which will result in significant adverse ecological effects.
23. Overall, subject to further work yet to be undertaken, the location and scale of ecological mitigation is probably appropriate. However this is very much dependant on the selection of a PMA within the Paraninihi-Mount Messenger area.
24. If the Alternative PMA at Waitaanga is selected, many components of the mitigation package will likely fail (e.g. plantings in areas of high pest density at Mount Messenger) or will not be addressed (e.g. no pest control to improve the condition of lowland forest). If the Alternative PMA is to be selected, that PMA will need to be subject to baseline biodiversity surveys, and a new ELMP will need to be prepared.

25. As there is still uncertainty regarding the location of the proposed PMA, and there are still many outstanding matters, it is our view that the Council needs to retain the right of final certification of the management plans to be provided, particularly the ELMP.

