#### **UNITARY PLAN UPDATE REQUEST MEMORANDUM**

TO Warren McLennan – Manager North West and Islands

FROM Petra Burns

**DATE** 26 September 2019

SUBJECT Alteration to Designation 6769 – State Highway 1 –

Puhoi to Warkworth in accordance with \$181(3) of the

Resource Management Act



This memorandum requests an update to Auckland Unitary Plan Operative in part

Reason for update:		
An alteration to allow planting to be undertaken on the land at 517 State Highway 1, Pūhoi.		
Chapter	Chapter K Designations	
Section	Schedules and designations	
Designation only		
Designation #	6769 – State Highway 1 – Puhoi to Warkworth, New Zealand Transport Agency	
Locations:	517 State Highway 1, Pūhoi	
Lapse Date	5 years after that date on which it is included in the Auckland Unitary Plan	
Purpose	The construction, operation and maintenance of a State Highway (Ara Tūhono – Pūhoi to Wellsford Road of National Significance: Pūhoi to Warkwork Section)	
Changes to text (shown in underline and strikethrough)	Conditions:  D62. No Project works are permitted on the area of land marked on Appendix 15AN(4) or Appendix 15AN(5) other than the planting and maintenance of low-lying species that do not exacerbate flood risk.	
Changes to diagrams	None	
Changes to spatial data	None	
Attachments	Attachment 1: Section 181(3) Decision Report	
	Attachment 2: Updated Text to Designation 6769	

Prepared by:	Text entered by:
Petra Burns	Sophia Coulter
Planner	Planning Techncian
Signature:	Signature:
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Reviewed by:	Signed off by:
Petra Burns	Warren McLennan
Petra Burns Planner	Warren McLennan Manager North West and Islands

Attachment 1: Section 181(3) Decision Report

# Notice of requirement for a minor alteration to a designation under section 181(3) of the Resource Management Act 1991



#### Notice of requirement description

Designation number: Designation 6769 – State Highway 1 – Puhoi to

Warkworth

Requiring authority: New Zealand Transport Agency Site address: 517 State Highway 1, Pūhoi

#### **Summary**

Auckland Council has received a request from New Zealand Transport Agency under section 181(3) of the Resource Management Act 1991 (RMA), dated 7 May 2019, to alter Designation 6769 – State Highway 1 – Puhoi to Warkworth.

It is considered after undertaking an assessment of the notice, that the proposed alteration meets the statutory tests of section 181(3) of the RMA and can therefore be processed and confirmed as a minor alteration.

#### Recommendation

- 1. The proposed alteration of Designation 6769 State Highway 1 Puhoi to Warkworth in the Auckland Unitary Plan be confirmed for the following reasons:
- the alteration involves no more than minor changes to the effects on the environment associated with the use of the land;
- both the requiring authority and Auckland Council agree with the alteration; and
- the land is owned and occupied by New Zealand Transport Agency and Auckland Council.
- 2. That Designation 6769 State Highway 1 Puhoi to Warkworth is altered in the Chapter K Designations in the Auckland Unitary Plan, as requested and set out in section 1.1 below.

#### 1. Background

#### 1.1. Minor alteration to a designation

Auckland Council has received a notice of requirement (NoR) for an alteration to a Designation 6769 – State Highway 1 – Puhoi to Warkworth from New Zealand Transport Agency under section 181(3) of the RMA.

The proposal is to amend condition D62 of the designation to allow planting to be undertaken on the land concerned. The proposed alteration to the condition wording is as follows, with additions **underlined and bold** and deletions struck through (struck through):

Vegetation

D62

No Project works are permitted on the area of land marked on Appendix 15AN(4) or Appendix 15AN(5) other than the planting and maintenance of low-lying species that do not exacerbate flood risk.

No additional land is required as part of the alteration of the designation, with the subject area already being within the boundary of Designation 6769.

It is noted that condition D62 refers to Appendix '15AN(4)' and '15AN(5)', however the appendices themselves are labelled as '15N(4)' and '15N(5)'. It appears that all references to the appendices follow this pattern and is believed to be a referencing error.

The conditions of the designation require a large amount of planting to be carried out. The subject site at 517 State Highway 1 has been identified as a potential area to accommodate some of this planting due to it being a vacant area of land within the designation boundary which already has linkages to other areas of planting. Assessment of the flood-risk has indicated that the use of specified low-lying, flexible plants would be suitable for the site and not exacerbate the risk of flooding. The contiguous nature of the site with other planted sites, allows more efficient maintenance access and certainty of land ownership (the site is owned by New Zealand Transport Agency and the bank-side portion by Auckland Council) than other potential sites.

#### 1.2. Land affected by the alteration

The land affected by the alteration to the designation is located 5174 State Highway 1, Puhoi, Pt Okahu DP 12748 and is shown in the Auckland Unitary Plan maps as follows:



#### 1.3. Description of the site and existing environment

The proposed area of planting is located to the west of the intersection of State Highway 1 and Pūhoi Road. It is bordered by the Pūhoi River to the east, west and south. The site slopes slightly towards the river, with steep banks outlining the river. The site is mostly grassed and has a small number of established trees near the river edge.

The site is zoned as Rural – Rural Coastal Zone in the Auckland Unitary Plan (Operative in Part) with Coastal Inundation Control of 1 per cent AEP plus 1m Control – 1m sea level rise.



The surrounding environment consists of rural farmland to the north and west of the site, with low-density residential development to the east.

#### 1.4. Delegated authority

The Team Leader - Planning North, West and Islands has delegated authority, in accordance with Schedule 2A of the Auckland Council Delegations: Chief Executive Officer (updated June 2019), to exercise the council's functions, powers, duties and discretions under the Resource Management Act 1991 in relation to section 181(3). The NoR can therefore be considered by the Team Leader – Planning North, West and Islands and confirmed or declined under section 181(3).

#### 1.5. Relevant statutory provisions

Section 181 "Alteration of designation" of the Resource Management Act 1991 states:

- (1) A requiring authority that is responsible for a designation may at any time give notice to the territorial authority of its requirement to alter the designation.
- (2) Subject to subsection (3), sections 168 to 179 and 198AA to 198AD shall, with all necessary modifications, apply to a requirement referred to in subsection (1) as if it were a requirement for a new designation.
- (3) A territorial authority may at any time alter a designation in its district plan or a requirement in its proposed district plan if-
  - (a) The alteration-
    - (i) Involves no more than minor changes to the effects on the environment associated with the use or proposed use of land or any water concerned: or
    - (ii) Involves only minor changes or adjustments to the boundaries of the designation or requirement; and

- (b) Written notice of the proposed alteration has been given to every owner or occupier of the land directly affected and those owners or occupiers agree with the alteration; and
- (c) Both the territorial authority and the requiring authority agree with the alteration
  - and sections 168 to 179 and 198AA to 198AD shall not apply to any such alteration.
- (4) This section shall apply, with all necessary modifications, to a requirement by a territorial authority to alter its own designation or requirement within its own district.

#### 2. Analysis of the proposed alteration

The relevant matters to consider are contained in section 181(3) of the RMA as outlined above.

#### 2.1. Assessment of Environmental effects (s181(3)(a)(i))

The requiring authority has provided an assessment of environmental effects (AEE) with the NoR, alongside a flood assessment (Flood Design Summary by Tonkin + Taylor, dated 10 May 2018) that includes flood modelling. The following effects have been considered:

Flooding

The requiring authority considers that the proposed alteration to the designation involves no more than minor changes to the effects on the environment.

#### The AEE states:

The Pūhoi River, (adjacent to the subject site), has a catchment of approximately  $33km^3$  consisting of pasture, forestry, native bush and the Pūhoi township. Immediately upstream of the site, the river is generally trapezoidal in section, with a top width of approximately 25m. The Hikauae Stream discharges into the Pūhoi River approximately 100m downstream of the existing SH1 bridge.

...There is a broad and flat floodplain on the true left bank of the river upstream of the existing SH1 bridge. The floodplain currently contains a mixture of grass, wetland species (e.g. oioi) and isolated large trees.

It is proposed to plant the floodplain area with low-lying, flexible plants. These could include species such as oioi, kukuraho and rautahi. The planting has the potential to increase the surface roughness of the floodplain, which could lead to a decrease in flood flow velocities across the floodplain with a corresponding increase in flood level...

The [flood] model was run for the pre-development scenario with a floodplain roughness representing the existing grassed surface, and then for the post-development scenario representing the floodplain surface roughness due to the proposed planting. Two rainfall scenarios were modelled, being the 1 in 20 year event and the 1 in 100 year event. Rainfall depths were adjusted to account for Climate Change to the year 2090.

The results ... demonstrate nominal increases in peak flood levels of 20-60mm during the 1 in 20 year rainfall event, and 10-50mm during the 1 in 100 year rainfall event due to the proposed planting. Increases in flood width on the true right bank of the Pūhoi River are 0-0.27m during the 1 in 20 year storm event, and 0-0.20m during the 1 in 100 year storm event.

The results also demonstrate that the habitable floor levels of properties located in Pūhoi Road, Pūhoi Close and Slowater Lane will not be impacted by any increases in flooding in the pre and post development scenarios for the 1 in 20 and 1 in 100 year rainfall event.

As such, any potential adverse effects in terms of flood risks are considered to be less than minor.

A flood risk assessment has been carried out for the proposed planting and concludes that there would be a small increase in modelled peak flood levels, and a small additional flooding risk to the site and surrounding land. There may be a small increase in flood levels outside of the designation.

The risks to people, property, infrastructure and the environment from flooding will not be increased as a result of the alternation to the designation to provide for planting on the area of land.

The planting enabled by the alteration to designation [will] not interrupt the functions of the natural systems, including the floodplain. The planting will also enhance aesthetics of the area for both residents and road users.

The application has been assessed by Ken Tomkins, Kevin Fan, Albert Ho and Jorge Astudillo from councils Healthy Waters department, and they are fully satisfied that any impact on upstream flood levels from the proposed planting will be less than minor.

I concur with the Requiring Authority that the effects on the environment resulting from the alteration will be less than minor.

#### 2.2. Assessment of minor changes or adjustments to the boundary (s181(3)(a)(ii))

The alteration to the designation does not involve any changes to the boundary of the existing designation.

## 2.3. Written notice of the proposed alteration has been given to every owner or occupier of the land directly affected and those owners and occupiers agree with the alteration (s181(3)(b))

The requiring authority has given written notice to Auckland Council as a landowner directly affected, but consider that there are no other owners or occupiers of land directly affected by the alteration to the designation.

#### The AEE states:

A flood risk assessment has been carried out for the proposed planting and concludes that there would be a small increase in modelled peak flood levels, and a small additional flooding risk to the site and surrounding land. There may be a small increase in flood levels outside of the designations ... the increase in flood width for the 20 year event will be on grassed/landscaped areas only and will not impact on habitable floor space. For the 100 year event, with the exception of 4 and 12 Pūhoi Close, the increase in flood width will also be on grassed/landscaped areas. Where the flood extent ... is close to the buildings on 4 and 12 Pūhoi Close ... there is no increase in flood level and width at 4 Pūhoi Close, and a 10mm and 30mm increase in flood height and width respectively at 12 Pūhoi Close. With respect to 12 Pūhoi Close, the information presented in [the Flooding Design Summary by Tonkin + Taylor, dated 10 May 2018] demonstrates that that the increase is considered sufficiently minimal in terms of extent and duration.

The risks to people, property, infrastructure and the environment from flooding will not be increased as a result of the alternation to the designation to provide for planting on the area of land.

Notice has been given to Auckland Council's Community Facilities team in its capacity as a landowner directly affected by the change. A copy of this correspondence is provided as part of [the application].

It is confirmed that council's Community Facilities team has provided their support for the proposal and under delegated authority have provided written approval for the alteration.

I concur with the Requiring Authority that no other persons are directly affected by the alteration to the designation and the Requiring Authority is not required to provide written notice to any other persons.

#### 2.4. Agreement of both the territorial authority and the requiring authority (181(3)(c))

The alteration to the designation has been requested by the requiring authority, and therefore it agrees to the alteration. Auckland Council agrees with the proposed alteration for the following reasons:

- The alteration involves no more than minor changes to the environmental effects
- The alteration does not involve any changes to the boundary
- There are no other owners or occupiers considered to be affected by the alteration
- Adherence with recommended conditions will ensure any potential adverse effects are avoided, remedied or mitigated.

#### 3. CONCLUSIONS AND RECOMMENDATIONS

#### 3.1. Conclusions

The proposed alteration meets the statutory tests of Section 181(3) of the Resource Management Act 1991, in that:

- The alteration involves no more than minor changes to the environmental effects.
- Existing conditions will ensure any potential adverse effects are avoided, remedied or mitigated.
- There are no changes or adjustments to the boundaries of the existing designation.
- There are no owners or occupiers considered to be affected by the alteration.
- The council and the requiring authority agree with the alteration.

#### 3.2 Recommendation

- 1. That pursuant to Section 181(3) of the Resource Management Act 1991, New Zealand Transport Agency's notice of requirement for an alteration to Designation 6769 State Highway 1 Puhoi to Warkworth is **confirmed.**
- 2. That Designation 6769 State Highway 1 Puhoi to Warkworth is amended in Chapter K Designations in the Auckland Unitary Plan Operative in part as recommended in Section 1.1 of this report.

#### 4. Agreed alterations

The text alterations are set out in section 1.1. A full set of the designation conditions is attached (Attachment A). Amendments are shown as either strikethrough or bold and underlined.

Date: 13 September 2019

Report Prepared by:

Petra Burns

Planner

#### 5. SECTION 181(3) DETERMINATION

Having read the council planner's report and recommendations on the notice or requirement, I am satisfied I have adequate information to consider the matters required by the Resource Management Act 1991 (the RMA) and to make a decision under delegated authority.

Accordingly, the notice of requirement for an alteration to Designation 6769 State highway 1 – Puhoi to Warkworth is confirmed under section 181(3) of the RMA as agreed and set out in section 4 of this report.

Name: Peter Vari

Title: Team Leader – Planning North, West and Islands

Signed: Plant

Date: 24 September 2019

#### **SCHEDULE OF ATTACHMENTS**

**Attachment 2:** Designation 6769 State highway 1 – Puhoi to Warkworth incorporating

amendments

Attachmer	nt 2: Updated <sup>-</sup>	Гехt to Desi	gnation 677	'3

#### 6769 State Highway 1 - Puhoi to Warkworth

Designation Number	6769
Requiring Authority	New Zealand Transport Agency
Location	Pt Allot 56 Psh Of Mahurangi DP 7361, Allot 97 Psh Of Ahuroa SO 6195A, Lot 6 DP 52247, Pt Allot 116 Psh Of Puhoi SO 1051, Allot 186 Psh Of Puhoi SO 26455, Lot 1 DP 74814, Allot 3A Psh Of Puhoi SO 6297, Pt Okahu ML 86, Lot 2 DP 163758, Lot 1 DP 157269, Lot 2 DP 169838, Lot 3 DP 113847, Lot 1 DP 199822, Sec 54 Blk XV Mahurangi Survey District SO 42469, Sec 62 Blk III Waiwera Survey District SO 41181, Lot 3 DP 169838, Allot 11A Psh Of Puhoi SO 6297, Sec 65 Blk III Waiwera Survey District SO 41181, Lot 3 DP 169838, Allot 11A Psh Of Puhoi SO 6297, Sec 65 Blk III Waiwera Survey District SO 41181, Pt Lot 1 DP 95606, Lot 2 DP 162354, Lot 8 DP 113848, Rec Land DP 55676, Sec 52 Blk XV Mahurangi Survey District SO 42469, Lot 6 DP 98771, Lot 6 DP 87207, Pt Lot 2 DP 180833, Lot 1 DP 208830, Lot 5 DP 52247, Lot 1 DP 52247, Lot 7 DP 52247, Lot 2 DP 74814, Sec 64 Blk III Waiwera Survey District SO 42498, Sec 61 Blk XV Mahurangi Survey District SO 42467, Pt Allot 283 Psh Of Mahurangi SO 27019, Lot 1 DP 199344, Pt Sec 17 Blk 111 Waiwera Survey District SO 6297, Sec 1 Blk XV Mahurangi Survey District SO 6297, Lot 3 DP 77098, Lot 1 DP 50685, Lot 1 DP 167491, Pt Lot 2 DP 151082, Allot 78 Psh Of Ahuroa SO 6195A, Lot 1 DP 16863, Pt Lot 3 DP 17945, Pt Sec SE163 Psh Of Mahurangi SO 2409, Lot 1 DP 175210, Pt Allot 55 Psh Of Mahurangi SO 270, Pt Okahu SO 28313, Lot 1 DP 175210, Pt Allot 55 Psh Of Mahurangi SO 270, Pt Okahu SO 28313, Lot 1 DP 175210, Pt Allot 55 Psh Of Mahurangi SUrvey District SO 43467, Pt Mblk Okahu, Lot 2 DP 157269, Sec 51 Blk XV Mahurangi Survey District SO 42467, Pt Mblk Okahu, Lot 2 DP 157269, Sec 51 Blk XV Mahurangi Survey District SO 42467, Pt Mblk Okahu, Lot 2 DP 157269, Sec 51 Blk XV Mahurangi Survey District SO 42467, Pt Mblk Okahu, Lot 2 DP 157269, Sec 51 Blk XV Mahurangi Survey District SO 42469, Lot 1 DP 203389, Pt Okahu ML 68, Lot 3 DP 87208, Pt Allot N158 Psh Of Mahurangi SO 15667, Pt Allot E157 Psh Of Mahurangi SO 25558, Allot 415 Psh Of Mahurangi SO 6565, Lot 1 DP 203399, Lot 1 DP 198032, Pt N101 N972 Ps

	369802, Pt Allot 55 Psh Of Mahurangi SO 26D, Pt Allot 75 Psh Of Ahuroa SO 2574, Pt Allot 75 Psh Of Ahuroa SO 2574, Pt Allot 184 Psh Of Puhoi SO 26455, Pt Allot 116 Psh Of Puhoi SO 1051, Pt Allot 95A Psh Of Mahurangi SO 3434, Pt Allot 95A Psh Of Mahurangi, Lot 1 DP 386317, Lot 2 DP 386317, Sec 2 SO 414559, Sec 4 SO 414559, Lot 3 DP 418913, Lot 1 DP 433555, Lot 3 DP 469718, Lot 4 DP 473567
Rollover Designation	Yes
Legacy Reference	Designation 408, Auckland Council District Plan (Rodney Section) 2011
Lapse Date	15 December 2024

### **Purpose**

The construction, operation and maintenance of a State highway (Ara Tūhono - Pūhoi to Wellsford Road of National Significance: Pūhoi to Warkworth Section)

#### **Conditions**

## ARA TÜHONO- PÜHOI TO WELLSFORD ROAD OF NATIONAL SIGNIFICANCE: PÜHOI TO WARKWORTH SECTION - CONDITIONS

Definitions	
Auckland Transport	The Chief Executive of Auckland Transport
Canopy Species	Kauri, tanekaha, puriri, totara, kahikatea, rimu, rewarewa and taraire trees
СНАМР	Cultural, Heritage and Archaeological Management Plan
CNVMP	Construction Noise and Vibration Management Plan
Construction Works	Activities undertaken to construct the Project, excluding Enabling Works
COPTTM	NZ Transport Agency Code of Practice for Temporary Traffic Management
СТМР	Construction Traffic Management Plan
dBA	A unit of sound level which has its frequency characteristics modified by a filter (C-weighted) so as to account for the non-linear frequency response of the human ear at high noise levels (typically greater than 100 decibels).
dbh	Diameter at breast height, being diameter measured at 1.4 m above ground level
Enabling Works	Preliminary activities, including such things as geotechnical investigations (including access for such investigations), sealing roads, and establishment of mitigation measures (such as earth bunds and planting)
Heavy Vehicle	A motor vehicle having a gross laden weight exceeding 3500 kg
Heritage New Zealand	Heritage New Zealand Pouhere Taonga
lwi Advisor	The advisor (or other nominated kaitiaki) appointed by Hōkai Nuku in accordance with Condition D7
KDBP	Kauri Dieback Biosecurity Plan
KQA	Kauri Quarantine Area

Manager	Manager Major Infrastructure Projects, Auckland Council (or the manager responsible for administering designations with the Project Area), or, in the appropriate context of a condition the Team Leader.
NZS6803:1999	New Zealand Standard 6803:1999 "Acoustics - Construction Noise"
PPF	Protected Premises and Facilities, as defined in New Zealand Standard 6806:2010 "Acoustics – Road-traffic noise – New and altered roads"
Project	The construction, maintenance and operation of the Ara Tūhono Pūhoi to Wellsford Road of National Significance: Pūhoi to Warkworth section
SCP	Stakeholder and Communications Plan
SSTMP	Site Specific Traffic Management Plan
Team Leader	Auckland Council Team Leader Compliance and Monitoring – Northern Resource Consenting and Compliance (Orewa) or the person subsequently exercising those functions and powers
ULDF	Urban Landscape Design Framework
ULDSP	Urban Landscape Design Sector Plan

#### General

- D1. From the time of opening, the Project shall provide grade-separated southbound vehicle access onto and northbound egress off the Project road between Pūhoi Road and the Johnstone's Hill tunnels. The design of the Project shall not preclude future access to the north of Pūhoi in the vicinity of Pūhoi Road.
- D2A. A viaduct shall be constructed using a construction method and location that minimises the effects on kauri in the area shown on Appendix 15AN(1).
- D2B. The viaduct over the Pūhoi River shall be constructed so that the viaduct is no further west than the line marked A to B as shown on Appendix 15AN(4).
- D3. As soon as practicable following completion of construction of the Project, the Requiring Authority shall give notice to Auckland Council in accordance with section 182 of the RMA for removal of those parts of the designation that are not required for the long-term operation, maintenance and mitigation of effects of the State highway.
- D4. The designation shall lapse if not given effect to within 15 years from the date on which it is included in the District Plan under section 175 of the RMA.
- D5. Conditions D6 to D70 relate to construction of the Project and only apply to construction activities. Once construction of the Project is complete these conditions, unless otherwise specified in a condition, will no longer apply and can be removed.
- D5A. On completion of the Project, the pre-cast yard and associated activity areas shall be returned to its former land use (See condition D70).

#### **Network Utilities**

D5B. The Requiring Authority shall ensure that construction work does not adversely impact on the safe and efficient operation of network utilities. The scope and timing of necessary utility relocation and protection works shall be developed and agreed between NZTA and network utility providers to

mitigate any safety hazards and provide cost efficiency for the required works.

#### **Stakeholder and Communication Plan**

D6. Prior to the commencement of Construction Works, the Requiring Authority shall prepare a Stakeholder and Communications Plan (SCP) that sets out the procedures detailing how the public and stakeholders (including but not limited to the owners of properties adjoining or close to the Designation) will be communicated with throughout the construction period.

The purpose of the SCP is to provide the framework for:

- a. Informing the community of construction progress, including proposed hours of operation outside normal working hours and Project contact details;
- b. Engaging with the community in order to foster good relationships and to provide opportunities for learning about the Project;
- c. Providing early information on key Project milestones;
- d. Identifying stakeholders such as educational facilities (including Mahurangi College), iwi and hapu groups, community groups, business groups, residents organisations, Auckland Council, Watercare Services Limited, and local board; and
- e. Establishing Community Liaison Groups.

D6A. The Requiring Authority shall provide a draft SCP to the Manager and the Iwi Advisor for comment at least 30 working days prior to the commencement of Construction Works. The Requiring Authority shall consider any comments received from the Manager and Iwi Advisor when finalising the SCP.

D6B. The Requiring Authority shall implement the SCP for the duration of the Construction Works.

D6CA. At all times during construction work, the Requiring Authority shall maintain a permanent register of any complaints received alleging adverse effects from, or related to, the exercise of this designation. The register shall include:

- a. the name and address or phone number of the complainant (if supplied);
- b. identification of the nature of the complaint;
- c. location, date and time of the complaint and of the alleged event;
- d. weather conditions at the time of the complaint (as far as practicable), including wind direction;
- e. the outcome of the Requiring Authority's investigation into the complaint;
- f. measures taken to respond to the complaint; and
- g. any other activities in the area, unrelated to the Project that may have contributed to the complaint.

D6CB. The Requiring Authority shall respond to any complaint within 48 hours of the complaint, except where urgency is indicated, in which case the Requiring Authority shall use its best endeavours to respond within 2 hours;

D6CC. The Requiring Authority shall also maintain a record of its responses and any remedial actions undertaken, such record to also contain the responses and actions taken under Conditions RC10CA – RC10D:

D6CD. This record (to be included in the register) shall be maintained on site and shall be made available to the Team Leader, upon request. The Requiring Authority shall provide the Team Leader with a copy of the complaints register every month.

D6D. The obligations in Condition D6CA to D6CD shall continue for 6 months following the Project officially opening to general public traffic. Any complaints received after this period shall be managed

by the Requiring Authority in accordance with its standard complaints procedures.

#### **Iwi Advisor**

D7. At least 12 months prior to commencement of Construction Works, the Requiring Authority shall request that Hokai Nuku (being comprised of the representatives for Ngāti Whatua, Ngāti Whatua o Kaipara, Te Uri o Hau, and Ngāti Manuhiri) appoint an Iwi Advisor or other nominated kaitiaki (together the Iwi Advisor) to undertake the roles and responsibilities as set out in these conditions.

D8. Where no lwi Advisor is appointed by Hōkai Nuku within 6 months prior to Construction Works commencing or where at any time the appointed lwi Advisor is unavailable or unwilling to undertake their roles and responsibilities set out in these conditions, the Requiring Authority shall seek the advice of Hokai Nuku prior to commencing an activity where the lwi Advisor's input would otherwise be required and shall have regard to any advice provided by Hōkai Nuku.

D9. The Requiring Authority shall invite the lwi Advisor to provide cultural indicators covering traditional association, mahinga kai and cultural stream health measures. The Requiring Authority shall have regard to any cultural indicators provided in the preparation of any management plan required under these conditions.

#### **Construction Noise and Vibration**

#### **Noise Criteria**

D10. Construction noise shall as far as practicable comply with the following criteria in accordance with NZS6803:1999:

a. Residential receivers:

	Time	dB L <sub>Aeq(T)</sub>	dB L <sub>Amax</sub>
Weekdays	0630-0730	55	75
	0730-1800	70	85
	1800-2000	65	80
	2000-0630	45	75
Saturdays	0630-0730	45	75
	0730-1800	70	85
	1800-2000	45	75
	2000-0630	45	75
Sundays and Public	0630-0730	45	75
Holidays	0730-1800	55	85
	1800-2000	45	75
	2000-0630	45	75

#### b. Industrial and commercial receivers:

Time	dB L <sub>Aeq(T)</sub>
0730-1800	70

1800-0730	75
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#### Notes:

"(T)" is a representative assessment duration between 10 and 60 minutes.

Measurement and assessment of construction and air blast noise shall be undertaken in accordance with NZS6803:1999.

Where the criteria set out above cannot be practicably met, the process in Condition D13 shall be adopted.

D11. Air blast noise shall comply with a peak sound level of 120dBA at 1 metre from the most exposed façade of any occupied building.

#### **Vibration Criteria**

D12. Construction vibration shall as far as practicable comply with the following criteria:

Receiver	Location	Detail	Category A	Category B
Occupied PPFs*	Inside the building	Night-time 2000h - 0630h	0.3mm/s PPV	1mm/s PPV
		Daytime 0630h - 2000h	1mm/s PPV	5mm/s PPV
		Blasting – vibration	5mm/s PPV	10mm/s PPV
Other occupied buildings	Inside the building	Daytime 0630h - 2000h	2mm/s PPV	5mm/s PPV
All other buildings	Building Foundation	Vibration - transient (including blasting)	5mm/s PPV	BS 5228-2 Table B.2
		Vibration - continuous		BS 5228-2 50% of Table B.2 values

#### Notes:

Measurements of construction vibration shall be undertaken in accordance with German Standard DIN 4150-3:1999 "Structural Vibration Part 3: Effects of vibration on structures".

Where the criteria set out above cannot be practicably met, the process in Condition D13 shall be adopted.

#### **Construction Noise and Vibration Management Plan**

D13. The Requiring Authority shall prepare a Construction Noise and Vibration Management Plan (CNVMP) to identify how Conditions D10 to D12 will be met. The CNVMP shall identify the best practicable option for management and mitigation of all construction noise and vibration, including where full compliance with the criteria in Conditions D10 to D12 cannot be achieved. The CNVMP shall, at a minimum, include the information required by NZS 6803:1999, Annex E2. The term 'noise' in that document shall be interpreted as 'noise and vibration'. The CNVMP shall be submitted to the Team Leader for certification prior to commencement of the works (being both Construction and Enabling Works).

<sup>\*</sup> For vibration, protected premises and facilities (PPFs) are dwellings, educational facilities, boarding houses, homes for the elderly and retirement villages, marae, hospitals that contain in-house patient facilities and buildings used as temporary accommodation (eg motels and hotels).

D13A. The Requiring Authority shall implement the CNVMP for the duration of the Construction Works.

D14. If measured or predicted vibration levels exceed the Category A criteria in Condition D12 above, then a suitably qualified expert shall be engaged to assess and manage construction vibration to comply with the Category A criteria as far as practicable.

D15. If measured or predicted vibration levels exceed the Category B criteria in Condition D12 above, then monitoring of vibration levels at those buildings shall be undertaken by a suitably qualified expert to identify, assess and manage any vibration effects on those buildings.

D16. Blasting shall only occur between 9.00am – 5.00pm Monday to Saturday. Pre-warning sirens shall be used prior to any blast.

D16a. The operation of the pre-cast yard at Woodcocks Road shall be limited to the following hours:

	Time
Weekdays	0730-1800*
Saturdays	0800-1600
Sundays and Public Holidays	No Work

<sup>\*</sup> The Requiring Authority may move bridge beams, heavy machinery, and other items moveable only at night in and out of the pre-cast yard outside these weekday times.

#### **Construction Traffic**

#### **General construction traffic conditions**

D16A. During construction of the Project, the Requiring Authority shall ensure that Project-related Heavy Vehicles do not use:

- a. Falls Road;
- b. Perry Road;
- c. The driveway on Lot 2 DP 171314 (CT NA104C/827) east of the designation boundary; and
- d. The section of Woodcocks Road from State Highway 1 to Morrison Drive (adjacent to Mahurangi College), between the hours of 8:00 am to 9:00 am and 3:00 pm to 4:00 pm on school days.

D17. The Requiring Authority shall manage construction traffic and construction parking to:

- a. Protect public safety including the safe passage of pedestrians and cyclists;
- b. Minimise delays to road users;
- c. Minimise interruption to property access; and
- d. Inform the public about any potential impacts on the road network.

#### **Construction Traffic Management Plan**

D18. The Requiring Authority shall prepare a Construction Traffic Management Plan (CTMP) for the Project to identify how Conditions D16A and D17 will be met. The CTMP shall include the following:

- a. Details of traffic management activities and sequencing proposed for the Project;
- b. Methods for managing construction related traffic movements;
- c. A process for preparing Site Specific Traffic Management Plans; and
- d. Provisions to ensure that local traffic will not be held up by construction activities for an unreasonable period of time (such time period to be specified).

e. Provisions for emergency services to have access along all local roads 24 hours per day, unless construction requires the temporary closure of a road, in which case, as part of the relevant SSTMP, an emergency action plan shall be developed and agreed with emergency services prior to any temporary closure so that an agreed access via an alternative route is available for the duration of that closure.

D19. At least 60 working days prior to commencement of Construction Works the Requiring Authority shall provide the CTMP to Auckland Transport for comment. The Requiring Authority shall consider any comments received from Auckland Transport when finalising the CTMP. If the Requiring Authority has not received any comment from Auckland Transport within 20 working days of providing the CTMP, the Requiring Authority may consider that Auckland Transport has no comments.

D19A. The Requiring Authority shall submit the CTMP to the Manager for comment. The Requiring Authority shall consider any comments received from Auckland Council when finalising the CTMP. If the Requiring Authority has not received comments from Auckland Council within 20 working days of providing the CTMP, the Requiring Authority may consider that Auckland Council has no comments.

D19B. The Requiring Authority shall implement the CTMP for the duration of the Construction Works.

#### **Site Specific Traffic Management Plans**

D20. In compliance with the CTMP, the Requiring Authority shall prepare a Site Specific Traffic Management Plan (SSTMP) or Plans where any Project construction activity varies the normal traffic conditions of any public road. The purpose of the SSTMP(s) is to identify specific construction methods to address the particular circumstances, local traffic and community travel demands within the area covered by the SSTMP.

D21. [This condition is intentionally left blank]

D22. The SSTMP(s) shall comply with the version of the NZ Transport Agency Code of Practice for Temporary Traffic Management (COPTTM) which applies at the time the relevant SSTMP is prepared. Where it is not possible to adhere to this Code, the COPTTM's prescribed Engineering Exception Decision (EED) process shall be followed.

D23. A SSTMP shall be prepared in accordance with Conditions D20 to D22 for:

- a. Moirs Hill Road between the western extent of the Project and State Highway 1. This SSTMP shall: i. provide for pedestrian, cyclist and equestrian safety;
- ii. establish a liaison group with local residents;
- iii. be developed in consultation with the owner(s) of 70 Moirs Hill Road and in particular to ensure that accesses are formed to each of the three gates to allow a vehicle to pull off the road to be clear of the traffic lanes; and;
- iv. detail temporary speed limits (no greater than 50 km/hr) for construction traffic during construction of the Project.
- b. The vicinity of the intersection of the property access on Lot 1 DP 321568 and SH1, if the property access on Lot 1 DP 321568 is to be used for construction vehicles. This SSTMP shall:
- i. include specific assessment of property access for 1488 State Highway 1;
- ii. be developed in consultation with the owner(s) and occupiers(s) of 1488 SH 1;
- iii. provide for turning bays, acceleration and deceleration facilities in and out of the property access on Lot 1 DP 321568;
- iv. require the Requiring Authority to erect signs at either end of the construction access road on Lot 1 DP 321568, advising that no engine braking shall occur along that access; and
- v. Require that heavy construction vehicles use the construction access road only between the hours

of 0730 to 1800 Monday to Saturday excluding Sundays and public holidays except for any heavy vehicle movements or deliveries which cannot be practicably made during these hours.

- c. The Hill Street intersection (being the intersections of State Highway 1, Hill Street, Elizabeth Street, Matakana Road, Sandspit Road and Millstream Place). This SSTMP shall include specific times for the prohibition of heavy construction traffic using the Hill Street intersection, based on the following periods:
- i. Weekday morning peaks;
- ii. Weekday afternoon peaks;
- iii. Late Friday afternoons and evenings;
- iv. Saturday mornings;
- v. Sunday afternoons; and
- vi. Public Holiday Monday afternoons.
- d. Carran Road and Kaipara Flats Road from Woodcocks Road to SH1, unless construction traffic is specifically prohibited from using this route.
- e. The proposed pre-cast concrete yard at Woodcocks Road for inbound and outbound traffic so that large vehicles with trailers (except for vehicles carrying large loads that require specific traffic management measures to ensure safe movements) can access the site without their swept paths encroaching into traffic lanes or running over verges, together with additional safety requirements should the access become obscured by fog.

D23A. At least 5 days prior to the applicable construction traffic commencing, the Requiring Authority shall provide the SSTMP to the relevant Road Controlling Authority for approval.

D23B. The Requiring Authority shall implement each SSTMP for the duration of the Construction Works to which the particular SSTMP applies.

#### Other

D23C. The Requiring Authority shall ensure vehicle access from the existing State Highway 1 is appropriate for the operation of a farm is retained to Lots 1 and 2 DP50685 and Lot 1 DP 74814, at all times during Construction Works unless otherwise agreed with the owner.

D24. The Requiring Authority shall ensure that adequate provision is made on State Highway 1 at the junctions with Pūhoi Road and also with Moirs Hill Road for set down areas to enable bus passengers to board and alight safely.

D25. [This condition is intentionally left blank]

#### **Urban and Landscape Design**

#### **Urban and Landscape Design Framework**

D26. The Requiring Authority shall design and construct the Project to appropriately integrate the permanent works into the surrounding landscape and topography, having regard to the local landscape character and contexts along the highway route.

D27. The Requiring Authority shall prepare an Urban and Landscape Design Framework (ULDF) to identify how Condition D26 will be met. The purpose of the ULDF shall be to ensure the integration of urban and landscape design with the overall design of the Project. The ULDF shall be consistent with:

- a. The urban design and landscape themes of the Northern Gateway Toll Road;
- b. Bridging the Gap: NZTA Urban Design Guidelines 2013;
- c. NZTA P39 Standard Specification for Highway Landscape Treatments 2013 (or any subsequent updates); and
- d. Mitigation required by other conditions of the Project designation and resource consents.

D28. The ULDF shall ensure the cultural footprint of mana whenua is acknowledged including the connections between Te Koroto and Nga Pā o Te Hēmara Tauhia are maintained at all times where practicable (to be identified in liaison with the Iwi Advisor).

D29. The ULDF shall be prepared by a suitably qualified urban designer and landscape architect in consultation with the wider Project design team, and in collaboration with the Iwi Advisor.

D30. The Requiring Authority shall provide the draft ULDF to the following stakeholders at least 30 working days prior to submitting it to the Manager under Condition D32, by mailing to:

- a. all owners and occupiers (if different) of:
- i. properties of Slowater Lane, Pūhoi;
- ii. properties of Pūhoi Close;
- iii. 60 Pūhoi Road, Pūhoi;
- iv. 46 Saleyards Road, Pūhoi;
- v. 815 SH 1, Pūhoi;
- vi. 1711 SH 1, Warkworth;
- vii. 62A Viv Davie-Martin Drive, Warkworth;
- viii. 62B Viv Davie-Martin Drive, Warkworth;
- ix. 77B Viv Davie-Martin Drive, Warkworth;
- x. 78 Viv Davie-Martin Drive, Warkworth;
- xi. 78B Viv Davie-Martin Drive, Warkworth;
- xii. 75 Wyllie Road, Warkworth;
- xiii. 221 Wyllie Road, Warkworth;
- xiv. 63 Perry Road, Warkworth;
- xv. 112 Perry Road, Warkworth;
- xvi. 122 Perry Road, Warkworth;
- xvii. 124 Perry Road, Warkworth;
- xviii. 40 Valerie Close, Warkworth;
- xix. 83 Valerie Close, Warkworth;
- xx. 123 Valerie Close, Warkworth;
- xxi. 141 Carran Road, Warkworth;
- xxii. 346 Woodcocks Road, Warkworth;
- xxiii. 372 Woodcocks Road, Warkworth;
- xxiv. 438 Woodcocks Road, Warkworth;
- xxv. 111 Kaipara Flats Road, Warkworth;
- xxvi. Lot 3 DP 418913;
- xxvii. Asia Pacific International Group (NZ) Limited at its registered office; and
- xxviii. Any other occupied dwellings within 500m of the designation boundary.
- b. Manager Built Environment Auckland Council;
- c. Pūhoi Landcare Group Incorporated;
- d. Mahurangi Action Incorporated;
- e. Slowater Lane and Pūhoi Close Residents Association; and
- f. Pūhoi Close Residents households from number 12, 16, and 24 Pūhoi Close.

D31. If the Requiring Authority has not received any comments from the stakeholders noted in Condition D30 within 20 working days of providing them the ULDF under Condition D30, the Requiring Authority may consider that the stakeholder concerned has no comments.

D32. The Requiring Authority shall submit the ULDF to both the Manager and the stakeholders set out in D30(a) – (f) in hard copy paper form for certification at least 40 working days prior to the

commencement of Construction Works. The certification will confirm that the ULDF is consistent with Condition D27. The Requiring Authority shall include any comments from the stakeholders noted in Condition D30 in its submission of the ULDF to the Manager, along with an explanation of where and why any comments have not been incorporated into the ULDF. If the Requiring Authority has not received any response (short of approval) from the Manager within 40 working days of submitting the ULDF, the Requiring Authority will be deemed to have certification and can commence preparation of the Urban and Landscape Design Section Plans.

#### **Urban and Landscape Design Sector Plans**

D33. Following certification of the ULDF, the Requiring Authority shall prepare an Urban and Landscape Design Sector Plan (ULDSP) for each sector of the Project in compliance with the ULDF.

D34. The purpose of the ULDSPs is to implement the ULDF through integrating the Project's permanent works, including areas of earthworks, structures, and mitigation works for landscaping, visual screening for residential properties, heritage, noise attenuation (if any) and ecology, into the surrounding landscape and topography, having regard to the local landscape character and contexts along the highway route.

D35. [Moved – now Condition D38C]

D36. Each ULDSP may be staged in accordance with Conditions D38, D38AA and D38C for the construction and permanent phases of the Project and shall include (where relevant):

- a. Detailed design drawings and information for the urban design and landscaping elements, including:
- i. Form, articulation and finish of all bridge elements;
- ii. Pedestrian and cycle facilities on local roads;
- iii. Highway furniture, including road safety barriers, signage gantries, light standards;
- iv. Retaining walls and noise walls (if any);
- v. Treatment of cut and fill batters, including benching;
- vi. Stormwater measures, including wetlands.
- b. Context sensitive design features to mark the entrances to Pūhoi and Warkworth. Feature elements shall be determined in conjunction with the Iwi Advisor, and in consultation with Auckland Council and Auckland Transport and shall reflect the history and character of the adjacent settlements (Pūhoi and Warkworth);
- c. Landscape design details within the designation, including:
- i. Landscaping treatments (landform and planting), including rehabilitation of all areas used for temporary work and construction yards;
- ii. Pest removal, weed control and identification of vegetation to be retained;
- iii. Proposed planting including plant species (including consideration of native food-bearing species), mixes (canopy and succession species), spacing/densities (which mayincorporate any planting required under Conditions D59 and D60), and sizes (at the time of planting);
- iv. Integration of riparian planting required pursuant to the resource consents for the Project;
- v. Provision or enhancement of wildlife corridors where practicable;
- vi. Planting programme the staging of planting in relation to the construction programme and the maintenance regime; and
- vii. Detailed specifications in accordance with NZTA P39 Standard Specification for Landscape Treatments.

D36A. When preparing each ULDSP, the Requiring Authority shall consider the suitability of sourcing planting raised via the open-ground forestry method, including availability and cost-effectiveness.

#### D37. Each ULDSP shall (where relevant):

- a. Where bridges will be viewed from afar or below (eg from Pūhoi River and from Woodcocks Road), pay particular attention to the visual amenity of the structure as well as the design of the underside of the structure, including having regard to the utility requirements and ongoing maintenance.
- aa. Optimise views (subject to the obligation to mitigate noise) from bridges by appropriate barrier design;
- b. Employ techniques to ensure the cut rock face resembles natural fractures where appropriate;
- c. Design any terracing and benching to break up their faces to reduce visual dominance where appropriate, including being irregular and responding to the natural bedding layers of the base material:
- d. Minimise the visual impact of:
- i. roadside drainage channels through design, location and planting;
- ii. cuttings and fill embankments through appropriate grading to integrate with the surrounding landscape (where practical) and landscaping, avoiding "engineered" looking landforms and retention and incorporation of naturally occurring landforms and features within the area of earthworks (eg rock outcrops, watercourses, ridges); and
- iii. spoil disposal areas through appropriate contouring to appear as natural as possible in keeping with the surrounding landscape characteristics.
- e. Address the compatibility of finished land cover with the surrounding land cover;
- f. Give consideration to planting replacement vegetation (as required by Condition D59) in the general location from where it was removed.

#### D38. A specific construction phase ULDSP shall be prepared for each of the following areas:

- a. the area on the eastern side of the Pūhoi River on (CT NA37A/148), with a focus on establishing visual screening of the construction yard for nearby residents as soon as practicable. This ULDSP shall be developed in consultation with a suitably qualified stormwater engineer to ensure appropriate consideration is given to the identified floodplain.
- b. any construction yard within 200m of a residential dwelling, with a focus on establishing appropriate visual screening.

D38A. Each ULDSP shall be prepared by a suitably qualified urban designer and landscape architect in collaboration with the lwi Advisor and a suitably qualified ecologist.

D38AA. A specific permanent phase ULDSP shall be prepared for each of the following areas: a. the area on the eastern side of the Pūhoi River on (CT NZ37A/148), with a focus on establishing visual screening of the Project for nearby residents as soon as practicable. This ULDSP shall be developed in consultation with a suitably qualified stormwater engineer to ensure appropriate consideration is given to the identified floodplain.

- b. the designation north of Woodcocks Road, with a focus on establishing a visual screen of the Project (including the intersection of the Project with the existing State Highway 1) for the nearby residents in Viv Davie-Martin Drive.
- c. For the land situated between the Project and the right branch of the Mahurangi River, extending from the Kauri Eco-Viaduct to Wyllie Road. The ULDSP shall ensure the proposed access track becomes inaccessible to motor vehicles and motorcycles and shall include:
- i. The removal of surfacing from any access track and its rehabilitation as far as practicable;
- ii. Dense planting which may include replacement planting required under condition D59.
- d. For the viaducts spanning the Okahu Inlet together with both approach embankments.

#### Advice Note:

As outlined in Section 06 of the Ara Tuhono: Puhoi to Warkworth Section Urban and Landscape Design Framework, the specific permanent phase ULDSPs required by designation Condition D38AA may be integrated with the ULDAP prepared for each sector of the Project (designation Condition D33), so long as they specifically address the requirement of designation Condition D38AA.

D38B. The Requiring Authority shall provide a draft of each ULDSP for comment to the stakeholders noted in Condition D30(b)-(d), and the stakeholders noted in Condition D30(a) with views from a dwelling onto the Project sector to which that ULDSP applies, at least 30 working days prior to submitting it to the Manager under Condition D38C. If the Requiring Authority has not received any comments from the stakeholders under this condition within 20 working days of providing them with the ULDSP, the Requiring Authority may consider that the stakeholder concerned has no comments.

D38C. The Requiring Authority shall submit to the Manager for certification:

- a. Each specific construction phase ULDSP at least 20 working days prior to the commencement of Construction Works to which the particular ULDSP applies.
- b. Each specific permanent phase ULDSP required in accordance with Condition D38AA, within 12 months of Construction Works commencing in that sector, or earthworks for permanent cut and fill batters in that sector.
- c. The ULDSP for each sector of the Project required in accordance with Condition D33, within 12 months of Construction Works commencing in that sector, or prior to construction of permanent structures or earthworks for permanent cut and fill batters in that sector.

At the same time that each ULDSP is submitted to the Manager, a copy of the submitted ULDSP will be provided to the stakeholders whose comments were sought pursuant to Condition D38B.

The certification will confirm that each specific construction phase ULDSP is consistent with the requirements of Section 5.10 of the ULDF and Condition D38(a) and (c) and each permanent phase ULDSP is consistent with the ULDF and Conditions D36 and D37. The requiring Authority shall note any comments received from the stakeholders who provided comments in accordance with Condition D38D in its submission of each ULDSP to the Manager, along with an explanation of where and why any comments have not been incorporated into that ULDSP.

If the Requiring Authority has not received a response (short of approval) from the Manager within 20 working days of submitting a specific construction phase ULDSP required under Condition D38 and 30 working days of submitting a permanent phase ULDSP required under Condition D33 or D38AA, the Requiring Authority will be deemed to have certification and can commence works.

D39. [This condition is intentionally left blank]

D40. [This condition is intentionally left blank]

D41. The Requiring Authority shall implement the ULDSPs.

#### Miscellaneous landscape conditions

D42. Prior to commencement of Construction Works on the construction access road located at Lot 1 DP 321568 (CT 398348), the Requiring Authority shall construct a 2.5 m high solid timber fence (or similar) for screening purposes on the shared boundary between Lot 2 DP 151082 (CT NA90A/427) and Lot 1 DP 321568 (CT 398348).

D42A. The existing macrocarpa located on the banks of the Pūhoi River on the western boundary at 517 State Highway 1 within the designation shall be retained for the duration of their natural life or until their state of health or safety considerations necessitate their removal either as a group or individually.

D42B. When finalising the detailed design for the Moirs Hill Road widening and realignment, the Requiring Authority shall minimise removal of the boundary trees on and adjacent to Lot 1 DP 118653 (CT NA68/91) where practicable.

D42C. Lighting of any yard, compounds or office complex located within the designation shall be designed to avoid light spill beyond the designation. Glare from any lighting shall be kept below the recommendations given in AS 4282 – 1997 "Control of the Obtrusive Effects of Outdoor Lighting" Tables 2.1 and 2.2.

#### **Ecology**

#### Bird breeding season

D42D. The clearance of vegetation (excluding pasture) shall be conducted outside of the bird breeding season (September to December inclusive).

#### **Bats**

D43. The Requiring Authority shall engage a suitably qualified expert to conduct bat habitat identification and surveys within the designation between New Zealand Transverse Mercator coordinates (1747939, 5960828) and (1746707, 5965552) in the summer months immediately before construction in that area of the Project.

D44. Upon identification of any roosting sites, the Requiring Authority shall ensure clearance of these sites shall only occur from 14 February to 1 May.

D45. On the night prior to clearance of any potential roosting sites, a suitably qualified ecologist shall survey the relevant area for any active roosting sites. The Requiring Authority shall leave standing any tree identified as an active roosting site, until the roosting site is confirmed to be vacant by the suitably qualified expert.

D46. The Requiring Authority shall, where practicable, enhance bat habitat by retaining large edge pine trees and enhance roosting and foraging opportunities in the long-term, including the provision of artificial bat habitat (ie bat roost boxes) in vegetation to be retained or under viaducts or bridges, as recommended by a suitably qualified ecologist.

#### Land snails, copper skinks, forest geckos and Hochstetter's frogs

D47. Prior to the commencement of Construction Works, a suitably qualified ecologist shall check likely areas of:

- a. land snail (Amborhytida dunniae);
- b. copper skink;
- c. forest gecko; and
- d. Hochstetter's frog (Leiopelma aff. hochstetteri) habitat within the designation affected by the proposed works for the presence of these species.

D47A. Any land snails (Amborhytida dunniae), copper skinks, forest geckos, or Hochstetter's frogs (Leiopelma aff. hochstetteri) found during the checks required by Condition D47 shall be captured and relocated to a site:

- a. that has been subject to predator control measures for at least six (6) months prior to the first transfer and will receive ongoing predator control for three years after the last transfer;
- b. deemed appropriate by a suitably qualified ecologist (ie in fauna relocation); and
- c. approved by the Manager.

D47AA. Any land snail, copper skink, forest gecko, or Hochstetter's frog capture and relocation shall be planned and supervised by a suitably qualified ecologist (ie in fauna relocation).

D47B. Where practicable, land snails (Amborhytida dunniae) shall be relocated along with their leaf-litter habitat. Land snails captured within 30 metres of any kauri shall not be relocated to a site within 30 metres of any kauri.

Advice Note: land snail, copper skink, forest gecko, and Hochstetter's frog capture and relocation will be carried out in accordance with a Wildlife Act Authority.

D48. [This condition is intentionally left blank]

D49. Immediately prior to construction, a suitably qualified ecologist shall check likely areas of fernbird habitat within the designation, in the vicinity of Okahu Inlet, for the presence of fernbird and shall also check likely habitat areas of other At Risk or Threatened birds (as defined in the current version of the New Zealand Threat Classification System) within proposed Construction Works areas for the presence of those bird species.

D49A. Unless deemed unnecessary by a suitably qualified ecologist, any fernbird found during the pre-construction check required by Condition D49 shall be captured and transferred to a site:

a. that has been subject to predator control measures for at least six (6) months prior to the first transfer and will receive ongoing predator control for three years after the last transfer;

b. deemed appropriate by a suitably qualified ecologist (ie in fauna relocation); and

c. approved by the Manager.

D49B. Any fernbird capture and relocation shall be planned and supervised by a suitably qualified ecologist (ie in fauna relocation).

Advice Note: fernbird capture and relocation will be carried out in accordance with a Wildlife Act Authority.

D50. [This condition is intentionally left blank]

#### At Risk or Threatened flora and fauna discovery protocol

D50A. In the event that a suitably qualified ecologist discovers any At Risk or Threatened flora and fauna (as defined in the current version of the New Zealand Threat Classification System) within the designation that is not specifically covered by Conditions D47 to D49B above, the Requiring Authority shall immediately notify the Local Area Manager, Department of Conservation. The Requiring Authority shall have regard to any advice provided by the Department of Conservation in determining the appropriate course of action to be undertaken with respect to the discovered flora or fauna (eg further surveys and/or capture and relocation).

Advice Note: The Requiring Authority will comply with all relevant provision of the Wildlife Act 1953

D51. [This condition is intentionally left blank]

#### Vegetation

D52. Where vegetation is removed within the designation on Lot 5 DP 113847 (CT NA64C/291), the Requiring Authority shall, where practicable, retain the understory of the forest under the viaduct, and plant species that are tolerant to the applicable light conditions on the exposed edge of the remaining vegetation.

D53. Prior to any Construction Works commencing, the Requiring Authority shall:

a. erect a fence around the kauri forest stand within the designation to the west of the existing State Highway 1 on Sec 65 Blk III Waiwera SD (CT NA3D/989) and Pt Sec 3 Blk III Waiwera SC (CT NA797/46) (as identified in the plan attached at Appendix 15AN(2)), to prevent access by the contractor.

b. erect fences to protect all totara trees carrying green mistletoe (Ileostylus micranthus) within the designation in the vicinity of land to the west of the intersection of SH 1 and Mahurangi East Road. c. erect a fence around the vegetation on the eastern boundary of the designation within Lot 7 DP 113847 (CT NA64C/293) and Lot 8 DP 113848 (CT NA64C/294) (as identified in the plan attached at Appendix 15AN(3)) to prevent access to areas of native vegetation within these Lots during construction.

d. erect a fence along the western boundary of Okahu Creek Scenic Reserve (Section 64 BlkIII Waiwera SD) to prevent access to areas of native vegetation within this Reserve during construction. e. cordon off with flagging tape the base of the slope below any native orchid plants of the genus Danhatchia, as identified by a suitably qualified botanist, within the designation on Lot 1 DP 321568 (CT 398348) to avoid removal or damage to any native orchid. The flagging tape shall be removed on completion of Construction Works.

D54. [This condition is intentionally left blank]

D55. Prior to construction the Requiring Authority shall implement a high level of dust control (eg wind fences) to protect all totara trees in Condition D53(b) that carry green mistletoe. The Requiring Authority shall engage a suitably qualified botanist to monitor the efficacy of the dust suppression measures. Additional dust minimisation measures shall be implemented by the Requiring Authority where the suitably qualified botanist finds that dust is settling on the mistletoe. Fencing, wind protection and any additional dust minimisation measures shall be removed on completion of Construction Works.

D56. [This condition is intentionally left blank]

D57. [This condition is intentionally left blank]

D58. The Requiring Authority shall engage a suitably qualified botanist to identify and remove the colonies of short hair plume grass located within the designation in the vicinity of the Pūhoi Road/State Highway 1 intersection prior to construction activities in that area and shall conserve the grass in a nursery to be used as planting stock where practical in the landscaping phase of the Project.

D59. The Requiring Authority shall provide replacement planting for kauri, tanekaha, puriri, totara, kahikatea, rimu, rewarewa and/or taraire trees (Canopy Species) that will be removed within the designation as a result of the Project. The purpose of the replacement planting is to replace the trunk cross sectional area of each Canopy Species greater than 15 cm dbh that are lost due to the Project with an equivalent trunk cross sectional area of those species after 20 years of growth. For this purpose, the following process shall be undertaken by a suitably qualified ecologist:

Steps	Action	Formula to be applied
1.	Measure and record by species the dbh of the Canopy Species greater than 15 cm dbh that will be lost within the designation as a result of the Project.	None

2.	Calculate the basal area (x) lost for each tree.	$\pi r^2 = x$ Where r = dbh/2 for each tree
3.	Group the results into species	None
4.	Calculate the total basal area (tx) lost for each species.	tx = ∑x for each species
5.	Specify the size of the trees to be used for replacement planting.	None
6.	Calculate the expected basal area (y) of one replacement tree for each species after 20 years' growth based on the average growth rate of trees of that species in the area. If unavailable, growth rate data can be used from other similar areas.	$\pi r^2 = y$ Where $r = dbh/2$ for the tree in 20 years
7.	Calculate the number (n) of replacement trees to be planted to replace the total basal area lost for each species.	n = tx/y
8.	Identify the process to be adopted to ensure the replacement planting will be adequately established, including:  1. The location, mix of species, planting densities, size at planting and layout to ensure the new vegetation reflects the forest removed.  2. Appropriate successional planting to support and enhance establishment.	None

D60. The Requiring Authority shall undertake restoration planting of wetland vegetation. The planting shall be implemented on a 1:1 area ratio basis, to be based upon the area of wetland habitat (including artificial wetland habitat) lost due to construction of the Project, as calculated by a suitably qualified ecologist. The wetland restoration design shall:

- a. Identify the location and areas of planting within existing wetland areas within the designation adjacent to existing wetlands, where practicable and taking into account technical and safety considerations; and
- b. Identify the mix of eco-sourced species, planting densities, size at planting and layout to ensure the wetland vegetation reflects typical wetlands in the local area.
- c. Provide measures to ensure stock is excluded from the wetland(s).
- D61. [This condition is intentionally left blank]

D62. No Project works are permitted on the area of land marked on Appendix 15N(4) or Appendix 15N(5) other than the planting and maintenance of low-lying species that do not exacerbate flood risk.

#### Kauri Dieback Biosecurity Plan

D63. At least 40 working days prior to any construction commencing within 30 metres of any kauri, the Requiring Authority shall prepare, in consultation with the Local Area Manager, Department of Conservation, and submit a Kauri Dieback Biosecurity Plan (KDBP) to Auckland Council Group Manager Biosecurity for approval. The KDBP shall apply to all areas in the designation within 30 metres of any kauri. The purpose of the KDBP is to set out the procedures to be used to prevent the introduction and/or spread of kauri dieback disease.

D63A. The KDBP shall meet the purpose in Condition D63 and, as a minimum, shall consider the following:

#### Features that apply prior to construction commencing within 30 metres of any kauri

- aa. Training requirements for contractors and subcontractors on the KDBP procedures and obligations;
- a. Methods for testing and monitoring of all kauri in the designation for the presence of kauri dieback disease;
- b. A process for identifying and mapping:
- i. All kauri within the designation that are not affected by kauri dieback disease ("Unaffected Kauri");
- ii. All kauri within the designation that are affected by kauri dieback disease ("Affected Kauri");
- iii. All kauri within the designation that are intended for removal as a result of the Project, and their status as Affected or Unaffected Kauri; and
- iv. Soil type profiling for kauri within the designation, that will define the operational soil moisture conditions in accordance with (h) below to minimise the risk of spread of Kauri dieback.
- c. Methods for the establishing and demarcating on the ground Kauri Quarantine Area(s) (KQA(s)).
- d. Methods for holding, cleaning and treating the collected soil from personnel and equipment in KQAs and releasing personnel and equipment from KQAs.

#### Features that apply during the period of construction within 30 metres of any kauri

- e. Removal of kauri trees shall be minimised as far as practicable;
- f. Soil disturbance within 30 metres of any kauri tree shall be minimised;
- g. Methods for ensuring soil is removed from all footwear, tools, clothing and equipment when:
- i. entering or exiting a KQA; or
- ii. moving from one KQA to another; or
- iii. entering a stream system in a KQA;

Except that this requirement does not apply to vehicle or personnel movements passing through a KQA that are separated from the bare or vegetated earth by height, or a compacted soil-free surface.

- h. All soil-disturbing works in KQAs are to be conducted in soil conditions as determined in the KDBP;
- i. Soil from earthworks within 30 metres of an Affected Kauri must not be transported outside the KQA in which that kauri is sited;
- j. All kauri tree material and other vegetation, including weeds and native vegetation, trimmed or cleared within 30 metres of an Affected Kauri must not be transported outside of the KQA in which that kauri is sited;
- k. Machinery and vehicles exposed to soil in a KQA shall remain in that KQA for the duration of works needing those materials or vehicles in that KQA;
- I. Raw materials (such as soil, substrate or gravel) shall not be sourced from any KQA containing an Affected Kauri;
- m. Methods for vegetation control within 30 metres of any kauri that do not disturb the soil (eg mowing, slashing or herbicide application should be used in preference to grubbing);
- n. Drainage and stormwater run-off from the Project must be diverted away from kauri trees;
- o. Methods for sourcing disease-free kauri (eg from an Auckland Council Biosecurity approved supplier, if one exists) for any mitigation planting required under Condition D59;
- oa. Methods for isolating kauri planted in accordance with Condition D59 from any surrounding natural stands of kauri;
- p. Procedures for site inspection, monitoring and supervision by Auckland Council biosecurity officers; and
- q. The express circumstances (if any) where an exemption to any of the above requirements applies.

#### **KDBP** review

r. Methods for updating the KDBP in the event of significant changes in scientific knowledge relating to the effective management of Kauri dieback that occur after the KDBP is approved.

D63B. No construction may commence within 30 metres of any kauri until the Auckland Council

Group Manager Biosecurity has approved the KDBP. If the Requiring Authority has not received any response from Auckland Council within 30 working days of submitting the KDBP, the KDBP will be deemed to have been approved.

D63C. Any alternations to the KDBP shall require the approval of the Auckland Council Group Manager Biosecurity.

D63D. The Requiring Authority shall implement and comply with the approved KDBP.

#### **Cultural, Heritage and Archaeology**

D64. In managing the construction of the Project and its effects on archaeology, cultural and heritage, the Requiring Authority shall, together with the Heritage New Zealand Pouhere Taonga Act 2014 processes, achieve the following outcomes:

- a. Protection and minimisation of effects on cultural, heritage and archaeological sites, where practicable;
- b. Recording of all pre-1900 cultural, heritage and archaeological sites within the designation boundary including the Te Pā o Te Hēmara Tauhia (R10/921), the rediscovered pā R10/1369 and the wider settlement area in compliance with an authority under the Heritage New Zealand Pouhere Taonga Act 2014 where required;
- c. Recording of any post-1900 cultural and historic heritage sites within the designation boundary; and
- d. Recording of the US Military camp sites (Wyllie Road Camps E (CHI 17006) and F and G (CHI 17007) and any remains exposed during construction.

#### **Cultural, Heritage and Archaeological Management Plan**

D65. Prior to construction, the Requiring Authority shall prepare and implement a Cultural, Heritage and Archaeological Management Plan (CHAMP). The purpose of the CHAMP is to identify procedures and practices to be adopted by the Requiring Authority to advance the outcomes noted in Condition D64, and protect, as far as reasonably practical, sites of cultural, heritage and/or archaeological value. The CHAMP will be prepared for the management of cultural, heritage and archaeological sites in conjunction with any conditions required in compliance with any archaeological authority issued by Heritage New Zealand. The CHAMP shall be implemented throughout the construction of the Project.

D66. The CHAMP shall be prepared by a suitably qualified archaeologist (Project Archaeologist) and the Iwi Advisor in conjunction with a conservation architect as required, and in consultation with Heritage New Zealand, and shall identify:

- a. That archaeological requirements of the Project will be undertaken in compliance with conditions of an archaeological authority issued by Heritage New Zealand under the Heritage New Zealand Pouhere Taonga Act 2014 and any conditions for post-1900 sites in the designation conditions for the Project:
- b. Known cultural, heritage and archaeological sites within the designation boundary including the Te Pā o Te Hēmara Tauhia (R10/921), the rediscovered pā R10/1369 and the wider settlement area;
- c. Any pre-1900 archaeological sites in accordance with authorities under the Heritage New Zealand Pouhere Taonga Act 2014;
- d. Roles and responsibilities of personnel involved with cultural, heritage, archaeological and ecological matters including surveys, and monitoring of conditions;
- e. Methods for avoiding and/or minimising effects on cultural, heritage and archaeological sites during construction where practicable (for example the fencing off of archaeological sites to protect them from damage during construction);
- f. Training requirements for contractors and subcontractors on cultural, heritage and archaeological areas/features within the designation boundary and accidental discovery protocols. The training shall

be undertaken under the guidance of the Project Archaeologist and the lwi Advisor;

- g. Access arrangements to Te Pā o Te Hēmara Tauhia;
- h. A process, involving a built heritage specialist, outlining a methodology for assessing the historic heritage, condition and means to mitigate any adverse effect on Schollum House, Titford House and Titford Cottage and timeframe for implementing the preferred methodology, in accordance with Heritage New Zealand guidelines for assessing and recording built heritage; and
- i. A process for assessing and recording the military camps being Wyllie Road Camps E (CHI 17006) and F and G (CHI 17007).

#### **Accidental Discovery Protocol**

D67. The Requiring Authority shall rely on Z22, the NZTA Accidental Discovery Protocol and implement that protocol throughout the Construction Works. Z22, the NZTA Accidental Discovery Protocol, shall be reviewed by the lwi Advisor and modified to best present the site specific Project detail and to be consistent with any archaeological authority issued by Heritage New Zealand under the Historic Places Act 1993 applying to the Project.

Advice Note: The Ministry for Culture and Heritage must also be advised of any artefact finds within 28 days of the discovery in accordance with the Protected Objects Act 1975. The final repatriation of artefacts is a matter for the Ministry of Culture and Heritage in consultation with iwi. Should archaeological features or deposits, human remains or taonga be exposed during construction, work must cease in the vicinity and contact made with AC, Heritage NZ, Project Archaeologist, iwi advisor and the NZ Police (if koiwi are discovered) to enable appropriate action to be taken before construction recommences in that area.

#### **Monitoring of earthworks**

D68. In addition to any earthwork areas identified in the CHAMP for monitoring:

- a. The Requiring Authority shall invite the Iwi Advisor (or Kaitiaki in the event the Iwi Advisor has not been appointed or is not available) to be on site to monitor earthworks within 50 metres of Te Pā o Te Hēmara Tauhia (R10/921), the rediscovered pā R10/1369 and Midden sites R10/1106 and R10/1107; and
- b. During construction, the Requiring Authority shall ensure the Project Archaeologist is on-site to monitor earthworks in the vicinity of the US military camps so that any pre-1900 archaeological remains or remains relating to US military camps (Wyllie Road Camps E (CHI 17006), and F and G (CHI 17007)) that are exposed can be recorded.

D69. [This condition is intentionally left blank]

#### **Rehabilitation of Construction Yards**

D70. At the completion of construction, all construction yard buildings, structures and surfacing shall be removed and the grounds rehabilitated to the general condition of their pre-Project state.

#### **Upgrade to Kaipara Flats Road Intersection**

D70A. Prior to Kaipara Flats Road being used by any Heavy Vehicle for construction and prior to the Project opening to traffic, the intersection of Kaipara Flats Road and State Highway 1 shall be upgraded to ensure that turning movements at the intersection can be made safely. To assess safety, the improvements shall undergo a detailed design road safety audit prior to construction of the intersection in accordance with the procedure set out in the New Zealand Transport Agency (NZTA) Guideline "Road Safety Audit Procedures for Projects" (May 2013 or as superseded by another NZTA publication). The audit shall give particular consideration to the safe operation of the intersection 10 years after opening of the Project.

#### **Moirs Hill Walkway**

D70AA. Prior to the Project opening to traffic, the Requiring Authority shall prepare a plan identifying a walking track connection between the two ends of the section of the Moirs Hill Walkway that will be severed by the Project. The walking track connection shall be:

- a. of a similar gradient and track surface to the existing upper section of the Moirs Hill Walkway (being the area of the walkaway within and to the west of the designation boundary);
- b. designed in consultation with the Local Area Manager Department of Conservation; and
- c. at least to the standard of the construction guidelines for "tramping tracks" contained in the Department of Conservation's Track Construction and Maintenance Guidelines (VC 1672).

D70AB. The Requiring Authority must, prior to the Project opening to traffic, construct a walking track connection in accordance with condition D70AA, unless the Requiring Authority provides the Manager with copies of correspondence from the Local Area Manager, Department of Conservation confirming that reinstating the walkway is not necessary. In that situation, the Requiring Authority has no obligation to construct any walking track connection.

#### Wyllie Road

D70B - The Requiring Authority shall review the design in the vicinity of Wyllie Road to lower the vertical alignment of the motorway and to reconfigure the northern end of Wyllie Road which will be severed as a result. The section of Wyllie Road east of the motorway shall be formed to a cul-de-sac, in a manner which does not preclude future connection to local roading which may be developed by others. The section of Wyllie Road west of the motorway shall be formed and sealed on a new alignment along the western side of the motorway to connect with Woodcocks Road near the Carran Road intersection. The new or altered sections of Wyllie Road shall be designed and constructed in accordance with applicable sections of the Auckland Transport Code of Practice or Auckland Transport's relevant standards at the time unless otherwise agreed with Auckland Transport.

## **Maintenance and Operation Conditions Operational Noise**

D71A. The Project shall be designed and constructed to ensure that the operational noise levels from the Project at PPFs residential receivers within 200 metres of the proposed alignment as identified in Appendix A of the Marshall Day report (Appendix A, "Individual receiver noise level predictions", Operational Noise Assessment Report, August 2013), attached as Appendix 15AN(6) to these conditions, meet, as a minimum, the specified "Noise Criteria Category" in Appendix 15AN(6) "Proposed Mitigation Option" noise levels predicted by the acoustic modelling undertaken by Marshall Day Acoustics.

- D71. The Requiring Authority shall use Open Graded Porous Asphalt, or another road surface with equivalent or better low-noise generating characteristics, on the carriageways of the Project, as shown in Appendices 15AN(7) and 15AN(8). Such a surface shall be implemented within 12 months following the Project being officially opened to general public traffic.
- a. Southern end (latitude from New Zealand Transverse Mercator point (1749438, 5957982) southwards to the Johnstone's Hill tunnel portal); and
- b. Northern end from a point 200 metres south of the eco-viaduct northwards to 50 metres south of the intersection of the Project with the existing State Highway 1).

Advice Note

Also refer to Resource Consent Condition RC77.

Condition D71(b) now requires OGPA to be extended further south than shown in Appendix15AN(8).

It is impractical to include an amended map in the Board's final report. Nonetheless NZTA is directed to prepare such an amended map (Appendix 15AN(8)) which shows the small extension to OGPA and make such map available to the Manager.

D71B. The Requiring Authority shall within 12 months of the Project being officially opened to general public traffic carry out acoustic surveys at no less than 5 appropriate locations (as determined by a qualified acoustic expert) to confirm that operational noise levels from the Project meet the categories set out in Appendix 15AN(6). If the results of the surveys reveal noise levels from the Project are such that a listed PPF is in a noise criteria category greater than set out in Appendix 15AN(6) (e.g. from category A to category B), the Requiring Authority shall carry out mitigation to attenuate the noise generated by the motorway to within the category levels specified in Appendix 15AN(6). Such mitigation may include the erection of noise barriers with associated landscape mitigation considered as part of the ULDF and relevant ULDSPs.

D72. Should the alignment change through detailed design so that PPFs not already included in Appendix 15AN(6) then fall within 200 metres of the alignment, the Requiring Authority shall update Appendix 15AN(6) to include those PPFs and they shall be assessed and mitigated accordingly.

D73. The Requiring Authority shall manage and maintain any noise mitigation measures within the designation boundaries to ensure that those mitigation works retain their noise reduction performance.

D74. [This condition is intentionally left blank.]

#### Lighting

D75. Lighting of the new State highway will be limited to safety and operational requirements (eg interchanges) and shall comply with AS/NZS 1158:2005: "Lighting for roads and public spaces".

#### Landscape

D76. The Requiring Authority shall maintain (and replace unsuccessful planting) all landscape planting undertaken as part of the Project for a period of 5 years following opening of the Project in accordance with "NZTA P39 Standard Specification for Highway Landscape Treatments 2013", or any subsequent amendment.

#### **Ecology**

D76A. The Requiring Authority shall use its best endeavours to procure from the Crown the entering into of appropriate covenants and/or encumbrances (or similar legal mechanisms) to ensure that the area of ecological mitigation in Conditions D59 and D60 is protected on an ongoing basis, regardless of any future ownership/tenure changes.

#### Pā Management Plan

D77. A Pā Management Plan for Te Pā o Te Hēmara Tauhia (R10/921) and the rediscovered pā R10/1369 sites shall be prepared and implemented. The purpose of the Pā Management Plan is to provide a framework for the ongoing management of sites of cultural significance in conjunction with Hōkai Nuku.

D78. The Pā Management Plan shall be prepared by the Project Archaeologist and the Iwi Advisor, in consultation with Heritage New Zealand to provide recommendations on the following:

- a. Options for public access (by walkways and waterways);
- b. Installation of information signage relating to the Māori and early European history and heritage sites in the area:

- c. Planting, landscaping and vegetation management;
- d. Options for limited remedial work to the defensive ditch (subject to Heritage New Zealand approval); and
- e. Options for protecting the pā sites in perpetuity.

#### Access

D79. Vehicle access from the existing SH1 appropriate for the operation of a farm shall be retained to Lot 1 and 2 DP50685 and Lot 1 DP 74814, at all times unless otherwise agreed with the owner.

D80. Vehicle access under the Carran Road Flood Relief Bridge appropriate for the operation of a farm shall be retained for the benefit of the Civil Family Farm interests comprised in Part Allotments 55 and 95, Parish of Mahurangi, Lot 3 DP418913 and Lot 2 DP343011.

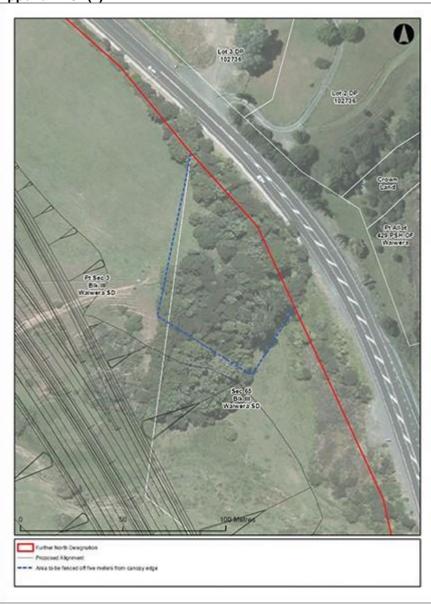
D81. In the event of Lot 1 DP587 not being acquired by the Requiring Authority, vehicle access and services including stock water appropriate for the operation of a farm shall be provided underneath the Project.

#### **Attachments**

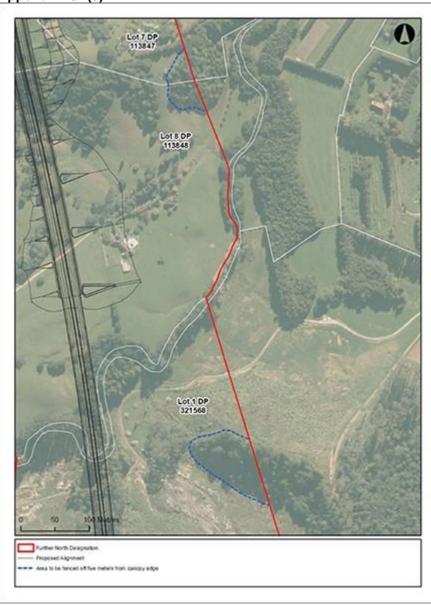
#### Appendix 15N(1)



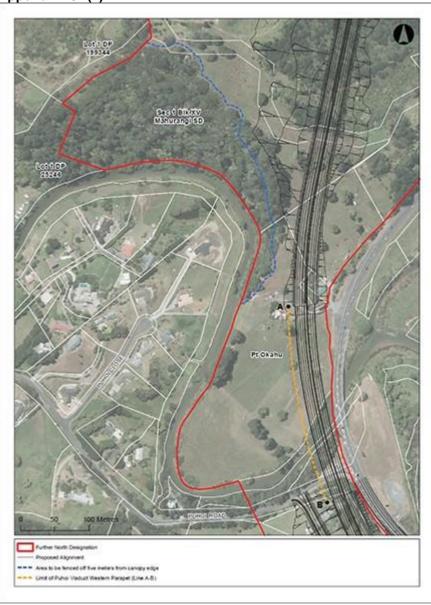
#### Appendix 15N(2)



#### Appendix 15N(3)



#### Appendix 15N(4)



#### Appendix 15N(5)



#### Appendix 15N(6)

Table 1: Noise Criteria Category of PFFs

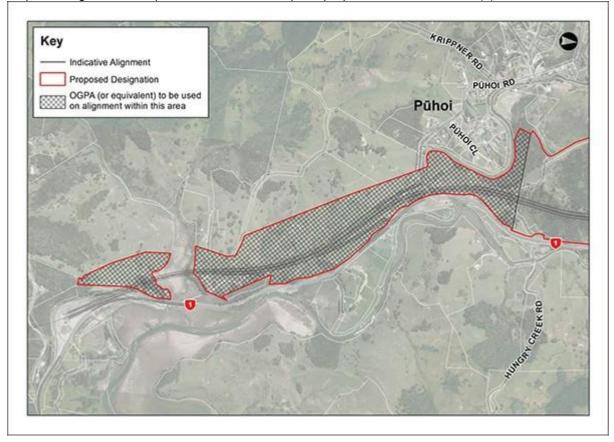
Street address (assessed against indicative alignment)	Noise Criteria Category Project Traffic Noise
24 Billing Road	А
26 Billing Road	А
72 Fowler Access Road	А
5 Hungry Creek Road	А
6 Hungry Creek Road	А
12 Pūhoi Close	А

16 Pūhoi Close	А
20 Pūhoi Close	A
28 Pūhoi Close	A
430 SH1	A
466 SH1	А
600 SH1	А
616 SH1	Α
642 SH1	А
654 SH1	А
682 SH1	В
101 Moirs Hill Road	Α
141 Carran Road	Α
6 Kaipara Flats Road	Α
027 SH1	Α
042 SH1	С
063 SH1	А
102 SH1	А
104 SH1	В
105 SH1	Α
371 Woodcocks Road	A
372 Woodcocks Road	A
074 Wyllie Road	A
075 Wyllie Road	В
075A Wyllie Road	В

<sup>\*</sup> The noise criteria categories are determined by noise from traffic on the Project road only. Where other noise sources affect the received noise level, these should be excluded from the measurement.

#### Appendix 15N(7)

Map showing extent of Open Graded Porous Asphalt proposed in condition D71(a)



#### Appendix 15N(8)

Map showing extent of Open Graded Porous Asphalt proposed in condition D71(b) – to be updated in

accordance with Condition D71(b)

