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

**TO** Peter Vari

**FROM** Dave Paul

**DATE** 5 February 2019

SUBJECT Alteration of Designation 6769 State highway (Ara

Tühono - Pühoi to Wellsford Road of National Significance: Pühoi to Warkworth Section) of the Auckland Unitary Plan(AUP) Operative in part (15 November 2016) in accordance with section 181(3) of

the Resource Management Act

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

Reason for update – Alteration to a designat	ion
Chapter	K Designations
Section	Designation Schedule New Zealand Transport Agency
Designation only	
Designation #	Designation 6769 State highway (Ara Tūhono - Pūhoi to Wellsford Road of National Significance: Pūhoi to Warkworth Section)  New Zealand Transport Agency (NZTA)
Locations:	Warkworth
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)
Changes to text (shown in underline and strikethrough)	"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."
Changes to diagrams	N/A
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Changes to spatial data	N/A
Attachments	
Prepared by:	Text entered by:
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# 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 (Ara Tūhono - Pūhoi to

Wellsford Road of National Significance: Pūhoi to

Warkworth Section)

Requiring authority:

New Zealand Transport Agency (NZTA)

Site address:

Wyllie Road Warkworth

#### Summary

Auckland Council has received a request from the New Zealand Transport Agency (NZTA) under section 181(3) of the Resource Management Act 1991 (RMA), on 20 August 2018, to alter Designation 6769 State highway (Ara Tūhono - Pūhoi to Wellsford Road of National Significance: Pūhoi to Warkworth Section).

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. That the proposed alteration of Designation 6769 State highway (Ara Tūhono Pūhoi to Wellsford Road of National Significance: Pūhoi to Warkworth Section in the Auckland Unitary Plan Condition D70B 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;
  - there is only a minor adjustment to the conditions of the existing designation;
  - both the requiring authority and Auckland Council agree with the alteration; and
  - the owner of the land, Auckland Transport, agrees with the alteration.
- 2. That Designation 6769 State highway (Ara Tūhono Pūhoi to Wellsford Road of National Significance: Pūhoi to Warkworth Section), is altered by adding condition D70B in Chapter K Designations in the Auckland Unitary Plan.

#### 1. Background

#### 1.1. Original Designation

On 30 August 2013 NZTA lodged two Notices of Requirement and a suite of resource consent applications for the construction, operation and maintenance of the Pūhoi to Warkworth motorway. The application package was considered to be for a proposal of national significance and was referred to a Board of Inquiry for determination. The Board of

Inquiry released its final decision report on 2 September 2014 confirming the NoRs and granting the resource consents, subject to conditions. The decision was not appealed.

The project is an 18.5km extension of the existing Northern Motorway from the termination of the Northern Gateway Toll Road at the Johnstone's Hill tunnels to SH1, just south of the Kaipara Flats Road intersection, north of Warkworth. The Project will provide a new and alternative alignment to the existing SH1 route, traversing land to the west of SH1 and bypassing to the western side of Warkworth.

The original design for the motorway vertical alignment at this location was to construct the motorway on a bridge crossing over Wyllie Road. No submissions were made specifically in support of the proposed bridge crossing for Wyllie Road. Submissions against the bridge crossing were made before the Board and the concerns were related to the proximity of the motorway alignment to the submitter's properties with consequential noise, dust, vibration and visual impacts. It was suggested that the motorway be lowered and incorporate an underpass under Wyllie Road to reduce impacts. This was considered impractical due to engineering difficulties.

The proposed work to be authorised by this alteration to the designation is a change to the alignment of Wyllie Road. Wyllie Road is a local road which passes through the designation to connect with Woodcocks Road to the east of the designation. The proposed changes to the motorway alignment, and to Wyllie Road, will be enabled through the insertion of a new condition. The details are explained more fully in section 1.2 below.

The proposed design for Wyllie Road has been shown in the required Urban and Landscape Design Sector Plans (ULDSPs) along with commentary which says that it is subject to a separate authorisation process by the Council. Since the NoR documentation was prepared the ULDSP has been released to stakeholders for comment. Through the ULDSP process, landowners and stakeholders have the opportunity to comment on the design.

The NoR notes that the proposed realignment of Wyllie Road has been a feature of the NX2 design from the time of tender and award. As such, this proposal has been signalled to the public through various open days and other communications from November 2016. Those residents of Wyllie Road who attended a meeting in early May 2017 were specifically alerted to the proposal.

More recently, as part of the Stakeholder consultation through the Specific Sector Plan process, the community has been informed about the proposed Wyllie Road realignment. This included directly informing all residents of Wyllie Road and some residents on Carran and Woodcocks Roads of the proposal via letter and they were all given the opportunity to provide feedback on the proposed reconfiguration of Wyllie Road.

Two information sessions were held in August 2017 following the letter drop to provide an opportunity for interested neighbours / stakeholders to gain further information and then comment on the proposal. One-to-one meetings were held following the information sessions with those who requested to meet with NX2.

Section 5 of the NoR outlines issues raised and NX2's response and Appendix G of the NoR contains a summary report of the process and feedback.

#### 1.2. Minor alteration to a designation

On 20 August 2018 Auckland Council received a notice of requirement (NoR) for an alteration to Designation 6769 State highway (Ara Tūhono - Pūhoi to Wellsford Road of National Significance: Pūhoi to Warkworth Section) from NZTA under section 181(3) of the

The proposed alteration to Designation 6769 is to add a new condition as follows:

#### "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, and 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 proposed work sought by this alteration to the designation is the realignment of Wyllie Road.

Wyllie Road is a local road which passes through the designation to connect with Woodcocks Road to the east of the designation, see Figure 1.

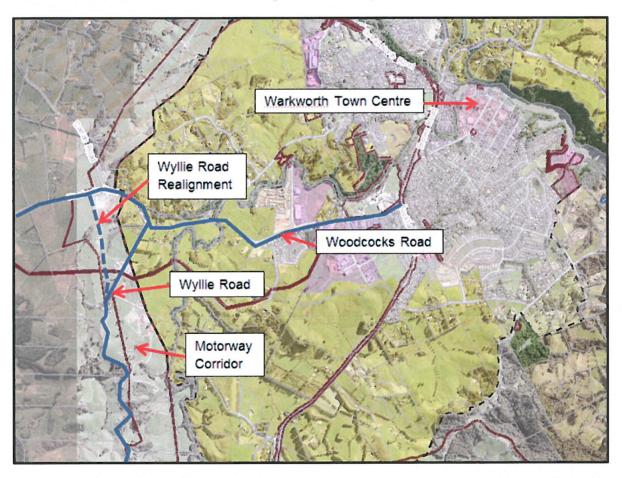


Figure 1 Wyllie Road Realignment Wider Context

The original design of the motorway vertical alignment at this location was to construct the motorway on a bridge crossing over Wyllie Road to maintain connection of the local road beneath the motorway.

The proposed changes to the motorway alignment and to Wyllie Road are shown in more detail in Figures 2 and 3. It is proposed to realign Wyllie Road to run north parallel to the motorway and connect with Woodcocks Road west of the designation alignment at a new T

intersection. The section of Wyllie Road to the east of the motorway and its intersection with Woodcocks Road will be retained.

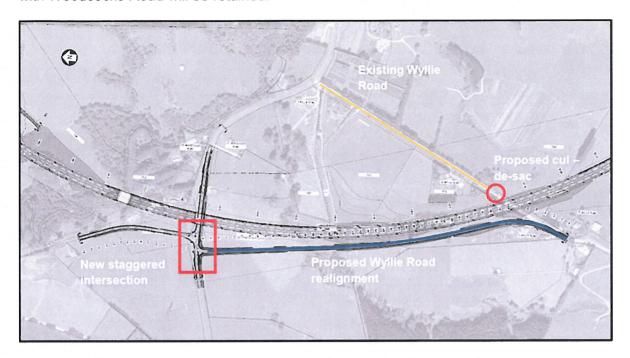


Figure 2 Wyllie Road Realignment

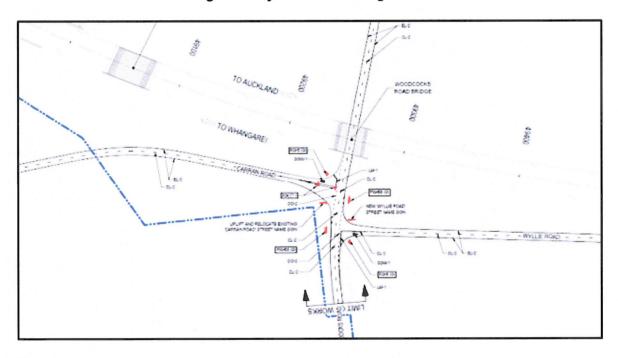


Figure 3 New Staggered Intersection

The implications of this realignment include:

- A lower vertical alignment of the motorway with no connection of Wyllie Road underneath;
- The severed eastern section of Wyllie Road (east of the motorway alignment) will end at a new cul-de-sac within close proximity to the motorway alignment;

- Users of Wyllie Road travelling from the west to the east will pass through this intersection and then cross under the motorway alignment via the proposed underpass on Woodcocks Road; and
- The new portion of Wyllie Road will be approximately 750m in length.

This will reduce the number of visually imposing structures along the motorway alignment and will allow the alignment to be constructed at a level up to around 5m lower than the point that it would have otherwise crossed the existing Wyllie Road. This will also result in considerably less earthworks.

There are no changes to the boundaries of the designation and all works will be undertaken within the existing designation boundary.

The purpose and effects of the alteration are discussed further below.

#### 1.3. Land affected by the alteration

Wyllie Road is a two-lane gravel rural road with a speed limit of 100kmph, serving approximately 30 rural properties. Wyllie Road is accessed from Woodcocks Road and continues south providing access to a number of rural living and rural productive properties.

To the western side of the designation, the land that Wyllie Road provides access to is within the Rural Production Zone. This is predominantly used for production activities (forestry, pastoral grazing or horticultural) with the 'Kourawhero Estate' lodge (wedding, retreat and conference venue) located at the southern end. The section of Wyllie Road to the east of the designation, to its intersection with Woodcocks Road, is zoned Future Urban.

There are flood prone areas on the existing alignment of Wyllie Road during the 100 year event in two locations; approximately 180m and 480m to the south west of the existing intersection with Woodcocks Road. Woodcocks Road currently floods in the vicinity of the Woodcocks/Carran Road intersection.

Based on the current counts undertaken by the Project Transport Analysts and presented in the NoR, it has been assessed that there are approximately 24vph using Wyllie Road during the PM peak hour. It is considered that the traffic volume on Wyllie Road during the AM peak is similar to that of the PM peak.

The First Gas Northland High Pressure Gas transmission main extends from north of Wellsford to south of Pūhoi. The First Gas designation (AUP:OP Designation 9101) crosses underneath the southern section of land subject to this alteration. The 50mm diameter branch of the intermediate pressure transmission main that crosses under Wyllie Road, to service Warkworth, has been relocated and upgraded to a 100mm diameter steel pipe as part of the Project and has been accommodated in the design. The proposed change in design of Wyllie Road will not require any additional works to this gas transmission main.

#### 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 February 2017), 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. It is set out in section 6 of the NoR. The following effects have been considered:

#### 2.1.1 Positive Effects

The NoR outlines several benefits as follows:

• There were several submissions against the originally anticipated Wyllie Road bridge, predominantly concerned with noise and visual effects. The proposed realignment of Wyllie Road will better address these concerns. In particular:

- There will be a reduction in noise levels for some residents as the motorway will be lower than proposed in the indicative alignment
- The visual impact on adjoining properties and the wider area will be reduced due to the road following a more natural lay of the land and the greater opportunity for landscaping
- The reduction and appearance of bulk over the alignment.
- The proposal will reduce the number of people and vehicles using the eastern stretch
  of Wyllie Road (as it will become a cul-de-sac), thereby reducing traffic volumes and
  associated noise and disturbances.
- Avoiding the construction of a bridge will decrease costs of construction, increasing the economic efficiency of the Project.

#### Comment

I agree with the assessment of positive effects and consider that the benefits of lowering the motorway and removing the need for a bridge outweigh the effects of severing Wyllie Road.

#### 2.1.2 Traffic Effects

The traffic assessment accompanying the NoR has been reviewed by an independent traffic consultant on the Council's behalf. This is attached as Attachment B.

#### 2.1.2.1 Effects on travel time

The NoR states that:

Due to the additional length of the 750m long realigned Wyllie Road, travel time is expected to increase for users heading east from the southern end of Wyllie Road and for those travelling from the proposed cul-de-sac to the southern end of Wyllie Road. However, an additional travel time of less than one minute (based on a posted speed of 60km/h) is anticipated in either direction, thus this additional travel time is considered negligible.

#### Comment

The review considers that:

Given the low volume of traffic and the likely length of journeys being made from Wyllie Road, it is considered that the additional travel time is not significant.

#### 2.1.2.2 Intersection Operation and safety

The NoR considers that the proposed change will have less than minor effects on the operation of the roads and intersections and states:

The separation between the Wyllie Road and Carran Road intersections meet the minimum separation requirement of 30m. The realignment of Wyllie Road is not expected to impact the operations of the existing and proposed realigned Wyllie Road/Woodcocks Road intersection as no additional traffic will be generated as a result of the realignment.

There is, however, an expected increase in volume of 24vph on the new Wyllie Road/Woodcocks intersection due to traffic using the new Wyllie Road alignment. Therefore the existing traffic flows will be redistributed and the introduction of traffic turning movements into Wyllie Road at this relocated position will result. The location of the intersection is such that good sightlines will be available for turning traffic. The proposed intersection has been designed to cater for predicted traffic volumes in terms of the existing environment. As the staggered intersection is currently operating with spare capacity, the overall adverse effects of the additional traffic will be less than minor on the local road intersections.

#### Comment

The review has considered intersection operation and safety and concurs with the NoR that the new Wyllie Road/Woodcocks Road intersection would have sufficient capacity and visibility requirements. The review also conducted a crash analysis and this does not suggest that there are crash patterns that will be affected by the realignment of Wyllie Road.

#### 2.1.2.3 Road Cross Section

#### Comment

The review notes that the design has been future proofed for a possible footpath to be provided by others on the eastern side of the road. Whilst 1.8m has been allowed for the footpath, this width is partly within the batter at the edge of the carriageway. This arrangement will require regrading or earthworks to construct the footpath. It is suggested that the design could be amended so that the batter at the edge of the sealed carriageway is to the rear of the area set aside for the future footpath.

The review and staff comments also refer to the Rodney Local Board Greenways Plan which sets out routes that aim to "provide cycle and walking connections which are safe and pleasant". One such existing route is along Wyllie Road. The review states:

Whilst, there are no specific existing provisions along Wyllie Road, it is considered prudent that with the re-alignment of the road, that pedestrian and cycle facilities should be incorporated into the design of the new section of road and under the motorway bridge at Woodcocks Road, rather than just future proofing. This would result in a more efficient and cost effective delivery of the facilities and enhance safety for pedestrians and cyclists.

The review concludes that the design should either:

 Include the provision of pedestrian and cycle facilities along the re-aligned section of Wyllie Road and under the motorway in accordance with the Rodney Local Board Greenways Plan.

Or

 If the pedestrian / cycle facilities are not included in the project, then sufficient width for a future footpath / cycle path on the eastern side of the re-aligned Wyllie Road should be provided without requiring reconstruction of the edge of the proposed carriageway, amendments to drainage or crash barriers. The comments also raise the issue that with the closure of Wyllie Road there is now only one crossing point for walking and cycling from Warkworth to the west.

To address these issues amendments to the conditions were proposed and forwarded to the Requiring Authority as follows:

"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, and 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. This new section of Wyllie Road west of the motorway shall be designed to include cycling and walking provision commensurate with the identification of Wyllie Road as a greenway connection (Rodney Greenways Paths and Trails Plan – Puhoi to Pakiri, May 2017, Rodney Local Board).

#### Pedestrian/cycling access on Woodcocks Road

D70C – Prior to the Project opening to traffic, the Requiring Authority must upgrade the section of Woodcocks Rd within the designation to include formed cycling and walking paths. These paths are to traverse under the Woodcocks Road bridge and connect to the realigned Wyllie Road greenway route (Rodney Greenways Paths and Trails Plan – Puhoi to Pakiri, May 2017, Rodney Local Board)."

The requiring authority does not agree with the proposed amendments. It considers that the proposed design does not preclude the construction of a footpath or cycle path as sufficient width is provided within the local road. The figure presented by the applicant (see Figure 4 below) shows what it considers to be sufficient space underneath the Woodcocks Road bridge to provide for future pedestrian/cycle paths along Woodcocks Road. It also notes that the design has been subject of a safety audit which includes consideration of cyclists and pedestrian use.

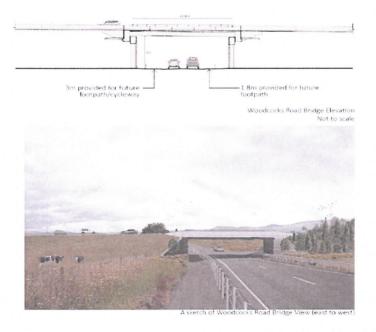


Figure 4 Woodcocks Road bridge cross section

On the question of there now only being one crossing point of the motorway to the west, the applicant responds as follows:

The redirection of Wyllie Road does reduce the number of physical crossings, however there is no change to the connectivity of the Greenways in question. The impacts should be evaluated on the loss of function, not the physical change. Both the existing greenway on Wyllie Road and the one proposed for the western end of Woodcocks Road share the same, single 'proposed' connection into Warkworth. Therefore, there are no impacts to connectivity.

The applicant agreed to further amend the condition by adding the following to the end of the condition:

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.

This response has been reviewed by the council's transport expert and he suggested that the condition be amended to future proof the condition as AT is developing a new Transport Design Manual which will replace the code of practice, by the addition of the words:

"or other design standard agreed with Auckland Transport".

The applicant has considered this suggested amendment and agreed to amended wording as follows:

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.

I agree with the proposed amendment to the condition and consider that it adequately covers the issue of the future design of Woodcocks and Wyllie Roads. I note that the matter has also been raised through the ULDSP process which I consider to be the more appropriate approach.

#### 2.1.2.4 Wyllie Road Cul-de-sac

The council is currently preparing a structure plan for Warkworth and this includes the Future Urban Zone land east of the motorway and where the eastern part of Wyllie Road ends in a cul-de-sac. There is concern that the opportunity to extend Wyllie Road into the Future Urban zone is not lost. The applicant agrees in principle and proposed the amended condition as follows:

"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. and 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.

#### Comment

I agree with the proposed amended condition as it addresses the issue of the possible future extension of Wyllie Road into the Future Urban Zone.

#### 2.1.3 Landscape and Visual Effects

Under the conditions of the motorway Designation, Urban and Landscape Design Sector Plans (ULDSPs) are to be prepared. The Warkworth ULDSP has been submitted to Auckland Council for certification as required by the conditions. The purpose of ULDSPs is:

"integrating the Project's permanent works ... into the surrounding landscape and topography, having regard to the local landscape character and contexts along the highway route".

The NoR has assessed the landscape and visual effects of the realignment of Wyllie Road and indicates that the actual and potential landscape character and visual effects of this proposal would arise from:

- the removal of the original design of the motorway which included a bridge crossing over Wyllie Road, to be replaced by the proposed redesigned motorway alignment
- the alterations to the alignment of Wyllie Road.

#### 2.1.3.1 Landscape Character Effects

The proposed design eliminates the elevated structure in this location. Removing the structure will reduce the bulk of built form located along this length of the motorway and it will more closely follow the natural contours of the surrounding landform.

The NoR notes that the proposed alignment of Wyllie Road will be contained entirely within the existing motorway designation and has been located as close to the motorway alignment as is practicable in order to minimise the reduction in productive land.

The NoR explains that landscape planting will be established between the realigned Wyllie Road and the motorway. The planting is proposed to be dense native planting in order to reduce headlight glare from Wyllie Road on the motorway and integrate with the surrounding rural landscape. The NoR states that the:

proposed landscape planting is considered appropriate to mitigate the landscape and character effects from the addition of a local road to the western side of the designated alignment.

The NoR concludes that overall, the proposed changes to the design of Wyllie Road will be more in keeping with the rural landscape character of the surrounding area when compared with the original design. Therefore, it considers that the proposal will result in less than minor adverse effects on the landscape character of the area and its immediate surrounds.

#### 2.1.3.2 Visual Effects

The NoR considers that the proposed design will appear rural in character and will not reduce views of the surrounding area when experienced from the motorway alignment due to the elevation difference and proposed landscape restoration planting.

The motorway will predominantly screen the proposed road from the eastern parts of Wyllie Road and Woodcocks Road and will not be visible from Carran Road. The Wyllie Road alignment will not appear out of character when experienced from these surrounding roads.

When viewed from the west the proposed location of Wyllie Road is as close to the motorway alignment as possible to reduce the visual bulk of the development, with mitigation

planting between the two carriageways to soften the visual effects associated with the views of the roads.

The NoR notes that there are only a small number of additional private dwellings located in elevated positions that will gain views of the proposed re-alignment of Wyllie Road. The proposed alignment will not reduce views to the surrounding landscape beyond the motorway alignment. The landscape restoration planting proposed between the motorway alignment and the proposed Wyllie Road carriageway will mitigate visual effects.

The NoR considers that overall the proposed Wyllie Road alignment will appear more in keeping with the surrounding rural landscape character than the original design. Any adverse visual effects when experienced from the surrounding public and private places will be no more than minor.

#### Comment

A landscape review of the landscape and visual effects has not been sought and the assessment provided by the NoR is considered sufficient given the scale of the proposed amendment in the context of the motorway itself.

I accept the conclusions of the NoR and agree that by keeping the alignment of Wyllie Road close to the motorway and providing planting between the two, the adverse landscape and visual effects are no more than minor.

#### 2.1.4 Noise

The NoR has considered the actual and potential adverse noise effects associated with the proposed change to the alignment of Wyllie Road compared to the original design.

Traffic volumes on Wyllie Road are less than 10% of the traffic on Woodcocks Road and less than 7% of traffic on the new motorway and the NoR considers that these are unlikely to add to the overall noise level of the neighbouring roads. It has therefore been assumed that traffic on Wyllie Road would not result in any additional noise at the closest Protected Premises and Facilities (locations where road-traffic noise is assessed and for which noise mitigation measures may be required).

Overall, the lowering of the motorway by up to 5m in the vicinity of Wyllie Road, is predicted to result in a minor (1 to 2 decibel) reduction in noise compared with the original design. All Protected Premises and Facilities are predicted to receive noise levels in the same (or better) noise criteria category as the original design.

The NoR concludes that the change in Wyllie Road alignment is predicted to have less than minor noise effects.

#### Comment

A review of the noise effects has not been sought and the assessment provided by the NoR is considered sufficient given the scale of the noise effects proposed by the amendment in the context of the motorway itself.

#### 2.1.5 Flood Effects

The NoR addresses flooding in the vicinity of the proposed road realignment. There are two flood prone areas on the existing alignment of Wyllie Road during the 100 year event located

approximately 180m and 480m towards the south west of the existing intersection with Woodcocks Road.

The NoR states that the proposed Wyllie Road design does not seek to solve/reduce the existing flooding in these areas, and the design is in accordance with the resource consent that limits any increase in flood height in the 1 in 100 year event to 100mm, or is contained within an existing floodplain.

The existing stormwater discharge consent for the Project has flexibility to address changes such as the proposed additional and realigned section of road and will appropriately manage, treat and discharge the additional stormwater generated.

NX2's flood modelling shows nominal (less than 50mm) flooding during the 10 year event at the northern end of the proposed diverted Wyllie Road where it intersects with Woodcocks Road. The length of flooded carriageway is approximately 5m. Flooding at this location during the 100 year event is approximately 100mm in depth which is considered traversable.

During significant flood events (i.e. 1 in 100 year), vehicles may experience restrictions on turning right out of the realigned Wyllie Road on to Woodcocks Road to travel towards Warkworth due to the surface flooding to the west of the existing Wyllie Road intersection. However, left turning onto Woodcocks Road will be maintained.

The NoR therefore considers that reasonable access to and from properties on Wyllie Road will be available during extreme and infrequent flooding events. The proposed design of Wyllie Road will not exacerbate the risk of flooding of the site or surrounding sites.

The NoR concludes that overall the effects of flooding on people and surrounding land are considered to be no more than minor.

#### Comment

Comments were sought from Council's Healthy Waters Department which raised two matters as follows:

- 1) Flooding Effects the report states "Auckland Council's GIS viewer shows two flood prone areas on the existing alignment of Wyllie Road during the 100 year event in tow locations", The floodplain map currently shown on Council's GIS viewer is a Rapid Flood Hazard Study which was developed in 2009, A detailed floodplain modelling was developed in 2017, it suggests there are no flood prone areas on the existing alignment of Wyllie Road (the latest floodplain map is attached).
- 2) The modelled flood depths from NX2's detailed model at the proposed diverted Wyllie Road where it intersects with Woodcocks Road seems lower than the predicted flood depths from Council's detailed model (flood depths map from Auckland Council's model is attached). There may be an agreement between T&T (or AECOM) and Auckland Council for the NX2's model to use different design rainfalls or CNs for their resource consent purposes, please confirm with T&T (or AECOM).

The applicant responded as follows:

A baseline hydrological and hydraulic model was developed in 2016 by the Auckland Council Stormwater Modelling team. This model was used to evaluate the existing

(i.e. pre-NX2) flood regime and used TP108 rainfall data and assumed the majority of the catchment consists of a Group C (low permeability) soil.

NX2 then undertook a detailed hydrological assessment based on flow gauge data and soil types (Group B and Group C) determined from Landcare maps and geotechnical site observations. This analysis results in a lower runoff curve number (CN) and rainfall when compared to the inputs used in the Auckland Council model. Justification of the NX2 proposed hydrological and hydraulic modelling approach was accepted in principle by Auckland Council Healthy Waters, provided that the Auckland Council hydrological conditions (referred to as CN74) were also modelled for the pre and post NX2 scenarios as a sensitivity analysis.

Consent compliance has been assessed against the preferred CN66 scenario, with an additional assessment of the effects of the CN74 scenario also undertaken. The CN74 scenario resulted in a similar change in effects to the CN66 scenario.

The Stage 2 Mahurangi Flood Model report has been submitted to Auckland Council, and NX2 is currently closing out Council comments and finalising the Stage 3 report for submission and final sign off by Council. In summary, an agreement on CN's has been reached and will be formalised with this sign off.

Heathy Waters have reviewed this response and accept the explanation.

#### 2.1.6 Conclusion

Overall I consider that the amendment to the designation and the effects of the associated work are no more than minor. The alterations to the alignment of the motorway will have positive effects and the effects of the realignment of Wyllie Road are no more than minor. The realigned Wyllie Road Woodcocks Road intersection can operate safely. The design of the motorway underpass is sufficient to enable future pedestrian and cycle access. The visual effects are also minor and any visual impacts can be mitigated by planting.

#### 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 had not originally given written notice to any party as it considered that there are no owners or occupiers of land directly affected by the alteration to the designation. However, the NoR does note that the land subject to the alteration of the designation crosses the First Gas transmission pipeline. It states that NX2 has sought approval from First Gas and that such approval has been provided. This did not accompany the NoR and but has been provided subsequently. This is included in Attachment D.

Following a request from the Council that considered that Auckland Transport was an affected party as occupiers of Wyllie and Woodcocks Roads, the requiring authority gave written notice to Auckland Transport and it agrees with the alteration. AT's agreement has been provided and is included in Attachment C.

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

Following issues raised by the reporting staff, the requiring authority has submitted an amended condition to address the issues. Auckland Council agrees with the proposed amended alteration to the condition as follows:

#### "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."

The alteration to the designation has been requested by the requiring authority, and therefore it agrees to the alteration.

The Council agrees with the 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 of the designation
- The alteration involves minor changes to the existing conditions
- The owners and/or occupiers of all land directly affected by the proposed alteration have been given notice and agree with the proposed alteration
- Adherence with recommended amended condition 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.
- The recommended amended condition will ensure any potential adverse effects are avoided, remedied or mitigated.
- There are no changes or adjustments to the boundaries of the existing designation.
- The owners and/or occupiers of all land directly affected agree with the alteration have been given notice and agree with the proposed alteration.
- The council and the requiring authority agree with the alteration.

#### 3.2 Recommendation

That pursuant to Section 181(3) of the Resource Management Act 1991, the notice of requirement by the New Zealand Transport Agency for an alteration to Designation 6769 State highway (Ara Tūhono - Pūhoi to Wellsford Road of

National Significance: Pūhoi to Warkworth Section) is **confirmed** subject to the amended condition recommended in Section 2.4 of this report.

That Designation 6769 State highway (Ara Tūhono - Pūhoi to Wellsford Road of National Significance: Pūhoi to Warkworth Section is amended in Chapter K Designations in the Auckland Unitary Plan Operative in Part as set out in Section 4 of this report.

#### 4. Agreed alterations

The text alterations are shown below. Amendments are shown as underlined.

**Designation Number** 

6769 State highway (Ara Tūhono - Pūhoi to Wellsford Road of

Date: 30/11/2018.

National Significance: Pūhoi to Warkworth Section

Requiring Authority

**NZ Transport Agency** 

#### Conditions

#### "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."

Report Prepared by:

Dave Paul - Principal Planner, North West

and Islands

Signature!

#### 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 (Ara Tūhono - Pūhoi to Wellsford Road of National Significance: Pūhoi to Warkworth Section 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

3/12/2018

Signed:

Date:

#### SCHEDULE OF ATTACHMENTS

Attachment A: Pūhoi to Warkworth Motorway Alteration to Designation: Wyllie Road

Realignment

Attachment B: Traffic Review of Notice of Requirement to Designation 6769 – Wyllie

Road Realignment, Progressive Transport Solutions, 10 July 2018

Attachment C: Auckland Transport Agreement

Attachment D: First Gas Agreement



3 December 2018

NZ Transport Agency Private Bag 106602 Auckland 1143

Attention Belinda Peterson

Dear Belinda

Re: Notice of requirement for a minor alteration to Designation 6769 State highway (Ara Tūhono - Pūhoi to Wellsford Road of National Significance: Pūhoi to Warkworth Section) (Wyllie Road) in the Auckland Unitary Plan.

Auckland Council has considered your request to alter the existing designation for 6769 State highway (Ara Tūhono - Pūhoi to Wellsford Road of National Significance: Pūhoi to Warkworth Section) relating to Wyllie Road.

The proposed alteration to the designation has been processed and confirmed, with modification as agreed by NZTA, in accordance with the statutory tests of Section 181(3) of the Resource Management Act 1991. The Section 181(3) confirmation report for the minor alteration is attached.

The Auckland Unitary Plan will be amended in due course.

If you have any questions please contact Dave Paul on 021 189 7045.

Yours sincerely

Peter Vari

Team Leader - Planning North West and Islands

Plans and Places



Dave Paul Auckland Council Private Bag 92300 Auckland 1142

> 10 July 2018 Our Ref: P18003

> > Tel: 021 663548

By email: dave.paul@aucklandcouncil.govt.nz

Dear Dave

## Traffic Review of Notice of Requirement Alteration to Designation 6769 – Wyllie Road Realignment

An application has been lodged for an amendment to Designation 6769 for the Puhoi to Warkworth motorway. The alteration is required to enable the new motorway to be constructed at a lower level resulting in the realignment of Wyllie Road which would tie into Woodcocks Road to the west of the Carran Road intersection.

This report reviews the traffic aspects of the proposed Notice of Requirement Amendment report reference 025-RPT-002-NX2, Revision A dated 15 May 2018 and supplementary information provided on vehicle tracking and visibility splays.

A site visit was conducted on 20 June 2018 to observe the operation of Wyllie Road and the transport environment. During the site visit there were traffic management measures and construction works in place around the Carran Road intersection where the re-aligned Wyllie Road is proposed to tie into Woodcocks Road. Therefore, it was not possible to fully appreciate the current operation of Woodcocks Road in this vicinity.

#### 1. Proposal

The proposed amendment to Designation 6769 Condition 16A is to amend the vertical alignment of the motorway to reduce the visual impact of the new road and remove the need for a bridge structure over Wyllie Road. The amended vertical alignment reduces the height of the motorway and will require Wyllie Road to be severed into two parts. The eastern end of Wyllie Road will be converted into a cul-de-sac of around 750m terminating at a turning circle on the eastern side of the motorway. The western end of Wyllie Road is to be re-aligned to run parallel with the motorway and to be connected at a new intersection on Woodcocks Road 30m west of the existing Carran Road / Woodcocks Road intersection.

The re-aligned Woodcocks Road is proposed to be constructed to a rural cross-section with swale drains on the eastern side of the road. It is proposed that the design be future proofed for a

Registered Office: 51A Terra Nova Street, Glen Eden, Auckland 0602



footpath on the eastern side of the road. The re-aligned Wyllie Road is at a slightly lower height than the motorway and it is proposed that Wyllie Road be screened from the motorway by planted vegetation. The new section of Wyllie Road is to be sealed.

The existing eastern end of Wyllie Road was originally metalled. This has been sealed as part of the construction works up to where the road is proposed to be severed. This road has been sealed as it is being used for access to the construction site for the motorway.

#### 2. Auckland Transport Feedback

Auckland Transport (AT) has reviewed the proposed design for the re-aligned section of Wyllie Road to determine whether the design is in accordance with the Auckland Transport Code of Practice and meets the works requirements of the NX2. AT has provided Asset Owners approval of the proposals.

#### 3. Traffic Volumes / Link Capacity

Full details of traffic volumes are not available for Wyllie Road, although a sample traffic count was undertaken by the applicant for a 15-minute period during the afternoon. This indicated that a typical hourly volume of traffic on Wyllie Road is around 24 vehicles per hour. Peak traffic volumes are expected to be slightly higher than this volume. Based on counts on Woodcocks Road and Carran Road, traffic volumes maybe around 35 vehicles per hour with total daily traffic around 300 vehicles per day. The low traffic volume is to be expected as Wyllie Road is a no-exit road and provides access to a relatively small number of rural properties, many of which are farms or lifestyle blocks.

The re-aligned Wyllie Road is designed with a marked carriageway width of 7m with shoulders of varying width; it has a relatively straight alignment. It would be anticipated that a road of this nature would be able to accommodate more than 1200 vehicles per hour in each direction. Therefore, the proposed road has sufficient capacity to accommodate the expected volume of traffic.

#### 4. Intersection Design

The re-aligned Wyllie Road will form a staggered cross-roads intersection with Woodcocks Road and Carran Road. The two sides roads (Wyllie Road and Carran Road) are proposed to be off-set by 30m. It is located in an area with a 100km/h (derestricted) posted speed limit.

The stagger distance between intersections is the upper limit of the distance recommended in AustRoads. This is considered to be appropriate for this proposed design. This distance ensures that motorists will not drive straight across Woodcocks Road when travelling from Wyllie Road to Carran Road.

No turning bays are proposed on Woodcocks Road for motorists to wait to turn right into Wyllie Road. This is consistent with the existing layout for the Carran Road intersection. Given the low turning volumes at the intersection, this is considered appropriate.

The applicant has provided an assessment of the Safe Intersection Sight Distance (SISD) for the Wyllie Road and Carran Road intersections with Woodcocks Road. The assessment is based on a design speed of 80km/h using a reaction time of 2.0 seconds. Based on the AustRoads standard<sup>1</sup> for

<sup>&</sup>lt;sup>1</sup> AustRoads Guide to Road Design, Part 4A, Table 3.2)



this design speed, the SISD required is 181m. Plans showing visibility splays for this distance have been provided. The visibility splay to the west from Wyllie Road extends over the proposed crash barrier. Whilst a vertical section has not been provided the applicant states that the crash barrier is at a height of 810mm; as the driver's eye height is at 1.1m and the object height of 1.25m, the SISD should be met.

Notwithstanding the applicant's assessment, the design speed is considered to be conservative. This section of Woodcocks Road is to have a posted speed limit of 100km/h. The alignment of the road, particularly from the west, is relatively straight. As such, it would not be unreasonable to expect motorists to be travelling at this speed. Speeds from the east may be lower due to the series of bends prior to the Carran Road and Wyllie Road intersections. However, where actual vehicle speeds are unknown, it is common practice to adopt a design speed of 10km/h above the posted speed limit. Thus, a design speed of 110km/h is considered more appropriate.

The visibility for the intersection has been assessed based on plans provided and aerial photographs. The visibility from the re-aligned Wyllie Road along Woodcocks Road to the east is around 275m and to the west in excess of 400m. No allowance for the vertical alignment have been made as this information is not available but as the area is reasonably flat this is not considered to affect the assessment.

The SISD has been reviewed against sight distances obtained from the AustRoads Guide for a design speed of 110km/h. For traffic from the east, it is considered that this will result in a longer sight distance requirement than what would be required in reality as vehicles are likely to be travelling slower than this speed for the reasons discussed above. The assessment for SISD is summarised in Table 1.

Table 1 - Assessment of Safe Intersection Sight Distance (SISD)

Reaction Time	SISD	Visibility provided to the east	Meets standard?	Visibility provided to the west	Meets standard?
2.0 secs	285m	275m	No	400m+	Yes

If a lower design speed is used, say 100km/h, the SISD requirement is 248m and therefore the sight distance to the east would meet the standard.

The Approach Site Distance (ASD) for a design speed of 110km/h for motorists approaching Woodcocks Road from Wyllie Road is 193m. Visibility is in excess of 200m.

Given the road alignment, it is considered that the visibility at the new Wyllie Road intersection meets the appropriate visibility requirements.

#### 5. Intersection Operation

Modelling of the new intersection between Woodcocks Road, the re-aligned Wyllie Road and Carran Road has not been undertaken. However, given the forecast total volumes of traffic of around 35 vph turning into and out of the re-aligned Wyllie Road, it is concurred with the applicant that the intersection would have sufficient capacity.

No physical changes are proposed to the existing Wyllie Road intersection.



#### 6. Road Safety

The crash records for the section of Woodcocks Road between the existing intersection with Wyllie Road and to 500m west of Carran Road has been extracted from the NZTA Crash Analysis System for the last five years (2013-2017).

The records show that there was a total of 15 crashes on Woodcocks Road consisting of 3 serious, 1 minor and 11 non-injury crashes.

The majority of crashes (11) were loss of control which included two serious crashes. One of the serious crash occurred at the bend by the existing Wyllie Road intersection and the other serious loss of control crash occurred slightly to the west of the proposed new intersection for the re-aligned Wyllie Road. The loss of control crashes were generally scattered along the length of Woodcocks Road rather than at one specific location.

The third serious crash involved a motorist crossing the centre line and colliding with a vehicle in the opposite direction. This occurred several hundred metres to the west of the proposed intersection location.

Only two of the crashes related to the operation of intersections. One was a non-injury crash at the existing Wylie Road intersection where a right turning motorist from Wyllie Road failed to give way and the second was a rear end crash at the Carran Road intersection.

The analysis indicates that the crashes are generally not intersection related.

Based on the crash analysis of the crash record, this does not suggest that there are crash patterns that will be affected by the re-alignment of Wyllie Road.

#### 7. Traffic Impact

The re-alignment of Wyllie Road will result in extra travel distance for motorists travelling between properties west of the proposed motorway and Warkworth in the east. The total increase in travel distance is approximately 790m.

The Traffic Assessment (Paragraph 4.2) assesses the additional travel time as a result of the increased travel distance with the re-alignment of Wyllie Road. The applicant suggests that the additional travel time would be less than 1 minute for a re-routed vehicle. This assessment is considered appropriate.

Given the low volume of traffic and the likely length of journeys being made from Wyllie Road, it is considered this additional travel time is not significant.

#### 8. Road Cross-Section

The proposed road cross-sections were provided within the applicant's submission. Lane widths are proposed to be 3.5m. This width exceeds the suggested maximum lane width for a local road in the Auckland Transport Code of Practice (ATCOP) Chapter 7: Road Layout and Geometric Design. The proposed lane width is, however, within the range for a Collector Road. Given that the re-aligned Wyllie Road will be subject to a 100km/h speed limit, it is considered that the wider lane width is appropriate in this instance.



Shoulders are proposed. On the eastern side, a shoulder of 1.5m is proposed between the edge of the lane and the safety barrier. This exceeds the minimum recommended shoulder width (1.0m) in ATCOP for a shoulder adjacent to a barrier. On the western side, the shoulder is of variable width, with a minimum width of 0.5m. This complies with the minimum requirement for a low volume rural road.

The cross-section drawings indicate that the design has been future proofed for a possible footpath to be provided by others on the eastern side of the road. Whilst 1.8m has been allowed for the footpath, this width is partly within the batter at the edge of the carriageway. This arrangement will require regrading or earthworks to construct the footpath. It is suggested that the design could be amended so that the batter at the edge of the sealed carriageway is to the rear of the area set aside for the future footpath. In addition, the design should take into account the Rodney Local Board's Greenway plan as discussed in Section 9.

#### 9. Pedestrians / Cyclists

No pedestrian or cycle facilities are proposed on the re-aligned Wyllie Road. However, as discussed above, width has been set aside on the eastern side of the re-aligned Wyllie Road for a possible future footpath.

The Rodney Local Board has developed a Greenways Plan which sets out routes that aim to "provide cycle and walking connections which are safe and pleasant"<sup>2</sup>. One such existing route is along Wyllie Road. Whilst, there are no specific existing provisions along Wyllie Road, it is considered prudent that with the re-alignment of the road, that pedestrian and cycle facilities should be incorporated into the design of the new section of road and under the motorway bridge at Woodcocks Road, rather than just future proofing. This would result in a more efficient and cost effective delivery of the facilities and enhance safety for pedestrians and cyclists.

#### 10. Property Access

It is understood that property access will be maintained with the proposed Wyllie Road realignment.

#### 11. Conclusions

Based on the assessment it is concluded that there are no traffic related reasons to oppose the proposed realignment of Wyllie Road. However, it is considered that the design should either:

1. Include the provision of pedestrian and cycle facilities along the re-aligned section of Wyllie Road and under the motorway in accordance with the Rodney Local Board Greenways Plan.

Or

2. If the pedestrian / cycle facilities are not included in the project, then sufficient width for a future footpath / cycle path on the eastern side of the re-aligned Wyllie Road should be provided without requiring reconstruction of the edge of the proposed carriageway, amendments to drainage or crash barriers.

<sup>&</sup>lt;sup>2</sup> Rodney Greenways Paths and Trails Plan Pūhoi to Pakiri, Rodney Local Board, May 2017



If you have any queries regarding the assessment, please do not hesitate to contact me.

Yours sincerely

Martin Peake

Progressive Transport Solutions Limited

M: 021 663548

E: martin@progressivetransport.co.nz



20 Viaduct Harbour Avenue, Auckland 1010 Private Bag 92250, Auckland 1142, New Zealand **Phone** 09 355 3553 **Website** www.AT.govt.nz

8 October 2018

New Zealand Transport Agency c/o Beca PO Box 6345 Wellesley Street Auckland 1141 Attn: Anna Belz

Dear Anna

#### Alteration to Designation 6769 - Wylie Road

We understand that NX2 has lodged an alteration to Designation 6769 in the Auckland Unitary Plan (Operative in Part) on behalf of the New Zealand Transport Agency (NZTA) and that the intention of this alteration is to include a new condition that will provide for the re-alignment of Wyllie Road. We note that Wyllie Road is a local road under Auckland Transport's (AT) control. NX2/NZTA have requested written approval from AT for the alteration to the designation as the asset owner/manager.

The proposed wording of this condition is as follows:

"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 the applicable sections of the Auckland Transport Code of Practice or Auckland Transport's relevant standards at the time unless otherwise agreed with Auckland Transport."

This letter confirms that AT does not have any opposition to the alteration with the inclusion of the above worded condition. If, however, the condition is amended or the alteration is notified (either full or limited), AT requests that it be notified to ensure it can take appropriate representation, such as a submission.

Please note that the portion of Wylie Road within the path of the motorway will need to be stopped and purchased from AT. This is a separate legal process subject to public notification and is one for which AT cannot confirm an outcome.

I trust this letter meets your requirements - please contact Evan Keating at 447 5081 if you have any questions.

Yours sincerely

Cynthia Gillespie

**Executive General Manager Planning and Investment** 





First Gas Limited 42 Connett Road West, Bell Block

Private Bag 2020, New Plymouth, 4342 New Zealand

**P** +64 6 755 0861 **F** +64 6 759 6509

23 November 2017

New Zealand Transport Agency Private Bag 106602 Auckland City Auckland 1143

To whom it may concern

## APPROVAL UNDER SECTION 177 OF THE RESOURCE MANAGEMENT ACT 1991 REGARDING DESIGNATION 9101

First Gas Limited ("First Gas") is the requiring authority for designation 9101 ("Designation").

Designation 9101 protects the IP20 gas distribution pipeline ("Pipeline") between 102

Amreins Road, Taupaki and 109 Vipond Road, Topuni. Vector Limited ("Vector") owns and operates the Pipeline.

First Gas is aware that Vector and the New Zealand Transport Agency ("NZTA") have entered into an Infrastructure Agreement via Fletcher Construction Company ("Agreement") for the relocation of the Pipeline (and other Vector assets) affected by the Project.

NZTA has sought approval from Vector to work within the Designation area as part of the realignment of Wyllie Road associated with Ara Tūhono - Pūhoi to Warkworth motorway project ("Project"). Vector and First Gas have been in discussions in relation to that request.

As the requiring authority, First Gas is prepared to give approval for NZTA to work within the Designation area to the extent that those works are reasonably necessary to construct, operate and / or maintain the Project, provided that:

NZTA comply with all conditions set out in the Agreement; and

Vector retain the same access rights and conditions currently in place, during the construction and operational life of the Projects.

We look forward to your confirmation that this is an acceptable way forward.

Regards

Adam Du Fall

Land and Planning Manager (Acting)

Copy to: Vector Limited

#### 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 126455, 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 44340, Lot 2 DP 162291, Sec 55 Blk III Waiwera Survey District SO 44340, Lot 2 DP 162291, Sec 55 Blk III Waiwera Survey District SO 44340, Lot 2 DP 162291, Sec 55 Blk III Waiwera Survey District SO 44340, Lot 2 DP 162291, Sec 55 Blk III Waiwera Survey District SO 44249, Lot 6 DP 9771, Lot 6 DP 87207, Pt Lot 2 DP 180823, Lot 1 DP 208830, Lot 5 DP 52247, Lot 7 DP 872247, Lot 7 DP 52247, Lot 2 DP 74814, Sec 64 Blk III Waiwera Survey District SO 44298, 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 2435, Pt Sec 3 Blk III Waiwera Survey District SO 6297, Lot 3 DP 77908, Lot 1 DP 50685, Lot 1 DP 167491, Pt Lot 2 DP 151082, Allot 78 Psh Of Ahuroa SO 6195A, Lot 1 DP 174691, Pt Lot 2 DP 151082, Allot 78 Psh Of Ahuroa SO 6195A, Lot 1 DP 175210, Pt Allot 55 Psh Of Mahurangi SO 27C, Pt Okahu SO 28313, Lot 1 DP 179452, Sec 63 Blk III Waiwera Survey District SO 26451, Lot 1 DP 175210, Pt Allot 55 Psh Of Mahurangi SO 27C, Pt Okahu SO 28313, Lot 1 DP 199142, Sec 63 Blk III Waiwera Survey District SO 42467, Pt Mblk Okahu, Lot 2 DP 157269, Sec 51 Blk XV Mahurangi Survey District SO 242467, 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 42647, Pt Mblk Okahu, Lot 2 DP 150566, Pt Lot 1 DP 57746, Pt Sec 43 Blk III Waiwera Survey District SO 42649, Lot 2 DP 17841, Lot 1 DP 180823, Lot 1 DP 180329, Pt Allot 9546, Pt Lot 1 D

	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 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 TŪHONO- PŪHOI TO WELLSFORD ROAD OF NATIONAL SIGNIFICANCE: PŪHOI 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 Iwi 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 practically 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 may incorporate 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.	$tx = \sum x$ 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 15AN(4) or Appendix 15AN(5).

# 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 Iwi 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 Iwi 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; andc. 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 lwi 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.

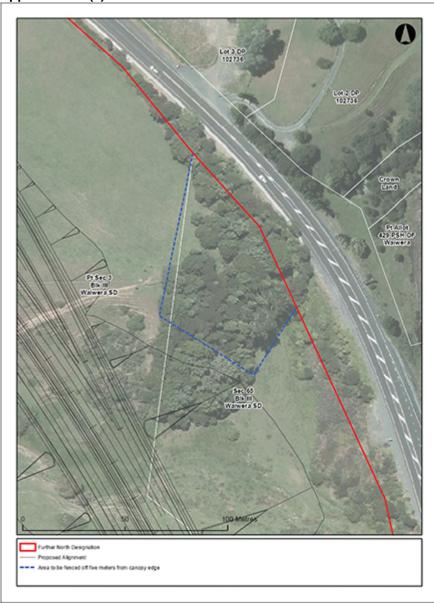
D81. In the event of Lot 1 DP587 not being acquired by the Requiring Authority, vehicle access and services including stock water appropriate for the operation of a farm shall be provided underneath the Project.

# **Attachments**

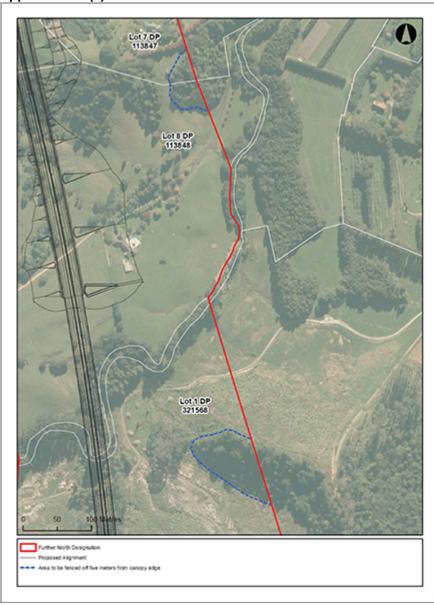
# Appendix 15N(1)



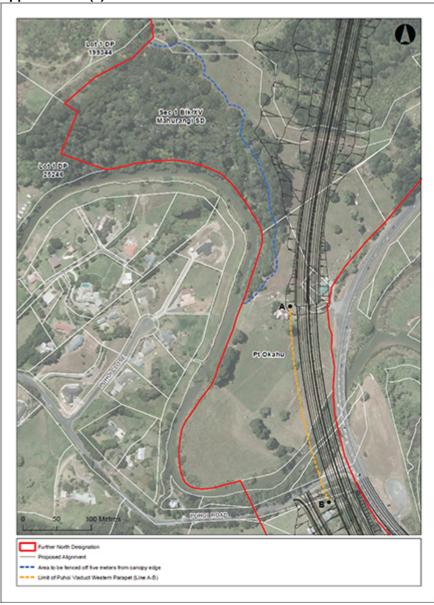
# Appendix 15N(2)



# Appendix 15N(3)



# Appendix 15N(4)



# Appendix 15N(5)



# Appendix 15N(6)

Table 1: Noise Criteria Category of PFFs

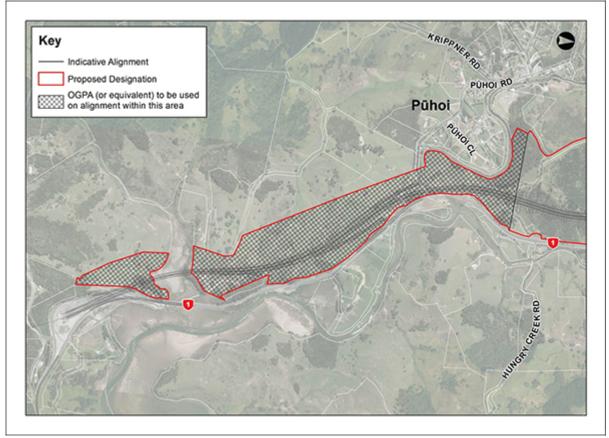
Street address (assessed against indicative alignment)	Noise Criteria Category Project Traffic Noise
24 Billing Road	Α
26 Billing Road	Α
72 Fowler Access Road	Α
5 Hungry Creek Road	Α
6 Hungry Creek Road	Α
12 Pūhoi Close	А

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

