TE TUPU NGĀTAHI
SUPPORTING GROWTH

7 April 2021

Te Tupu Ngātahi
Supporting Growth
PO Box 105218
Auckland 1143

Nicholas Lau and Sanjay Bangs
Auckland Council
135 Albert Street,
Auckland
Private Bag 92300, Auckland 1142

Issued via email: nicholas.lau@aucklandcouncil.govt.nz and Sanjay.bangs@aucklandcouncil.govt.nz

Dear Nicholas and Sanjay

Re: Response to s92 Further Information Request for the Drury Arterial Network

We refer to your letter of 22 March 2021 requesting further information under section 92 of the Resource Management Act 1991 (RMA) in relation to the Notice of Requirement by Waka Kotahi for an alteration to designation and Notices of Requirement by Auckland Transport for four designations for the Drury Arterial Network.

This letter contains the response to each request. For ease of reference, tables are included that include the request and the relevant response. Where appropriate, reference has been made to the relevant lodgement documentation that should be read in conjunction with a response.

In preparing the response, AT and Waka Kotahi have updated a few of the proposed conditions that were submitted with the Notices of Requirement. Appendix A contains the updated conditions. We welcome further discussion with Council on appropriate conditions in due course.

We request that the public notification of the Notices of Requirement for the Drury Arterial Network are included in the next Auckland Unitary Plan notification schedule.

If you have any queries regarding the information contained in this response, please do not hesitate to get in contact.

Yours sincerely

Helen Hicks
Drury Arterial Network – Planning Lead
Helen.Hicks@supportinggrowth.nz
029 355 1385

TE TUPU NGĀTAHI
SUPPORTING GROWTH

Response to s92 Request for Further Information

(1) Planning and General Matters

Table 1: s92 Response – Planning and General Matters

Ref	Request	Response	Relevant Document / Section
1	What will be the council's regulatory role in ensuring that the following management plans achieve their stated objectives of avoiding, remedying or mitigating adverse environmental effects associated with proposed Project construction works if they are only being provided to the council for information instead of certification through submittal with an Outline Plan pursuant to s176A of the RMA (as per Project's proposed management plan conditions, noting that other management plan conditions put forward to address construction effects provide for certification by the council, such as the Project's Construction Noise and Vibration Management Plan conditions) (Project-wide): • Construction Environmental Management Plan (CEMP) • Construction Traffic Management Plan (CTMP) *<u>Explanation</u>: Certification of management plans which address project construction effects (including the certification of CEMPs and CTMPs) is consistent with conditions which have been approved over recent years for Auckland Transport (AT) and Waka Kotahi New Zealand Transport Agency (WKNZTA) designations. When responding to this further information request, and if these requiring authorities are still of the view that CEMPs and CTMPs for the Project should be provided for information only to the council, it would be useful to understand the reasons for adopting this approach which is inconsistent with conditions approved for recent AT and WKNZTA designations.* *Section 176A(3)(f) of the RMA requires an Outline Plan to show (amongst other specific matters) "any other matters to avoid, remedy, or mitigate any adverse effects on the environment". As the stated objectives of the Project's proposed CEMP and CTMP conditions are to avoid, remedy or mitigate adverse environmental effects associated with proposed Project construction works, submittal of these management plans with the corresponding outline plans would be required under section 176A(3)(f) of the RMA, noting that the Project's proposed conditions exclude provision of these plans with future Project Outline Plans.* *Sections 176A(1) and 176A(4) of the RMA enables the council in it's regulatory role to request that the requiring authority make changes to the Outline Plan, and this would not be possible for certification purposes in relation to the Project CEMPs and CTMPs if they are not provided with the Project Outlines Plan and are instead submitted to the council for information only.* *Certification of the Project CEMPs and CTMPs to confirm they achieve their stated objectives of avoiding, remedying or mitigating adverse environmental effects associated with proposed Project construction works would also be supported by the need to ensure such effects are appropriately managed both within the existing environment, which is*	The reasons the CEMP and CTMP are to be provided to Council for information are set out below. We welcome further discussion with Council on conditions as the Projects progress. <u>CEMP</u> It is appropriate that the CEMP be provided to Council for information only. The CEMP requirements are largely factual and administrative in nature. For example, they specify construction management roles and procedures such as recording contact details, working hours, contractor roles and responsibilities. These are not typical effects management measures that require technical peer review comments or input from Council for example, ecological mitigation techniques or soil/erosion control methodologies. We note that the Council has accepted the CEMP can be provided for information in recent transport projects including the Puhoi to Warkworth and the Warkworth to Wellsford designation conditions. In addition, it is expected that any CEMP associated with future regional consents will be certified by Council as it will contain management measures requiring peer review. <u>CTMP</u> It is appropriate that the CTMP be provided to Council for information only. Auckland Transport and Waka Kotahi are the relevant road controlling authorities for Auckland's transport network and State Highway system. It is their primary statutory function to ensure the safe and efficient operation of this network and to ensure that their construction activities will not impact on the safe operation of Auckland's transport network. Both Auckland Transport and Waka Kotahi have significant experience with developing and implementing Construction Traffic Management Plans. Additional peer review by Auckland Council is not necessary or efficient in this context.	N/A

Ref	Request	Response	Relevant Document / Section
	predominantly rural in nature, and likely future environment which is anticipated to reflect a mix of urban residential and business land uses, in accordance with the current future urban zoning and indicative future land uses identified in the Drury-Opaheke Structure Plan (the need to manage construction effects within the likely future receiving environment is particularly relevant to the proposed Project works as anticipated construction commencement dates are identified as being later this decade, and this accords with the15-20 year lapse periods sought for the Auckland Transport NoRs).		
2	The AEEs submitted for each NoR state that adverse construction effects on affected communities will be mitigated by ensuring the public and stakeholders (including directly affected and adjacent owners and occupiers of land) are communicated with throughout construction works by implementing Stakeholder and Communication Management Plans, and these communications will need to address, amongst other matters: • determining adequate notice periods for the commencement of construction activities and works that affect access to properties; and • informing parties of the expected timing, duration and staging of works and regular updating of progress. It is also noted that the measures listed at the end of each NoR AEE for managing adverse Project effects on property, land use and business include: • Methods to regularly communicate with the community, stakeholders and land owners/occupiers during construction, including timeframes. • Links to other communication methods in other management plans Please confirm how the Stakeholder and Communication Management Plan conditions proposed for each NoR will achieve the aforementioned communication outcomes and outlined in the submitted NoR AEEs, noting that condition 14(b)(v), which is the same for each NoR, only provides for "methods to communicate the proposed hours of construction activities outside of normal working hours and on weekends and public holidays, to surrounding businesses and residential communities" (also noted that the aforementioned measures for managing adverse Project effects on property, land use and business appear to be absent from the Stakeholder and Communication Management Plan conditions proposed for each NoR, with the intention being to include these measures in these conditions (as per statement preceding table summarising measures at the end of each NoR AEE)). *<u>Explanation:</u> Stakeholder and Communication Management Plan conditions which have been approved over recent years for Auckland Transport (AT) and Waka Kotahi New Zealand Transport Agency (WKNZTA) designations specifically provide for methods to communicate and consult with affected communities throughout construction works, but this appears to be absent from the Stakeholder and Communication Management Plan conditions proposed for each NoR. As the AEEs submitted for each NoR states that adverse construction effects on affected communities will be mitigated by ensuring they are communicated with throughout construction works, this should be stated in the Stakeholder and Communication Management Plan conditions proposed for each NoR, as has been the case in relation to Stakeholder and Communication Management Plan*	The following points describe how the SCMP and other proposed management plans and/or designation conditions will achieve the communication outcomes identified in request #2: • *<u>"informing parties of the expected timing, duration and staging of works and regular updating of progress."</u>* See Condition 2[1] *Project Information*. This information will be available on a Project website (or equivalent virtual information source) which will be established within 12 months of the date on which each designation is included in the AUP. At the start of detailed design for a Stage of Work, the Project website or virtual information source will be updated to provide information on the likely date for Start of Construction and any staging of works. The Project website (or equivalent virtual information source) will contain the status of the Project and anticipated construction timeframes which will be updated on the website as they change. • *<u>"Methods to regularly communicate with the community, stakeholders and land owners/occupiers during construction, including timeframes"</u>* The SCMP objective is to identify how the public and stakeholders (including directly affected and adjacent owners and occupiers of land) will be communicated with throughout the construction works. As noted in the request, the SCMP will *provide methods to communicate the proposed hours of construction activities outside of normal working hours and on weekends and public holidays, to surrounding businesses and residential communities*. It is not the intent of the condition to limit the SCMP to construction outside of normal working hours. Therefore, a minor amendment to the proposed condition 14(b)(v)[2] is made as follows: …14(b)(v) *methods to communicate the proposed hours of construction activities **<u>including</u>** outside of normal working hours and on weekends and public holidays, to surrounding businesses and residential communities…* The SCMP will also include procedures for ensuring that there is a contact person available for the duration of Construction Works, for public enquiries or complaints about the Construction Works. This contact person will be available for regular communication with any party who seeks information. • *"<u>Links to other communication methods in other management plans"</u>* SCMP Condition 14[3](b)(vi) provides for links to other communication methods in other management plans: *14(b)* *The objective of the SCMP is to identify how the public and stakeholders (including directly affected and adjacent owners and occupiers of land) will be communicated with throughout the Construction Works. To achieve the objective, the SCMP shall include:* *… (vi)* *linkages and cross-references to communication methods set out in other conditions and management plans where relevant.* • *"<u>determining adequate notice periods for the commencement of construction activities and works that affect access to properties"</u>*	Appendix A, Condition 2 for NoR D2, D3, D4 and D5. Condition 3 for NoR D1. Appendix A, Condition 14(b)(v) for NoR D1, D3, D4 and D5. Condition 15(b)(v) for NoR D2. Appendix A, Condition 14(b)(vi) for NoR D1, D3, D4 and D5. Condition 15(b)(vi) for NoR D2

[1] ~~Condition 2 for NoR D2, D3, D4 and D5. Condition 3 for NoR D1.~~
[2] Condition 14(b)(v) for NoR D1, NoR D3, NoR D4, NoR D5 and condition 15(b)(v) for NoR D2
[3] Condition 14(b)(vi) for NoR D1, NoR D3, NoR D4, NoR D5 and condition 15(b)(vi) for NoR D2

Ref	Request	Response	Relevant Document / Section
	conditions approved over recent years for Auckland Transport (AT) and Waka Kotahi New Zealand Transport Agency (WKNZTA) designations (as stated above, noted that the NoR AEEs also specify communication methods, but these appear to be absent from the proposed NoR Stakeholder and Communication Management Plan conditions).	The proposed CTMP condition provides for methods to communicate traffic measures that affect road users: *17[4](b) The objective of the CTMP is to avoid, remedy or mitigate, as far as practicable, adverse construction traffic effects. To achieve this objective, the CTMP shall include:* *… (viii) methods that will be undertaken to communicate traffic management measures to affected road users (e.g. residents/public/stakeholders/emergency services)* Traffic management measures provided for in condition 17[5](b)(viii) include impacts to property access as a result of the Project. Methods that will be undertaken to communicate traffic management measures will include the determination of adequate notice periods.	Appendix A, Condition 17(b)(viii) for NoR D1, D3, D4 and D5. Condition 18(b)(viii) for NoR D2

3	In relation to site compounds, construction yards (laydown areas) and bridge construction areas shown on the Project's indicative design drawings (Project-wide):
	
	a) Please clarify the anticipated effects on existing buildings located within the footprint of these construction works areas.
	
	b) Please explain what amenity-related effects are anticipated on occupied buildings proximate to these construction works areas, particularly in relation to visual, noise and vibration effects. Please also explain what mitigation measures are proposed, and how these are reflected in the proposed conditions for each designation which seek to address construction effects.
	
	<u>Explanation:</u> *The AEE and indicative design drawings identify site compounds, construction yards (laydown areas) and bridge construction areas in various locations throughout the Project's spatial footprint. Further commentary is sought on the noise, vibration and visual effects of construction on owners and occupiers in the vicinity of these construction works areas.*
		a) As identified in Section 5 of the Assessment of Construction Noise and Vibration Effects, any buildings within the proposed designation footprint will be removed or will not be occupied by members of the public.
		
		b) <u>Visual Amenity Effects</u>
		
		Temporary visual effects during construction including site compound and construction areas are assessed and summarised for each Project at the following locations within the lodgement documentation:
		
		• D1 – SH22 Upgrade:
		  • **Section 6.3.2.4** of the Assessment of Landscape and Visual Effects
		  • **Section 9.5.2** (including subsections) of the Assessment of Effects on the Environment
		• D2 – Jesmond to Waihoehoe Road West FTN Upgrade:
		  • Sections **7.3.2.1.4, 7.3.3.3 and 7.3.4.2.1** of the Assessment of Landscape and Visual Effects
		  • Section **16.5.2** (including subsections) of the Assessment of Effects on the Environment
		• D3 – Waihoehoe Road East Upgrade:
		  • Section **8.3.2.4** of the Assessment of Landscape and Visual Effects
		  • Section **23.5.2** (including subsections) of the Assessment of Effects on the Environment
		• D4 – Ōpāheke N-S FTN Arterial:
		  • Section **9.3.3.2** of the Assessment of Landscape and Visual Effects
		  • Section **30.5.2** (including subsections) of the Assessment of Effects on the Environment
		• D5 – Ponga and Ōpāheke Road Upgrade:
		  • Sections **10.3.2.3, 10.3.4.2 and 10.3.6.1** of the Assessment of Landscape and Visual Effects
		  • Section **37.5.2** (including subsections) of the Assessment of Effects on the Environment
		
		Within each assessment identified above, a number of factors which are considered to moderate the nature and significance of the potential adverse visual effects are outlined. In addition, it is standard practice that site compounds and construction works areas are fenced, which will assist to mitigate potential effects.
		
		Mitigation measures proposed are outlined for each notice in sections 6.3.3, 7.3.5, 8.3.3, 9.3.4 and 10.3.7 of the Assessment of Landscape and Visual Effects. Among a range of other measures provided for within the proposed conditions, these measures are reflected in the following condition clauses under the ULDMP (see Appendix A):
		
		• *For all notices:*
		  • *10(a)(iii)(I) - re-instatement of construction and site compound areas, driveways, accessways and fences.*
		  • *11(a)(iii)(C) - ground preparation (top soiling and decompaction).*
		• *NoR D1, D2 and D5:*
			Assessment of Construction Noise and Vibration Effects, Version 1, January 2021
			
			Assessment of Landscape and Visual Effects, Version 1, January 2021
			
			Assessment of Effects on the Environment, Version 1, January 2021

[4] Condition 17(b)(viii) for NoR D1, NoR D3, NoR D4, NoR D5 and condition 18 (b)(viii) for NoR D2

[5] As above

Ref	Request	Response	Relevant Document / Section

		• *11(a)(i)(A) - identification of existing trees and vegetation that will be retained with reference to the Tree Management Plan in Condition 25. Where practicable, mature trees and native vegetation should be retained;*
		• *For NoR D1 and D2:*
		  • *11(a)(i)(E) - identification of vegetation to be retained and any planting requirements under Conditions 23 and 24;*
		  • *11(a)(i)(G) - reinstatement planting of construction and site compound areas as appropriate*
		• *For NoR D3 and D4:*
		  • *11(a)(i)(B) – where practicable, mature trees and native vegetation should be retained*
		• *For NoR D3, D4 and D5:*
		  • *11(a)(i)(F) -reinstatement planting of construction and site compound areas as appropriate;*
		
		<u>Noise and Vibration Effects</u>
		
		Construction site compounds, construction yards (laydown areas) and bridge construction areas were included within the noise modelling undertaken within the Assessment of Construction Noise and Vibration Effects (*see response to Request #32)*. These effects are assessed and summarised for each Project at the following locations within the lodgement documentation:
		
		• D1 – SH22 Upgrade:
		  • **Section 6.2** (including subsections) of the Assessment of Construction Noise and Vibration Effects
		  • **Section 9.9.2** (including subsections) of the Assessment of Effects on the Environment
		• D2 – Jesmond to Waihoehoe Road West FTN Upgrade:
		  • Sections (including their subsections) **7.2** of the Assessment of Construction Noise and Vibration Effects
		  • Section **16.9.1** (including subsections) of the Assessment of Effects on the Environment
		• D3 – Waihoehoe Road East Upgrade:
		  • Section **8.2** (including subsections) of the Assessment of Construction Noise and Vibration Effects
		  • Section **23.9.2** (including subsections) of the Assessment of Effects on the Environment
		• D4 – Ōpāheke N-S FTN Arterial:
		  • Sections **9.2** (including subsections) of the Assessment of Construction Noise and Vibration Effects
		  • Section **30.9.1** (including subsections) of the Assessment of Effects on the Environment
		• D5 – Ponga and Ōpāheke Road Upgrade:
		  • Sections **10.2** (including subsections) of the Assessment of Construction Noise and Vibration Effects
		  • Section **37.9.1** (including subsections) of the Assessment of Effects on the Environment
		
		Mitigation measures for all Projects are provided in **Section 5.6** of the Assessment of Construction Noise and Vibration Effects. These measures are reflected in the following conditions provided in Appendix A:
		
		• For NoR D1, D3, D4 and D5:
		  • 18. Construction Noise Standards
		  • 19. Construction Vibration Standards
		  • 20. Construction Noise and Vibration Management Plan (CNVMP)
		  • 21. Schedule to a CNVMP
		• For NoR D2:
		  • 19. Construction Noise Standards
		  • 20. Construction Vibration Standards
		  • 21. Construction Noise and Vibration Management Plan (CNVMP)
		  • 22. Schedule to a CNVMP.
			Appendix A

Ref	Request	Response	Relevant Document / Section
4	*Please provide further information to supplement the Project feedback summaries provided for the following groups, stakeholders and affected landowners who were consulted and engaged on the Project which is sought to better understand how this feedback informed the design and proposed designation boundaries for individual NoRs to avoid, remedy or mitigate adverse effects of the Project on their interests (Project-wide):* *a) Mana Whenua groups Ngāti Tamaoho, Ngāi Tai Ki Tamaki, Te Ākitai Waiohua and Ngāti Te Ata Waiohua* *b) KiwiRail* *c) Heritage New Zealand Pouhere Taonga* *d) Ministry of Education* *e) Department of Conservation* *f) Fire and Emergency New Zealand* *g) Network Utilities providers* *h) Developers* *i) Landowners and community* *Explanation: Summaries of feedback received from the above groups, stakeholders and affected landowners during consultation and engagement on the projects have been referenced in Part C and Appendix A of the Project AEE in relation to the design of the Project, assessment of alternatives and avoiding, remedying or mitigating adverse Project effects. To assist the council and potential submitters better understand how the feedback provided by groups, stakeholders and affected landowners was used to address adverse Project effects on their interests, further information is sought which confirms how this feedback informed the design and proposed designation boundaries for individual NoRs. For example, page 49 of the Project's assessment of alternatives makes reference to this in relation to discussions had with stakeholders and affected landowners, although it is not clear from the assessment how the resulting Project design refinements informed selection of the Project's preferred options. Also, Part C of the Project AEE (page 58) states that in relation to those parts of the Project covered by NoR D1-NoR D4, "…there were adjustments to the proposed designation boundary and opportunities, including identification of valued trees and private property adjustments were identified, to address landscape and visual amenity at detailed design stage." Again, it is not clear from the Project's assessment of alternatives how the resulting Project design refinements informed selection of the Project's preferred options.* *Furthermore, in order to adequately assess specific concerns raised by groups, stakeholders and affected landowners regarding the Project's environmental effects, it is requested that further information be provided which expands upon these concerns where stated in the corresponding feedback summaries, noting that this information will also assist in ensuring the Project's cultural effects can be adequately assessed in the absence of cultural value assessments from the Mana Whenua groups with an interest in the Project area.*	See Appendix B.	Appendix B

(2) Transport

Table 2: s92 Response - Transport

Ref	Request / Advice	Response	Relevant Document / Section
5	Please demonstrate that an intersection that complies with relevant standards and guidelines can be formed within the proposed designation and/or existing legal road boundaries, between Drury Hills Road and Waihoehoe Road (NoR D3). *Explanation: Drawing SGA-DRG-STH-004-CI-4103 does not include an appropriate tie in to Drury Hills Road, as shown in Figure 10. We consider that NoR: D3 should demonstrate an appropriate design for the intersection can be accommodated within the proposed designation boundary and/or the existing legal road boundary.*	The proposed Waihoehoe Road East Upgrade primarily involves the addition of walking and cycling facilities to support the adjoining development, along with a suitable urban streetscape. At this location the upgrade connects to Drury Hills Road, which is an existing rural road with no walking or cycling facilities. Upgrading the intersection of Waihoehoe Road and Drury Hills Road is not required as part of the Waihoehoe Road East Upgrade Project. The proposed designation boundary has sufficient space for the proposed walking and cycling upgrade on Waihoehoe Road to tie into the existing environment. This could be achieved by provision of 'Transition Ramps' (Auckland Transport TDM – Section 9).	N/A
6	Please provide further detail on the proposed closure of the Waihoehoe/Flanagan intersection, including timing, co-ordination with any other works needed to maintain access to Flanagan Road, and consultation with affected parties. Alternatively, if the closure of the intersection is not proposed as part of the designation, drawing SGA-DRG-STH-04-CI-3101 should be updated (NoR D3). *Explanation: Drawing SGA-DRG-STH-04-CI-3101 identifies that the intersection between Waihoehoe Road and Flanagan Road will be closed and that "CONNECTION WITH FLANAGAN ROAD AND PROPERTY ACCESS TO BE DEVELOPED WITH FUTURE NZUP PROJECT"* *Further, Table 7-15 of the Assessment of Transport Effects states that* *"The Flannagan Road intersection with Waihoehoe Road West is expected to be closed through NZUP as a result of the new Drury Central Rail station and park and ride facilities."* *In our view NoR D2 should not include the closure of the Flanagan Road intersection, as currently shown in Drawing SGA-DRG-STH-04-CI-3101. If the closure of the intersection proceeds works under NZUP, this affect access to the future rail station and existing properties on Flanagan Road, noting there is currently no alternative access for Flanagan Road.*	For the Jesmond to Waihoehoe Road West FTN Upgrade Project (NoR D2), the existing Waihoehoe Road Bridge over the rail line will need to be replaced with a wider and higher bridge to accommodate adequate clearance over the rail line. This will include retaining wall abutments with upgraded bridge barriers on the approaches. Therefore, Flanagan Road cannot be retained in its current location as the presence of the retaining walls and barriers would restrict access and visibility. The existing sight distance along Waihoehoe Road from Flanagan Road is already compromised by the alignment over the existing bridge. As part of the Drury Central Rail Station Project which is a part of the New Zealand Upgrade Programme (NZUP), the closure of the intersection of Flanagan Road with Waihoehoe Road is also proposed and an alternative access for Flanagan Road provided. This project is funded and work is anticipated to begin in 2023. The closure of Flanagan Road and provision of alternative access is therefore expected to be undertaken as part of the Drury Central Rail Station Project prior to the Jesmond to Waihoehoe Road West FTN Upgrade taking place and therefore no alternative access has been included in the Jesmond to Waihoehoe Road West FTN Upgrade. However, in the event that this work has not been undertaken as part of the Drury Central Rail Station Project prior to closure of Flanagan Road for the upgrade to Waihoehoe Road West (NoR D2), an alternative connection will be provided by Auckland Transport. Auckland Transport will seek landowner and statutory approvals to provide an alternative access before the Flanagan Road intersection with Waihoehoe Road is closed. A condition has been proposed to address this and is included as Condition 13 on NoR D2 (included in Appendix A): *13. Closure of Flanagan Road Intersection with Waihoehoe Road* *If the Flanagan Road intersection with Waihoehoe Road requires closure, the project shall be designed to provide an alternative connection for Flanagan Road. Where this outcome cannot be achieved within the designation, the Outline Plan shall include confirmation that any necessary landowner and statutory approvals have been obtained for that work.*	Appendix A, new condition 13 on NoR D2.
7	Please provide further detail on construction traffic effects upon the transport network should the Jesmond Road and Bremner Road sections of NoR D2 be constructed in parallel including how this will be addressed in the recommended construction traffic management plan condition (NoR D2). *Explanation: Section 5.2 of the Assessment of Transport Effects identifies the methodology used to assess the potential construction traffic effects, including consideration of any works that should not occur at the same time. The subsequent sections of the report do not identify any works that should not occur at the same time. It is unclear whether the author considers that all sections of all corridors could*	Due to the long term nature of this Project, it is recommended that the construction traffic effects are assessed again when a greater level of detail is available regarding the specific construction methodology, any staging of the Jesmond to Waihoehoe Road West FTN Arterial and traffic and urban form environment at the time of construction. Should the Jesmond Road and Bremner Road sections of Jesmond to Waihoehoe West FTN Upgrade (NoR D2) be constructed in parallel, the effects on the transport network will be assessed and managed through the implementation of the Construction Traffic Management Plan, proposed as a condition on the designation. Specifically, the objective of the CTMP	

Ref	Request / Advice	Response	Relevant Document / Section
	be constructed in parallel. While NoR D2 is assessed in sections, there is no detail on whether NoR D2 is likely constructed in sections, or as a single corridor of works. Should the Jesmond Road and Bremner Road sections be constructed in parallel, there may be significant effects on access as there are no alternative corridors to access existing and future development within the Auranga Precinct.	(Condition 17[6](b)) is to avoid, remedy or mitigate, as far as practicable, adverse construction traffic effects. This will include methods to manage the effects of temporary traffic management activities on traffic, methods to ensure the safety of all transport users and methods to ensure the safe management and maintenance of traffic flows, including pedestrians and cyclists, on existing roads. The objective of the CTMP ensures that NoR D2 could not be staged so that there would be significant effects on the transport network, including on access to specific areas.	Condition 17(b) for NoR D1, D3, D4 and D5. Condition 18(b) for NoR D2.
8	Please provide further assessment of the proposed realignment of Tui Street, including safety and access effects. Please comment on what, if any, alternatives have been considered to maintain access to properties on Tui Street (NoR D2). *<u>Explanation:</u> Drawing SGA-DRG-STH-04-CI-3101 shows the realignment of Tui Street, to form a new intersection with Great South Road, as shown in Figure 11 above. We consider that the proximity of the proposed intersection with the upgraded Great South Road/Waihoehoe Road intersection is likely to create safety issues for drivers turning right into and out of Tui Street. Please provide further assessment of the proposed realignment of Tui Street, including safety and access effects, and comment on what means to mitigate potential safety effects were considered (such as an alternative access to the north of the Drury Rugby Clubrooms).*	The proposed Tui Street and Great South Road intersection is planned to allow left-in and left-out vehicle movements only - with right turn movements prohibited. While some trips may require longer routes for access (such as where right turn access is banned), these effects are expected to be offset by the more reliable and safer travel provided along the corridor itself. The Project team also looked at retaining the existing Tui Street access from Waihoehoe Road. With the need to raise the level of Waihoehoe Road to accommodate clearance over the rail corridor, the intersection with Tui Street would also need to be raised. A compliant geometric design on the approach to Waihoehoe Road could not be accommodated without significant regrading along Tui Street, so the existing location could not be retained. To reduce the vertical grades, a further option to relocate the intersection to the west of the existing location was reviewed. However, this needed to be very close to the Great South Road intersection (and on the exit), so this option was discounted. An additional northern alignment through Drury Domain was also considered. However, this was discounted due to the direct impacts to the playing fields and the Drury and Districts Rugby Football and Recreation Club Inc. At the time of construction, the Project will be subject to detailed safety audit, as is standard practice for Auckland Transport. It is noted that the site to the north of Drury Domain is subject to potential intensification and reconfiguration by Kainga Ora. Those potential future changes provide opportunity to rationalise and improve the access to this location.	N/A
9	Please demonstrate that an intersection that complies with relevant standards and guidelines can be formed within the proposed designation and/or existing legal road boundaries, between Ponga Road and Jack Paterson Road. This should include an assessment of sight distances, management of the interface between a rural and urban road environment, and accommodation of vehicle tracking (NoR D5). *<u>Explanation:</u> Drawing SGA-DRG-STH-04-CI-8102 does not include an appropriate tie in between NoR D5 and the Ponga Road/Jack Paterson Road intersection, as shown in Figure 13. We consider that NoR D5 should demonstrate than an appropriate design for the intersection can be accommodated within the proposed designation boundary and/or the existing legal road boundary. The design should demonstrate that safe intersection sight distances can be met, that the interface between a rural and urban road environment is appropriately managed, and appropriate vehicle tracking movements can be accommodated.*	The proposed Ponga Road Upgrade is primarily a walking and cycling upgrade, along with a suitable urban streetscape. At this location, the upgrade connects to Jack Paterson Road and Ponga Road, which are existing rural roads with no walking or cycling facilities. Upgrading the intersection of Ponga Road and Jack Paterson Road is not required as part of the Ponga Road and Ōpāheke Road Upgrade Project. The proposed designation boundary has sufficient space for the proposed walking and cycling upgrade on the portion of Ponga Road to tie into the existing environment. This could be achieved by provision of 'Transition Ramps' (Auckland Transport TDM – Section 9).	N/A
10	Please confirm whether the arrangement of the Hunua Road/Croskery Road intersection, as assumed in the traffic model, can be accommodated within the existing legal road boundaries and/or NoR D4 boundary. Further, please confirm the timing of the alteration in intersection form (conversion to a roundabout) (NoR D4). *<u>Explanation:</u> In the traffic model, the Hunua Road/Croskery Road intersection is assumed to be a roundabout, in both the future Do Minimum and NoR SATURN models. Clarification is required on*	This intersection is not part of the Project and the change of form of the Croskery Road / Hunua Road intersection to a roundabout is not a consequence of, or required for NoR D4. The Hunua Road/Croskery Road intersection is grouped with the Frequent Transit Networks Business Case. This is a future South Detailed Business Case Supporting Growth Programme project that will evaluate any footprint requirements and corresponding designation in more detail. The role and form of Croskery Road is also subject to decisions regarding intersection controls on the adjacent Mill Road project.	N/A

[6] Condition 17(b) for NoR D1, D3, D4 and D5. Condition 18(b) for NoR D2.

Ref	Request / Advice	Response	Relevant Document / Section
	• *is the change in layout in response to NOR D4 or considered to be a separate business as usual project* • *what are the implications if the intersection is not altered prior to implementing NOR D4* • *whether any localised widening is required and whether it should be included in the NOR D4 designation.*	For the purpose of the Drury Arterial Network modelling, we assumed such an upgrade could be in place before or at the same time as NoR D4. The future year models include a number of network upgrade assumptions in order to provide plausible forecasts for the growth expected. That location is therefore subject to other studies and the upgrade assumed for modelling purposes is not expected to have a significant impact on the required corridor width, nor the assessed effect of NoR D4.	
11	Please explain what effects on the transport network may be under or over-stated in the NoR due to the difference between the traffic model and the NoR design for the Ōpāheke N-S arterial intersections with Walker Road and Ponga Road (NoR D4). *<u>Explanation:</u> In the traffic model, the Ōpāheke N-S arterial intersections with Walker Road and Ponga Road are assumed to be signalised intersections. However, the designation layout includes roundabouts at both intersections. While we appreciate that the detail around intersection design and control will be dealt with through the design phase, the traffic modelling includes a sizeable delay at the Ponga Road intersection (more than 3 minutes).* *Our concern here isn't related to the potential footprint at these particular intersections, as a roundabout presents a conservative approach, but the footprint about the upstream and downstream signalised intersections may alter, as the level of delay included in the traffic model may be pushing demand away from the corridor and onto alternative routes.* *Some feedback on possible impacts to the NOR D4 designation is worth teasing out should modelled constraints (high delays along the route) be reduced.*	As part of the indicative design, both intersection forms were tested. While roundabouts were favoured for safety and efficiency, walking and cycling provision could be preferable via signals. Therefore, the final intersection design and controls will be decided at detailed design phase. Under conditions where fewer delays are present than modelled, more trips could be attracted to Ōpāheke N-S arterial, along with less traffic on other routes such as Mill Road and Great South Road. Although it is feasible that there is less delay at the Ponga Road intersection, it is not the aim of the Project to provide uncongested road conditions during the commuter peaks (with priority for PT and walking/cycling facilities). The full build-out models (2048+) have high delays for traffic during the commuter peaks in a large number of locations, so such delays in the network are to be expected. Additionally, as the Ōpāheke area develops, there could be additional collector-road intersections on the Ōpāheke North-South FTN arterial south of Ponga Road or additional northbound delay at Walker Road. These intersections would add additional travel time to north-south movement, offsetting any reduced delay at the Ponga Road location. Within the context of these future uncertainties, it is not considered that these model uncertainties reflect an adverse effect being materially under-stated. We have undertaken a sensitivity test in the model[7] on the traffic signal settings to reduce the northbound delay on Ōpāheke North South FTN Arterial. As identified by Council in the request (number 11), the model showed reasonably high delays at the Ōpāheke North South FTN Arterial/Ponga Road intersection in the full build (2048+) AM peak model. The model assumed traffic signal control at this location, although other forms (such as a roundabout) could be implemented. The test involved altering the traffic signal settings to reduce that northbound delay to identify any potential wider network effect. A roundabout (instead of signals) could give different modelled delays. However, the test is considered representative of a scenario with less delay, whatever intersection form is ultimately implemented. This test showed a potential increase in northbound am peak flows of 211 passenger car units (equivalent to just under 200 vehicles per hour). This increase was due to vehicles diverting from parallel north-south routes, mainly Mill Road, and to a much lesser extent from Great South Road. That diversion was a localised impact, with limited change north of Hunua Road. For example, the model indicated an increase of only some 30 vehicles per hour on Hunua Road and some 20 vpd on Ōpāheke Road. The potential effect on the wider network is therefore not expected to be significant.	N/A
12	Please detail the extent to which documents lodged for NoR D4 will be updated to confirm the proposed closure of the Sutton Road at-grade rail crossing, with the traffic model used to inform the supporting transport assessment placing particular importance on the Ōpāheke N-S arterial being protected to allow for this network change (NoR D4). *<u>Explanation:</u> The SATURN traffic model assumes that Sutton Road is closed when the Ōpāheke N-S arterial is operational. We support the closing of this level rail crossing, noting that it presents a safer outcome and aligns with the Vision Zero safety strategy, but highlight the need for this assumption to be*	We agree that a positive effect of NoR D4 is that it allows for a range of potential wider-network changes, such as the potential closure of the Sutton Road at-grade crossing and extended bus lanes on Great South Road etc. However, they remain independent projects (with the closure of Sutton Road primarily required by future rail projects) and it is not intended to link NoR D4 with wider network projects through the designation conditions (or update any of the documents associated with NoR D4 to reflect this closure).	N/A

[7] Note that the testing was undertaken on a slightly different version of the model. However, the same issue was seen in both versions of the model and the same outcome is expected.

Ref	Request / Advice	Response	Relevant Document / Section
	addressed in the AEE for NoR D4 and proposed designation conditions, noting that the closure of this connection places additional importance on adjacent sections of the NOR D4 corridor being protected to allow for this network change.		
13	Please provide clarification on whether turning lanes and/or intersection improvements along the urban section of Ōpāheke Road may be required due to the increase in vehicle movements resulting from (NoR D5). *<u>Explanation:</u> The traffic modelling suggests predicts a significant increase in traffic on Ōpāheke Road into the future. For example, the base traffic model assumes some 150 vehicles northbound about Boundary Road, with this predicted to increase to some 750 vehicles per hour. While the proposed designation includes several vehicle crossings, where localised works are required, we ask for clarification on the extent to which turning lanes and localised intersection improvements have been captured within the analysis. For example, right turning storage space will likely be required to ensure right turning vehicles can stack safely based on the increased demand predicted along this route.*	The intersection improvements on Ōpāheke Road (urban section) are limited to walking and cycling improvements. We do not preclude that such future localised intersection improvements might be necessary as the area develops. Ōpāheke Road will become significantly busier due to growth in Ōpāheke. It is not anticipated that Ōpāheke Road will significantly increase its traffic capacity beyond a general two lane arterial. Any treatments at specific locations would therefore likely be localised, and dependent on redevelopment and other network pressures, not as a result of this Project.	N/A

(3) Noise and Vibration

Table 3: s92 Response - Construction Noise and Vibration

Ref	Request	Response	Relevant Document / Section
Construction Noise and Vibration			
14	The preamble to Table 4-1 of the CA notes that the long term construction noise limits of the AUP have been adopted but the night time levels reported in Table 4-1 do not include the described -5dB correction. Please clarify why this is the case.	There is a discrepancy between NZS 6803 and AUP limits for night time levels. E25.6.1(3) of the AUP states "the noise from any construction work activity must be measured and assessed in accordance with the requirements of New Zealand Standard NZS6803:1999 Acoustics – Construction noise. Construction work is defined in New Zealand Standard NZS6803:1999 Acoustics – Construction noise." Rule E25.6.27 details construction noise limits for different times of the day. Part 4 of this rule states that where the duration of construction work will be longer than 20 weeks the limits should be decreased by 5 dB in all cases. However, this differs from NZS6803 where only the daytime limits are reduced by 5 dB. The AUP appears to have misinterpreted the standard. The limits in Table 4-1 of our report align with the long term duration noise limits detailed in NZS6803. This change has no material effect on the outcomes of the construction noise assessment as any noisy works would not comply with either 40 or 45 dB L_{Aeq}.	N/A
15	Please explain whether the exceptions to construction noise outlined in E25.6.29(3) (page 10 of the CA) apply to the Project? *<u>Explanation:</u> Page 10 of the CA discusses Rule E25.6.29(3) of the Auckland Unitary Plan – Operative in Part (AUP) and identifies situations where the AUP construction noise levels between 7am and 10pm do not apply. These include:* *(a) …*	The exceptions to construction noise outlined in E25.6.29(3) do not apply to this Project. The exception in this rule applies to short duration night-time works in roads but not to longer duration works as proposed for the Drury Arterial Network.	N/A

Ref	Request	Response	Relevant Document / Section
	(b) Because the nature of the works and the proximity of the receivers the noise generated cannot practicably be made to comply … or *(c) for planned works, a copy of the works access permit issued by Auckland Transport or approval from the NZTA is provide to the Council five days prior to work commencing; or* *(d) for planned works where the works will take more than 8 hours to completed a construction noise and vibration management plan is provided to the Council no less than five days prior to work commencing …* *Could the author of the CA please comment on how the above three points apply to the Project? Is the Project required to comply with the AUP limits?*		
16	Please explain what thought has been given to protect construction of the road corridors against reverse sensitivity effects arising from future development. *<u>Explanation:</u> In the last paragraph of the summary to the Assessment Methodology (Section 5) the CA notes that "Construction will occur several years in the future. Therefore, receivers may have changed by then, with new receivers in the vicinity due to increased development. Construction noise and vibration effects will need to be reassessed at the time of construction".* *While we understand this to be a practical solution to address the unknown, this does not appear to fulfil the purpose of the designation, being route protection for the local arterial roads. If the future reassessments result in significant adverse effects, could this compromise the project through reverse sensitivity?*	It is not uncommon for works on roads to occur within urban environments, and the potential effects of this (including reverse sensitivity effects) have been assessed, and will be mitigated, as part of the Project. The proposed road upgrades and new roads are required to support the planned growth in Drury-Ōpāheke. Without the Drury Arterial Network, the transport infrastructure will be insufficient and the planned growth cannot occur. As outlined in our description of the existing environment, it was assumed for assessment purposes that generally construction will take place before or in parallel with the urbanisation of the area, as this is required to support the growth. The proposed alteration to existing, and new designations signal the upgrade and construction of the roads. In each NoR there are existing properties right on the boundary of the designation. As the assessment assumes construction works can occur right up to the boundary of the designation the worst case effects have already been considered for the construction methodology provided. Whilst new dwellings may be constructed in the future, the effects they experience will be no worse than those already described in the report. The CNVMP will include all receivers present at the time of construction. When construction does take place and new houses are present, then they will be included in the CNVMP at the time. The recommended conditions reflect the management approach to construction noise and vibration that will be flexible enough to respond to any new buildings that may be present at the time of road construction. There is no risk to this Project to consider future receivers this way as effects of construction are covered over an extended area and not just at existing receivers.	N/A
17	Please elaborate on the potential effects of construction works at night, particularly in relation to bridge demolition and construction, and noise from machinery (millers, trucks and pavers) operating on existing roads. *<u>Explanation:</u> Section 5.1 provides commentary on activities and duration. It raises night works, which may include the noisiest activity of pavement construction. Any night work has the potential to result in the largest effects on neighbours and is touched on in Section 5.6.6. For previous projects, bridge demolition and construction were often undertaken at night, both of which require major items of plant and occur for significant durations. Likewise, working on existing roads, of which most of the designations relate to, often requires night works with the use of noisy machinery including millers, trucks and pavers. Given the large machinery often required at night, the potential for adverse effects and size and resources available to the design team, could the potential effects of night works be significantly elaborated upon?*	According to the current construction methodology, night works are expected to be rare and limited. The majority of construction works can happen during the day. Night works are discussed further in Section 5.6.6 of the Assessment of Construction Nosie and Vibration Effects. If night-time work occurs then the CNVMP provisions would be used (e.g. the use of site specific Schedules) to manage and mitigate all activities' noise emissions to achieve reasonable outcomes.	Section 5.6.6, Assessment of Construction Noise and Vibration Effects, Version 1, January 2021
18	Please assess the construction noise effects arising from night time works.	Please refer to above comments regarding night time noise	N/A

<table>
<tr><th>Ref</th><th>Request</th><th>Response</th><th>Relevant Document / Section</th></tr>
<tr><td></td><td><u>Explanation:</u> Table 5-4 of the CA provides an assessment of day time effects from various levels of construction noise and is used throughout the CA as a basis for determining effects. Given the expectation of night time works, could some form of assessing the resulting effects be provided?</td><td></td><td></td></tr>
<tr><td>19</td><td>Please provide noise data for the large items of plant identified in Table 6.1 of the CA, including mobile concrete pumps and trucks, mobile cranes used for bridge construction, graders and kerb machines.

<u>Explanation</u> Table 5.1 of the CA provides noise data from some of the plant considered in the analysis. Table 6.1 goes on to identify other large items of plant not considered, including mobile concrete pumps and truck, mobile cranes used for bridge construction, graders and kerb machines. Could noise data please be provided for this additional plant?</td><td><table><tr><th>Equipment</th><th>Source BS5228</th><th>Sound Power Level (dB L_{AW})</th></tr><tr><td>Grader</td><td>D3.75</td><td>112</td></tr><tr><td>Kerb Machines</td><td>C4.28</td><td>103</td></tr><tr><td>Concrete Truck</td><td>C4.27</td><td>107</td></tr><tr><td>Cranes</td><td>C4.41</td><td>99</td></tr></table></td><td>N/A</td></tr>
<tr><td>20</td><td>Please clarify whether the plant identified in Table 5.1 of the CA is a complete list, or if additional plant will be required.

<u>Explanation:</u> Other, noisy plant often required for road building includes motor scrapers, millers, concrete saws and breakers.</td><td>The plant identified in Table 5-1 is based on the indicative construction methodology provided by the Project team. Section 5.2 makes note that the equipment list is to be updated and reassessed at detailed design stage. Motor scrapers, millers and concrete saws are not currently specified in the indicative construction methodology. As future design phases progress, different machinery may be required. The CNVMP outlined in Condition 20[8] will be used to manage the effects from construction machinery</td><td>Table 5-1 and Section 5.2, Assessment of Construction Noise and Vibration Effects, Version 1, January 2021

Condition 20 for NoR D1, D3, D4 and D5. Condition 21 for NoR D2.</td></tr>
<tr><td>21</td><td>Please explain what type of piling is expected in construction of the bridges. Given that proposed bridges are often over streams, please clarify whether piling require driving or casings to be vibrated in or out. If so, does the assessment allow for this?</td><td>Bored piling is identified in Table 5-1 of the construction assessment and is allowed for within the assessment.

Typically, piling works will utilise temporary steel casing to protect the bored hole from collapsing, especially at the softer upper layers. These steel casings are normally vibrated down to the top of the rock level. Once the pile hole is bored and concrete placed, the steel casing can be extracted or left in place. Further design work and ground investigations will be needed to confirm the final pile design which will confirm the piling method to be used.</td><td>Table 5-1, Assessment of Construction Noise and Vibration Effects, Version 1, January 2021</td></tr>
<tr><td>22</td><td>Please check and confirm the construction noise anticipated from the plate compactor

<u>Explanation:</u> Throughout the CA, it is the plate compactor that results in the largest effects. Table 5.1 reports this as one of the noisiest pieces of plant anticipated for construction with a sound power level of 110dBA. Based on field measurements of handheld plate compactors undertaken by Hegley Acoustics, this level appears high.</td><td>Whilst not the largest item of equipment used, plate compactors are expected to be working at locations closest to the designation boundaries, and in turn closest to receivers. As such it is considered appropriate to use for the assessment.

The noise level provided is considered appropriate.</td><td>N/A</td></tr>
<tr><td>23</td><td>Please clarify whether setback distances from plant are required for night time construction.

<u>Explanation:</u> Tables 5-1 and 5-2 give the respective setback distances from individual and groups of plant to comply with the day time limit of 70dB LAeq. Given night time works are anticipated, is a similar setback distance required for night time?</td><td>We do not consider it necessary to provide set back distances at this stage.

Night time works are expected to be rare and limited and will be managed by the CNVMP(s) and Schedules

Should night works be required a Schedule will be produced that sets out predicted noise and vibration levels from the actual equipment for any affected receivers and details the BPO if required.</td><td>N/A</td></tr>
</table>

[8] Condition 20 for NoR D1, D3, D4 and D5. Condition 21 for NoR D2.

Ref	Request	Response	Relevant Document / Section
24	Please comment on whether the requirements of Waka Kotahi (Waka Kotahi State highway construction and maintenance noise and vibration guide (version 1.1, 2019) referenced in Condition 20 to NoR D1 should be included in the appendices to the conditions? (NoR D1) *<u>Explanation:</u> Condition 20 to NoR D1 requires the CNVMP to be undertaken in accordance with Waka Kotahi State highway construction and maintenance noise and vibration guide (version 1.1, 2019), but does not make this document available to view within the conditions.*	A reference to Waka Kotahi State highway construction and maintenance noise and vibration guide within the conditions is preferred to allow for updated Waka Kotahi documentation in the future. It is not necessary to append the requirements to the conditions as these are readily accessible online.	N/A
25	Please explain why the requirements of the Schedules in the CA (Section 5.6.2) are different to those of the CNVMP (Section 5.6.1).	The CNVMP and Schedules are two different documents serving different purposes, therefore it is appropriate for the requirements of these documents to be different. The CNVMP covers a wider scope than the Schedules. The Schedules are typically an appendix of the CNVMP specific to a construction activity or specific property.	N/A
26	Please explain whether SGA has considered developing a set of guidelines for the relocation of neighbours during times of high noise at this stage of the project to provide an understanding of how this is anticipated to work. *<u>Explanation:</u> In 5.6.3, the CA describes the hierarchy of noise mitigation measures before going on to note the limitations of relocating neighbours. Section 5.6.4 is the comparable vibration section.*	We do not consider further guidelines are necessary. The CNVMP and Schedules will set out how neighbours will be engaged with and how offers of relocation will be undertaken at the appropriate time if relocation is required.	N/A
27	Please expand on the noise and vibration effects associated with demolition in any of the sections of the Project. This is not discussed in the construction methodology within the CA or the AEE.	Demolition will typically use excavators with various attachments to suit the job, such as hydraulic breakers, ripping bucket, or hydraulic crushers. High noise levels can be generated by the use of this equipment, however, this is typically intermittent and over a short duration. If demolition of a building or structure is required in close proximity to a receiver, then the effects associated with demolition will be similar to those from construction as assessed in the report (as they have similar noise levels). Mitigation and management measures will be determined if required during production of the CNVMP.	N/A
28	Please expand the assessment of construction noise effects within the CA to consider the following: a) The noise levels that each property predicted to more than 70dB LAeq was to receive. For instance, Section 6.2.1.2 says that with mitigation the highest levels of noise would be 75 – 80dB LAeq. It is not clear however, whether this level applies to all 22 properties or whether some are exposed to lower levels. b) The addresses of the properties that are predicted to receive over the 70dB LAeq adopted limit. This is requested as it will aid with determining which properties should be considered for notification, and which is discussed further below: c) When assessing effects of the various levels, it would be useful to understand the duration of such levels. The CA explains that construction noise will vary with worst case levels expected for around three days. However, given that the construction periods of the various NoRs are up to four years, a more detailed investigation on the durations is requested. d) A discussion on expected night-time levels and durations is requested (cross-reference with item 13 which also seeks similar information) e) The assessment provided is in terms of LAeq. Why has LAFmax been omitted? If it has been omitted from the assessment, should the LAFmax form part of the conditions? *<u>Explanation:</u> The sections relevant to each NoR on Construction Noise Effects are confined to reporting the highest day time level to the most affected property/ properties and the*	a) Section 6.2.1.1 specifies the total number of properties exceeding 70dBA (25) and Section 6.2.1.2 identifies the number of properties still exceeding the 70dBA with mitigation applied (22). With the highest noise levels between 75-80dBA with mitigation. This approach is consistent throughout each NoR. b) The list of properties is included in Appendix C. c) We can not provide further detail on duration of noise levels at this stage of the Project. That level of detail will be unknown until a contractor is onboard and the construction methodology finalised. For some of the NoRs this will be in 10 to 15 years' time. However, a reasonable assessment has been made noting that the road construction is linear, and each receiver would only be affected for part of the overall construction duration. d) Please refer to previous comments on night works. e) L_{Amax} is not predictable as it depends on the specific items of equipment and how they are being operated. Typically L_{Amax} is 15dB higher than L_{Aeq}. Therefore, compliance with the L_{Aeq} criteria is likely to indicate compliance with the L_{Amax} criteria.	Section 6.2.1.1 and 6.2.1.2, Assessment of Construction Noise and Vibration Effects, Version 1, January 2021 Appendix C

Ref	Request	Response	Relevant Document / Section
	number of properties that can expect to receive day time levels above 70dB LAeq. For assessment, it would be useful to understand the above.		
29	Please explain how significant vibration effects that exceed the damage protection threshold of DIN 4150 would be avoided, remedied or mitigated by the project, and who would undertake this. *<u>Explanation:</u> Throughout the NoRs, there are 83 of sites where vibration is reported to exceed the damage protection threshold of DIN 4150. The CA advises pre and ongoing monitoring of such sites but offers no view on whether such damage is an acceptable outcome for the project and comment on this adverse effect is requested. Comment is also requested on who would remediate any damage. While it is expected that much of this would be addressed through the CNVMP, it would be useful if the CA at least offered guidance on how any serious effects would be avoided, remedied or mitigated.*	Properties predicted to exceed the DIN 4150 vibration criteria for cosmetic building damage will have a building condition survey before construction takes place and another survey once construction has finished to determine if any cosmetic damage has been caused by the Project. Any cosmetic damage would be remediated as part of the Project by the Requiring Authority as is standard practice. Although current predictions indicate vibration could exceed the cosmetic building damage criteria at a number of receivers, this may not be the case in reality. It is difficult to predict construction vibration effects at this early stage as there are a number of variables that are not yet known or that are likely to change. For example, the ground conditions are unknown, and this will be major factor in vibration transmission. Different construction methods may be used, and vibration source energies will vary depending on the precise equipment selected. Vibration monitoring will be carried out when works begin on site to determine actual equipment vibration levels and the attenuation provided by the local ground conditions. The emission radii will then be updated accordingly. This is standard practice. It should be noted that even if the cosmetic building damage criteria are exceeded it does not necessarily mean damage will occur. Section 5.6.4 of the report sets out some vibration mitigation/ management measures. These will be further developed through the CNVMP. We do not anticipate “serious effects” (e.g. structural damage) relating to construction vibration.	Section 5.6.4, Assessment of Construction Noise and Vibration Effects, Version 1, January 2021
30	Please clarify the approximate durations where vibration is anticipated to exceed the amenity criteria levels of DIN 4150.	It is not possible to provide this level of detail at this stage of the Project.	N/A
31	Please identify all buildings predicted to be exposed to vibration levels exceeding the amenity criteria of DIN 4150, and the duration that these receivers would be exposed to vibration exceeding these criteria. *<u>Explanation to 25 & 26:</u> In addition to the buildings predicted to receive vibration levels in exceedance of DIN 4150, there are a number of additional buildings that are predicted to be exposed to vibration levels that exceed the amenity criteria.*	A table of addresses predicted to exceed the amenity criteria is included in Appendix D. Note that some addresses have multiple buildings. Consultation nearer the time of construction will determine which buildings will be occupied. As per the previous response it is not possible to determine durations at this stage. The amenity criteria are only applicable to occupied buildings.	Appendix D
32	Please explain whether the use of construction yards across the project requires consideration from a noise and vibration perspective.	Construction yards are referred to as construction compounds within the Assessment of Construction Noise and Vibration Effects. These have been included in the assessment of effects. Construction compounds will be in place for longer but are generally less noisy than other construction works. Noise from construction compounds will be managed by the CNVMP and Schedules where required as outlined in Section 5.6 of the Assessment of Construction Noise and Vibration Effects.	Assessment of Construction Noise and Vibration Effects, Version 1, January 2021
Operational Noise and Vibration			
33	Please expand upon the statement in Section 4.1.1 of the CA that commercial and industrial building do not fall within the definition of a Protected Premises and Facility (PPF) as described by NZS 6806. It is our understanding that section 1.4 of NZS 6806 neither includes such uses nor excludes such uses.	Although Section 1.4 of NZS 6806 does not specifically exclude commercial or industrial buildings it states that the standard applies to a limited range of PPFs used for **noise-sensitive activities**. Commercial and industrial buildings, other than those specified in section 1.4.1 of the standard, do not typically contain noise-sensitive activities and are therefore excluded from this assessment. This is also supported by the definition of an “activity sensitive to noise” in the AUP, which excludes businesses and commercial premises.	N/A

Ref	Request	Response	Relevant Document / Section
34	Please clarify whether consideration needs to be given to controlling road traffic noise on future residential areas to levels considered appropriate for residential amenity. Please explain why the Operational Noise Assessment ('ONA') assessment is limited to existing and consented PPF's under NZD 6806, given the limitation of these standards in addressing a changing environment. *<u>Explanation</u>: The ONA has included existing PPFs and those with building consent but which are yet to be built but excludes are all future properties. It is recognised that this is the approach described by NZS 6806. However, most roading projects that NZS 6806 relates to are in either a rural environment or a built up area where the potential for future dwellings is limited. The proposal differs in that the purpose of the intended roads is to facilitate large numbers of new residential dwellings. This being the case, does consideration need to be given to controlling road traffic noise to future residential areas to levels that are considered appropriate for residential amenity? Essentially, is the Project creating a problem for someone else to fix as suggested by section 5.4?* *In relation to the above point, Auckland Council Practice Note RC 3.2.23 describes assessing noise to sites based in their development potential as described by the AUP. While the practice note confines itself to NZS 6802 and resource consent applications, please explain whether you consider this approach is appropriate for the Project?*	In assessing noise effects, we applied the standard assessment methodology required by the AUP. Across the different NoRs there are some dwellings that have been assessed that are adjacent to the proposed designation boundary. This is considered as representative of future dwellings that may be constructed near to the new and upgraded road corridors. Therefore, the traffic noise levels will be similar to those already assessed at these dwellings. Mitigation, where required, is typically a low noise road surface which will benefit future receivers as well as existing receivers. Section 5.4 does not suggest the Project is creating a problem for someone else to fix. It indicates the design of new developments should take account of potential traffic noise effects. This is no different to a developer building next to any other busy road in a rural or residential zone in Auckland except that they will know what potential traffic noise to expect from the Project as noise level contours for the design year are available to inform future development. Importantly, Council has zoned the land Future Urban and the roads are required to enable the development of the future residential areas. That development could not take place without the roads and road improvements enabled by this Project. The practice note does not apply to this assessment for several reasons. NZS6806 (which the AUP applies to roads within the Auckland Council area) clearly excludes mitigation of future developments unless the location of such development is known (e.g. when building consent has been obtained). Mitigation for individual PPFs relates to the location of the facade (including height and location of noise sensitive rooms), and therefore designing specific mitigation for an unknown receiver is impractical and potentially ineffective. Further mitigation (e.g. fences) may in fact limit access to development and be contrary to the urban design outcomes sought. Applying low noise road surface across the Projects is the most appropriate mitigation.	Section 5.4, Assessment of Traffic Noise and Vibration Effects, Version 1, January 2021
35	Please explain whether consideration has been given to achieving the BPO described in s16. Are there areas of the Project where mitigation could easily and effectively be installed to the benefit to PPFs regardless of the level before such mitigation?	Different mitigation methods have been considered for different areas of the Project including low noise road surface and barriers. Barriers do not work in some locations due to topography and may not be in keeping with the urban design approach or access requirements for the future developments. Without knowing if future developments adjacent to the Project will be single storey or multi-storey and where exactly the facades of the future developments will be, the effectiveness of any barrier cannot be determined. Low noise road surface is already proposed for the majority of the arterial roads which will benefit both existing and future receivers.	N/A
36	Please explain the rationale underpinning the timeframe of 2048 is used as a design year in Section 4.1.3. *<u>Explanation:</u> In relation to the design year, Section 4.1.3 makes the point that the opening year for the project is yet to be confirmed before going on to describe why 2048 was selected. Is the SGA able to confirm that 2048 is generally in accordance with the requirement of NZS 6806 for it to be 10 – 20 years after the completion of a road*	Whilst no opening year is confirmed, 2048 is expected to be 10 – 20 years after the completion and therefore in keeping with NZS 6806 requirements.	N/A
37	Please provide further commentary on the risk that traffic flows exceed those anticipated due to some road alignments not being constructed, and whether the effects associated with these risks could lead to a different conclusion being reached in respect of designation the project. *<u>Explanation:</u> The ONA notes that the design year does not represent the highest possible traffic flows which, it explains, might eventuate should some of the roads not be constructed. Is the author able to provide some commentary on the risk that any realistic alternatives pose to the Project? Are there scenarios where traffic flows/ noise levels would increase significantly to the point that a different conclusion would be reached with respect to designating the Project*	There is no significant risk of different effects arising, because any change in traffic volumes is unlikely to be significant enough (such as doubling or halving of traffic volumes) to alter outcomes. A change in traffic volume of 1/3 would result in a 1 dB change, which is unnoticeable.	N/A
38	In relation to comparing the noise effects against the Do-nothing and Do-minimum scenarios/baselines used for the ONA:	a) The do-nothing levels are based on the Transport model of "Likely future without Drury Projects" also referred to as "2048+ without Drury" which considers the growth of the surrounding area with other projects planned such as Mill Road and Drury Rail stations to be implemented. These traffic volumes	N/A

Ref	Request	Response	Relevant Document / Section
	a) Please justify the use of Do-nothing flows as a baseline for the operational noise effects assessment, given that the Do-nothing noise levels are based on full residential development of the Future Urban area, which the ONA identifies as not being possible without the Project. b) Please clarify the difference in traffic flows between the Do-nothing and Do-minimum scenarios. c) Please explain whether the calculation method used for the Do-nothing noise levels lead to any issues with comparing the Do-minimum levels, which the assessment relies upon. d) Please explain why the analysis methodology explained in Section 5.1.1 of the ONA does not apply to interrupted vehicle flows, and how this methodology addresses intersections, which introduce interrupted flows. e) Table 5-2 demonstrates the accuracy of the modelling through a comparison of a measured level of the existing noise at 116 Waihoehoe Road with a predicted level of road traffic noise at the same point. The conclusion is that the difference of 0.6dB confirms the accuracy of the model. Section 6.1.3 discusses the same measurement but describes the dominant sounds as being birdsong and farm animals with road traffic noise being audible at a distance. Did road traffic noise control the measurement making it a good basis for calibrating the noise model? *<u>Explanation</u>: NZS 6806 describes the Do-nothing scenario as the predicted noise levels at design year assuming the Project did not go ahead. As Section 4.1.4 explains, this assumes full growth of the surrounding area (for which the Project is intended to facilitate). Does this mean that the Do-nothing flows are the same as the Do-minimum flows?* *Based on the answer to the above being yes, the ONA goes on to point out that the Do-nothing flows could not occur as the existing roads could not accommodate that volume of traffic before confirming that the reported do- nothing noise levels are therefore not a feasible option. However, the predicted Do-nothing levels are then used as the basis of the analysis. In simple terms, the use of the Do-nothing noise levels by NZS 6806 is to allow a noise level comparison at a set point in time with and without the Project to highlight its effects. In this instance, this does not appear to be possible as the Do-nothing noise levels are based on the full residential development, which cannot occur without the Project. As such, it would appear that the differences between the Do-nothing and the Do-minimum are limited to road width, traffic speed and road surface. The anticipated change in traffic flow resulting from the upgraded road network (which is the aim of the Project) is not addressed by the analysis. Is this a correct interpretation of the assessment and if so, can it be justified?*	are supplied by the transport engineers and reflect the requirements of NZS6806 for the Do-nothing noise environment. b) The Do-minimum flows are generally lower than the Do-Nothing flows. The reason is that the Do-nothing scenario assumes that all traffic from the developments would travel on existing roads only. This is a theoretical scenario that would not occur, nevertheless, a transport model reflecting this situation was prepared (refer (a) above). The Do-minimum scenario includes the Drury Projects which enables traffic volumes to spread out over existing, upgraded, and new, roads. c) Following the requirements of NZS6806 and basing the assessment of altered roads on the comparison of the Do-nothing and Do-minimum scenarios has limited effect on the assessment of the Drury Arterial Network Projects. Only "altered roads" are potentially affected. Of the five NoRs assessed, four result in a full assessment or all PPFs receive noise levels in Category A only. Only NoR D3 would not be assessed as an "altered road" because the relevant noise level change is not sufficiently high to qualify as an "altered road" in accordance with NZS 6806, which in turn affects the mitigation requirements. Of the PPFs receiving noise levels above Category A, several are likely to be removed as they are inside another Drury Arterial Network NoR area. Overall, following the requirements of NZS 6806 results in an equitable assessment of all PPFs affected by the Projects, and the recommendations are unlikely to change if the approach was changed to diverge from the Standard approach. d) The assessment has been carried out in accordance with the standard which does not include noise at intersections. The calculation method commonly applied in New Zealand is the Calculation of Road Traffic Noise, which also does not account for interrupted traffic flows. The majority of intersections associated with the Projects already exist, and the assessment of the existing and Do-nothing scenarios also does not account for these intersections. Given that the predictions relate to a comparison of noise levels, the assessment has been equally applied to all scenarios. It is noted that noise at intersections is likely to be similar to free flowing traffic when assessing the 24-hour LAeq as the increase in noise level from accelerating after a stop is balanced against a slower speed and idling of vehicles at the intersections. e) Road traffic was the controlling noise during measurements at 116 Waihoehoe Road with birdsong and farm noise being audible when no traffic was present. Birdsong and farm noise levels were lower than traffic noise and it was therefore a good basis for calibrating the model.	
39	Table 5-2 demonstrates the accuracy of the modelling through a comparison of a measured level of the existing noise at 116 Waihoehoe Road with a predicted level of road traffic noise at the same point. The conclusion is that the difference of 0.6dB confirms the accuracy of the model. Section 6.1.3 discusses the same measurement but describes the dominant sounds as being birdsong and farm animals with road traffic noise being audible at a distance. Did road traffic noise control the measurement making it a good basis for calibrating the noise model?	See response above in 38-e.	N/A
40	Has the applicant considered providing a conclusion on the existing noise environment for each of the NoRs?	The information included about the existing environment is considered appropriate for the assessment. A conclusion in each section is unnecessary.	N/A

(4) Urban design and Landscape and visual effects

Ref	Advice received	Response	Relevant Document / Section
AV1	The proposed Urban Landscape Design Management Plan conditions appear to be quite generic, and do not take into account the place-based recommendations made in the Urban Design and Form Effects and Assessment of Landscape and Visual Effects. Further consideration will need to be given to these matters later in the NoR process (Project-wide).	Not required.	N/A

(5) Arboriculture

Table 4: s92 Response - Arboriculture

Ref	Request	Response	Relevant Document / Section
41	Please confirm whether the proposed replanting will include a calculation for replacing the ecosystem services including sequestered carbon loss that will result from the proposed tree removals (Project-wide). *Explanation: While the Applicant has offered to provide 'mitigation' for the proposed tree removals, by definition, mitigation acknowledges that there is a lasting negative effect, and it is preferred that an approach which remedies the impact of tree removals is adopted, where the remedial planting accounts for lost future environmental benefits, including the eco-system services of soil / erosion protection, storm-water reduction, wildlife habitat, and sequestered carbon as outlined in the Applicant's tree values checklist.* *In consideration of the ecosystem services provided by the trees proposed to be removed for these designations, and specifically carbon sequestration, the loss will also require appropriate remedial planting to achieve the stated objective of central government to be 'carbon neutral' by 2050 and also to align with the sustainability goals of the Auckland Council's 'Low Carbon Strategic Action Plan'.* *In regards to carbon sequestration, the remedial planting needs to match or exceed the value of total stored carbon which would have been achieved by the existing tree asset at the end of the forecast period. In this instance the forecasted carbon sequestration value is for 30 years, which was chosen as this is a realistic average life span for the trees proposed for removal, and 2050 is the goal that has been set by the government for carbon neutrality under the Climate Change Response (Zero Carbon) Amendment Act.* *The carbon calculation can be achieved by using the i-Tree Development Team, 2020 forecasting tool to estimate the lost future benefits arising from the proposed tree removals.* *The remedial planting will need to achieve this same value of stored carbon by 2050 if carbon neutrality is to be achieved, and the actual effects of tree removal are to be addressed in a sustainable fashion. Please refer to this link provided for your assistance https://www.itreetools.org/*	No, we are not proposing a calculation at this time. This is because the majority of any vegetation removal required to facilitate the Projects and therefore any replanting works will need to be authorised through the regional resource consents for the Projects, which will be sought in the future at detailed design (i.e. 10-20 years from now). We consider it is more appropriate to consider replanting matters holistically at that time. We have added a new clause (condition 23[9](c)(viii)) to the Tree Management Plan condition so that any measures developed under that plan are consistent with any equivalent measures proposed via resource consent conditions granted for the Project in relation to managing construction effects on trees: *c) The Tree Management Plan shall:* *(iii) demonstrate how the tree management measures (outlined in A – C above) are consistent with conditions of any resource consents granted for the project in relation to managing construction effects on trees.*	Appendix A, conditions: • For NoR D1, condition 25 • For NoR D2, condition 26 • For NoR D5, condition 23

[9] Condition 25 for NoR D1, Condition 26 for NoR D2, and Condition 23 for NoR D5.

(6) Historic Heritage

Table 5: s92 Response – Historic Heritage

Ref	Request	Response	Relevant Document / Section
42	Please explain how the discovery and subsequent management of non-Māori artefacts found during the development of the arterial network will be undertaken, particularly in relation to the redevelopment of bridges over the Ngākoroa and Hingaia streams (Project-wide). *<u>Explanation:</u> The potential for finding, and subsequent management of, non-Māori artefacts found during the development of the arterial network, should be addressed in the AEE. Matters that should be considered include conservation treatment (where needed) and eventual ownership or intended repository or display of items recovered.* *In relation to NoR D2, the proposed transport corridor crosses the Ngākoroa and Hingaia streams and will involve demolition and replacement of the existing bridges.* *The existing Ngākoroa bridge occupies the site of a series of earlier bridges dating back to (at least) Runcimans bridge of the 1850s. The bridge site is recorded as R12_1171. The effects on this site are not specifically addressed in the historic heritage AEE. They will potentially include modification or destruction of structural elements of earlier bridges or abutments and of earlier road/track approaches, both of which exist beneath the existing bridge.* *There is also potential for assemblages of artefacts (including waterlogged organic materials) lost or dropped from the bridge to be present in stream bed deposits at this site and that of the Hingaia Stream bridge (R12_1152). Both bridges were extensively used during the New Zealand Wars. The Ngākoroa Stream bridge is close to the site of the Commissariat Redoubt and wharves, Runciman's homestead and wharf (which was also used to ship coal from Drury) and a Tauranga waka (Māori canoe landing site).* *We consider that the effects on the Ngākoroa and Hingaia bridge sites including potential artefact finds and how they will be managed are not fully addressed in the application.* *The D2 and D5 NoRs are adjacent to or within the extent of cemeteries (St Johns Church graveyard – D2; Papakura Cemetery – D5). While it would appear unlikely that unmarked or unrecorded graves will be impacted, this possibility should be addressed since it is not uncommon in historic cemeteries to find unrecorded burials such as pauper graves in unexpected locations.*	Methods for the discovery and management of artefacts are set out in the proposed Heritage and Archaeological Management Plan condition 22[10] (HAMP). The HAMP will be prepared in consultation with Council, HNZPT and Mana Whenua prior to the Start of Construction for a Stage of Work. The HAMP condition on the proposed designations specifically covers: • The names of agencies that will need to be involved should discoveries be made • Specific areas to be investigated, monitored and recorded to the extent these are directly affected by the Project • Inclusion of HNZ authorities or those to be sought. The sites near the Ngakoroa and Hingaia Streams are known sites and an HNZPTA authority will be sought at detailed design once the construction methodology has been confirmed and effects on these sites is better understood. As there are a number of sites within the NoR D2 Project area, an authority will be sought for the Project works throughout the area (or stage of works). The methodology for the discovery of artefacts associated with these sites will be included in the authority application and within the HAMP. Further information on standard practice for discovery is provided below. Should pre-1900 European material be exposed in the works, these will be the property of the landowner, as per Objective 7 within Heritage New Zealand Pouhere Taongas Statement Of General Policy: the Administration Of The Archaeological Provisions. The conservation of material which requires specialist input, such as waterlogged wood of a bridge structure or cloth, will be managed using standard conservation methodologies with the guidance of the University of Auckland Conservation laboratory who will be contacted as soon as the material is exposed. Once the material is analysed and reported on for the final report under HNZPTA conditions, the material will be offered to the Papakura Museum and similar entities for display. This could include a public Project display cabinet, which the material could help the public engage with tangible evidence of the past of Drury.	Appendix A, conditions: • For NoRs D1, D3, D4 and D5, condition 22 • For NoR D2, condition 23
43	Please explain how the discovery of graves will be managed (NoR D2 and D5). *<u>Explanation:</u> The D2 and D5 NoRs are adjacent to or within the extent of cemeteries (St Johns Church graveyard – D2; Papakura Cemetery – D5). While it would appear unlikely that unmarked or unrecorded graves will be impacted, this*	It is considered very unlikely that unmarked graves will be exposed during works for NoR D2 (St John's Church and Cemetery) and NoR D5 (Papakura Cemetery). As can be seen in the images below from the Drury Arterial Network Historic Heritage Assessment, both Norrie Road (previously Great South Road) and Ōpāheke Road were in place before the graves. No works are proposed with the scheduled site of St Johns Church and Cemetery and minimal works within the edge of the Papakura Cemetery site. Although part of the Papakura Cemetery has been recorded as an	N/A

[10] Condition 22 for NoR D1, D3, D4 and D5. Condition 23 for NoR D2

Ref	Request	Response	Relevant Document / Section
	possibility should be addressed since it is not uncommon in historic cemeteries to find unrecorded burials such as pauper graves in unexpected locations *The discovery and disinterment of burials would potentially have an impact on affected persons, particularly descendants of the individuals interred. This community of interest may include New Zealanders of Pākehā or Māori descent, and/or persons resident overseas.* *In my opinion, the potential effects of the discovery of graves and how they will be managed are not fully addressed in the application and would be of interest to persons who may be affected. For example, it may be appropriate to address identification and reinterment of disinterred individuals, should graves be found.*	archaeological site (Presbyterian section), the graves in proximity to the proposed designation boundary are more recent(see Figure 2 where no graves are shown at this location in 1960). In the unlikely event that graves are discovered during works, this will be managed appropriately. The exposure of graves will be in accordance with a HNZPTA authority which will be sought at detailed design and included in the HAMP. Any exposure will be hand-removed by a suitably qualified specialist with the archaeologist, such as a bioarchaeologist. Stakeholders who determine the reinternment process, location, and any post-excavation analysis will likely include the New Zealand Police, Auckland Council, HNZPT, manawhenua, necessary representatives of Saint Johns Church or Auckland Council (Papakura Cemetery), and the Ministry of Culture and Heritage.  **Figure 1: Figure 7-22 from Drury Arterial Network Historic Heritage Assessment. *Close-up of Drury in 1865 overlaid on modern aerial with NoR2 overlaid and buildings shaded in transparent green and R12/1149 circled in red (NZ Map 4498-16).*** 	

Ref	Request	Response	Relevant Document / Section
		 **Figure 2: Figure 10-7 from the Drury Arterial Network Historic Heritage Assessment. *Aerial taken in 1960 showing the cemetery use for earlier graves clustered to the northern half of the property with proposed NoR D5 designation (taken from Retrolens.nz).*** **Figure 2: Figure 10-7 from the Drury Arterial Network Historic Heritage Assessment. *Aerial taken in 1960 showing the cemetery use for earlier graves clustered to the northern half of the property with proposed NoR D5 designation (taken from Retrolens.nz).***	
44	Please identify the extent of vibration effects on scheduled historic heritage places, and in particular the St Johns Church graveyard and also Papakura Cemetery (NoR D2 and D5). *<u>Explanation:</u> Vibration effects on the church are briefly addressed and indicate that the thresholds for damage may be exceeded (p.46) and that there is the potential for 'cosmetic damage' to buildings such as cracking. This is a matter of concern. St Johns Church is a timber framed and clad building. The structure itself is not in the same risk category as an unreinforced masonry building. However the building has historic stained glass windows (see photo of one example). These are potentially made of very thin and brittle glass, in colours or patterns that are difficult or impossible to replace. The associated graveyard contains multiple unreinforced stone or masonry grave markers including tablets and obelisks (see photos) including some from the New Zealand Wars of the 1860s. Some of these are very close to the existing road and are potentially at significant risk of damage from excessive construction vibration.* *I consider cracking of windows, or cracking, collapse or subsidence of grave markers, to be modification of features/fabric of a scheduled heritage place rather than cosmetic damage. I consider that these effects have not been adequately addressed in the vibration report and application, and that these potential effects*	Construction vibration levels at St Johns Church and cemetery (Scheduled Extent of Place 707), are predicted to exceed 2.5 mm/s PPV criterion based on the worst-case equipment operating at the construction boundary. A Schedule to the Construction Noise and Vibration Management Plan will be prepared (as set out in the proposed designation conditions) at this location to assess potential construction vibration management plans, effects and methodologies for heritage buildings and changes could be made to the construction methodology to minimise vibration nearer the time. A suitably qualified conservator will be consulted to recommend methods of mitigation for the Scheduled St Johns Church and associated surface grave structures. This will include the stained-glass windows and other vulnerable elements of the building and surrounds. This requirement has been added to HAMP Condition 23(b)(viii) of NoR D2 in Appendix A, as follows: *23(b) The objective of the HAMP is to protect historic heritage and to remedy and mitigate any residual effects as far as practicable. To achieve the objective, the HAMP shall identify:* *…(viii) methods to protect or minimise damage to the St Johns Anglican Church and Cemetery (AUP Scheduled Site 707) during project works as far as practicable based on pre construction advise from a specialist heritage conservator.* If it is recommended by the heritage conservator that headstones should be moved before specific construction works, consultation with stakeholders will occur such as the St John's Church, Auckland Council, HNZPT, the Ministry of Culture and Heritage and descendants of the plot owner (if known). These requirements and methodologies will be included in the archaeological management plan as part of the HNZPT authority and the HAMP and will include any reinstatement or repair of items damaged as a result of the Project.	Appendix A, NoR D2 Condition 23(b)(viii)

Ref	Request	Response	Relevant Document / Section
	should be avoided to the extent possible rather than just monitored to determine if damage was pre-existing. *Further information is required to better understand the effects on these identified historic heritage places.*	It is noted that the section of the Papakura Cemetery adjacent to the works area is not a Scheduled Historic Site. The south-east corner of Papakura Cemetery is adjacent to the construction boundary of NoR D5. This area of the cemetery is the returned servicemen section, a newer part of the cemetery established post-1900. The cemetery area within 21m of the construction boundary could experience vibration levels of up to 2mm/s PPV based on the worst-case construction scenario. Since only walking and cycling facilities are proposed to be constructed, smaller equipment may be used (e.g. plate compactors rather than vibratory rollers). A Schedule will be prepared to look at the construction vibration management and methodologies that are being prepared for heritage buildings / cemeteries and where necessary changes could be made to the construction methodology to minimise vibration nearer the time. In addition, management of construction will take account of any active service times to avoid disruption due to construction noise. There are two other Scheduled heritage sites adjacent to NoR D2 works – Aroha Cottage (Scheduled Extent of Place 704) and Redoubt Wharves (Scheduled Extent of Place 2173). These sites could experience vibration levels of up to 2.5 mm/s PPV for Aroha Cottage and 2mm/s PPV for the Redoubt Wharves based on the worst-case construction scenario. A Schedule will be prepared for these sites and where necessary changes could be made to the construction methodology to minimise vibration nearer the time.	

(7) Parks Planning

Table 6: s92 Response – Parks Planning

Ref	Request	Response	Relevant Document / Section
45	In relation to NoR D1, please provide an assessment detailing it's effects on the blue-green network in the Drury-Opaheke Structure Plan and the proposed future delivery of a greenway connection along the Ngakaroa Esplanade (NoR D1).	The potential effects of the proposed SH22 Upgrade on the blue-green network were assessed as part of the Assessment of Landscape and Visual Effects (section 6.3.1), the Assessment of Ecological Effects (section 6.4.3) and summarised in the Assessment of Effects on the Environment (section 9.1). The Urban Design Framework and Evaluation also made urban design recommendations relating to the blue-green network in section 4.4. In summary, the proposed upgrade of SH22 will include the provision of safe active mode facilities that will improve connectivity to recreational facilities (including Ngakoroa Reserve and the Drury Sports Complex). This will include the ability for future active mode tie ins to the proposed greenways and recreational corridors anticipated by the Drury-Ōpāheke Structure Plan Blue-Green Network. In addition, the Project will result in a net increase in green infrastructure within the Project area associated with street trees, berm and stormwater plantings and planted stormwater wetlands, resulting in improved visual amenity for road users and adjacent audiences. The future Project landscape planting will provide an opportunity to tie into the proposed vegetated corridors anticipated by the Drury -Ōpāheke Structure Plan Blue-Green Network. The implementation of these positive effects and opportunities is represented in the Urban Landscape and Design Management Plan (conditions 9, 10 and 11). In particular: *9(d)To achieve the objective, the ULDMP(s) shall provide details of how the Project:* *(i) is designed to integrate with the adjacent urban (or proposed urban) and landscape context, including the surrounding existing or proposed topography, urban environment (i.e. centres and density of built form), landscape character, and open space zones;* *(ii) provides appropriate walking and cycling connectivity to, and interfaces with, existing or proposed adjacent land uses, and walking and cycling connections;*	Section 6.3.1, Assessment of Landscape and Visual Effects, Version 1, January 2021 Section 6.4.3, Assessment of Ecological Effects, Version 1, January 2021 Section 9.1, Assessment of Effects on the Environment, Version 1, January 2021 Section 4.4, Urban Design Framework and Evaluation, Version 1, January 2021
46	In relation to NoR D2, please provide an assessment detailing it's effects on the blue-green network in the Drury-Opaheke Structure Plan and the proposed future delivery of a greenway connection along the Hingaia stream esplanade reserve (NoR D2).	The potential effects of the proposed Jesmond to Waihoehoe Road West FTN Arterial on the blue-green network were assessed as part of the Assessment of Landscape and Visual Effects (section 6.3.1), the Assessment of Ecological Effects (section 6.4.3) and summarised in the Assessment of Effects on the Environment (section 9.1). The Urban Design Framework and Evaluation also made urban design recommendations relating to the blue-green network in section 5.8. In summary, the proposed Jesmond to Waihoehoe Road West FTN Arterial will include the provision of safe active mode facilities that will improve active mode connectivity to recreational facilities (Drury Sports Complex, Drury Domain and open space planned within Auranga Development) and passive open space areas (north of Drury Sports Complex and the esplanade reserves associated with Ngakoroa and Hingaia Streams). This will	Section 7.3.1, Assessment of Landscape and Visual Effects, Version 1, January 2021 Section 7.4.3, Assessment of Ecological Effects, Version 1, January 2021

Ref	Request	Response	Relevant Document / Section
		include the ability to tie into the proposed greenways and recreational corridors anticipated by the Drury -Ōpāheke Structure Plan Blue-Green Network. In addition, the Project will result in a net increase in green infrastructure within the Project area associated with street trees, berm and stormwater plantings, resulting in improved visual amenity for road users and adjacent audiences. The future Project landscape planting will provide an opportunity to tie into the proposed vegetated corridors anticipated by the Drury -Ōpāheke Structure Plan Blue-Green Network. The implementation of these positive effects and opportunities is represented in the Urban Landscape and Design Management Plan (conditions 9, 10 and 11). In particular: *9(c)To achieve the objective, the ULDMP(s) shall provide details of how the Project:* (i) *is designed to integrate with the adjacent urban (or proposed urban) and landscape context, including the surrounding existing or proposed topography, urban environment (i.e. centres and density of built form), landscape character, and open space zones;* (ii) *provides appropriate walking and cycling connectivity to, and interfaces with, existing or proposed adjacent land uses, and walking and cycling connections;*	Section 16.1, Assessment of Effects on the Environment, Version 1, January 2021 Section 5.8, Urban Design Framework and Evaluation, Version 1, January 2021
47	In relation to NoR D5, please provide an assessment detailing it's effects on access to the proposed Opaheke Park shown in the Bellfield Masterplan and Opaheke park concept plan (included as Appendix 1 to this letter) and how this will be provided for during and after project construction works are completed, particularly in relation to the finished ground levels for the widened Opaheke Road corridor and proposed new bridge over Slippery Creek. For example, how will these finished ground levels affect the feasibility of proposed carpark and pedestrian access links into Opaheke Park from Opaheke Road, as shown on the concept plan? (NoR D5).	The Project will improve active mode connectivity to recreational facilities including the proposed upgrades to Ōpāheke Park and the Ōpāheke Reserve Sports Park. The Project will also include the ability to tie into the proposed greenways and recreational corridors anticipated by the Drury-Ōpāheke Structure Plan Blue-Green Network. The purpose of this Project is to primarily provide improved active mode facilities along the Ōpāheke Road – adjacent to the Ōpāheke Park. This can be achieved through providing a widened berm area (widening is generally to the northern side of the road), and it is anticipated that the existing road levels will remain. There are new active mode bridges proposed for either side of the bridge over Ōtūwairoa (Slippery) Creek which can be graded into the existing levels either side of the bridge. Formation of a new access to Ōpāheke Park as proposed in the concept plan will be maintained, with an upgraded active mode crossing of the access provided. During construction, access will be maintained to the Ōpāheke Park. In summary, there will be minimal impact from on the proposed accessway and car park as shown in the concept plan. The Project will improve access to the park through walking and cycling facilities.	N/A

Appendix A – Updated Conditions

Note:

Additions are shown as **<u>underlined and bold</u>**

Deletions are shown as ~~strikethrough~~

NoR D1

Abbreviations and Definitions

Acronym/Term	Definition
AUP	Auckland Unitary Plan
ARI	Annual Recurrence Interval
Average increase in flood hazard	Flow depth times velocity.
BMP	Bird Management Plan
BPO or Best Practicable Option	Has the same meaning as in section 2 of the RMA 1991.
CEMP	Construction Environmental Management Plan
Certification of material changes to management plans	Confirmation from the Manager that a material change to a management plan has been prepared in accordance with the condition to which it relates. A material change to a management plan shall be deemed certified: (a) where the Requiring Authority has received written confirmation from Council that the material change to the management plan is certified; or (b) ten working days from the submission of the material change to the management plan where no written confirmation of certification has been received.
CNVMP	Construction Noise and Vibration Management Plan
CNVMP Schedule or Schedule	A schedule to the CNVMP
Completion of Construction	When construction of the Project (or part of the Project) is complete and it is available for use.
Construction Works	Activities undertaken to construct the Project excluding Enabling Works.
Council	Auckland Council
CPTED	Crime prevention through environmental design
CTMP	Construction Traffic Management Plan
EIANZ Guidelines	Ecological Impact Assessment: EIANZ guidelines for use in New Zealand: terrestrial and freshwater ecosystems, second edition, dated May 2018.
Enabling works	Includes, but is not limited to, the following and similar activities: • geotechnical investigations (including trial embankments); • archaeological site investigations; • formation of access for geotechnical investigations;

Acronym/Term	Definition
	• establishment of site yards, site entrances and fencing; • constructing and sealing site access roads; • demolition or removal of buildings and structures; • relocation of services; and • establishment of mitigation measures (such as erosion and sediment control measures, temporary noise walls, earth bunds and planting).
Flood prone area	A potential ponding area that relies on a single culvert for drainage and does not have an overland flow path.
Habitable floor	Any room (floor) in an authorised building used for residential living activity, excluding a laundry, bathroom, toilet or any room used solely as an entrance hall, passageway or garage.
Habitable floor level that has existing flooding	Where the flood level using the pre Project model scenario is above the existing authorised the habitable floor level.
HAMP	Heritage and Archaeology Management Plan
HNZPT	Heritage New Zealand Pouhere Taonga
HNZPTA	Heritage New Zealand Pouhere Taonga Act 2014
Manager	The Manager – Resource Consents of the Auckland Council, or authorised delegate.
Maximum Probable Development	Design case for consideration of future flows allowing for development within a catchment that takes into account the maximum impervious surface limits of the current zone or, if the land is zoned Future Urban in the Auckland Unitary Plan, the probable level of development arising from zone changes.
MID	Maintenance in Design
Network Utility Operator	Has the same meaning as set out in section 166 of the RMA.
Ngakoroa Stream Wetlands	For the purpose of Condition 23 and 24, the Ngakoroa Stream Wetlands is the area shown in Schedule 2.
NOR	Notice of Requirement
NUMP	Network Utilities Management Plan
Outline Plan	An outline plan prepared in accordance with section 176A of the RMA.
Project	Upgrade of State Highway 22 (SH22) from the Drury Interchange at State Highway 1 to Oira Creek, including active transport facilities, and associated infrastructure.
Project Liaison Person	The person or persons appointed for the duration of the Project's Construction Works to be the main point of contact for persons wanting information about the Project or affected by the Construction Works.

Acronym/Term	Definition
Pre-Project development	Existing site condition prior to the Project (including existing buildings and roadways).
Post-Project development	Site condition after the Project has been completed (including existing and new buildings and roadways).
Protected Premises and Facilities (PPF)	Protected Premises and Facilities as defined in New Zealand Standard NZS 6806:2010: *Acoustics – Road-traffic noise – New and altered roads.*
Requiring Authority	Has the same meaning as section 166 of the RMA and for this Designation is Waka Kotahi NZ Transport Agency (Waka Kotahi).
RMA	Resource Management Act (1991)
SCMP	Stakeholder Communication Management Plan
SID	Safety in Design
Stage of Work	Any physical works that require the development of an Outline Plan.
Start of Construction	The time when Construction Works (excluding Enabling Works) start.
Suitably Qualified and Experienced Person	A person (or persons) who can provide sufficient evidence to demonstrate their suitability and competence.
ULDMP	Urban and Landscape Design Management Plan

General Conditions

1. Activity in General Accordance with Plans and Information

(a) Except as provided for in the conditions below, and subject to final design and Outline Plan(s), works within the designation shall be undertaken in general accordance with the Project Description and Concept Plan in Schedule 1.

(b) Where there is inconsistency between:
  (i) the Project Description and Concept Plan in Schedule 1 and the requirements of the following conditions, the conditions shall prevail; and
  (ii) the Project Description and Concept Plan in Schedule 1, and the management plans under the conditions of the designation, the requirements of the management plans shall prevail.

2. (a) Conditions 1 – 41 of this designation shall only apply to the work described in the Project Description and Concept Plan in Schedule 1.

(b) Except where explicitly provided for, conditions 1 – 41 do not apply to works associated with on-going operation, safety improvements, and maintenance of the existing state highway, or the upgraded state highway following construction of the Project.

3. Project Information

(a) A Project website, or equivalent virtual information source, shall be established within 12 months of the date on which this designation is included in the AUP. The Project website or virtual information source shall include these conditions and shall provide information on:
  (i) the status of the Project;
  (ii) anticipated construction timeframes; and
  (iii) contact details for enquiries.

(b) At the start of detailed design for a Stage of Work, the Project website or virtual information source shall be updated to provide information on the likely date for Start of Construction, and any staging of works.

4. Designation Review

(a) As soon as practicable following Completion of Construction the Requiring Authority shall:
  (i) review the extent of the designation to identify any areas of designated land that it no longer requires for the on-going operation, maintenance or mitigation of effects of the Project; and
  (ii) give notice to Auckland Council in accordance with section 182 of the RMA for the removal of those parts of the designation identified above.

5. Network Utility Operators (Section 176 Approval)

(a) Prior to the start of Construction Works, Network Utility Operators with existing infrastructure located within the designation will not require written consent under section 176 of the RMA for the following activities:
  (i) operation, maintenance and urgent repair works;
  (ii) minor renewal works to existing network utilities necessary for the on-going provision or security of supply of network utility operations;
  (iii) minor works such as new service connections; and
  (iv) the upgrade and replacement of existing network utilities in the same location with the same or similar effects as the existing utility.

(b) To the extent that a record of written approval is required for the activities listed above, this condition shall constitute written approval.

Pre-construction Conditions

6. Outline Plan(s)

(a) An Outline Plan (or Plans) shall be prepared in accordance with section 176A of the RMA.

(b) Outline Plans (or Plan) may be submitted in parts or in stages to address particular activities (e.g. design or construction aspects), or a Stage of Work of the Project.

(c) Outline Plans shall include any management plan or plans that are relevant to the management of effects of those activities or Stage of Work, which may include:
- (i) Network Utilities Management Plan;
- (ii) Construction Noise and Vibration Management Plan;
- (iii) Urban and Landscape Design Management Plan;
- (iv) Heritage and Archaeology Management Plan;
- (v) Bird Management Plan; and
- (vi) Tree Management Plan.

7. Management Plans

(a) Any management plan shall:
- (i) be prepared and implemented in accordance with the relevant management plan condition (refer to Conditions 8 to 26);
- (ii) be prepared by a Suitably Qualified and Experienced Person(s);
- (iii) include sufficient detail relating to the management of effects associated with the relevant activities and/or Stage of Work to which it relates;
- (iv) summarise comments received from Mana Whenua and other stakeholders as required by the relevant management plan condition, along with a summary of where comments have:
  - A. been incorporated; and
  - B. where not incorporated, the reasons why;
- (v) be submitted as part of an Outline Plan pursuant to s176A of the RMA, with the exception of SCMPs, CEMPs, CTMPs and CNVMP Schedules; and
- (vi) once finalised, uploaded to the Project website or equivalent virtual information source.

(b) Any management plan developed in accordance with Condition 7(a) may:
- (i) be submitted in parts or in stages to address particular activities (e.g. design or construction aspects) a Stage of Work of the Project, or to address specific activities authorised by the designation;
- (ii) except for material changes, be amended to reflect any changes in design, construction methods or management of effects without further process; and
- (iii) if there is a material change required to a management plan which has been submitted with an Outline Plan in accordance with Condition 6, the revised part of the plan shall be submitted to the Council as an update to the Outline Plan or for Certification as soon as practicable following identification of the need for a revision.

(c) Any material changes to the SCMPs, CEMPs or CTMPs are to be submitted to the Council for information.

8. Cultural Advisory Report

(a) At least six (6) months prior to the start of detailed design for a Stage of Work, Mana Whenua shall be invited to prepare a Cultural Advisory Report for the Project.

(b) The objective of the Cultural Advisory Report is to assist in understanding and identifying Ngā Taonga Tuku Iho ('treasures handed down by our ancestors') affected by the Project, to inform their management and protection. To achieve the objective, Requiring Authority shall invite Mana Whenua to prepare a Cultural Advisory Report that:
- (i) identifies the cultural sites, landscapes and values that have the potential to be affected by the construction and operation of the Project;

(ii) sets out the desired outcomes for management of potential effects on cultural sites, landscapes and values;
(iii) identifies traditional cultural practices within the area that may be impacted by the Project;
(iv) identifies opportunities for restoration and enhancement of identified cultural sites, landscapes and values within the Project area;
(v) taking into account the outcomes of (i) to (iv) above, identify cultural matters and principles that should be considered in the development of the Urban and Landscape Design Management Plan and Heritage and Archaeological Management Plan, and the Cultural Monitoring Plan referred to in Condition 16; and
(vi) identifies and (if possible) nominates traditional names along the Project alignment. Noting there may be formal statutory processes outside the Project required in any decision-making.

(c) The desired outcomes for management of potential effects on cultural sites, landscapes and values identified in the Cultural Advisory Report shall be discussed with Mana Whenua and those outcomes reflected in the relevant management plans where practicable.

(d) Conditions 8(b) and 8(c) above will cease to apply if:
(i) Mana Whenua have been invited to prepare a Cultural Advisory Report by a date at least 6 months prior to start of Construction Works; and
(ii) Mana Whenua have not provided a Cultural Advisory Report within six months prior to start of Construction Works.

9. Urban and Landscape Design Management Plan (ULDMP)

(a) A ULDMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the ULDMP(s) is to:
(i) enable integration of the Project's permanent works into the surrounding landscape and urban context; and
(ii) ensure that the Project manages potential adverse landscape and visual effects as far as practicable and contributes to a quality urban environment.

(c) The ULDMP shall be prepared in general accordance with:
(i) Waka Kotahi Urban Design Guidelines: Bridging the Gap (2013) or any subsequent updated version;
(ii) Waka Kotahi Landscape Guidelines (2013) or any subsequent updated version; and
(iii) Waka Kotahi P39 Standard Specification for Highway Landscape Treatments (2013) or any subsequent updated version.

(d) To achieve the objective, the ULDMP(s) shall provide details of how the Project:
(i) is designed to integrate with the adjacent urban (or proposed urban) and landscape context, including the surrounding existing or proposed topography, urban environment (i.e. centres and density of built form), landscape character, and open space zones;
(ii) provides appropriate walking and cycling connectivity to, and interfaces with, existing or proposed adjacent land uses, and walking and cycling connections;
(iii) promotes inclusive access (where appropriate); and
(iv) promotes a sense of personal safety by aligning with best practice guidelines, such as:
A. Crime Prevention Through Environmental Design (CPTED) principles;
B. Safety in Design (SID) requirements; and
C. Maintenance in Design (MID) requirements and anti-vandalism/anti-graffiti measures.

10. (a) The ULDMP(s) shall include:
(i) a concept plan which depicts the overall landscape and urban design concept, and explains the rationale for the landscape and urban design proposals;
(ii) developed design concepts, including principles for walking and cycling facilities and public transport; and

(iii) landscape and urban design details that cover the following:

A. road design – elements such as earthworks contouring including cut and fill batters, benching, spoil disposal sites, median width and treatment, roadside width and treatment;

B. roadside elements – such as lighting, sign gantries and signage, fences, and median barriers;

C. architectural and landscape treatment of all major structures, including bridges and retaining walls;

D. architectural and landscape treatment of noise barriers;

E. landscape treatment of permanent stormwater control wetlands and swales;

F. integration of passenger transport;

G. pedestrian and cycle facilities including paths, road crossings and dedicated pedestrian/ cycle bridges or underpasses;

H. heritage items with reference to the HAMP in Condition 22; and

I. re-instatement of construction and site compound areas, driveways, accessways and fences.

11. (a) The ULDMP(s) shall also include the following planting details and maintenance requirements:

(i) planting design details including:

A. identification of existing trees and vegetation that will be retained with reference to the Tree Management Plan in Condition 25. Where practicable, mature trees and native vegetation should be retained;

B. street trees, shrubs and ground cover suitable for berms;

C. treatment of fill slopes to integrate with adjacent land use, streams, riparian margins and open space zones;

D. planting of stormwater wetlands;

E. identification of vegetation to be retained and any planting requirements under Conditions 23 and 24;

F. integration of any planting requirements required by conditions of any resource consents for the Project; and

G. reinstatement planting of construction and site compound areas as appropriate;

(ii) a planting programme including the staging of planting in relation to the construction programme which shall, as far as practicable, include provision for planting within each planting season following completion of works in each Stage of Work;

(iii) detailed specifications relating to the following:

A. weed control and clearance;

B. pest animal management (to support plant establishment);

C. ground preparation (top soiling and decompaction);

D. mulching;

E. plant sourcing and planting, including hydroseeding and grassing; and

(iv) a maintenance plan in accordance with the Waka Kotahi P39 Standard Specification for Highway Landscape Treatments (2013) or any subsequent updated version.

(b) Mana Whenua shall be invited to participate in the development of the ULDMP(s) to provide input into relevant cultural landscape and design matters including how desired outcomes for management of potential effects on cultural sites, landscapes and values identified and discussed in accordance with Condition 8 may be reflected in the ULDMP.

12. Flood Hazard

(a) The Project shall be designed to achieve the following flood risk outcomes:
   (i) no increase in flood levels for existing authorised habitable floors that are already subject to flooding;
   (ii) no more than a 10% reduction in freeboard for existing authorised habitable floors;
   (iii) no increase of more than 50mm in flood level on land zoned for urban or future urban development where there is no existing dwelling;
   (iv) no new flood prone areas; and
   (v) no more than a 10% average increase of flood hazard (defined as flow depth times velocity) for main access to authorised habitable dwellings.

(b) Compliance with this condition shall be demonstrated in the Outline Plan, which shall include flood modelling of the pre-Project and post-Project 100 year ARI flood levels (for Maximum Probable Development land use and including climate change).

(c) Where the above outcomes can be achieved through alternative measures outside of the designation such as flood stop banks, flood walls, raising existing authorised habitable floor level and new overland flow paths, the Outline Plan shall include confirmation that any necessary landowner and statutory approvals have been obtained for that work.

Construction Conditions

13. Construction Environmental Management Plan (CEMP)

(a) A CEMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the CEMP is to set out the management procedures and construction methods to be undertaken to, avoid, remedy or mitigate any adverse effects associated with Construction Works as far as practicable. To achieve the objective, the CEMP shall include:
   (i) the roles and responsibilities of staff and contractors;
   (ii) details of the site or Project manager and the Project Liaison Person, including their contact details (phone and email address);
   (iii) the Construction Works programmes and the staging approach, and the proposed hours of work;
   (iv) the proposed site layouts (including construction yards), locations of refuelling activities and construction lighting;
   (v) methods for controlling dust and the removal of debris and demolition of construction materials from public roads or places;
   (vi) methods for providing for the health and safety of the general public;
   (vii) measures to mitigate flood hazard effects such as siting stockpiles out of floodplains, minimising obstruction to flood flows, actions to respond to warnings of heavy rain;
   (viii) procedures for incident management;
   (ix) procedures for the refuelling and maintenance of plant and equipment to avoid discharges of fuels or lubricants to watercourses;
   (x) measures to address the storage of fuels, lubricants, hazardous and/or dangerous materials, along with contingency procedures to address emergency spill response(s) and clean up;
   (xi) procedures for responding to complaints about Construction Works; and
   (xii) methods for amending and updating the CEMP as required.

(c) Any CEMP prepared for a Stage of Work shall be submitted to Council for information at least ten working days before the Start of Construction for a Stage of Work.

(d) The CEMP shall be prepared having regard to the NZ Transport Agency Guideline for Preparing Environmental and Social Management Plans (April 2014), or any subsequent version.

14. Stakeholder and Communication Management Plan (SCMP)

(a) A SCMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the SCMP is to identify how the public and stakeholders (including directly affected and adjacent owners and occupiers of land) will be communicated with throughout the Construction Works. To achieve the objective, the SCMP shall include:

(i) the contact details for the Project Liaison Person. These details shall be on the Project website, or equivalent virtual information source, and prominently displayed at the main entrance(s) to the site(s);

(ii) the procedures for ensuring that there is a contact person available for the duration of Construction Works, for public enquiries or complaints about the Construction Works;

(iii) methods for engaging with Mana Whenua, to be developed in consultation with Mana Whenua;

(iv) a list of stakeholders, organisations, businesses and persons who will be communicated with;

(v) methods to communicate the proposed hours of construction activities **including** outside of normal working hours and on weekends and public holidays, to surrounding businesses and residential communities; and

(vi) linkages and cross-references to communication methods set out in other conditions and management plans where relevant.

(c) Any SCMP prepared for a Stage of Work shall be submitted to Council for information ten working days prior to the Start of Construction for a Stage of Work.

15. Complaints Register

(a) At all times during Construction Works, a record of any complaints received about the Construction Works shall be maintained. The record shall include:

(i) the date, time and nature of the complaint;

(ii) the name, phone number and address of the complainant (unless the complainant wishes to remain anonymous);

(iii) measures taken to respond to the complaint (including a record of the response provided to the complainant) or confirmation of no action if deemed appropriate;

(iv) the outcome of the investigation into the complaint; and

(v) any other activities in the area, unrelated to the Project that may have contributed to the complaint, such as non-Project construction, fires, traffic accidents or unusually dusty conditions generally.

(b) A copy of the Complaints Register required by this condition shall be made available to the Manager upon request as soon as practicable after the request is made.

16. Cultural Monitoring Plan

(a) Prior to the start of Construction Works, a Cultural Monitoring Plan shall be prepared by a Suitably Qualified and Experienced Person(s) identified in collaboration with Mana Whenua.

(b) The objective of the Cultural Monitoring Plan is to identify methods for undertaking cultural monitoring to assist with management of any cultural effects during Construction Works.

(c) The Cultural Monitoring Plan shall include:

(i) requirements for formal dedication or cultural interpretation to be undertaken prior to start of Construction Works in areas identified as having significance to Mana Whenua;

(ii) requirements and protocols for cultural inductions for contractors and subcontractors;

(iii) identification of activities, sites and areas where cultural monitoring is required during particular Construction Works;

(iv) identification of personnel to undertake cultural monitoring, including any geographic definition of their responsibilities; and

(v) details of personnel to assist with management of any cultural effects identified during cultural monitoring, including implementation of any accidental discovery protocols under Condition 22.

(d) If Enabling Works involving soil disturbance are undertaken prior to the start of Construction Works, an Enabling Works Cultural Monitoring Plan shall be prepared by a Suitably Qualified and Experienced Person identified in collaboration with Mana Whenua. This plan may be prepared as a standalone Enabling Works Cultural Monitoring Plan or be included in the main Construction Works Cultural Monitoring Plan.

Advice Note

Where appropriate, the Cultural Monitoring Plan shall align with the requirements of other conditions of the designation and resource consents for the Project which require monitoring during Construction Works.

17. Construction Traffic Management Plan (CTMP)

(a) A CTMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the CTMP is to avoid, remedy or mitigate, as far as practicable, adverse construction traffic effects. To achieve this objective, the CTMP shall include:

(i) methods to manage the effects of temporary traffic management activities on traffic;
(ii) measures to ensure the safety of all transport users;
(iii) the estimated numbers, frequencies, routes and timing of traffic movements, including any specific non-working or non-movement hours to manage vehicular and pedestrian traffic near schools or to manage traffic congestion;
(iv) site access routes and access points for heavy vehicles, the size and location of parking areas for plant, construction vehicles and the vehicles of workers and visitors;
(v) identification of detour routes and other methods to ensure the safe management and maintenance of traffic flows, including pedestrians and cyclists, on existing roads;
(vi) methods to maintain vehicle access to property and/or private roads where practicable, or to provide alternative access arrangements when it will not be;
(vii) the management approach to loads on heavy vehicles, including covering loads of fine material, the use of wheel-wash facilities at site exit points and the timely removal of any material deposited or spilled on public roads; and
(viii) methods that will be undertaken to communicate traffic management measures to affected road users (e.g. residents/public/stakeholders/emergency services).

(c) Auditing, monitoring and reporting requirements relating to traffic management activities shall be undertaken in accordance with the Waka Kotahi Code of Practice for Temporary Traffic Management.

(d) Any CTMP prepared for a Stage of Work shall be submitted to Council for information ten working days prior to the Start of Construction for a Stage of Work.

18. Construction Noise Standards

(a) Construction noise shall be measured and assessed in accordance with NZS6803:1999 Acoustics – Construction Noise and shall comply with the noise standards set out in the following table as far as practicable.

Table 18.1: Construction noise standards

Day of week	Time period	$L_{Aeq(15min)}$	L_{AFmax}
Occupied activity sensitive to noise			
Weekday	0630h - 0730h	55 dB	75 dB
	0730h - 1800h	70 dB	85 dB
	1800h - 2000h	65 dB	80 dB
	2000h - 0630h	45 dB	75 dB
Saturday	0630h - 0730h	55 dB	75 dB
	0730h - 1800h	70 dB	85 dB
	1800h - 2000h	45 dB	75 dB
	2000h - 0630h	45 dB	75 dB
Sunday and Public Holidays	0630h - 0730h	45 dB	75 dB
	0730h - 1800h	55 dB	85 dB
	1800h - 2000h	45 dB	75 dB
	2000h - 0630h	45 dB	75 dB
Other occupied buildings			
All	0730h – 1800h	70 dB	
	1800h – 0730h	75 dB	

(b) Where compliance with the noise standards set out in the Table 18.1 above is not practicable, and unless otherwise provided for in the CNVMP, then the methodology in Condition 21 shall apply.

19. Construction Vibration Standards

(a) Construction vibration shall be measured in accordance with ISO 4866:2010 Mechanical vibration and shock – Vibration of fixed structures – Guidelines for the measurement of vibrations and evaluation of their effects on structures and shall comply with the vibration standards set out in the following table as far as practicable.

Table 19.1 Construction vibration criteria

Receiver	Details	Category A	Category B
Occupied Activities sensitive to noise	Night-time 2000h - 0630h	0.3mm/s ppv	1mm/s ppv
	Daytime 0630h - 2000h	1mm/s ppv	5mm/s ppv
Other occupied buildings	Daytime 0630h - 2000h	2mm/s ppv	5mm/s ppv

All other buildings	At all other times Vibration transient	5mm/s ppv	BS 5228-2* Table B2
	At all other times Vibration continuous	5mm/s ppv	BS 5228-2* 50% of Table B2 values

**BS 5228-2:2009 'Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration'*

(b) Where compliance with the vibration standards set out in Table 19.1 is not practicable, and unless otherwise provided for in the CNVMP, then the methodology in Condition 21 shall apply.

(c) If measured or predicted vibration from construction activities exceeds the Category A criteria, a Suitably Qualified and Experienced Person shall assess and manage construction vibration during those activities.

(d) If measured or predicted vibration from construction activities exceeds the Category B criteria those activities must only proceed if vibration effects on affected buildings are assessed, monitored and mitigated by a Suitably Qualified and Experienced Person.

20. Construction Noise and Vibration Management Plan (CNVMP)

(a) A CNVMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) A CNVMP shall be implemented during the Stage of Work to which it relates.

(c) The objective of the CNVMP is to provide a framework for the development and implementation of the Best Practicable Option for the management of construction noise and vibration effects to achieve the construction noise and vibration standards set out in Conditions 18 and 19 to the extent practicable. To achieve this objective, the CNVMP shall be prepared in accordance with Annex E2 of the New Zealand Standard NZS6803:1999 'Acoustics – Construction Noise' (NZS6803:1999) and the Waka Kotahi State highway construction and maintenance noise and vibration guide (version 1.1, 2019), and shall as a minimum, address the following:

(i) description of the works and anticipated equipment/processes;
(ii) hours of operation, including times and days when construction activities would occur;
(iii) the construction noise and vibration standards for the Project;
(iv) identification of receivers where noise and vibration standards apply;
(v) management and mitigation options, and identification of the Best Practicable Option;
(vi) methods and frequency for monitoring and reporting on construction noise and vibration;
(vii) procedures for communication and engagement with nearby residents and stakeholders, including notification of proposed construction activities, the period of construction activities, and management of noise and vibration complaints;
(viii) contact details of the Project Liaison Person;
(ix) procedures for the regular training of the operators of construction equipment to minimise noise and vibration as well as expected construction site behaviours for all workers;
(x) identification of areas where compliance with the noise [Condition 18] and/or vibration standards [Condition 19] Category A or Category B will not be practicable and the specific management controls to be implemented and consultation requirements with owners and occupiers of affected sites;
(xi) procedures and requirements for the preparation of a Schedule to the CNVMP (Schedule) for those areas where compliance with the noise [Condition 18] and/or vibration standards [Condition 19] Category A or Category B will not be practicable and where sufficient information is not available at the time of the CNVMP to determine the area specific management controls [Condition 20(c)(x) CNVMP];

(xii) procedures and trigger levels for undertaking building condition surveys before and after works to determine whether any cosmetic or structural damage has occurred as a result of construction vibration;
(xiii) methodology and programme of desktop and field audits and inspections to be undertaken to ensure that CNVMP, Schedules and the best practicable option for management of effects are being implemented; and
(xiv) requirements for review and update of the CNVMP.

21. Schedule to a CNVMP

(a) Unless otherwise provided for in a CNVMP, a Schedule to the CNVMP (Schedule) shall be prepared, in consultation with the owners and occupiers of sites subject to the Schedule to the CNVMP, when:
(i) construction noise is either predicted or measured to exceed the noise standards in Condition 18;
(ii) construction vibration is either predicted or measured to exceed the Category A standard at the receivers in Condition 19.

(b) The objective of the Schedule is to set out the Best Practicable Option for the management of noise and/or vibration effects of the construction activity beyond those measures set out in the CNVMP. The Schedule shall include details such as:
(i) construction activity location, start and finish times;
(ii) the nearest neighbours to the construction activity;
(iii) the predicted noise and/or vibration level for all receivers where the levels are predicted or measured to exceed the applicable standards in Conditions 18 and 19;
(iv) the proposed mitigation;
(v) the proposed communication with neighbours; and
(vi) location, times and types of monitoring.

(c) The Schedule shall be submitted to the Manager for information at least 5 working days, except in unforeseen circumstances, in advance of Construction Works that are covered by the scope of the Schedule and shall form part of the CNVMP.

22. Heritage and Archaeology Management Plan (HAMP)

(a) A HAMP shall be prepared in consultation with Council, HNZPT and Mana Whenua prior to the Start of Construction for a Stage of Work.

(b) The objective of the HAMP is to protect historic heritage and to remedy and mitigate any residual effects as far as practicable. To achieve the objective, the HAMP shall identify:
(i) methods for the identification and assessment of potential built heritage and archaeological sites within the Designation to inform detailed design;
(ii) known heritage places and archaeological sites and potential archaeological sites within the Designation, including identifying any archaeological sites for which an Archaeological Authority under the HNZPTA will be sought or has been granted;
(iii) any unrecorded archaeological sites or post-1900 heritage sites within the Designation, which shall also be documented and recorded;
(iv) roles, responsibilities and contact details of Project personnel, Mana Whenua representatives, and relevant agencies involved with heritage and archaeological matters including surveys, monitoring of Project works, compliance with AUP accidental discovery rule, and monitoring of conditions;
(v) specific areas to be investigated, monitored and recorded to the extent these are directly affected by the Project;
(vi) the proposed methodology for investigating and recording post-1900 heritage sites (including buildings) that need to be demolished or relocated, including details of their condition, measures to mitigate any adverse effects and timeframe for implementing the proposed methodology, in accordance with the HNZPT guideline AGS 1A: Investigation and Recording of Buildings and Standing Structures (4 July 2014), or any subsequent version;

(vii) methods to acknowledge cultural values identified through Condition 8 where archaeological sites also involve Ngā Taonga Tuku Iho (treasures handed down by our ancestors) and where feasible and practicable to do so;

(viii) methods for protecting or minimising adverse effects on heritage and archaeological sites within the Designation during Project Works as far as practicable, (for example fencing around heritage and archaeological sites to protect them from damage during construction); and

(ix) training requirements and inductions for contractors and subcontractors on heritage and archaeological sites within the Designation, and legal obligations relating to accidental discoveries. The training shall be undertaken prior to the Start of Construction, under the guidance of a Suitably Qualified and Experienced Person and Mana Whenua representatives (to the extent the training relates to cultural values identified under Condition 8).

Advice Note:

The requirements for accidental discoveries of heritage items are set out in Rule E11.6.1 of the AUP and in the Waka Kotahi Minimum Standard P45 Accidental Archaeological Discovery Specification, or any subsequent version.

23. Pre-Construction Wetland Bird Survey

(a) Prior to the Start of Construction for a Stage of Work within 500m of the Ngakoroa Stream Wetlands, a survey and assessment of Threatened or At-Risk wetland birds and their habitat in the area shown in Schedule 2 shall be undertaken by a Suitably Qualified and Experienced Person.

(b) The purpose of the survey and assessment is to:

(i) confirm the ecological value of the Ngakoroa Stream Wetlands for Threatened or At-Risk wetland birds; and

(ii) confirm whether the Project will or may have a moderate or greater level of ecological effect on Threatened or At-Risk wetland birds and their habitat prior to implementation of impact management measures, as determined in accordance with the EIANZ Guidelines for Use in New Zealand: Terrestrial and Freshwater Ecosystems (May 2018) or subsequent revision.

(c) If the wetland bird survey in (a) above confirms that the Project will or may have a moderate or greater level of ecological effect on Threatened or At Risk Wetland birds without impact management, then Condition 24 applies.

24. Bird Management Plan (BMP)

(a) If required under Condition 23, prior to the start of construction for a Stage of Work within 500m of the Ngakoroa Stream Wetlands, a BMP shall be prepared and implemented.

(b) The objective of the BMP is to avoid and/or minimise impacts of construction activities on Threatened or At-Risk wetland birds in the Ngakoroa Stream Wetlands. The BMP shall set out the methods that will be used to achieve this objective. These methods may include:

(i) commencing Construction Works outside of the wetland bird breeding season (September to February) where practicable, in order to discourage bird nesting in the construction areas within the designation;

(ii) a nesting bird survey of Threatened or At-Risk wetland birds undertaken by a Suitably Qualified and Experienced Person. This should occur prior to any Construction Works taking place within a 50m radius of the Ngakoroa Stream Wetlands (including establishment of the site compound adjacent to the Ngakoroa Stream Wetlands). Surveys should be repeated at the beginning of each wetland bird breeding season and following periods of construction inactivity;

(iii) protection and buffer measures if nesting Threatened or At-Risk Wetland birds are identified within 50m of any construction area (including laydown areas). This could include:

A. a 20 m buffer area around the nest location and retaining vegetation. The buffer areas should be demarcated where necessary to protect birds from encroachment. This might include the use of marker poles, tape and signage;
B. monitoring of the nesting Threatened or At-Risk wetland birds by a Suitably Qualified and Experienced Person. Construction works within the 20m nesting buffer areas should not occur until the Threatened or At-Risk wetland birds have fledged from the nest location (approximately 30 days from egg laying to fledging) as confirmed by a Suitably Qualified and Experienced Person; and
C. minimising the disturbance from the works if construction works are required within 50 m of a nest, as advised by a Suitably Qualified and Experienced Person;

(iv) a 10m setback where practicable, between the edge of the Ngakoroa Stream Wetlands and the construction area (along the edge of the stockpile/laydown area). This could be achieved by retaining existing vegetation or by planting unvegetated areas with native coastal forest/riparian/wetland species (as appropriate). Marker poles, tape and signage could also be used to clearly delineate the wetland area to prevent encroachment; and

(v) minimising light spill from construction areas into the Ngakoroa Stream Wetlands.

(c) The BMP shall be consistent with any ecological management measures to be undertaken in compliance with conditions of any resource consents granted for the Project**.**

Advice Note:

Depending on the potential effects of the Project, the resource consents for the Project may include the following monitoring and management plans:

(a) Stream and/or wetland restoration plans;
(b) Vegetation restoration plans; and
(c) Fauna management plans (e.g. herpetofauna, bats).

25. Tree Management Plan

(a) Prior to the Start of Construction for a Stage of Work a Tree Management Plan shall be prepared.

(b) The objective of the Tree Management Plan is to mitigate effects of construction activities on trees identified in Schedule 3.

(c) The Tree Management Plan shall:
(i) confirm that the trees listed in Schedule 3 still exist; and
(ii) demonstrate how the design and location of Project works has avoided, remedied or mitigated any effects on the trees listed in Schedule 3. This may include:
A. planting to replace trees that require removal (with reference to the ULDMP planting design details in Condition 11);
B. tree protection zones and tree protection measures such as protective fencing, ground protection and physical protection of roots, trunks and branches; and
C. methods for work within the rootzone of trees that are to be retained in line with accepted arboricultural standards**.**
(iii) **demonstrate how the tree management measures (outlined in A – C above) are consistent with conditions of any resource consents granted for the project in relation to managing construction effects on trees.**

26. Network Utility Management Plan (NUMP)

(a) A NUMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the NUMP is to set out a framework for protecting, relocating and working in proximity to existing network utilities. The NUMP shall include methods to:
(i) provide access for maintenance at all reasonable times, or emergency works at all times during construction activities;

(ii) manage the effects of dust and any other material potentially resulting from construction activities and able to cause material damage, beyond normal wear and tear to overhead transmission lines in the Project area; and

(iii) demonstrate compliance with relevant standards and Codes of Practice including, where relevant, the NZECP 34:2001 New Zealand Electrical Code of Practice for Electrical Safe Distances 2001; and AS/NZS 4853:2012 Electrical hazards on Metallic Pipelines.

(c) The NUMP shall be prepared in consultation with the relevant Network Utility Operator(s) who have existing assets that are directly affected by the Project.

(d) The NUMP shall describe how any comments from the Network Utility Operator in relation to its assets have been addressed.

(e) Any comments received from the Network Utility Operator shall be considered when finalising the NUMP.

(f) Any amendments to the NUMP related to the assets of a Network Utility Operator shall be prepared in consultation with that asset owner.

Operational Conditions

27. Traffic Noise

For the purposes of Conditions 28 to 41:

(a) Building-Modification Mitigation – has the same meaning as in NZS 6806;

(b) Detailed Mitigation Options – means the fully detailed design of the Selected Mitigation Options, with all practical issues addressed;

(c) Habitable Space – has the same meaning as in NZS 6806;

(d) Identified Noise Criteria Category – means the Noise Criteria Category for a PPF identified in Schedule 4: Identified PPFs Noise Criteria Categories;

(e) Mitigation – has the same meaning as in NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads;

(f) Noise Criteria Categories – means the groups of preference for sound levels established in accordance with NZS 6806 when determining the Best Practicable Option for noise mitigation (i.e. Categories A, B and C);

(g) NZS 6806 – means New Zealand Standard NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads;

(h) P40 – means Waka Kotahi NZTA P40:2014 Specification for noise mitigation;

(i) Protected Premises and Facilities (PPFs) – means only the premises and facilities identified in in Schedule 4: Identified PPFs Noise Criteria Categories;

(j) Selected Mitigation Options – means the preferred mitigation option resulting from a Best Practicable Option assessment undertaken in accordance with NZS 6806; and

(k) Structural Mitigation – has the same meaning as in NZS 6806.

28. The Noise Criteria Categories identified in Schedule 4: Identified PPFs Noise Criteria Categories at each of the PPFs shall be achieved where practicable and subject to Conditions 27 to 41.

Achievement of the Noise Criteria Categories for PPFs shall be by reference to a traffic forecast for a high growth scenario in a design year at least 10 years after the programmed opening of the Project.

29. As part of the detailed design of the Project, a Suitably Qualified and Experienced Person shall determine the Selected Mitigation Options for the PPFs identified on Schedule 4 Identified PPFs Noise Criteria Categories.

30. Prior to construction of the Project, a Suitably Qualified and Experienced Person shall develop the Detailed Mitigation Options for the PPFs identified on Schedule 4 Identified PPFs Noise Criteria Categories, taking into account the Selected Mitigation Options.

31. If the Detailed Mitigation Options would result in the Identified Noise Criteria Category changing to a less stringent Category, e.g. from Category A to B or Category B to C, at any relevant PPF, a Suitably Qualified and Experienced Person shall provide confirmation to the Manager that the Detailed Mitigation Option would be consistent with adopting the Best Practicable Option in accordance with NZS 6806 prior to implementation.

32. Prior to the Start of Construction, a Noise Mitigation Plan written in accordance with P40 shall be provided to the Manager for information.

33. The Detailed Mitigation Options shall be implemented prior to completion of construction of the Project, with the exception of any low-noise road surfaces, which shall be implemented within twelve months of completion of construction.

34. Prior to the Start of Construction, a Suitably Qualified and Experienced Person shall identify those PPFs which, following implementation of all the Detailed Mitigation Options, will not be Noise Criteria Categories A or B and where Building-Modification Mitigation might be required to achieve 40 dB $L_{Aeq(24h)}$ inside Habitable Spaces ('Category C Buildings').

35. Prior to the Start of Construction in the vicinity of each Category C Building, the Requiring Authority shall write to the owner of the Category C Building requesting entry to assess the noise reduction performance of the existing building envelope. If the building owner agrees to entry within twelve months of the date of the Requiring Authority's letter, the Requiring Authority shall instruct a Suitably Qualified and Experienced Person to visit the building and assess the noise reduction performance of the existing building envelope.

36. For each Category C Building identified, the Requiring Authority is deemed to have complied with Condition 35 above if:

(a) the Requiring Authority's Suitably Qualified and Experienced Person has visited the building and assessed the noise reduction performance of the building envelope; or

(b) the building owner agreed to entry, but the Requiring Authority could not gain entry for some reason (such as entry denied by a tenant); or

(c) the building owner did not agree to entry within twelve months of the date of the Requiring Authority's letter sent in accordance with Condition 35 above (including where the owner did not respond within that period); or

(d) the building owner cannot, after reasonable enquiry, be found prior to completion of construction of the Project.

If any of (b) to (d) above apply to a Category C Building, the Requiring Authority is not required to implement Building-Modification Mitigation to that building.

37. Subject to Condition 36 above, within six months of the assessment undertaken in accordance with Conditions 35 and 36, the Requiring Authority shall write to the owner of each Category C Building advising:

(a) if Building-Modification Mitigation is required to achieve 40 dB LAeq(24h) inside habitable spaces; and

(b) the options available for Building-Modification Mitigation to the building, if required; and

(c) that the owner has three months to decide whether to accept Building-Modification Mitigation to the building and to advise which option for Building-Modification Mitigation the owner prefers, if the Requiring Authority has advised that more than one option is available.

38. Once an agreement on Building-Modification Mitigation is reached between the Requiring Authority and the owner of a Category C Building, the mitigation shall be implemented, including any third party

authorisations required, in a reasonable and practical timeframe agreed between the Requiring Authority and the owner.

39. Subject to Condition 36, where Building-Modification Mitigation is required, the Requiring Authority is deemed to have complied with Condition 38 if:

(a) the Requiring Authority has completed Building Modification Mitigation to the building; or

(b) an alternative agreement for mitigation is reached between the Requiring Authority and the building owner; or

(c) the building owner did not accept the Requiring Authority's offer to implement Building-Modification Mitigation within three months of the date of the Requiring Authority's letter sent in accordance with Condition 36 (including where the owner did not respond within that period); and

(d) The building owner cannot, after reasonable enquiry, be found prior to completion of construction of the Project.

40. Within twelve months of completion of construction of the Project, a post-construction review report written in accordance with P40 Specification for Noise Mitigation 2014 shall be provided to the Manager.

41. The Detailed Mitigation Options shall be maintained so they retain their noise reduction performance as far as practicable.

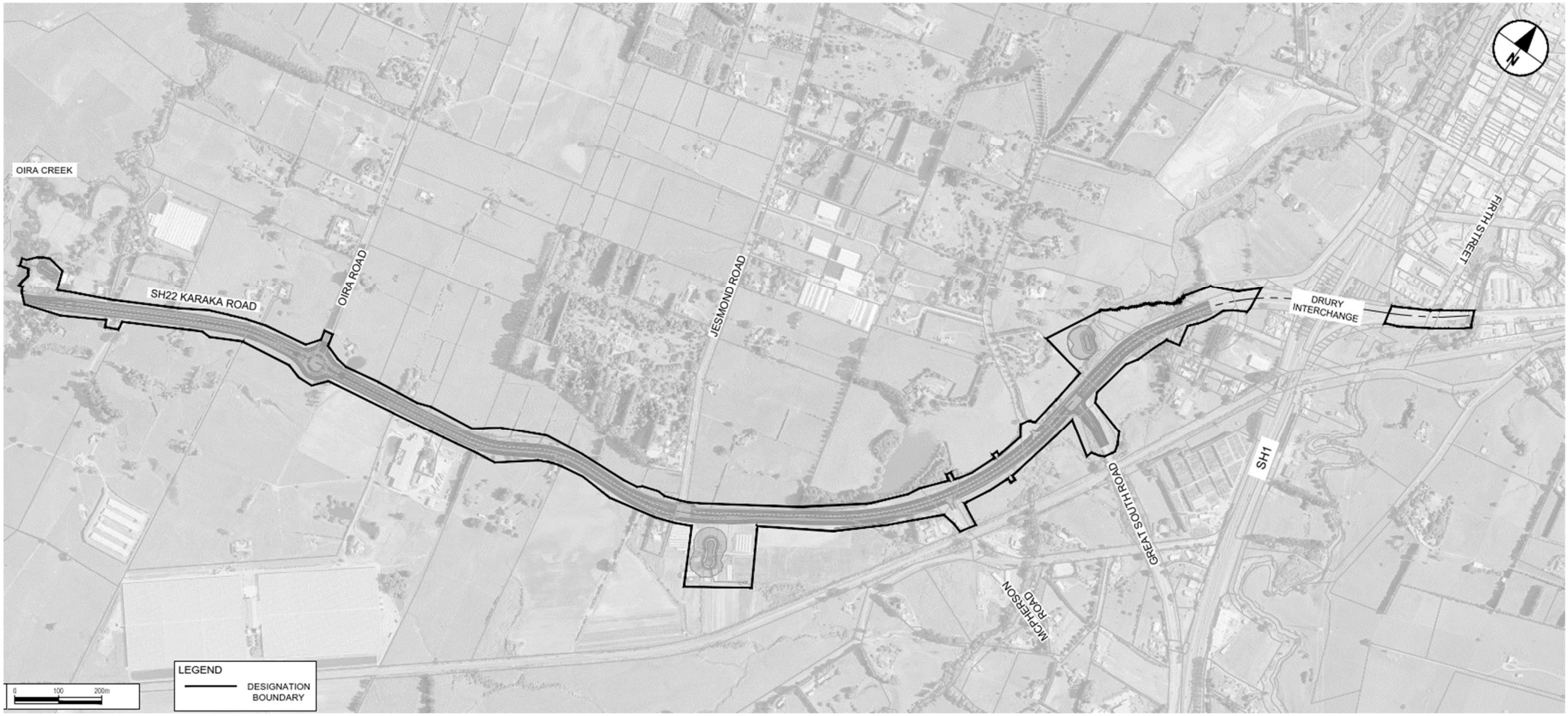
Schedule 1: General Accordance Plans and Information

Project Description

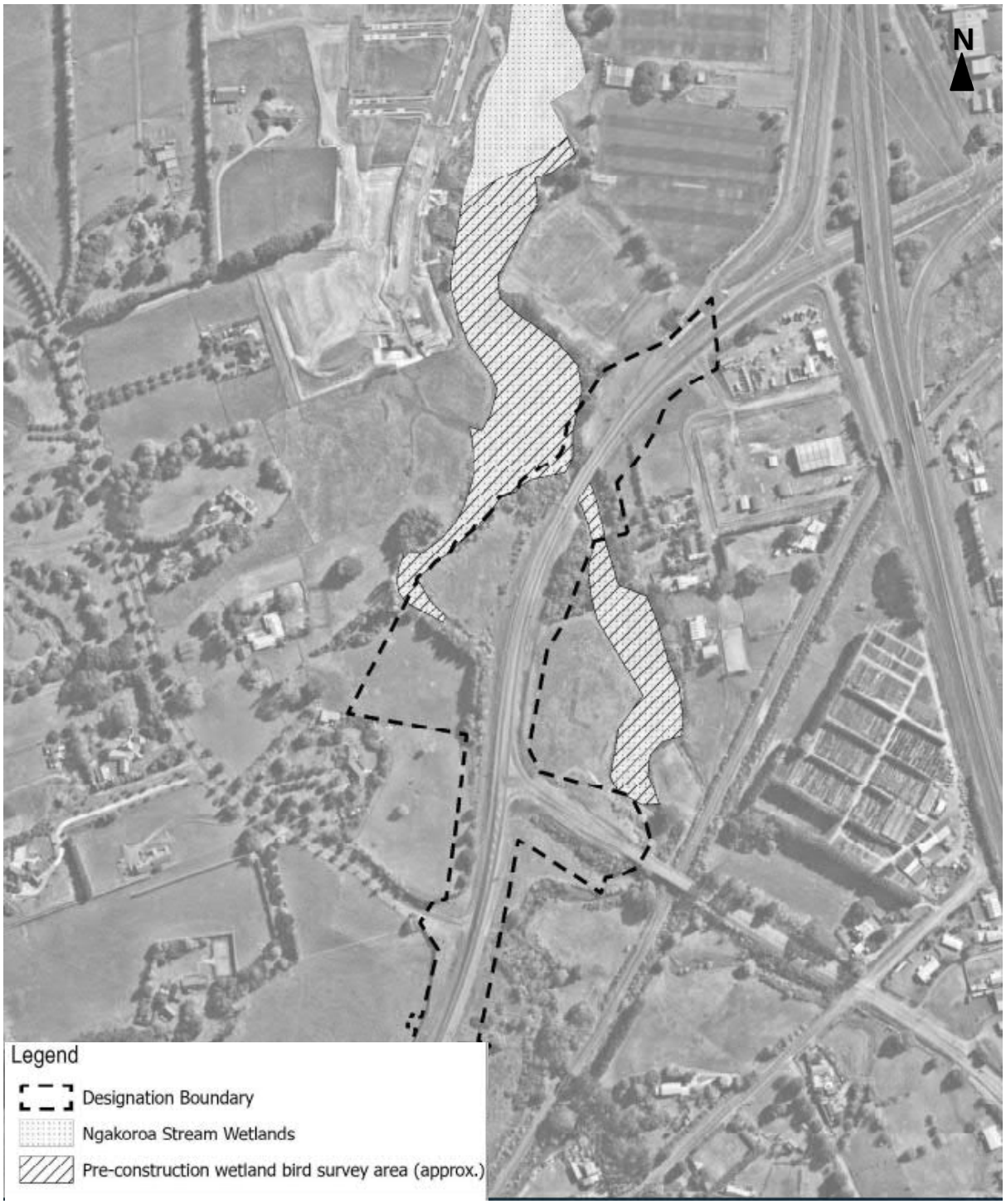
The proposed work is the construction, operation and maintenance of an upgrade of the existing State Highway 22 (SH22) from the Drury Interchange at State Highway 1 Drury to Oira Creek, including active transport facilities, and associated infrastructure. The proposed work is shown in the following Concept Plan and includes:

a) Widening SH22 for two additional lanes and active transport facilities;
b) Associated works including intersections, bridges, embankments, retaining, culverts and stormwater management systems;
c) Changes to local roads, where the proposed work intersects with local roads; and
d) Construction activities, including vegetation removal, construction compounds, lay down areas, bridge works area, construction traffic management and the re-grade of driveways.

Concept Plan



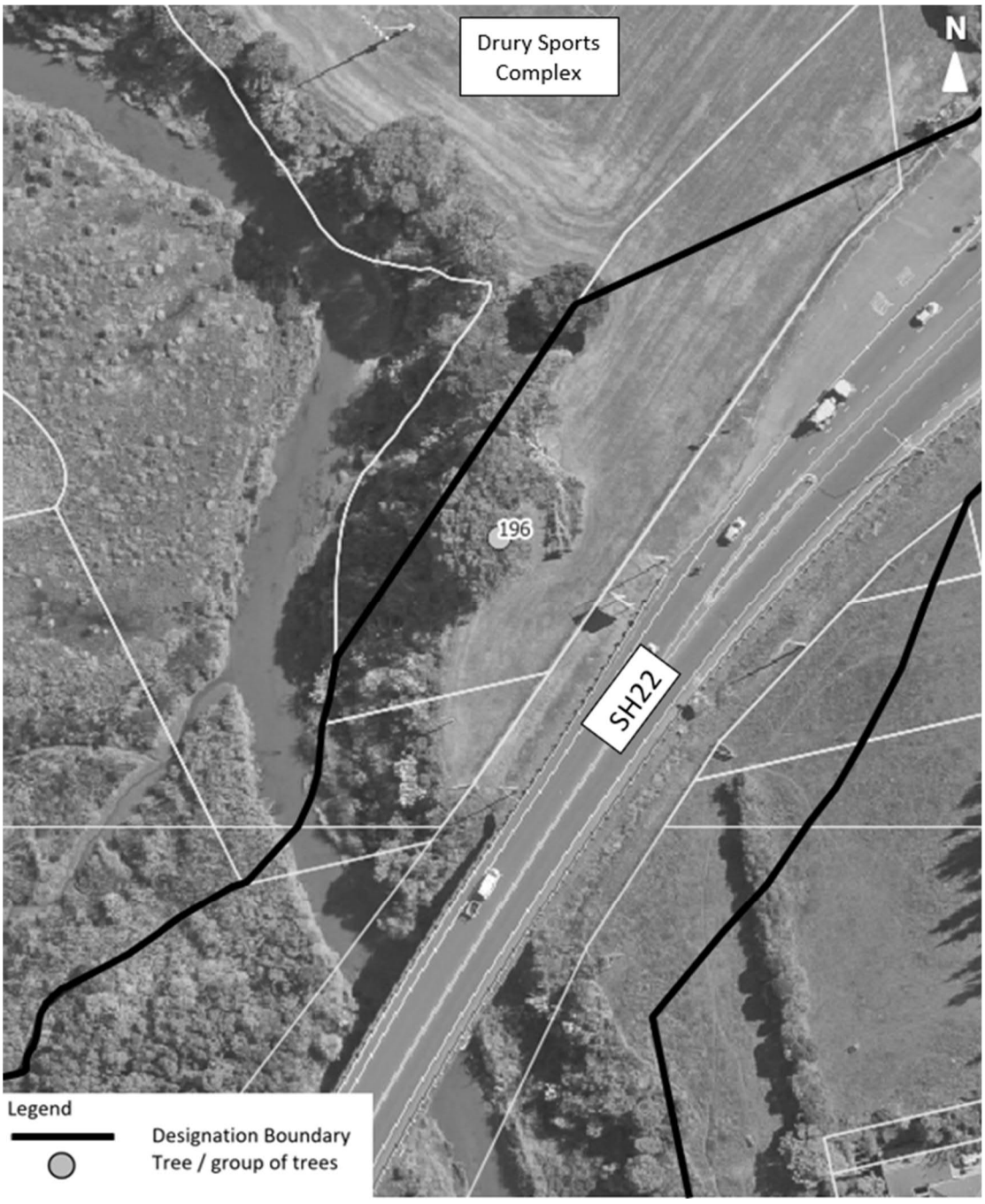
Schedule 2: Pre-construction Wetland Bird Survey



Schedule 3: Trees to be Included in the Tree Management Plan

Tree Number	Tree or Group	Number of trees	Species List	Location (refer to Tree Location Plan)	Reason for protection in the AUP (District Plan rules) as at January 2021 when the alteration to designation 6707 was lodged
196	Tree group	7	Eucalyptus sp., Acacia mearnsii	Within 67 Mercer Street (Section 5 SO 61999). South of Drury Sports Complex and east of Ngakoroa Stream.	Open space (note also protected under the regional plan rules as in the riparian margin)

Tree Location Plan



Schedule 4: Identified PPFs Noise Criteria Categories

Address	New or Altered Road	Noise Criteria Category
5 Burberry Road	Altered	A
14 Burberry Road	Altered	A
15 Burberry Road	Altered	A
18 Burberry Road	Altered	A
41 Jesmond Road	Altered	A
160 Karaka Road	Altered	A
200 Karaka Road	Altered	A
250 Karaka Road	Altered	A
332A Karaka Road	Altered	A
351 Karaka Road	Altered	A
370 Karaka Road	Altered	A
373 Karaka Road	Altered	A
411 Karaka Road	Altered	A
415 Karaka Road	Altered	A
435 Karaka Road	Altered	A
458 Karaka Road	Altered	A
462 Karaka Road	Altered	A
7 Woodlyn Drive	Altered	A

PPF Location Plans


Legend
Protected Premises and Facilities (PPFs)
NZS 6806 Assessment Area
This map contains data derived in part or wholly from sources other than those party to the Supporting Growth Alliance, and therefore, no representations or warranties are made by those party to the Supporting Growth Alliance as to the accuracy or completeness of this information.
Map intended for distribution as a PDF document.
Scale may be incorrect when printed.
Contains information sourced from LINZ. Crown Copyright Reserved.
Unitary plan data sourced from Auckland Council published web services.
Legend information can be viewed on Auckland Council unitary plan viewer.
Linework shown on this plan is conceptual only.
Not to be used for construction.
Karaka Rd
Jesmond Rd
41 Jesmond Roac
McPherson Rd
Burtt Rd
Southern Line
160 Karaka Road
200 Karaka Road
250 Karaka Road
22


Legend
Protected Premises and Facilities (PPFs)
NZS 6806 Assessment Area
This map contains data derived in part or wholly from sources other than those party to the Supporting Growth Alliance, and therefore, no representations or warranties are made by those party to the Supporting Growth Alliance as to the accuracy or completeness of this information.
Map intended for distribution as a PDF document.
Scale may be incorrect when printed.
Contains information sourced from LINZ. Crown Copyright Reserved.
Unitary plan data sourced from Auckland Council published web services.
Legend information can be viewed on Auckland Council unitary plan viewer.
Linework shown on this plan is conceptual only.
Not to be used for construction.
15 Burberry Road
18 Burberry Road
5 Burberry Road
14 Burberry Road
Burberry Rd
Burberry Rd
Burberry Rd
Ngakoroa Stream
Great South Rd
Great South Rd
Great South Rd
Mercer St
Southern Mtwy
Southern Mtwy
Southern Mtwy
Flanagan Rd
Southern Line
Southern Line
Karaka Rd
Pitt Rd
Runciman
22
3
461

NoR D2

Abbreviations and Definitions

Acronym/Term	Definition
AUP	Auckland Unitary Plan
ARI	Annual Recurrence Interval
Average increase in flood hazard	Flow depth times velocity.
BMP	Bird Management Plan
BPO or Best Practicable Option	Has the same meaning as in section 2 of the RMA 1991.
CEMP	Construction Environmental Management Plan
Certification of material changes to management plans	Confirmation from the Manager that a plan or material change to a plan has been prepared in accordance with the condition to which it relates. A management plan shall be deemed certified: (a) where the Requiring Authority has received written confirmation from Council that a management plan is certified; or (b) five working days from the submission of a management plan where no written confirmation of certification has been received. A material change to a management plan shall be deemed certified: (a) where the Requiring Authority has received written confirmation from Council that the material change to the management plan is certified; or (b) ten working days from the submission of the material change to the management plan where no written confirmation of certification has been received.
CHI	Auckland Council Cultural Heritage Inventory
CNVMP	Construction Noise and Vibration Management Plan
CNVMP Schedule or Schedule	A schedule to the CNVMP
Completion of Construction	When construction of the project (or part of the project) is complete and it is available for use.
Construction Works	Activities undertaken to construct the project excluding Enabling Works.
Council	Auckland Council

Acronym/Term	Definition
CPTED	Crime prevention through environmental design
CTMP	Construction Traffic Management Plan
EIANZ Guidelines	Ecological Impact Assessment: EIANZ guidelines for use in New Zealand: terrestrial and freshwater ecosystems, second edition, dated May 2018.
Enabling works	Includes, but is not limited to, the following and similar activities: • geotechnical investigations (including trial embankments); • archaeological site investigations; • formation of access for geotechnical investigations; • establishment of site yards, site entrances and fencing; • constructing and sealing site access roads; • demolition or removal of buildings and structures; • relocation of services; and • establishment of mitigation measures (such as erosion and sediment control measures, temporary noise walls, earth bunds and planting).
Flood prone area	A potential ponding area that relies on a single culvert for drainage and does not have an overland flow path.
Habitable floor	Any room (floor) in an authorised building used for residential living activity, excluding a laundry, bathroom, toilet or any room used solely as an entrance hall, passageway or garage.
Habitable floor level that has existing flooding	Where the flood level using the pre project model scenario is above the existing authorised the habitable floor level.
HAMP	Heritage and Archaeology Management Plan
HNZPT	Heritage New Zealand Pouhere Taonga
HNZPTA	Heritage New Zealand Pouhere Taonga Act 2014
Manager	The Manager – Resource Consents of the Auckland Council, or authorised delegate.
Maximum Probable Development	Design case for consideration of future flows allowing for development within a catchment that takes into account the maximum impervious surface limits of the current zone or, if the land is zoned Future Urban in the Auckland Unitary Plan, the probable level of development arising from zone changes.
MID	Maintenance in Design
Network Utility Operator	Has the same meaning as set out in section 166 of the RMA.
Ngakoroa Stream Wetlands	For the purpose of Condition 24 and 25, the Ngakoroa Stream Wetlands is the area shown in Schedule 2.
NOR	Notice of Requirement

Acronym/Term	Definition
NUMP	Network Utilities Management Plan
NZAA	New Zealand Archaeological Association
NZTM	New Zealand Transverse Mercator [coordinates system]
Outline Plan	An outline plan prepared in accordance with section 176A of the RMA.
Project Liaison Person	The person or persons appointed for the duration of the project's Construction Works to be the main point of contact for persons wanting information about the project or affected by the Construction Works.
Pre-project development	Existing site condition prior to the project (including existing buildings and roadways).
Post-project development	Site condition after the project has been completed (including existing and new buildings and roadways).
Protected Premises and Facilities (PPF)	Protected Premises and Facilities as defined in New Zealand Standard NZS 6806:2010: *Acoustics – Road-traffic noise – New and altered roads.*
Requiring Authority	Has the same meaning as section 166 of the RMA and for this Designation is Auckland Transport (AT).
RMA	Resource Management Act (1991)
SCMP	Stakeholder Communication Management Plan
SID	Safety in Design
Stage of Work	Any physical works that require the development of an Outline Plan.
Start of Construction	The time when Construction Works (excluding Enabling Works) start.
Suitably Qualified and Experienced Person	A person (or persons) who can provide sufficient evidence to demonstrate their suitability and competence.
ULDMP	Urban and Landscape Design Management Plan

General Conditions

1. Activity in General Accordance with Plans and Information

(a) Except as provided for in the conditions below, and subject to final design and Outline Plan(s), works within the designation shall be undertaken in general accordance with the Project Description and Concept Plan in Schedule 1.

(b) Where there is inconsistency between:
  (i) the Project Description and Concept Plan in Schedule 1 and the requirements of the following conditions, the conditions shall prevail; and
  (ii) the Project Description and Concept Plan in Schedule 1, and the management plans under the conditions of the designation, the requirements of the management plans shall prevail.

2. Project Information

(a) A project website, or equivalent virtual information source, shall be established within 12 months of the date on which this designation is included in the AUP. The project website or virtual information source shall include these conditions and shall provide information on:
  (i) the status of the project;
  (ii) anticipated construction timeframes; and
  (iii) contact details for enquiries.

(b) At the start of detailed design for a Stage of Work, the project website or virtual information source shall be updated to provide information on the likely date for Start of Construction, and any staging of works.

3. Designation Review

(a) As soon as practicable following Completion of Construction the Requiring Authority shall:
  (i) review the extent of the designation to identify any areas of designated land that it no longer requires for the on-going operation, maintenance or mitigation of effects of the project; and
  (ii) give notice to Auckland Council in accordance with section 182 of the RMA for the removal of those parts of the designation identified above.

4. Lapse

In accordance with section 184(1)(c) of the RMA, this designation shall lapse if not given effect to within 15 years from the date on which it is included in the AUP.

5. Network Utility Operators (Section 176 Approval)

(a) Prior to the start of Construction Works, Network Utility Operators with existing infrastructure located within the designation will not require written consent under section 176 of the RMA for the following activities:
  (i) operation, maintenance and urgent repair works;
  (ii) minor renewal works to existing network utilities necessary for the on-going provision or security of supply of network utility operations;
  (iii) minor works such as new service connections; and
  (iv) the upgrade and replacement of existing network utilities in the same location with the same or similar effects as the existing utility.

(b) To the extent that a record of written approval is required for the activities listed above, this condition shall constitute written approval.

Pre-construction Conditions

6. Outline Plan(s)

(a) An Outline Plan (or Plans) shall be prepared in accordance with section 176A of the RMA.

(b) Outline Plans (or Plan) may be submitted in parts or in stages to address particular activities (e.g. design or construction aspects), or a Stage of Work of the project.

(c) Outline Plans shall include any management plan or plans that are relevant to the management of effects of those activities or Stage of Work, which may include:
- (i) Network Utilities Management Plan;
- (ii) Construction Noise and Vibration Management Plan;
- (iii) Urban and Landscape Design Management Plan;
- (iv) Heritage and Archaeology Management Plan;
- (v) Bird Management Plan; and
- (vi) Tree Management Plan.

7. Management Plans

(a) Any management plan shall:
- (i) be prepared and implemented in accordance with the relevant management plan condition (refer to Conditions 8 to 27);
- (ii) be prepared by a Suitably Qualified and Experienced Person(s);
- (iii) include sufficient detail relating to the management of effects associated with the relevant activities and/or Stage of Work to which it relates;
- (iv) summarise comments received from Mana Whenua and other stakeholders as required by the relevant management plan condition, along with a summary of where comments have:
  - A. been incorporated; and
  - B. where not incorporated, the reasons why;
- (v) be submitted as part of an Outline Plan pursuant to s176A of the RMA, with the exception of SCMPs, CEMPs, CTMPs and CNVMP Schedules; and
- (vi) once finalised, uploaded to the project website or equivalent virtual information source.

(b) Any management plan developed in accordance with Condition 7(a) may:
- (i) be submitted in parts or in stages to address particular activities (e.g. design or construction aspects) a Stage of Work of the project, or to address specific activities authorised by the designation;
- (ii) except for material changes, be amended to reflect any changes in design, construction methods or management of effects without further process; and
- (iii) if there is a material change required to a management plan which has been submitted with an Outline Plan in accordance with Condition 6, the revised part of the plan shall be submitted to the Council as an update to the Outline Plan or for Certification as soon as practicable following identification of the need for a revision.

(c) Any material changes to the SCMPs, CEMPs or CTMPs are to be submitted to the Council for information.

8. Cultural Advisory Report

(a) At least six (6) months prior to the start of detailed design for a Stage of Work, Mana Whenua shall be invited to prepare a Cultural Advisory Report for the project.

(b) The objective of the Cultural Advisory Report is to assist in understanding and identifying Ngā Taonga Tuku Iho ('treasures handed down by our ancestors') affected by the project, to inform their management and protection. To achieve the objective, Requiring Authority shall invite Mana Whenua to prepare a Cultural Advisory Report that:
- (i) identifies the cultural sites, landscapes and values that have the potential to be affected by the construction and operation of the project;

(ii) sets out the desired outcomes for management of potential effects on cultural sites, landscapes and values;
(iii) identifies traditional cultural practices within the area that may be impacted by the project;
(iv) identifies opportunities for restoration and enhancement of identified cultural sites, landscapes and values within the project area;
(v) taking into account the outcomes of (i) to (iv) above, identify cultural matters and principles that should be considered in the development of the Urban and Landscape Design Management Plan and Heritage and Archaeological Management Plan, and the Cultural Monitoring Plan referred to in Condition 17; and
(vi) identifies and (if possible) nominates traditional names along the project alignment. Noting there may be formal statutory processes outside the project required in any decision-making.

(c) The desired outcomes for management of potential effects on cultural sites, landscapes and values identified in the Cultural Advisory Report shall be discussed with Mana Whenua and those outcomes reflected in the relevant management plans where practicable.

(d) Conditions 8(b) and 8(c) above will cease to apply if:
(i) Mana Whenua have been invited to prepare a Cultural Advisory Report by a date at least 6 months prior to start of Construction Works; and
(ii) Mana Whenua have not provided a Cultural Advisory Report within six months prior to start of Construction Works.

9. Urban and Landscape Design Management Plan (ULDMP)

(a) A ULDMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the ULDMP(s) is to:
(i) enable integration of the project's permanent works into the surrounding landscape and urban context; and
(ii) ensure that the project manages potential adverse landscape and visual effects as far as practicable and contributes to a quality urban environment.

(c) To achieve the objective, the ULDMP(s) shall provide details of how the project:
(i) is designed to integrate with the adjacent urban (or proposed urban) and landscape context, including the surrounding existing or proposed topography, urban environment (i.e. centres and density of built form), landscape character and open space zones;
(ii) provides appropriate walking and cycling connectivity to, and interfaces with, existing or proposed adjacent land uses, and walking and cycling connections;
(iii) promotes inclusive access (where appropriate); and
(iv) promotes a sense of personal safety by aligning with best practice guidelines, such as:

A. Crime Prevention Through Environmental Design (CPTED) principles;

B. Safety in Design (SID) requirements; and

C. Maintenance in Design (MID) requirements and anti-vandalism/anti-graffiti measures.

10. (a) The ULDMP(s) shall include:
(i) a concept plan – which depicts the overall landscape and urban design concept, and explain the rationale for the landscape and urban design proposals;
(ii) developed design concepts, including principles for walking and cycling facilities and public transport; and
(iii) landscape and urban design details – that cover the following:

A. road design – elements such as earthworks contouring including cut and fill batters, benching, spoil disposal sites, median width and treatment, roadside width and treatment;

B. roadside elements – such as lighting, fencing, wayfinding and signage;

C. architectural and landscape treatment of all major structures, including bridges and retaining walls;

D. architectural and landscape treatment of noise barriers;

E. landscape treatment of permanent stormwater control wetlands and swales;

F. integration of passenger transport;

G. pedestrian and cycle facilities including paths, road crossings and dedicated pedestrian/ cycle bridges or underpasses;

H. heritage items with reference to the HAMP in Condition 23; and

I. re-instatement of construction and site compound areas, driveways, accessways and fences.

11. (a) The ULDMP shall also include the following planting details and maintenance requirements:

(i) planting design details including:

A. identification of existing trees and vegetation that will be retained with reference to the Tree Management Plan in Condition 26. Where practicable, mature trees and native vegetation should be retained;

B. street trees, shrubs and ground cover suitable for berms;

C. treatment of fill slopes to integrate with adjacent land use, streams, riparian margins and open space zones;

D. planting of stormwater wetlands;

E. identification of vegetation to be retained and any planting requirements under Conditions 24 and 25;

F. integration of any planting requirements required by conditions of any resource consents for the project; and

G. re-instatement planting of construction and site compound areas as appropriate.

(ii) a planting programme including the staging of planting in relation to the construction programme which shall, as far as practicable, include provision for planting within each planting season following completion of works in each Stage of Work; and

(iii) detailed specifications and a two year maintenance plan relating to the following:

A. weed control and clearance;

B. pest animal management (to support plant establishment);

C. ground preparation (top soiling and decompaction);

D. mulching; and

E. plant sourcing and planting, including hydroseeding and grassing.

(b) Mana Whenua shall be invited to participate in the development of the ULDMP(s) to provide input into relevant cultural landscape and design matters including how desired outcomes for management of potential effects on cultural sites, landscapes and values identified and discussed in accordance with Condition 8 may be reflected in the ULDMP.

12. Flood Hazard

(a) Where relevant to the Stage of Work, the project shall be designed to demonstrate that:

(i) the unnamed tributary of the Ngakoroa Stream generally located at NZTM 1772069, 5891654 and shown in Schedule 1 is crossed by a bridge; and

(ii) the existing Norrie Road Bridge crossing the Hingaia Stream generally located at NZTM 1773201, 5891836 and shown in Schedule 1 is removed within 6 months of a new bridge crossing the Hingaia Stream becoming operational.

(b) The project shall be designed to achieve the following flood risk outcomes:

(i) no increase in flood levels for existing authorised habitable floors that are already subject to flooding;
(ii) no more than a 10% reduction in freeboard for existing authorised habitable floors;
(iii) no increase of more than 50mm in flood level on land zoned for urban or future urban development where there is no existing dwelling;
(iv) no new flood prone areas; and
(v) no more than a 10% average increase of flood hazard (defined as flow depth times velocity) for main access to authorised habitable dwellings.

(c) Compliance with this condition shall be demonstrated in the Outline Plan, which shall include flood modelling of the pre-project and post-project 100 year ARI flood levels (for Maximum Probable Development land use and including climate change).

(d) Where the above outcomes can be achieved through alternative measures outside of the designation such as flood stop banks, flood walls, raising existing authorised habitable floor level and new overland flow paths, the Outline Plan shall include confirmation that any necessary landowner and statutory approvals have been obtained for that work.

13. Closure of Flanagan Road Intersection with Waihoehoe Road

If the Flanagan Road intersection with Waihoehoe Road requires closure, the project shall be designed to provide an alternative connection for Flanagan Road. Where this outcome cannot be achieved within the designation, the Outline Plan shall include confirmation that any necessary landowner and statutory approvals have been obtained for that work.

Construction Conditions

~~13~~14. Construction Environmental Management Plan (CEMP)

(a) A CEMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the CEMP is to set out the management procedures and construction methods to be undertaken to, avoid, remedy or mitigate any adverse effects associated with Construction Works as far as practicable. To achieve the objective, the CEMP shall include:

(i) the roles and responsibilities of staff and contractors;
(ii) details of the site or project manager and the project Liaison Person, including their contact details (phone and email address);
(iii) the Construction Works programmes and the staging approach, and the proposed hours of work;
(iv) the proposed site layouts (including construction yards), locations of refuelling activities and construction lighting;
(v) methods for controlling dust and the removal of debris and demolition of construction materials from public roads or places;
(vi) methods for providing for the health and safety of the general public;
(vii) measures to mitigate flood hazard effects such as siting stockpiles out of floodplains, minimising obstruction to flood flows, actions to respond to warnings of heavy rain;
(viii) procedures for incident management;
(ix) procedures for the refuelling and maintenance of plant and equipment to avoid discharges of fuels or lubricants to Watercourses;
(x) measures to address the storage of fuels, lubricants, hazardous and/or dangerous materials, along with contingency procedures to address emergency spill response(s) and clean up;
(xi) procedures for responding to complaints about Construction Works; and
(xii) methods for amending and updating the CEMP as required.

(c) Any CEMP prepared for a Stage of Work shall be submitted to Council for information at least ten working days before the Start of Construction for *a* Stage of Work.

~~14~~15. Stakeholder and Communication Management Plan (SCMP)

(a) A SCMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the SCMP is to identify how the public and stakeholders (including directly affected and adjacent owners and occupiers of land) will be communicated with throughout the Construction Works. To achieve the objective, the SCMP shall include:

(i) the contact details for the project Liaison Person. These details shall be on the project website, or equivalent virtual information source, and prominently displayed at the main entrance(s) to the site(s);
(ii) the procedures for ensuring that there is a contact person available for the duration of Construction Works, for public enquiries or complaints about the Construction Works;
(iii) methods for engaging with Mana Whenua, to be developed in consultation with Mana Whenua;
(iv) a list of stakeholders, organisations, businesses and persons who will be communicated with;
(v) methods to communicate the proposed hours of construction activities **including** outside of normal working hours and on weekends and public holidays, to surrounding businesses and residential communities; and
(vi) linkages and cross-references to communication methods set out in other conditions and management plans where relevant.

(c) Any SCMP prepared for a Stage of Work shall be submitted to Council for information ten working days prior to the Start of Construction for a Stage of Work.

~~15~~16. Complaints Register

(a) At all times during Construction Works, a record of any complaints received about the Construction Works shall be maintained. The record shall include:
   (i) the date, time and nature of the complaint;
   (ii) the name, phone number and address of the complainant (unless the complainant wishes to remain anonymous);
   (iii) measures taken to respond to the complaint (including a record of the response provided to the complainant) or confirmation of no action if deemed appropriate;
   (iv) the outcome of the investigation into the complaint; and
   (v) any other activities in the area, unrelated to the project that may have contributed to the complaint, such as non-project construction, fires, traffic accidents or unusually dusty conditions generally.

(b) A copy of the Complaints Register required by this condition shall be made available to the Manager upon request as soon as practicable after the request is made.

~~16~~17. Cultural Monitoring Plan

(a) Prior to the start of Construction Works, a Cultural Monitoring Plan shall be prepared by a Suitably Qualified and Experienced Person(s) identified in collaboration with Mana Whenua.

(b) The objective of the Cultural Monitoring Plan is to identify methods for undertaking cultural monitoring to assist with management of any cultural effects during Construction Works.

(c) The Cultural Monitoring Plan shall include:
   (i) requirements for formal dedication or cultural interpretation to be undertaken prior to start of Construction Works in areas identified as having significance to Mana Whenua;
   (ii) requirements and protocols for cultural inductions for contractors and subcontractors;
   (iii) identification of activities, sites and areas where cultural monitoring is required during particular Construction Works;
   (iv) identification of personnel to undertake cultural monitoring, including any geographic definition of their responsibilities; and
   (v) details of personnel to assist with management of any cultural effects identified during cultural monitoring, including implementation of any accidental discovery protocols under condition ~~22~~**23**.

(d) If Enabling Works involving soil disturbance are undertaken prior to the start of Construction Works, an Enabling Works Cultural Monitoring Plan shall be prepared by a Suitably Qualified and Experienced Person identified in collaboration with Mana Whenua. This plan may be prepared as a standalone Enabling Works Cultural Monitoring Plan or be included in the main Construction Works Cultural Monitoring Plan.

Advice Note: *Where appropriate, the Cultural Monitoring Plan shall align with the requirements of other conditions of the designation and resource consents for the project which require monitoring during Construction Works.*

~~17~~18. Construction Traffic Management Plan (CTMP)

(a) A CTMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the CTMP is to avoid, remedy or mitigate, as far as practicable, adverse construction traffic effects. To achieve this objective, the CTMP shall include:
   (i) methods to manage the effects of temporary traffic management activities on traffic;
   (ii) measures to ensure the safety of all transport users;
   (iii) the estimated numbers, frequencies, routes and timing of traffic movements, including any specific non-working or non-movement hours to manage vehicular and pedestrian traffic near schools or to manage traffic congestion;

(iv) site access routes and access points for heavy vehicles, the size and location of parking areas for plant, construction vehicles and the vehicles of workers and visitors;

(v) identification of detour routes and other methods to ensure the safe management and maintenance of traffic flows, including pedestrians and cyclists, on existing roads;

(vi) methods to maintain vehicle access to property and/or private roads where practicable, or to provide alternative access arrangements when it will not be;

(vii) the management approach to loads on heavy vehicles, including covering loads of fine material, the use of wheel-wash facilities at site exit points and the timely removal of any material deposited or spilled on public roads; and

(viii) methods that will be undertaken to communicate traffic management measures to affected road users (e.g. residents/public/stakeholders/emergency services).

(c) Any CTMP prepared for a Stage of Work shall be submitted to Council for information ten working days prior to the Start of Construction for a Stage of Work.

~~18~~19. Construction Noise Standards

(a) Construction noise shall be measured and assessed in accordance with NZS6803:1999 Acoustics – Construction Noise and shall comply with the noise standards set out in the following table as far as practicable:

Table ~~18~~19.1: Construction noise standards

Day of week	Time period	$L_{Aeq(15min)}$	L_{AFmax}
Occupied activity sensitive to noise			
Weekday	0630h - 0730h	55 dB	75 dB
	0730h - 1800h	70 dB	85 dB
	1800h - 2000h	65 dB	80 dB
	2000h - 0630h	45 dB	75 dB
Saturday	0630h - 0730h	55 dB	75 dB
	0730h - 1800h	70 dB	85 dB
	1800h - 2000h	45 dB	75 dB
	2000h - 0630h	45 dB	75 dB
Sunday and Public Holidays	0630h - 0730h	45 dB	75 dB
	0730h - 1800h	55 dB	85 dB
	1800h - 2000h	45 dB	75 dB
	2000h - 0630h	45 dB	75 dB
Other occupied buildings			
All	0730h – 1800h	70 dB	
	1800h – 0730h	75 dB	

(b) Where compliance with the noise standards set out in the Table ~~18~~**19**.1 above is not practicable, and unless otherwise provided for in the CNVMP, then the methodology in Condition ~~21~~**22** shall apply.

~~19~~20. Construction Vibration Standards

(a) Construction vibration shall be measured in accordance with ISO 4866:2010 Mechanical vibration and shock – Vibration of fixed structures – Guidelines for the measurement of vibrations and evaluation of their effects on structures and shall comply with the vibration standards set out in the following table as far as practicable.

Table ~~19~~20.1 Construction vibration criteria

Receiver	Details	Category A	Category B
Occupied Activities sensitive to noise	Night-time 2000h - 0630h	0.3mm/s ppv	2mm/s ppv
	Daytime 0630h - 2000h	2mm/s ppv	5mm/s ppv
Other occupied buildings	Daytime 0630h - 2000h	2mm/s ppv	5mm/s ppv
All other buildings	At all other times	Tables 1 and 3 of DIN4150-3:1999	

(b) Where compliance with the vibration standards set out in Table ~~19~~20.1 above is not practicable, and unless otherwise provided for in the CNVMP as required by Condition ~~20~~21(c)(x), then the methodology in Condition ~~21~~22 shall apply.

~~20~~21. Construction Noise and Vibration Management Plan (CNVMP)

(a) A CNVMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) A CNVMP shall be implemented during the Stage of Work to which it relates.

(c) The objective of the CNVMP is to provide a framework for the development and implementation of the Best Practicable Option for the management of construction noise and vibration effects to achieve the construction noise and vibration standards set out in Conditions ~~18~~19 and ~~19~~20 to the extent practicable. To achieve this objective, the CNVMP shall be prepared in accordance with Annex E2 of the New Zealand Standard NZS6803:1999 *'Acoustics – Construction Noise'* (NZS6803:1999) and shall as a minimum, address the following:

(i) description of the works and anticipated equipment/processes;
(ii) hours of operation, including times and days when construction activities would occur;
(iii) the construction noise and vibration standards for the project;
(iv) identification of receivers where noise and vibration standards apply;
(v) management and mitigation options, and identification of the Best Practicable Option;
(vi) methods and frequency for monitoring and reporting on construction noise and vibration;
(vii) procedures for communication and engagement with nearby residents and stakeholders, including notification of proposed construction activities, the period of construction activities, and management of noise and vibration complaints;
(viii) contact details of the project Liaison Person;
(ix) procedures for the regular training of the operators of construction equipment to minimise noise and vibration as well as expected construction site behaviours for all workers;
(x) identification of areas where compliance with the noise (Condition ~~18~~19) and/or vibration standards (Condition ~~19~~20 Category A or Category B) will not be practicable and the specific management controls to be implemented and consultation requirements with owners and occupiers of affected sites;
(xi) procedures and requirements for the preparation of a Schedule to the CNVMP (Schedule) for those areas where compliance with the noise (Condition ~~18~~19) and/or vibration standards (Condition ~~19~~20 Category B) will not be practicable and where sufficient information is not available at the time of the CNVMP to determine the area specific management controls Condition ~~17~~18(c)(x);
(xii) procedures for:

A. communicating with affected receivers, where measured or predicted vibration from construction activities exceeds the vibration criteria of Condition ~~19~~**20**; and

B. assessing, mitigating and monitoring vibration where measured or predicted vibration from construction activities exceeds the Category B vibration criteria of Condition ~~19~~**20**, including the requirement to undertake building condition surveys before and after works to determine whether any damage has occurred as a result of construction vibration; and

(xiii) requirements for review and update of the CNVMP.

~~21~~22. Schedule to a CNVMP

(a) Unless otherwise provided for in a CNVMP, a Schedule to the CNVMP (Schedule) shall be prepared in consultation with the owners and occupiers of sites subject to the Schedule, when:

(i) construction noise is either predicted or measured to exceed the noise standards in Condition ~~18~~**19**, except where the exceedance of the L_{Aeq} criteria is no greater than 5 decibels and does not exceed:

A. 0630 – 2000: 2 period of up to 2 consecutive weeks in any 2 months; or

B. 2000 - 0630: 1 period of up to 2 consecutive nights in any 10 days;

(ii) construction vibration is either predicted or measured to exceed the Category B standard at the receivers in Condition ~~19~~**20**.

(b) The objective of the Schedule is to set out the Best Practicable Option for the management of noise and/or vibration effects of the construction activity beyond those measures set out in the CNVMP. The Schedule shall include details such as:

(i) construction activity location, start and finish dates;

(ii) the nearest neighbours to the construction activity;

(iii) the predicted noise and/or vibration level for all receivers where the levels are predicted or measured to exceed the applicable standards in Condition ~~21~~**22**(a);

(iv) the proposed mitigation;

(v) the proposed communications with neighbours; and

(vi) location, times and types of monitoring.

(c) The Schedule shall be submitted to the Manager Council for certification at least 5 working days, except in unforeseen circumstances, in advance of Construction Works that are covered by the scope of the Schedule and shall form part of the CNVMP.

~~22~~23. Heritage and Archaeology Management Plan (HAMP)

(a) A HAMP shall be prepared in consultation with Council, HNZPT and Mana Whenua prior to the Start of Construction for a Stage of Work.

(b) The objective of the HAMP is to protect historic heritage and to remedy and mitigate any residual effects as far as practicable. To achieve the objective, the HAMP shall identify:

(i) methods for the identification and assessment of potential built heritage and archaeological sites within the Designation to inform detailed design;

(ii) known heritage places and archaeological sites and potential archaeological sites within the Designation, including identifying any archaeological sites for which an Archaeological Authority under the HNZPTA will be sought or has been granted;

(iii) any unrecorded archaeological sites or post-1900 heritage sites within the Designation, which shall also be documented and recorded;

(iv) roles, responsibilities and contact details of project personnel, Mana Whenua representatives, and relevant agencies involved with heritage and archaeological matters including surveys, monitoring of project works, compliance with AUP accidental discovery rule, and monitoring of conditions;

(v) specific areas to be investigated, monitored and recorded to the extent these are directly affected by the project. This shall include non invasive techniques or exploratory investigation to clarify the extent of the Runciman's Homestead site (NZAA R12/1131);

(vi) the proposed methodology for investigating and recording post-1900 heritage sites (including buildings) that need to be demolished or relocated, including details of their condition, measures to mitigate any adverse effects and timeframe for implementing the proposed methodology, in accordance with the HNZPT guideline AGS 1A: Investigation and Recording of Buildings and Standing Structures (4 July 2014), or any subsequent version. This shall include a built heritage assessment of:

A. the former Drury Creamery and Casein Factory (12 Norrie Road, CHI site 15102); and

B. the former railway worker's residence (18 Waihoehoe Road, CHI site 22288);

(vii) methods to acknowledge cultural values identified through Condition 8 where archaeological sites also involve Ngā Taonga Tuku Iho (treasures handed down by our ancestors) and where feasible and practicable to do so;

(viii) methods for protecting or minimising adverse effects on heritage and archaeological sites within the Designation during project works as far as practicable, (for example fencing around heritage and archaeological sites to protect them from damage during construction, using geotextile fabric and aggregate in construction compound areas not being earthworked);

(viii) <u>methods to protect or minimise damage to the St Johns Anglican Church and Cemetery (AUP Scheduled Site 707) during project works as far as practicable based on pre construction advise from a specialist heritage conservator; and</u>

(ix) training requirements and inductions for contractors and subcontractors on heritage and archaeological sites within the Designation, and legal obligations relating to accidental discoveries. The training shall be undertaken prior to the Start of Construction, under the guidance of a Suitably Qualified and Experienced Person and Mana Whenua representatives (to the extent the training relates to cultural values identified under Condition 8).

Advice Note: *The requirements for accidental discoveries of heritage items are set out in Rule E11.6.1 of the AUP.*

~~23~~<u>24</u>. Pre-Construction Wetland Bird Survey

(a) Prior to the Start of Construction for a Stage of Work within 500m of the Ngakoroa Stream Wetlands, a survey and assessment of Threatened or At-Risk wetland birds and their habitat in the area shown in Schedule 2 shall be undertaken by a Suitably Qualified and Experienced Person.

(b) The purpose of the survey and assessment is to:

(i) confirm the ecological value of the Ngakoroa Stream Wetlands for Threatened or At-Risk wetland birds; and

(ii) confirm whether the project will or may have a moderate or greater level of ecological effect on Threatened or At-Risk wetland birds and their habitat prior to implementation of impact management measures, as determined in accordance with the EIANZ Guidelines for Use in New Zealand: Terrestrial and Freshwater Ecosystems (May 2018) or subsequent revision.

(c) If the wetland bird survey in (a) above confirms that the project will or may have a moderate or greater level of ecological effect on Threatened or At-Risk wetland birds without impact management, then Condition ~~24~~**<u>25</u>** applies.

~~24~~**25**. **Bird Management Plan (BMP)**

(a) If required under Condition ~~23~~**24**, prior to the start of construction for a Stage of Work within 500m of the Ngakoroa Stream Wetlands, a BMP shall be prepared and implemented.

(b) The objective of the BMP is to avoid and/or minimise impacts of construction activities on Threatened or At-Risk wetland birds in the Ngakoroa Stream Wetlands. The BMP shall set out the methods that will be used to achieve this objective. These methods may include:

(i) commencing Construction Works outside of the wetland bird breeding season (September to February) where practicable, in order to discourage bird nesting in the construction areas within the designation;

(ii) a nesting bird survey of Threatened or At-Risk wetland birds undertaken by a Suitably Qualified and Experienced Person. This should occur prior to any Construction Works taking place within a 50m radius of the Ngakoroa Stream Wetlands (including establishment of construction areas adjacent to the Ngakoroa Stream Wetlands). Surveys should be repeated at the beginning of each wetland bird breeding season and following periods of construction inactivity;

(iii) protection and buffer measures if nesting Threatened or At-Risk Wetland birds are identified within 50m of any construction area (including laydown areas). This could include:

A. a 20 m buffer area around the nest location and retaining vegetation. The buffer areas should be demarcated where necessary to protect birds from encroachment. This might include the use of marker poles, tape and signage;

B. monitoring of the nesting Threatened or At-Risk wetland birds by a Suitably Qualified and Experienced Person. Construction works within the 20m nesting buffer areas should not occur until the Threatened or At-Risk wetland birds have fledged from the nest location (approximately 30 days from egg laying to fledging) as confirmed by a Suitably Qualified and Experienced Person; and

C. minimising the disturbance from the works if construction works are required within 50 m of a nest, as advised by a Suitably Qualified and Experienced Person;

(iv) a 10m setback where practicable, between the edge of the Ngakoroa Stream Wetlands and the construction area (along the edge of the stockpile/laydown area). This could be achieved by retaining existing vegetation or by planting unvegetated areas with native coastal forest/riparian/wetland species (as appropriate). Marker poles, tape and signage could also be used to clearly delineate the wetland area to prevent encroachment; and

(v) minimising light spill from construction areas into the Ngakoroa Stream Wetlands.

(c) The BMP shall be consistent with any ecological management measures to be undertaken in compliance with conditions of any resource consents granted for the project**.**

Advice Note:

Depending on the potential effects of the project, the resource consents for the project may include the following monitoring and management plans:

(a) Stream and/or wetland restoration plans;
(b) Vegetation restoration plans; and
(c) Fauna management plans (e.g. herpetofauna, bats).

~~25~~**26. Tree Management Plan**

a) Prior to the Start of Construction for a Stage of Work, a Tree Management Plan shall be prepared.

b) The objective of the Tree Management Plan is to manage effects of construction activities on trees identified in Schedule 3.

c) The Tree Management Plan shall:

(i) confirm that the trees listed in Schedule 3 still exist; and

(ii) demonstrate how the design and location of project works has avoided, remedied or mitigated any effects on any tree listed in Schedule 3. This may include:

A. planting to replace trees that require removal (with reference to the ULDMP planting design details in Condition 11);
B. tree protection zones and tree protection measures such as protective fencing, ground protection and physical protection of roots, trunks and branches; and
C. methods for work within the rootzone of trees that are to be retained in line with accepted arboricultural standards.

(iii) **demonstrate how the tree management measures (outlined in A – C above) are consistent with conditions of any resource consents granted for the project in relation to managing construction effects on trees.**

~~26~~**27. Network Utility Management Plan (NUMP)**

(a) A NUMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the NUMP is to set out a framework for protecting, relocating and working in proximity to existing network utilities. The NUMP shall include methods to:
(i) provide access for maintenance at all reasonable times, or emergency works at all times during construction activities;
(ii) manage the effects of dust and any other material potentially resulting from construction activities and able to cause material damage, beyond normal wear and tear to overhead transmission lines in the project area; and
(iii) demonstrate compliance with relevant standards and Codes of Practice including, where relevant, the NZECP 34:2001 New Zealand Electrical Code of Practice for Electrical Safe Distances 2001; and AS/NZS 4853:2012 Electrical hazards on Metallic Pipelines.

(c) The NUMP shall be prepared in consultation with the relevant Network Utility Operator(s) who have existing assets that are directly affected by the project.

(d) The NUMP shall describe how any comments from the Network Utility Operator in relation to its assets have been addressed.

(e) Any comments received from the Network Utility Operator shall be considered when finalising the NUMP.

(f) Any amendments to the NUMP related to the assets of a Network Utility Operator shall be prepared in consultation with that asset owner.

Operational Conditions

~~27~~**28. Traffic Noise**

For the purposes of Conditions ~~28~~**29** to ~~41~~**42**:

(a) Building-Modification Mitigation – has the same meaning as in NZS 6806;

(b) Detailed Mitigation Options – means the fully detailed design of the Selected Mitigation Options, with all practical issues addressed;

(c) Habitable Space – has the same meaning as in NZS 6806;

(d) Identified Noise Criteria Category – means the Noise Criteria Category for a PPF identified in Schedule 4: Identified PPFs Noise Criteria Categories;

(e) Mitigation – has the same meaning as in NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads;

(f) Noise Criteria Categories – means the groups of preference for sound levels established in accordance with NZS 6806 when determining the Best Practicable Option for noise mitigation (i.e. Categories A, B and C);

(g) NZS 6806 – means New Zealand Standard NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads;

(h) P40 – means Waka Kotahi NZTA P40:2014 Specification for noise mitigation;

(i) Protected Premises and Facilities (PPFs) – means only the premises and facilities identified in Schedule 4: Identified PPFs Noise Criteria Categories;

(j) Selected Mitigation Options – means the preferred mitigation option resulting from a Best Practicable Option assessment undertaken in accordance with NZS 6806; and

(k) Structural Mitigation – has the same meaning as in NZS 6806.

~~28~~**29.** The Noise Criteria Categories identified in Schedule 4: Identified PPFs Noise Criteria Categories at each of the PPFs shall be achieved where practicable and subject to Conditions ~~27~~**28** to ~~41~~**42**.

The Noise Criteria Categories do not need to be complied with at a PPF where:

(a) the PPF no longer exists; or

(b) agreement of the landowner has been obtained confirming that the Noise Criteria Category does not need to be met.

Achievement of the Noise Criteria Categories for PPFs shall be by reference to a traffic forecast for a high growth scenario in a design year at least 10 years after the programmed opening of the project.

~~29~~**30.** As part of the detailed design of the project, a Suitably Qualified and Experienced Person shall determine the Selected Mitigation Options for the PPFs identified on Schedule 4: Identified PPFs Noise Criteria Categories.

~~30~~**31.** Prior to construction of the project, a Suitably Qualified and Experienced Person shall develop the Detailed Mitigation Options for the PPFs identified on Schedule 4: Identified PPFs Noise Criteria Categories, taking into account the Selected Mitigation Options.

~~31~~**32.** If the Detailed Mitigation Options would result in the Identified Noise Criteria Category changing to a less stringent Category, e.g. from Category A to B or Category B to C, at any relevant PPF, a Suitably Qualified and Experienced Person shall provide confirmation to the Manager that the Detailed Mitigation Option would be consistent with adopting the Best Practicable Option in accordance with NZS 6806 prior to implementation.

~~32~~**33.** Prior to the Start of Construction, a Noise Mitigation Plan written in accordance with Chapter 7 of P40 shall be provided to the Manager for information.

The purpose of the Noise Mitigation Plan is to confirm that the Detailed Mitigation Options meet the requirements of Conditions ~~28~~**29** to ~~41~~**42**. The Noise Mitigation Plan shall include confirmation that consultation has been undertaken with affected property owners for site specific design requirements and the implementation programme.

~~33~~**34.** The Detailed Mitigation Options shall be implemented prior to completion of construction of the project, with the exception of any low-noise road surfaces, which shall be implemented within twelve months of completion of construction.

~~34~~**35.** Prior to the Start of Construction, a Suitably Qualified and Experienced Person shall identify those PPFs which, following implementation of all the Detailed Mitigation Options, will not be Noise Criteria Categories A or B and where Building-Modification Mitigation might be required to achieve 40 dB $L_{Aeq(24h)}$ inside Habitable Spaces ('Category C Buildings').

~~35~~**36.** Prior to the Start of Construction in the vicinity of each Category C Building, the Requiring Authority shall write to the owner of the Category C Building requesting entry to assess the noise reduction performance of the existing building envelope. If the building owner agrees to entry within three months of the date of the Requiring Authority's letter, the Requiring Authority shall instruct a Suitably Qualified and Experienced Person to visit the building and assess the noise reduction performance of the existing building envelope.

~~36~~**37.** For each Category C Building identified, the Requiring Authority is deemed to have complied with Condition ~~35~~**36** above if:

(a) the Requiring Authority's Suitably Qualified and Experienced Person has visited the building and assessed the noise reduction performance of the building envelope; or

(b) the building owner agreed to entry, but the Requiring Authority could not gain entry for some reason (such as entry denied by a tenant); or

(c) the building owner did not agree to entry within three months of the date of the Requiring Authority's letter sent in accordance with Condition ~~35~~**36** above (including where the owner did not respond within that period); or

(d) the building owner cannot, after reasonable enquiry, be found prior to completion of construction of the project.

If any of (b) to (d) above apply to a Category C Building, the Requiring Authority is not required to implement Building-Modification Mitigation to that building.

~~37~~**38.** Subject to Condition ~~36~~**37** above, within six months of the assessment undertaken in accordance with Conditions ~~35~~**36** and ~~36~~**37**, the Requiring Authority shall write to the owner of each Category C Building advising:

(a) if Building-Modification Mitigation is required to achieve 40 dB LAeq(24h) inside habitable spaces; and

(b) the options available for Building-Modification Mitigation to the building, if required; and

(c) that the owner has three months to decide whether to accept Building-Modification Mitigation to the building and to advise which option for Building-Modification Mitigation the owner prefers, if the Requiring Authority has advised that more than one option is available.

~~38~~**39.** Once an agreement on Building-Modification Mitigation is reached between the Requiring Authority and the owner of a Category C Building, the mitigation shall be implemented, including any third party authorisations required, in a reasonable and practical timeframe agreed between the Requiring Authority and the owner.

~~39~~**40.** Subject to Condition ~~36~~**37**, where Building-Modification Mitigation is required, the Requiring Authority is deemed to have complied with Condition ~~38~~**39** if:

(a) the Requiring Authority has completed Building Modification Mitigation to the building; or

(b) an alternative agreement for mitigation is reached between the Requiring Authority and the building owner; or

(c) the building owner did not accept the Requiring Authority's offer to implement Building-Modification Mitigation within three months of the date of the Requiring Authority's letter sent in accordance with Condition ~~36~~**37** (including where the owner did not respond within that period); or

(d) the building owner cannot, after reasonable enquiry, be found prior to completion of construction of the project.

~~40~~**41.** Within twelve months of completion of construction of the project, a post-construction review report written in accordance with Chapter 8 of P40 Specification for Noise Mitigation 2014 shall be provided to the Manager.

~~41~~**42.** The Detailed Mitigation Options shall be maintained so they retain their noise reduction performance as far as practicable.

Schedule 1: General Accordance Plans and Information

Project Description

The proposed work is the construction, operation and maintenance of an arterial transport corridor in Drury from Jesmond Road (from State Highway 22) to Waihoehoe Road east of Fitzgerald Road including active transport facilities and associated infrastructure. The proposed work is shown in the following Concept Plan and includes:

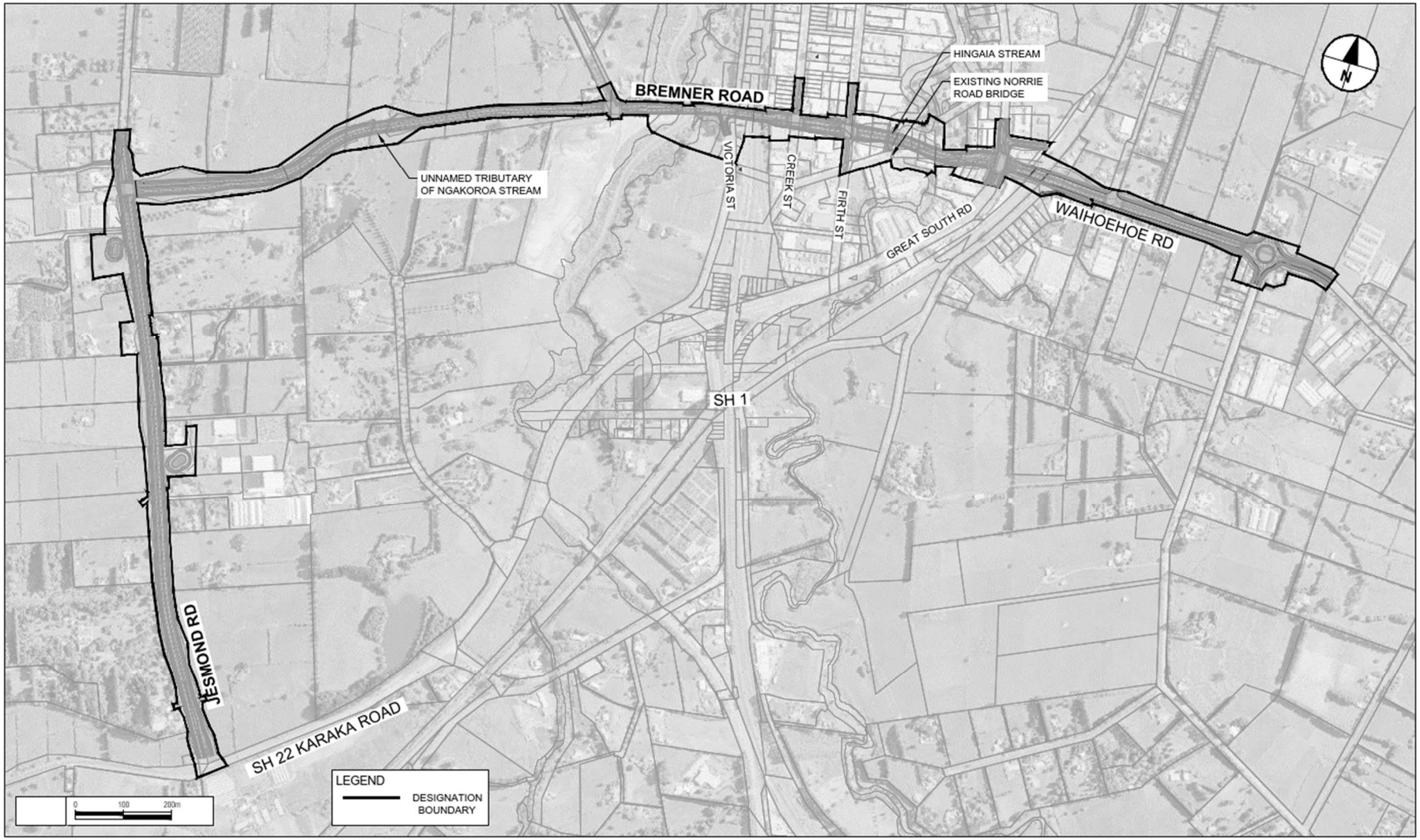
(a) An upgraded and new transport corridor with four lanes, including public transport and active transport facilities;

(b) Associated works including intersections, bridges, embankments, retaining, culverts, stormwater management systems and realignment of Tui Street;

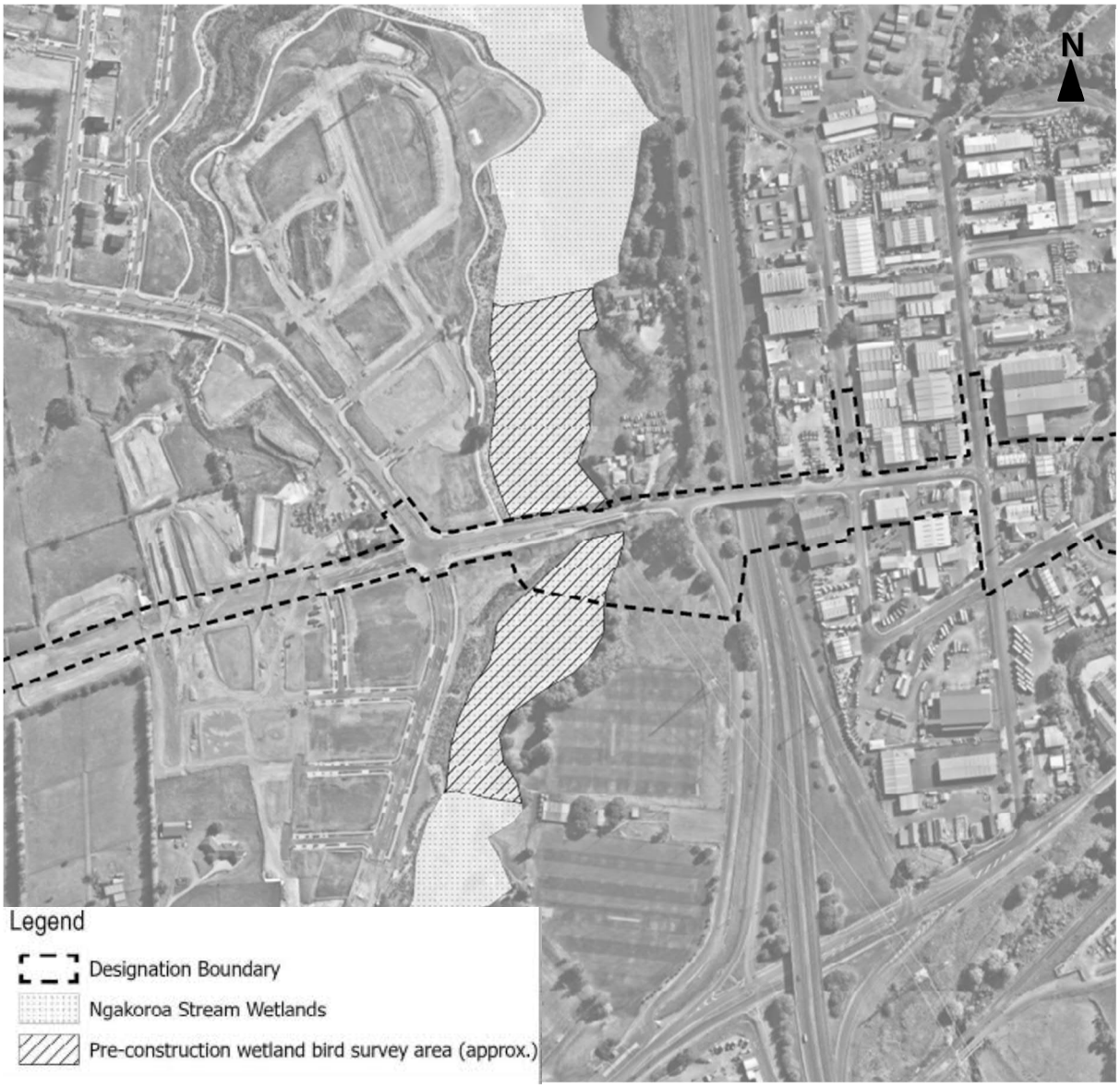
(c) Changes to local roads, where the proposed work intersects with local roads; and

(d) Construction activities, including vegetation removal, construction compounds, lay down areas, bridge works area, construction traffic management and the re-grade of driveways.

Concept Plan



Schedule 2: Pre-construction Wetland Bird Survey



Schedule 3: Trees to be Included in the Tree Management Plan

Tree Number	Tree or Group	Number of trees	Species List	Location (refer to Tree Location Plan)	Reason for protection in the AUP (District Plan rules) as at January 2021 when the Notice of Requirement was lodged
27	Hedge / shelter belt	undefined	Cryptomeria japonica	Within 201 Jesmond Road (Lot 1 DP 365133) adjoining the road corridor	Heritage
39	Tree group	9	Platanus x hispanica 'Acerifolia'	Within the Bremner Road road corridor adjoining 132F Bremner Road (Lot 611 DP 528695), 132E Bremner Road (Lot 610 DP 528695).	Road
40	Tree group	8	Pinus radiata	Within 20 Victoria Street (Part Allot 37 PSH OF Opaheke). Drury Sports Complex, on the corner of Bremner Road and Victoria Road	Open space
41	Tree group	5	Quercus palustris, Liquidambar styraciflua, Ligustrum lucidum, Fraxinus ornus	Within 20 Victoria Street (Part Allot 37 PSH OF Opaheke). Drury Sports Complex, adjacent to Ngakoroa Stream.	Open space, Riparian
42	Tree group	8	Quercus palustris, Liquidambar styraciflua, Populus yunnanensis	Within the Victoria Street Road corridor / Drury Sports Complex	Open space
43	Tree group	4	Quercus robur	Within the State Highway 1 road corridor	Road
44	Tree group	3	Melia azedarach, Podocarpus totara	Within the Creek Street road corridor adjacent to 11 Bremner Road (1/3 SH Lot 1 DP 144254, Factory 1 DP 144254)	Road
45	Tree group	2	Betula pendula	Within the Bremner Road road corridor adjacent to 69 Creek Street (Lot 1 DP 201670)	Road
46	Tree group	3	Salix fragilis, Populus alba	Within the Esplanade Reserve at 19 Norrie Road (Crown Land Survey Office Plan 200).	Open Space
48	Tree group	3	Salix alba, Populus yunnanensis	Within the Cameron Road paper road corridor adjoining 9 Cameron Place (Lot 2 DP 535409).	Road
49	Single Tree	1	Thuja occidentalis	Within the Cameron Road paper road corridor adjoining 9 Cameron Place (Lot 2 DP 535409).	Road
50	Single Tree	1	Picea sitchensis	Within 9 Cameron Place (Lot 2 DP 535409) adjoining the Norrie Road road corridor.	Heritage
51	Single Tree	1	Cryptomeria japonica	Within 9 Cameron Place (Lot 2 DP 535409) adjoining the Norrie Road road corridor.	Heritage
52	Tree group	3	Quercus robur	Within the Waihoehoe Road road corridor adjoining 236 Great South Road (Lot 1 DP 205378)	Road
150	Tree group	5	Washingtonia robusta	Within the road corridor adjoining 239-243 Great South Road (Lot 1 DEEDS Whau 72, Lot 5 DEEDS Whau 72)	Road

Tree Location Plan 1

Tree Location Plan 2

Tree Location Plan 3

Schedule 4: Identified PPFs Noise Criteria Categories

Address	New or Altered Road	Noise Criteria Category
1 Auranga Stage 2 Lot	New	A
2 Auranga Stage 2 Lot	New	A
3 Auranga Stage 2 Lot	New	A
4 Auranga Stage 2 Lot	New	A
5 Auranga Stage 2 Lot	New	A
6 Auranga Stage 2 Lot	New	B
7 Auranga Stage 2 Lot	New	A
8 Auranga Stage 2 Lot	New	A
9 Auranga Stage 2 Lot	New	A
10 Auranga Stage 2 Lot	New	A
11 Auranga Stage 2 Lot	New	A
12 Auranga Stage 2 Lot	New	A
13 Auranga Stage 2 Lot	New	A
31 Bremner Road	Altered	A
33 Bremner Road	Altered	A
37 Bremner Road	Altered	A
144 Bremner Road	Altered	A
38 Burberry Road	New	A
2 Cameron Place	Altered	A
4 Cameron Place	Altered	A
6 Cameron Place	Altered	A
8 Cameron Place	Altered	A
10 Cameron Place	Altered	A
12 Cameron Place	Altered	A
14 Cameron Place	Altered	A
3 Fitzgerald Road	Altered	A
5 Fitzgerald Road	Altered	A
7 Fitzgerald Road	Altered	A
9 Fitzgerald Road (2 PPFs)	Altered	A
15 Fitzgerald Road	Altered	A
21 Fitzgerald Road	Altered	A
28 Fitzgerald Road	Altered	A
86 Fitzgerald Road	Altered	A
113 Fitzgerald Road	Altered	A
8 Flanagan Road	Altered	A
16 Flanagan Road	Altered	A
20 Flanagan Road	Altered	A

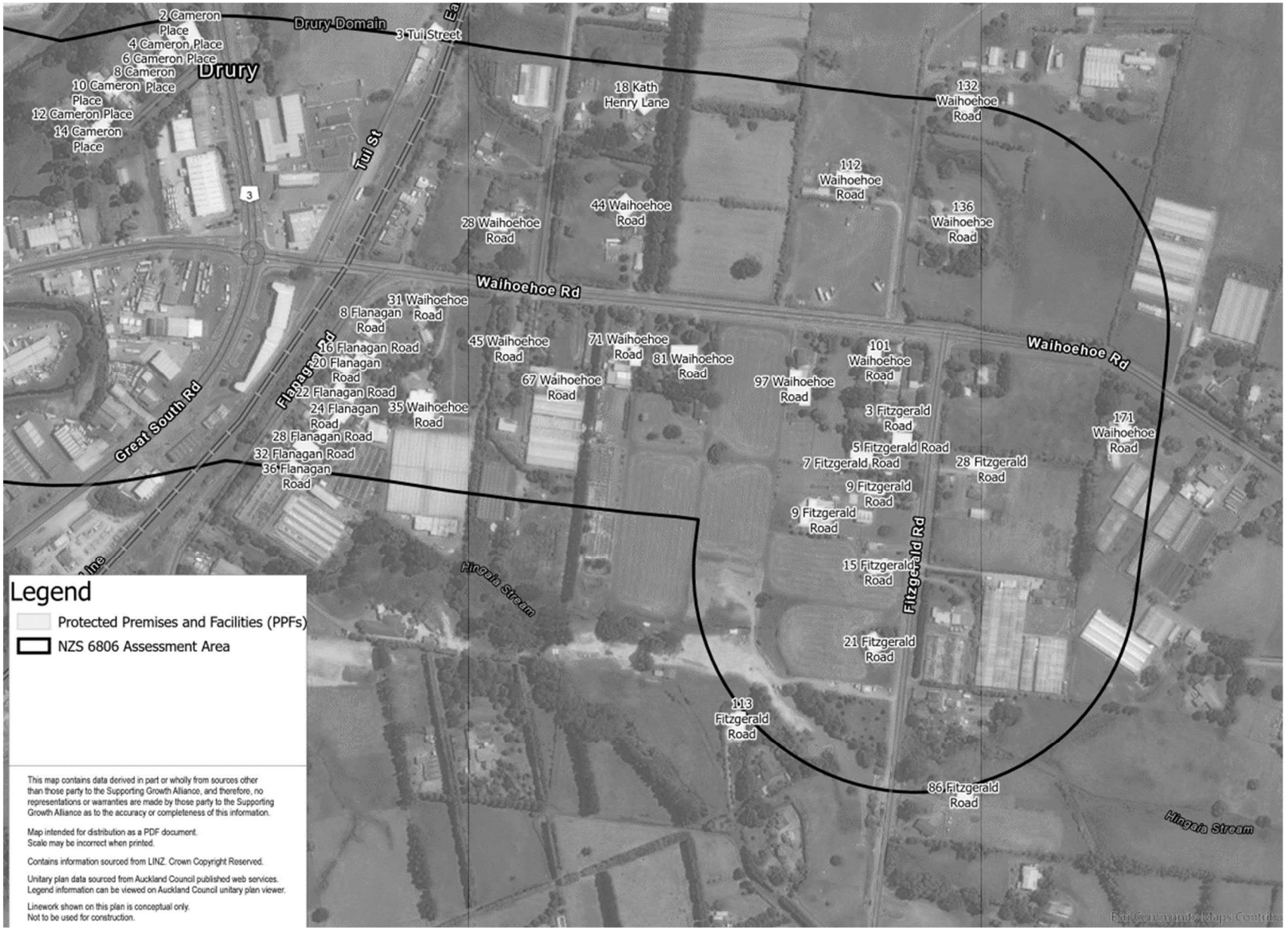
Address	New or Altered Road	Noise Criteria Category
22 Flanagan Road	Altered	A
24 Flanagan Road	Altered	A
28 Flanagan Road	Altered	A
32 Flanagan Road	Altered	A
36 Flanagan Road	Altered	A
41 Jesmond Road	Altered	A
64 Jesmond Road	Altered	A
84 Jesmond Road	Altered	A
85 Jesmond Road	Altered	A
119 Jesmond Road	Altered	A
121 Jesmond Road	Altered	A
125 Jesmond Road	Altered	A
131 Jesmond Road	Altered	A
160 Jesmond Road	Altered	A
169 Jesmond Road	Altered	A
177 Jesmond Road	Altered	A
188 Jesmond Road	Altered	A
201 Jesmond Road (2 PPFs)	Altered	A
224 Jesmond Road	Altered	A
235 Jesmond Road	New	B
238 Jesmond Road	Altered	A
256 Jesmond Road	Altered	A
262 Jesmond Road	Altered	A
280 Jesmond Road	Altered	A
281 Jesmond Road	Altered	A
288 Jesmond Road	Altered	A
296 Jesmond Road	Altered	A
341 Jesmond Road	New	A
160 Karaka Road	Altered	A
18 Kath Henry Lane	Altered	A
3 Tui Street	Altered	A
28 Waihoehoe Road	Altered	A
31 Waihoehoe Road	Altered	A
35 Waihoehoe Road	Altered	A
44 Waihoehoe Road	Altered	A
45 Waihoehoe Road	Altered	A
67 Waihoehoe Road	Altered	A
71 Waihoehoe Road	Altered	A

Address	New or Altered Road	Noise Criteria Category
81 Waihoehoe Road	Altered	A
97 Waihoehoe Road	Altered	A
101 Waihoehoe Road	Altered	A
112 Waihoehoe Road	Altered	A
132 Waihoehoe Road	Altered	A
136 Waihoehoe Road	Altered	A
171 Waihoehoe Road	Altered	A

PPF Location Plans


Jesmond Rd
Oira Rd
Burberry Rd
296 Jesmond Road
288 Jesmond Road
281 Jesmond Road
280 Jesmond Road
256 Jesmond Road
262 Jesmond Road
341 Jesmond Road
38 Burberry Road
235 Jesmond Road
238 Jesmond Road
224 Jesmond Road
201 Jesmond Road
201 Jesmond Road
177 Jesmond Road
188 Jesmond Road
169 Jesmond Road
160 Jesmond Road
131 Jesmond Road
Legend
Protected Premises and Facilities (PPFs)
NZS 6806 Assessment Area
This map contains data derived in part or wholly from sources other than those party to the Supporting Growth Alliance, and therefore, no representations or warranties are made by those party to the Supporting Growth Alliance as to the accuracy or completeness of this information.
Map intended for distribution as a PDF document.
Scale may be incorrect when printed.
Contains information sourced from LINZ. Crown Copyright Reserved.
Unitary plan data sourced from Auckland Council published web services.
Legend information can be viewed on Auckland Council unitary plan viewer.
Linework shown on this plan is conceptual only.
Not to be used for construction.
Esri Community Maps Contributors, LINZ, Stats NZ, Esri, TomTom, Garmin, FAO, NASA, USGS


Bremner Rd
Kaea Ln
Faithfull Dr
Peara Ln
33 Bremner Road
31 Bremner Road
37 Bremner Road
144 Bremner Road
Bremner Rd
Bremner Rd
Rapoto Dr
1-13 Auranga Stage 2 Lot
Ngakaroa Stream
Victoria St
Southern Mtwy
Southern Mtwy
Southern Mtwy
Creek St
Creek St
Creek St
Firth St
Firth St
Norrie Rd
Great South Rd
Legend
Protected Premises and Facilities (PPFs)
NZS 6806 Assessment Area
This map contains data derived in part or wholly from sources other than those party to the Supporting Growth Alliance, and therefore, no representations or warranties are made by those party to the Supporting Growth Alliance as to the accuracy or completeness of this information.
Map intended for distribution as a PDF document.
Scale may be incorrect when printed.
Contains information sourced from LINZ. Crown Copyright Reserved.
Unitary plan data sourced from Auckland Council published web services.
Legend information can be viewed on Auckland Council unitary plan viewer.
Linework shown on this plan is conceptual only.
Not to be used for construction.


2 Cameron Place
4 Cameron Place
6 Cameron Place
8 Cameron Place
10 Cameron Place
12 Cameron Place
14 Cameron Place
Drury
Drury Domain
3 Tui Street
Tui St
18 Kath Henry Lane
132 Waihoehoe Road
112 Waihoehoe Road
44 Waihoehoe Road
28 Waihoehoe Road
136 Waihoehoe Road
Waihoehoe Rd
31 Waihoehoe Road
8 Flanagan Road
16 Flanagan Road
20 Flanagan Road
22 Flanagan Road
24 Flanagan Road
28 Flanagan Road
32 Flanagan Road
36 Flanagan Road
Flanagan Rd
Great South Rd
45 Waihoehoe Road
71 Waihoehoe Road
81 Waihoehoe Road
67 Waihoehoe Road
35 Waihoehoe Road
101 Waihoehoe Road
97 Waihoehoe Road
3 Fitzgerald Road
5 Fitzgerald Road
7 Fitzgerald Road
28 Fitzgerald Road
171 Waihoehoe Road
9 Fitzgerald Road
9 Fitzgerald Road
Fitzgerald Rd
15 Fitzgerald Road
Hingaia Stream
21 Fitzgerald Road
113 Fitzgerald Road
86 Fitzgerald Road
Hingaia Stream
Legend
Protected Premises and Facilities (PPFs)
NZS 6806 Assessment Area
This map contains data derived in part or wholly from sources other than those party to the Supporting Growth Alliance, and therefore, no representations or warranties are made by those party to the Supporting Growth Alliance as to the accuracy or completeness of this information.
Map intended for distribution as a PDF document.
Scale may be incorrect when printed.
Contains information sourced from LINZ. Crown Copyright Reserved.
Unitary plan data sourced from Auckland Council published web services.
Legend information can be viewed on Auckland Council unitary plan viewer.
Linework shown on this plan is conceptual only.
Not to be used for construction.

NoR D3

Abbreviations and Definitions

Acronym/Term	Definition
AUP	Auckland Unitary Plan
ARI	Annual Recurrence Interval
Average increase in flood hazard	Flow depth times velocity.
BPO or Best Practicable Option	Has the same meaning as in section 2 of the RMA 1991.
CEMP	Construction Environmental Management Plan
Certification of material changes to management plans	Confirmation from the Manager that a plan or material change to a plan has been prepared in accordance with the condition to which it relates. A management plan shall be deemed certified: (a) where the Requiring Authority has received written confirmation from Council that a management plan is certified; or (b) five working days from the submission of a management plan where no written confirmation of certification has been received. A material change to a management plan shall be deemed certified: (a) where the Requiring Authority has received written confirmation from Council that the material change to the management plan is certified; or (b) ten working days from the submission of the material change to the management plan where no written confirmation of certification has been received.
CNVMP	Construction Noise and Vibration Management Plan
CNVMP Schedule or Schedule	A schedule to the CNVMP
Completion of Construction	When construction of the project (or part of the project) is complete and it is available for use.
Construction Works	Activities undertaken to construct the project excluding Enabling Works.
Council	Auckland Council
CPTED	Crime prevention through environmental design
CTMP	Construction Traffic Management Plan

Acronym/Term	Definition
Enabling works	Includes, but is not limited to, the following and similar activities: • geotechnical investigations (including trial embankments); • archaeological site investigations; • formation of access for geotechnical investigations; • establishment of site yards, site entrances and fencing; • constructing and sealing site access roads; • demolition or removal of buildings and structures; • relocation of services; and • establishment of mitigation measures (such as erosion and sediment control measures, temporary noise walls, earth bunds and planting).
Flood prone area	A potential ponding area that relies on a single culvert for drainage and does not have an overland flow path.
Habitable floor	Any room (floor) in an authorised building used for residential living activity, excluding a laundry, bathroom, toilet or any room used solely as an entrance hall, passageway or garage.
Habitable floor level that has existing flooding	Where the flood level using the pre project model scenario is above the existing authorised the habitable floor level.
HAMP	Heritage and Archaeology Management Plan
HNZPT	Heritage New Zealand Pouhere Taonga
HNZPTA	Heritage New Zealand Pouhere Taonga Act 2014
Manager	The Manager – Resource Consents of the Auckland Council, or authorised delegate.
Maximum Probable Development	Design case for consideration of future flows allowing for development within a catchment that takes into account the maximum impervious surface limits of the current zone or, if the land is zoned Future Urban in the Auckland Unitary Plan, the probable level of development arising from zone changes.
MID	Maintenance in Design
Network Utility Operator	Has the same meaning as set out in section 166 of the RMA.
NOR	Notice of Requirement
NUMP	Network Utilities Management Plan
NZAA	New Zealand Archaeological Association
Outline Plan	An outline plan prepared in accordance with section 176A of the RMA.
Project Liaison Person	The person or persons appointed for the duration of the project's Construction Works to be the main point of contact for persons wanting information about the project or affected by the Construction Works.

Acronym/Term	Definition
Pre-project development	Existing site condition prior to the project (including existing buildings and roadways).
Post-project development	Site condition after the project has been completed (including existing and new buildings and roadways).
Protected Premises and Facilities (PPF)	Protected Premises and Facilities as defined in New Zealand Standard NZS 6806:2010: *Acoustics – Road-traffic noise – New and altered roads.*
Requiring Authority	Has the same meaning as section 166 of the RMA and for this Designation is Auckland Transport (AT).
RMA	Resource Management Act (1991)
SCMP	Stakeholder Communication Management Plan
SID	Safety in Design
Stage of Work	Any physical works that require the development of an Outline Plan.
Start of Construction	The time when Construction Works (excluding Enabling Works) start.
Suitably Qualified and Experienced Person	A person (or persons) who can provide sufficient evidence to demonstrate their suitability and competence.
ULDMP	Urban and Landscape Design Management Plan

General Conditions

1. Activity in General Accordance with Plans and Information

(a) Except as provided for in the conditions below, and subject to final design and Outline Plan(s), works within the designation shall be undertaken in general accordance with the Project Description and Concept Plan in Schedule 1.

(b) Where there is inconsistency between:
- (i) the Project Description and Concept Plan in Schedule 1 and the requirements of the following conditions, the conditions shall prevail; and
- (ii) the Project Description and Concept Plan in Schedule 1, and the management plans under the conditions of the designation, the requirements of the management plans shall prevail.

2. Project Information

(a) A project website, or equivalent virtual information source, shall be established within 12 months of the date on which this designation is included in the AUP. The project website or virtual information source shall include these conditions and shall provide information on:
- (i) the status of the project;
- (ii) anticipated construction timeframes; and
- (iii) contact details for enquiries.

(b) At the start of detailed design for a Stage of Work, the project website or virtual information source shall be updated to provide information on the likely date for Start of Construction, and any staging of works.

3. Designation Review

(a) As soon as practicable following Completion of Construction the Requiring Authority shall:
- (i) review the extent of the designation to identify any areas of designated land that it no longer requires for the on-going operation, maintenance or mitigation of effects of the project; and
- (ii) give notice to Auckland Council in accordance with section 182 of the RMA for the removal of those parts of the designation identified above.

4. Lapse

In accordance with section 184(1)(c) of the RMA, this designation shall lapse if not given effect to within 15 years from the date on which it is included in the AUP.

5. Network Utility Operators (Section 176 Approval)

(a) Prior to the start of Construction Works, Network Utility Operators with existing infrastructure located within the designation will not require written consent under section 176 of the RMA for the following activities:
- (i) operation, maintenance and urgent repair works;
- (ii) minor renewal works to existing network utilities necessary for the on-going provision or security of supply of network utility operations;
- (iii) minor works such as new service connections; and
- (iv) the upgrade and replacement of existing network utilities in the same location with the same or similar effects as the existing utility.

(b) To the extent that a record of written approval is required for the activities listed above, this condition shall constitute written approval.

Pre-construction Conditions

6. Outline Plan(s)

(a) An Outline Plan (or Plans) shall be prepared in accordance with section 176A of the RMA.

(b) Outline Plans (or Plan) may be submitted in parts or in stages to address particular activities (e.g. design or construction aspects), or a Stage of Work of the project.

(c) Outline Plans shall include any management plan or plans that are relevant to the management of effects of those activities or Stage of Work, which may include:
- (i) Network Utilities Management Plan;
- (ii) Construction Noise and Vibration Management Plan;
- (iii) Urban and Landscape Design Management Plan; and
- (iv) Heritage and Archaeology Management Plan.

7. Management Plans

(a) Any management plan shall:
- (i) be prepared and implemented in accordance with the relevant management plan condition (refer to Conditions 8 to 23);
- (ii) be prepared by a Suitably Qualified and Experienced Person(s);
- (iii) include sufficient detail relating to the management of effects associated with the relevant activities and/or Stage of Work to which it relates;
- (iv) summarise comments received from Mana Whenua and other stakeholders as required by the relevant management plan condition, along with a summary of where comments have:
  - A. been incorporated; and
  - B. where not incorporated, the reasons why;
- (v) be submitted as part of an Outline Plan pursuant to s176A of the RMA, with the exception of SCMPs, CEMPs, CTMPs and CNVMP Schedules; and
- (vi) once finalised, uploaded to the project website or equivalent virtual information source.

(b) Any management plan developed in accordance with Condition 7(a) may:
- (i) be submitted in parts or in stages to address particular activities (e.g. design or construction aspects) a Stage of Work of the project, or to address specific activities authorised by the designation;
- (ii) except for material changes, be amended to reflect any changes in design, construction methods or management of effects without further process; and
- (iii) if there is a material change required to a management plan which has been submitted with an Outline Plan in accordance with Condition 6, the revised part of the plan shall be submitted to the Council as an update to the Outline Plan or for Certification as soon as practicable following identification of the need for a revision.

(c) Any material changes to the SCMPs, CEMPs or CTMPs are to be submitted to the Council for information.

8. Cultural Advisory Report

(a) At least six (6) months prior to the start of detailed design for a Stage of Work, Mana Whenua shall be invited to prepare a Cultural Advisory Report for the project.

(b) The objective of the Cultural Advisory Report is to assist in understanding and identifying Ngā Taonga Tuku Iho ('treasures handed down by our ancestors') affected by the project, to inform their management and protection. To achieve the objective, Requiring Authority shall invite Mana Whenua to prepare a Cultural Advisory Report that:
- (i) identifies the cultural sites, landscapes and values that have the potential to be affected by the construction and operation of the project;
- (ii) sets out the desired outcomes for management of potential effects on cultural sites, landscapes and values;

(iii) identifies traditional cultural practices within the area that may be impacted by the project;
(iv) identifies opportunities for restoration and enhancement of identified cultural sites, landscapes and values within the project area;
(v) taking into account the outcomes of (i) to (iv) above, identify cultural matters and principles that should be considered in the development of the Urban and Landscape Design Management Plan and Heritage and Archaeological Management Plan, and the Cultural Monitoring Plan referred to in Condition 16; and
(vi) identifies and (if possible) nominates traditional names along the project alignment. Noting there may be formal statutory processes outside the project required in any decision-making.

(c) The desired outcomes for management of potential effects on cultural sites, landscapes and values identified in the Cultural Advisory Report shall be discussed with Mana Whenua and those outcomes reflected in the relevant management plans where practicable.

(d) Conditions 8(b) and 8(c) above will cease to apply if:
(i) Mana Whenua have been invited to prepare a Cultural Advisory Report by a date at least 6 months prior to start of Construction Works; and
(ii) Mana Whenua have not provided a Cultural Advisory Report within six months prior to start of Construction Works.

9. Urban and Landscape Design Management Plan (ULDMP)

(a) A ULDMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the ULDMP(s) is to:
(i) enable integration of the project's permanent works into the surrounding landscape and urban context; and
(ii) ensure that the project manages potential adverse landscape and visual effects as far as practicable and contributes to a quality urban environment.

(c) To achieve the objective, the ULDMP(s) shall provide details of how the project:
(i) is designed to integrate with the adjacent urban (or proposed urban) and landscape context, including the surrounding existing or proposed topography, urban environment (i.e. centres and density of built form), landscape character and open space zones;
(ii) provides appropriate walking and cycling connectivity to, and interfaces with, existing or proposed adjacent land uses, and walking and cycling connections;
(iii) promotes inclusive access (where appropriate); and
(iv) promotes a sense of personal safety by aligning with best practice guidelines, such as:

A. Crime Prevention Through Environmental Design (CPTED) principles;

B. Safety in Design (SID) requirements; and

C. Maintenance in Design (MID) requirements and anti-vandalism/anti-graffiti measures.

10. (a) The ULDMP(s) shall include:
(i) a concept plan – which depicts the overall landscape and urban design concept, and explain the rationale for the landscape and urban design proposals;
(ii) developed design concepts, including principles for walking and cycling facilities and public transport; and
(iii) landscape and urban design details – that cover the following:

A. road design – elements such as earthworks contouring including cut and fill batters, benching, spoil disposal sites, median width and treatment, roadside width and treatment;

B. roadside elements – such as lighting, fencing, wayfinding and signage;

C. architectural and landscape treatment of all major structures, including bridges and retaining walls;

D. architectural and landscape treatment of noise walls;

E. landscape treatment of permanent stormwater control wetlands and swales;

F. integration of passenger transport;

G. pedestrian and cycle facilities including paths, road crossings and dedicated pedestrian/ cycle bridges or underpasses;

H. protected heritage items with reference to the HAMP in Condition 22; and

I. re-instatement of construction and site compound areas, driveways, accessways and fences.

11. (a) The ULDMP shall also include the following planting details and maintenance requirements:

(i) planting design details including:

A. street trees, shrubs and ground cover suitable for berms;

B. where practicable, mature trees and native vegetation should be retained;

C. treatment of fill slopes to integrate with adjacent land use, streams, riparian margins and open space zones;

D. planting of stormwater wetlands;

E. integration of any planting requirements required by conditions of any resource consents for the project; and

F. reinstatement planting of construction and site compound areas as appropriate;

(ii) a planting programme including the staging of planting in relation to the construction programme which shall, as far as practicable, include provision for planting within each planting season following completion of works in each Stage of Work; and

(iii) detailed specifications and a two year maintenance plan relating to the following:

A. weed control and clearance;

B. pest animal management (to support plant establishment);

C. ground preparation (top soiling and decompaction);

D. mulching; and

E. plant sourcing and planting, including hydroseeding and grassing.

(b) Mana Whenua shall be invited to participate in the development of the ULDMP(s) to provide input into relevant cultural landscape and design matters including how desired outcomes for management of potential effects on cultural sites, landscapes and values identified and discussed in accordance with Condition 8 may be reflected in the ULDMP.

12. Flood Hazard

(a) The project shall be designed to achieve the following flood risk outcomes:

(i) no increase in flood levels for existing authorised habitable floors that are already subject to flooding;

(ii) no more than a 10% reduction in freeboard for existing authorised habitable floors;

(iii) no increase of more than 50mm in flood level on land zoned for urban or future urban development where there is no existing dwelling;

(iv) no new flood prone areas; and

(v) no more than a 10% average increase of flood hazard (defined as flow depth times velocity) for main access to authorised habitable dwellings.

(b) Compliance with this condition shall be demonstrated in the Outline Plan, which shall include flood modelling of the pre-project and post-project 100 year ARI flood levels (for Maximum Probable Development land use and including climate change).

(c) Where the above outcomes can be achieved through alternative measures outside of the designation such as flood stop banks, flood walls, raising existing authorised habitable floor level and new overland flow paths, the Outline Plan shall include confirmation that any necessary landowner and statutory approvals have been obtained for that work.

Construction Conditions

13. Construction Environmental Management Plan (CEMP)

(a) A CEMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the CEMP is to set out the management procedures and construction methods to be undertaken to, avoid, remedy or mitigate any adverse effects associated with Construction Works as far as practicable. To achieve the objective, the CEMP shall include:

- (i) the roles and responsibilities of staff and contractors;
- (ii) details of the site or project manager and the project Liaison Person, including their contact details (phone and email address);
- (iii) the Construction Works programmes and the staging approach, and the proposed hours of work;
- (iv) the proposed site layouts (including construction yards), locations of refuelling activities and construction lighting;
- (v) methods for controlling dust and the removal of debris and demolition of construction materials from public roads or places;
- (vi) methods for providing for the health and safety of the general public;
- (vii) measures to mitigate flood hazard effects such as siting stockpiles out of floodplains, minimising obstruction to flood flows, actions to respond to warnings of heavy rain;
- (viii) procedures for incident management;
- (ix) procedures for the refuelling and maintenance of plant and equipment to avoid discharges of fuels or lubricants to Watercourses;
- (x) measures to address the storage of fuels, lubricants, hazardous and/or dangerous materials, along with contingency procedures to address emergency spill response(s) and clean up;
- (xi) procedures for responding to complaints about Construction Works; and
- (xii) methods for amending and updating the CEMP as required.

(c) Any CEMP prepared for a Stage of Work shall be submitted to Council for information at least ten working days before the Start of Construction for a Stage of Work.

14. Stakeholder and Communication Management Plan (SCMP)

(a) A SCMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the SCMP is to identify how the public and stakeholders (including directly affected and adjacent owners and occupiers of land) will be communicated with throughout the Construction Works. To achieve the objective, the SCMP shall include:

(i) the contact details for the project Liaison Person. These details shall be on the project website, or equivalent virtual information source, and prominently displayed at the main entrance(s) to the site(s);

(ii) the procedures for ensuring that there is a contact person available for the duration of Construction Works, for public enquiries or complaints about the Construction Works;

(iii) methods for engaging with Mana Whenua, to be developed in consultation with Mana Whenua;

(iv) a list of stakeholders, organisations, businesses and persons who will be communicated with;

(v) methods to communicate the proposed hours of construction activities **including** outside of normal working hours and on weekends and public holidays, to surrounding businesses and residential communities; and

(vi) linkages and cross-references to communication methods set out in other conditions and management plans where relevant.

(c) Any SCMP prepared for a Stage of Work shall be submitted to Council for information ten working days prior to the Start of Construction for a Stage of Work.

15. Complaints Register

(a) At all times during Construction Works, a record of any complaints received about the Construction Works shall be maintained. The record shall include:

(i) the date, time and nature of the complaint;

(ii) the name, phone number and address of the complainant (unless the complainant wishes to remain anonymous);

(iii) measures taken to respond to the complaint (including a record of the response provided to the complainant) or confirmation of no action if deemed appropriate;

(iv) the outcome of the investigation into the complaint; and

(v) any other activities in the area, unrelated to the project that may have contributed to the complaint, such as non-project construction, fires, traffic accidents or unusually dusty conditions generally.

(b) A copy of the Complaints Register required by this condition shall be made available to the Manager upon request as soon as practicable after the request is made.

16. Cultural Monitoring Plan

(a) Prior to the start of Construction Works, a Cultural Monitoring Plan shall be prepared by a Suitably Qualified and Experienced Person(s) identified in collaboration with Mana Whenua.

(b) The objective of the Cultural Monitoring Plan is to identify methods for undertaking cultural monitoring to assist with management of any cultural effects during Construction Works.

(c) The Cultural Monitoring Plan shall include:

(i) requirements for formal dedication or cultural interpretation to be undertaken prior to start of Construction Works in areas identified as having significance to Mana Whenua;

(ii) requirements and protocols for cultural inductions for contractors and subcontractors;

(iii) identification of activities, sites and areas where cultural monitoring is required during particular Construction Works;

(iv) identification of personnel to undertake cultural monitoring, including any geographic definition of their responsibilities; and

(v) details of personnel to assist with management of any cultural effects identified during cultural monitoring, including implementation of any accidental discovery protocols under condition 22.

(d) If Enabling Works involving soil disturbance are undertaken prior to the start of Construction Works, an Enabling Works Cultural Monitoring Plan shall be prepared by a Suitably Qualified and Experienced Person identified in collaboration with Mana Whenua. This plan may be prepared as a standalone Enabling Works Cultural Monitoring Plan or be included in the main Construction Works Cultural Monitoring Plan.

Advice Note: *Where appropriate, the Cultural Monitoring Plan shall align with the requirements of other conditions of the designation and resource consents for the project which require monitoring during Construction Works.*

17. Construction Traffic Management Plan (CTMP)

(a) A CTMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the CTMP is to avoid, remedy or mitigate, as far as practicable, adverse construction traffic effects. To achieve this objective, the CTMP shall include:

(i) methods to manage the effects of temporary traffic management activities on traffic;
(ii) measures to ensure the safety of all transport users;
(iii) the estimated numbers, frequencies, routes and timing of traffic movements, including any specific non-working or non-movement hours to manage vehicular and pedestrian traffic near schools or to manage traffic congestion;
(iv) site access routes and access points for heavy vehicles, the size and location of parking areas for plant, construction vehicles and the vehicles of workers and visitors;
(v) identification of detour routes and other methods to ensure the safe management and maintenance of traffic flows, including pedestrians and cyclists, on existing roads;
(vi) methods to maintain vehicle access to property and/or private roads where practicable, or to provide alternative access arrangements when it will not be;
(vii) the management approach to loads on heavy vehicles, including covering loads of fine material, the use of wheel-wash facilities at site exit points and the timely removal of any material deposited or spilled on public roads; and
(viii) methods that will be undertaken to communicate traffic management measures to affected road users (e.g. residents/public/stakeholders/emergency services).

(c) Any CTMP prepared for a Stage of Work shall be submitted to Council for information ten working days prior to the Start of Construction for a Stage of Work.

18. Construction Noise Standards

(a) Construction noise shall be measured and assessed in accordance with NZS6803:1999 Acoustics – Construction Noise and shall comply with the noise standards set out in the following table as far as practicable:

Table 18.1: Construction noise standards

Day of week	Time period	$L_{Aeq(15min)}$	L_{AFmax}
Occupied activity sensitive to noise			
Weekday	0630h - 0730h	55 dB	75 dB
	0730h - 1800h	70 dB	85 dB
	1800h - 2000h	65 dB	80 dB
	2000h - 0630h	45 dB	75 dB

Saturday	0630h - 0730h 0730h - 1800h 1800h - 2000h 2000h - 0630h	55 dB 70 dB 45 dB 45 dB	75 dB 85 dB 75 dB 75 dB
Sunday and Public Holidays	0630h - 0730h 0730h - 1800h 1800h - 2000h 2000h - 0630h	45 dB 55 dB 45 dB 45 dB	75 dB 85 dB 75 dB 75 dB
Other occupied buildings			
All	0730h – 1800h 1800h – 0730h	70 dB 75 dB	

(b) Where compliance with the noise standards set out in the Table 18.1 above is not practicable, and unless otherwise provided for in the CNVMP, then the methodology in Condition 21 shall apply.

19. **Construction Vibration Standards**

(a) Construction vibration shall be measured in accordance with ISO 4866:2010 Mechanical vibration and shock – Vibration of fixed structures – Guidelines for the measurement of vibrations and evaluation of their effects on structures and shall comply with the vibration standards set out in the following table as far as practicable.

Table 19.1 CNV2 Construction vibration criteria

Receiver	Details	Category A	Category B
Occupied Activities sensitive to noise	Night-time 2000h - 0630h	0.3mm/s ppv	2mm/s ppv
	Daytime 0630h - 2000h	2mm/s ppv	5mm/s ppv
Other occupied buildings	Daytime 0630h - 2000h	2mm/s ppv	5mm/s ppv
All other buildings	At all other times	Tables 1 and 3 of DIN4150-3:1999	

(b) Where compliance with the vibration standards set out in Table 19.1 above is not practicable, and unless otherwise provided for in the CNVMP as required by Condition 20(c)(x), then the methodology in Condition 21 shall apply.

20. Construction Noise and Vibration Management Plan (CNVMP)

(a) A CNVMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) A CNVMP shall be implemented during the Stage of Work to which it relates.

(c) The objective of the CNVMP is to provide a framework for the development and implementation of the Best Practicable Option for the management of construction noise and vibration effects to achieve the construction noise and vibration standards set out in Conditions 18 and 19 to the extent practicable. To achieve this objective, the CNVMP shall be prepared in accordance with Annex E2

of the New Zealand Standard NZS6803:1999 *'Acoustics – Construction Noise'* (NZS6803:1999) and shall as a minimum, address the following:

(i) description of the works and anticipated equipment/processes;
(ii) hours of operation, including times and days when construction activities would occur;
(iii) the construction noise and vibration standards for the project;
(iv) identification of receivers where noise and vibration standards apply;
(v) management and mitigation options, and identification of the Best Practicable Option;
(vi) methods and frequency for monitoring and reporting on construction noise and vibration;
(vii) procedures for communication and engagement with nearby residents and stakeholders, including notification of proposed construction activities, the period of construction activities, and management of noise and vibration complaints;
(viii) contact details of the project Liaison Person;
(ix) procedures for the regular training of the operators of construction equipment to minimise noise and vibration as well as expected construction site behaviours for all workers;
(x) identification of areas where compliance with the noise (Condition 18) and/or vibration standards (Condition 19 Category A or Category B) will not be practicable and the specific management controls to be implemented and consultation requirements with owners and occupiers of affected sites;
(xi) procedures and requirements for the preparation of a Schedule to the CNVMP (Schedule) for those areas where compliance with the noise (Condition 18) and/or vibration standards (Condition 19 Category B) will not be practicable and where sufficient information is not available at the time of the CNVMP to determine the area specific management controls Condition 17(c)(x);
(xii) procedures for:
  A. communicating with affected receivers, where measured or predicted vibration from construction activities exceeds the vibration criteria of Condition 19; and
  B. assessing, mitigating and monitoring vibration where measured or predicted vibration from construction activities exceeds the Category B vibration criteria of Condition 19, including the requirement to undertake building condition surveys before and after works to determine whether any damage has occurred as a result of construction vibration; and
(xiii) requirements for review and update of the CNVMP.

21. Schedule to a CNVMP

(a) Unless otherwise provided for in a CNVMP, a Schedule to the CNVMP (Schedule) shall be prepared in consultation with the owners and occupiers of sites subject to the Schedule, when:
  (i) construction noise is either predicted or measured to exceed the noise standards in Condition 18, except where the exceedance of the L_{Aeq} criteria is no greater than 5 decibels and does not exceed:
    A. 0630 – 2000: 2 period of up to 2 consecutive weeks in any 2 months; or
    B. 2000 - 0630: 1 period of up to 2 consecutive nights in any 10 days;
  (ii) construction vibration is either predicted or measured to exceed the Category B standard at the receivers in Condition 19.

(b) The objective of the Schedule is to set out the Best Practicable Option for the management of noise and/or vibration effects of the construction activity beyond those measures set out in the CNVMP. The Schedule shall include details such as:
  (i) construction activity location, start and finish dates;
  (ii) the nearest neighbours to the construction activity;
  (iii) the predicted noise and/or vibration level for all receivers where the levels are predicted or measured to exceed the applicable standards in Condition 21(a);
  (iv) the proposed mitigation;
  (v) the proposed communications with neighbours; and
  (vi) location, times and types of monitoring.

(c) The Schedule shall be submitted to the Manager Council for certification at least 5 working days, except in unforeseen circumstances, in advance of Construction Works that are covered by the scope of the Schedule and shall form part of the CNVMP.

22. Heritage and Archaeology Management Plan (HAMP)

(a) A HAMP shall be prepared in consultation with Council, HNZPT and Mana Whenua prior to the Start of Construction for a Stage of Work.

(b) The objective of the HAMP is to protect historic heritage and to remedy and mitigate any residual effects as far as practicable. To achieve the objective, the HAMP shall identify:
   (i) methods for the identification and assessment of potential built heritage and archaeological sites within the Designation to inform detailed design;
   (ii) known heritage places and archaeological sites and potential archaeological sites within the Designation, including identifying any archaeological sites for which an Archaeological Authority under the HNZPTA will be sought or has been granted;
   (iii) any unrecorded archaeological sites or post-1900 heritage sites within the Designation, which shall also be documented and recorded;
   (iv) roles, responsibilities and contact details of project personnel, Mana Whenua representatives, and relevant agencies involved with heritage and archaeological matters including surveys, monitoring of project works, compliance with AUP accidental discovery rule, and monitoring of conditions;
   (v) specific areas to be investigated, monitored and recorded to the extent these are directly affected by the project;
   (vi) the proposed methodology for investigating and recording post-1900 heritage sites (including buildings) that need to be demolished or relocated, including details of their condition, measures to mitigate any adverse effects and timeframe for implementing the proposed methodology, in accordance with the HNZPT guideline AGS 1A: Investigation and Recording of Buildings and Standing Structures (4 July 2014), or any subsequent version;
   (vii) methods to acknowledge cultural values identified through Condition 8 where archaeological sites also involve Ngā Taonga Tuku Iho (treasures handed down by our ancestors) and where feasible and practicable to do so;
   (viii) methods for protecting or minimising adverse effects on heritage and archaeological sites within the Designation during project works as far as practicable, (for example fencing around heritage and archaeological sites to protect them from damage during construction); and
   (ix) training requirements and inductions for contractors and subcontractors on heritage and archaeological sites within the Designation, and legal obligations relating to accidental discoveries. The training shall be undertaken prior to the Start of Construction, under the guidance of a Suitably Qualified and Experienced Person and Mana Whenua representatives (to the extent the training relates to cultural values identified under Condition 8).

Advice Note: *The requirements for accidental discoveries of heritage items are set out in Rule E11.6.1 of the AUP.*

23. Network Utility Management Plan (NUMP)

(a) A NUMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the NUMP is to set out a framework for protecting, relocating and working in proximity to existing network utilities. The NUMP shall include methods to:
   (i) provide access for maintenance at all reasonable times, or emergency works at all times during construction activities;
   (ii) manage the effects of dust and any other material potentially resulting from construction activities and able to cause material damage, beyond normal wear and tear to overhead transmission lines in the project area; and

(iii) demonstrate compliance with relevant standards and Codes of Practice including, where relevant, the NZECP 34:2001 New Zealand Electrical Code of Practice for Electrical Safe Distances 2001; and AS/NZS 4853:2012 Electrical hazards on Metallic Pipelines.

(c) The NUMP shall be prepared in consultation with the relevant Network Utility Operator(s) who have existing assets that are directly affected by the project.

(d) The NUMP shall describe how any comments from the Network Utility Operator in relation to its assets have been addressed.

(e) Any comments received from the Network Utility Operator shall be considered when finalising the NUMP.

(f) Any amendments to the NUMP related to the assets of a Network Utility Operator shall be prepared in consultation with that asset owner.

Operational Conditions

24. Traffic Noise

For the purposes of Conditions 25 to 38:

(a) Building-Modification Mitigation – has the same meaning as in NZS 6806;

(b) Detailed Mitigation Options – means the fully detailed design of the Selected Mitigation Options, with all practical issues addressed;

(c) Habitable Space – has the same meaning as in NZS 6806;

(d) Identified Noise Criteria Category – means the Noise Criteria Category for a PPF identified in Schedule 2: Identified PPFs Noise Criteria Categories;

(e) Mitigation – has the same meaning as in NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads;

(f) Noise Criteria Categories – means the groups of preference for sound levels established in accordance with NZS 6806 when determining the Best Practicable Option for noise mitigation (i.e. Categories A, B and C);

(g) NZS 6806 – means New Zealand Standard NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads;

(h) P40 – means Waka Kotahi NZTA P40:2014 Specification for noise mitigation;

(i) Protected Premises and Facilities (PPFs) – means only the premises and facilities identified in Schedule 2: Identified PPFs Noise Criteria Categories;

(j) Selected Mitigation Options – means the preferred mitigation option resulting from a Best Practicable Option assessment undertaken in accordance with NZS 6806; and

(k) Structural Mitigation – has the same meaning as in NZS 6806.

25. The Noise Criteria Categories identified in Schedule 2: Identified PPFs Noise Criteria Categories at each of the PPFs shall be achieved where practicable and subject to Conditions 24 to 38.

The Noise Criteria Categories do not need to be complied with at a PPF where:

(a) the PPF no longer exists; or

(b) agreement of the landowner has been obtained confirming that the Noise Criteria Category does not need to be met.

Achievement of the Noise Criteria Categories for PPFs shall be by reference to a traffic forecast for a high growth scenario in a design year at least 10 years after the programmed opening of the project.

26. As part of the detailed design of the project, a Suitably Qualified and Experienced Person shall determine the Selected Mitigation Options for the PPFs identified on Schedule 2: Identified PPFs Noise Criteria Categories.

27. Prior to construction of the project, a Suitably Qualified and Experienced Person shall develop the Detailed Mitigation Options for the PPFs identified on Schedule 2: Identified PPFs Noise Criteria Categories, taking into account the Selected Mitigation Options.

28. If the Detailed Mitigation Options would result in the Identified Noise Criteria Category changing to a less stringent Category, e.g. from Category A to B or Category B to C, at any relevant PPF, a Suitably Qualified and Experienced Person shall provide confirmation to the Manager that the Detailed Mitigation Option would be consistent with adopting the Best Practicable Option in accordance with NZS 6806 prior to implementation.

29. Prior to the Start of Construction, a Noise Mitigation Plan written in accordance with Chapter 7 of P40 shall be provided to the Manager for information.

The purpose of the Noise Mitigation Plan is to confirm that the Detailed Mitigation Options meet the requirements of Conditions 25 to 38. The Noise Mitigation Plan shall include confirmation that consultation has been undertaken with affected property owners for site specific design requirements and the implementation programme.

30. The Detailed Mitigation Options shall be implemented prior to completion of construction of the project, with the exception of any low-noise road surfaces, which shall be implemented within twelve months of completion of construction.

31. Prior to the Start of Construction, a Suitably Qualified and Experienced Person shall identify those PPFs which, following implementation of all the Detailed Mitigation Options, will not be Noise Criteria Categories A or B and where Building-Modification Mitigation might be required to achieve 40 dB $L_{Aeq(24h)}$ inside Habitable Spaces ('Category C Buildings').

32. Prior to the Start of Construction in the vicinity of each Category C Building, the Requiring Authority shall write to the owner of the Category C Building requesting entry to assess the noise reduction performance of the existing building envelope. If the building owner agrees to entry within three months of the date of the Requiring Authority's letter, the Requiring Authority shall instruct a Suitably Qualified and Experienced Person to visit the building and assess the noise reduction performance of the existing building envelope.

33. For each Category C Building identified, the Requiring Authority is deemed to have complied with Condition 32 above if:

(a) the Requiring Authority's Suitably Qualified and Experienced Person has visited the building and assessed the noise reduction performance of the building envelope; or

(b) the building owner agreed to entry, but the Requiring Authority could not gain entry for some reason (such as entry denied by a tenant); or

(c) the building owner did not agree to entry within three months of the date of the Requiring Authority's letter sent in accordance with Condition 32 above (including where the owner did not respond within that period); or

(d) the building owner cannot, after reasonable enquiry, be found prior to completion of construction of the project.

If any of (b) to (d) above apply to a Category C Building, the Requiring Authority is not required to implement Building-Modification Mitigation to that building.

34. Subject to Condition 33 above, within six months of the assessment undertaken in accordance with Conditions 32 and 33, the Requiring Authority shall write to the owner of each Category C Building advising:

(a) if Building-Modification Mitigation is required to achieve 40 dB LAeq(24h) inside habitable spaces; and

(b) the options available for Building-Modification Mitigation to the building, if required; and

(c) that the owner has three months to decide whether to accept Building-Modification Mitigation to the building and to advise which option for Building-Modification Mitigation the owner prefers, if the Requiring Authority has advised that more than one option is available.

35. Once an agreement on Building-Modification Mitigation is reached between the Requiring Authority and the owner of a Category C Building, the mitigation shall be implemented, including any third party authorisations required, in a reasonable and practical timeframe agreed between the Requiring Authority and the owner.

36. Subject to Condition 33, where Building-Modification Mitigation is required, the Requiring Authority is deemed to have complied with Condition 35 if:

(a) the Requiring Authority has completed Building Modification Mitigation to the building; or

(b) an alternative agreement for mitigation is reached between the Requiring Authority and the building owner; or

(c) the building owner did not accept the Requiring Authority's offer to implement Building-Modification Mitigation within three months of the date of the Requiring Authority's letter sent in accordance with Condition 33 (including where the owner did not respond within that period); or

(d) the building owner cannot, after reasonable enquiry, be found prior to completion of construction of the project.

37. Within twelve months of completion of construction of the project, a post-construction review report written in accordance with Chapter 8 of P40 Specification for Noise Mitigation 2014 shall be provided to the Manager.

38. The Detailed Mitigation Options shall be maintained so they retain their noise reduction performance as far as practicable.

Schedule 1: General Accordance Plans and Information

Project Description

The proposed work is the construction, operation and maintenance an arterial transport corridor in Drury East along Waihoehoe Road between east of Fitzgerald Road and Drury Hills Road, including active transport facilities, and associated infrastructure. The proposed work is shown in the following Concept Plan and includes:

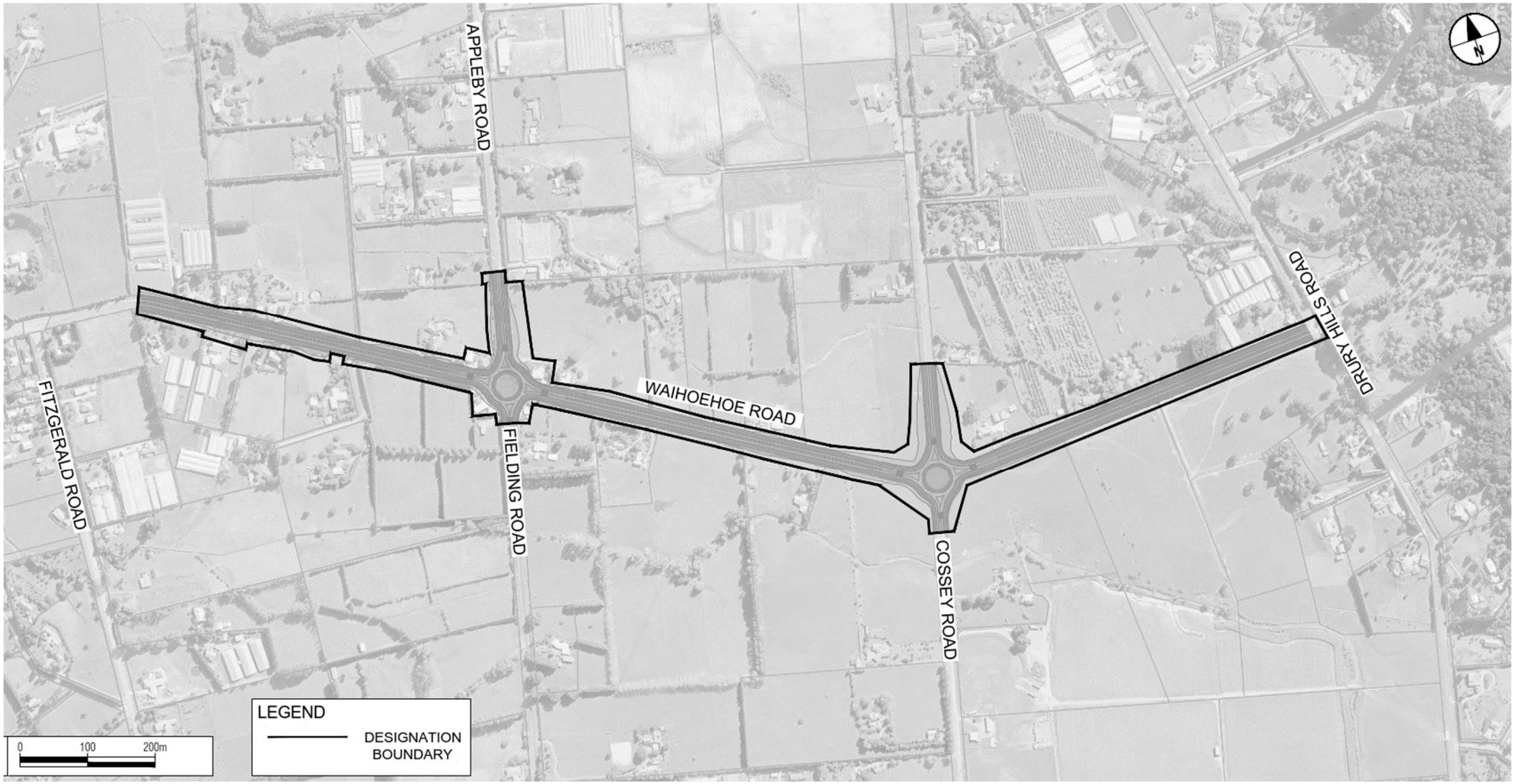
(a) Upgrading and widening Waihoehoe Road for two lanes and active transport facilities;

(b) Associated works including intersections, embankments, retaining, culverts and stormwater management systems;

(c) Changes to local roads, where the proposed work intersects with local roads; and

(d) Construction activities, including vegetation removal, construction compounds, lay down areas, construction traffic management and the re-grade of driveways.

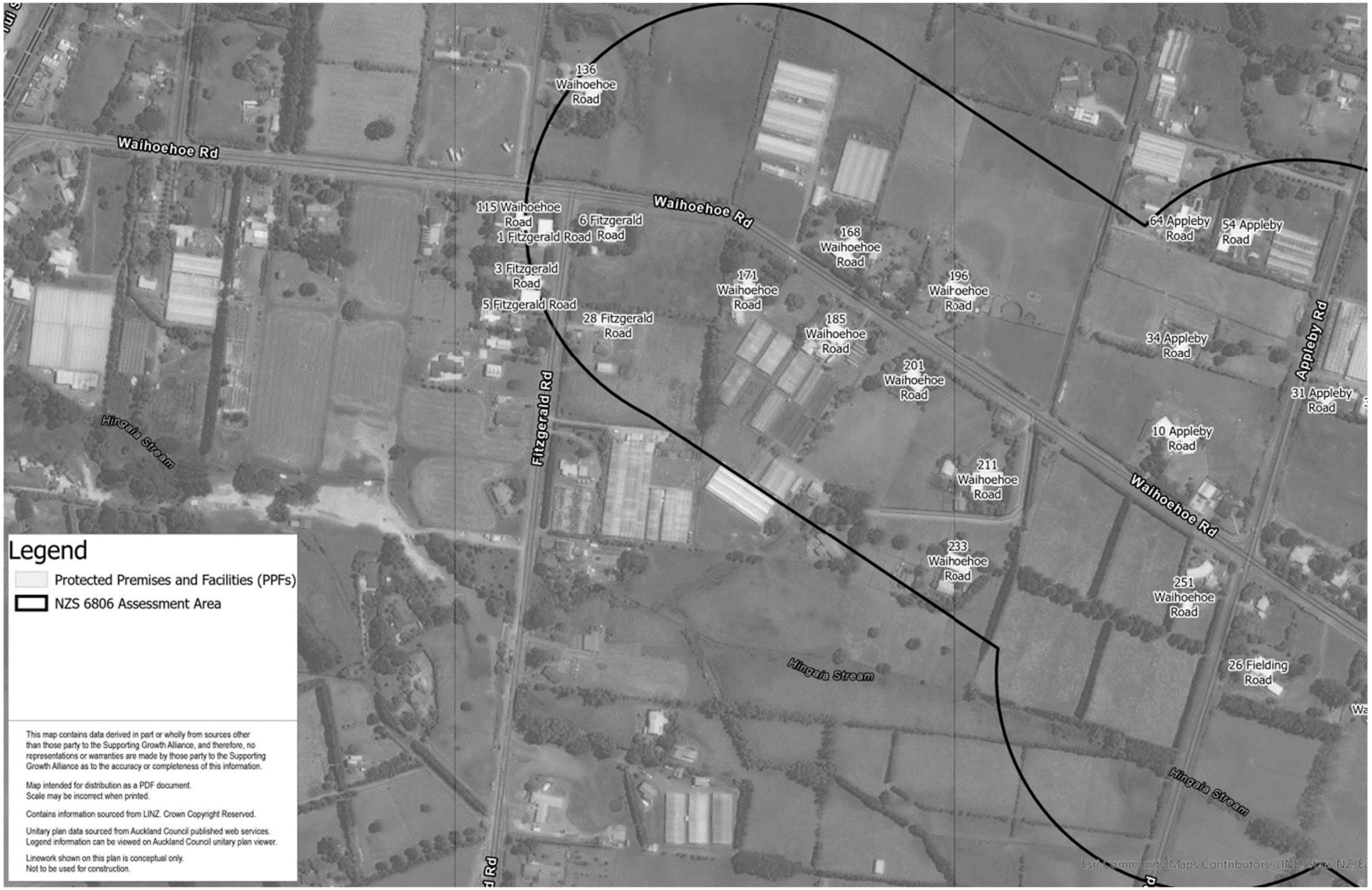
Concept Plan

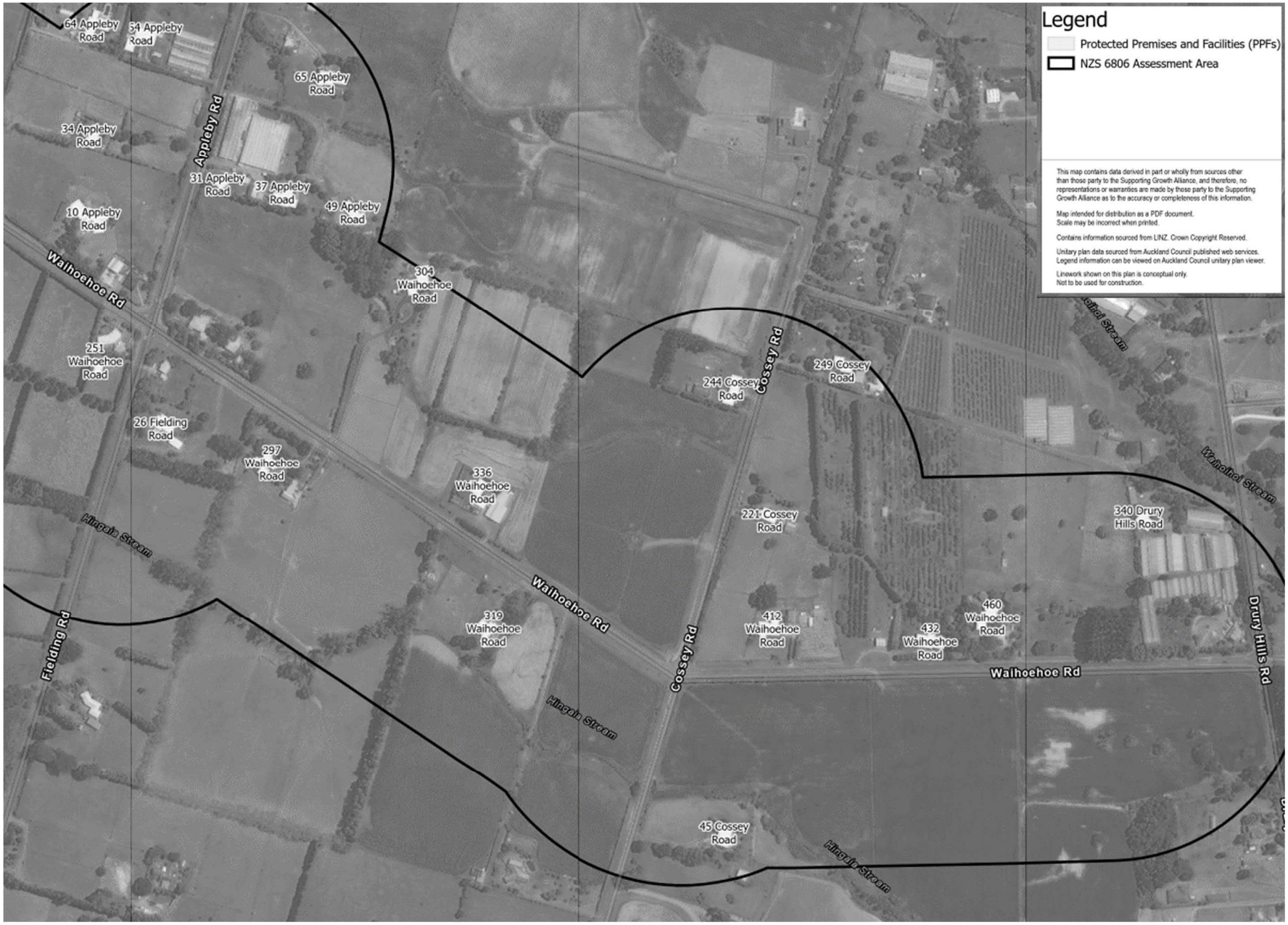


Schedule 2: Identified PPFs Noise Criteria Categories

Address	New or Altered Road	Noise Criteria Category
10 Appleby Road	Altered	A
31 Appleby Road	Altered	A
34 Appleby Road	Altered	A
37 Appleby Road	Altered	A
49 Appleby Road	Altered	A
54 Appleby Road	Altered	A
64 Appleby Road	Altered	A
65 Appleby Road	Altered	A
45 Cossey Road	Altered	A
221 Cossey Road	Altered	A
244 Cossey Road	Altered	A
249 Cossey Road	Altered	A
340 Drury Hills Road	Altered	A
26 Fielding Road	Altered	A
1 Fitzgerald Road	Altered	A
3 Fitzgerald Road	Altered	A
5 Fitzgerald Road	Altered	A
6 Fitzgerald Road	Altered	A
28 Fitzgerald Road	Altered	A
115 Waihoehoe Road	Altered	A
136 Waihoehoe Road	Altered	A
168 Waihoehoe Road	Altered	B
171 Waihoehoe Road	Altered	A
185 Waihoehoe Road	Altered	A
196 Waihoehoe Road	Altered	A
201 Waihoehoe Road	Altered	A
211 Waihoehoe Road	Altered	A
233 Waihoehoe Road	Altered	A
251 Waihoehoe Road	Altered	A
297 Waihoehoe Road	Altered	A
304 Waihoehoe Road	Altered	A
319 Waihoehoe Road	Altered	A
336 Waihoehoe Road	Altered	A
412 Waihoehoe Road	Altered	A
432 Waihoehoe Road	Altered	A
460 Waihoehoe Road	Altered	A

PPF Location Plans




Legend
Protected Premises and Facilities (PPFs)
NZS 6806 Assessment Area
This map contains data derived in part or wholly from sources other than those party to the Supporting Growth Alliance, and therefore, no representations or warranties are made by those party to the Supporting Growth Alliance as to the accuracy or completeness of this information.
Map intended for distribution as a PDF document.
Scale may be incorrect when printed.
Contains information sourced from LINZ. Crown Copyright Reserved.
Unitary plan data sourced from Auckland Council published web services.
Legend information can be viewed on Auckland Council unitary plan viewer.
Linework shown on this plan is conceptual only.
Not to be used for construction.
64 Appleby Road
54 Appleby Road
65 Appleby Road
34 Appleby Road
Appleby Rd
31 Appleby Road
37 Appleby Road
49 Appleby Road
10 Appleby Road
Waihoehoe Rd
304 Waihoehoe Road
251 Waihoehoe Road
26 Fielding Road
297 Waihoehoe Road
336 Waihoehoe Road
Hingaia Stream
Fielding Rd
319 Waihoehoe Road
Cossey Rd
244 Cossey Road
249 Cossey Road
221 Cossey Road
412 Waihoehoe Road
432 Waihoehoe Road
460 Waihoehoe Road
340 Drury Hills Road
Drury Hills Rd
45 Cossey Road

NoR D4

Abbreviations and Definitions

Acronym/Term	Definition
AUP	Auckland Unitary Plan
ARI	Annual Recurrence Interval
Average increase in flood hazard	Flow depth times velocity.
BPO or Best Practicable Option	Has the same meaning as in section 2 of the RMA 1991.
CEMP	Construction Environmental Management Plan
Certification of material changes to management plans	Confirmation from the Manager that a plan or material change to a plan has been prepared in accordance with the condition to which it relates. A management plan shall be deemed certified: (a) where the Requiring Authority has received written confirmation from Council that a management plan is certified; or (b) five working days from the submission of a management plan where no written confirmation of certification has been received. A material change to a management plan shall be deemed certified: (a) where the Requiring Authority has received written confirmation from Council that the material change to the management plan is certified; or (b) ten working days from the submission of the material change to the management plan where no written confirmation of certification has been received.
CHI	Auckland Council Cultural Heritage Inventory
CNVMP	Construction Noise and Vibration Management Plan
CNVMP Schedule or Schedule	A schedule to the CNVMP
Completion of Construction	When construction of the project (or part of the project) is complete and it is available for use.
Construction Works	Activities undertaken to construct the project excluding Enabling Works.
Council	Auckland Council
CPTED	Crime prevention through environmental design

Acronym/Term	Definition
CTMP	Construction Traffic Management Plan
Enabling works	Includes, but is not limited to, the following and similar activities: • geotechnical investigations (including trial embankments); • archaeological site investigations; • formation of access for geotechnical investigations; • establishment of site yards, site entrances and fencing; • constructing and sealing site access roads; • demolition or removal of buildings and structures; • relocation of services; and • establishment of mitigation measures (such as erosion and sediment control measures, temporary noise walls, earth bunds and planting).
Flood prone area	A potential ponding area that relies on a single culvert for drainage and does not have an overland flow path.
Habitable floor	Any room (floor) in an authorised building used for residential living activity, excluding a laundry, bathroom, toilet or any room used solely as an entrance hall, passageway or garage.
Habitable floor level that has existing flooding	Where the flood level using the pre project model scenario is above the existing authorised the habitable floor level.
HAMP	Heritage and Archaeology Management Plan
HNZPT	Heritage New Zealand Pouhere Taonga
HNZPTA	Heritage New Zealand Pouhere Taonga Act 2014
Manager	The Manager – Resource Consents of the Auckland Council, or authorised delegate.
Maximum Probable Development	Design case for consideration of future flows allowing for development within a catchment that takes into account the maximum impervious surface limits of the current zone or, if the land is zoned Future Urban in the Auckland Unitary Plan, the probable level of development arising from zone changes.
MID	Maintenance in Design
Network Utility Operator	Has the same meaning as set out in section 166 of the RMA.
NOR	Notice of Requirement
NUMP	Network Utilities Management Plan
NZAA	New Zealand Archaeological Association
NZTM	New Zealand Transverse Mercator [coordinates system]
Outline Plan	An outline plan prepared in accordance with section 176A of the RMA.

Acronym/Term	Definition
Project Liaison Person	The person or persons appointed for the duration of the project's Construction Works to be the main point of contact for persons wanting information about the project or affected by the Construction Works.
Pre-project development	Existing site condition prior to the project (including existing buildings and roadways).
Post-project development	Site condition after the project has been completed (including existing and new buildings and roadways).
Protected Premises and Facilities (PPF)	Protected Premises and Facilities as defined in New Zealand Standard NZS 6806:2010: *Acoustics – Road-traffic noise – New and altered roads.*
Requiring Authority	Has the same meaning as section 166 of the RMA and for this Designation is Auckland Transport (AT).
RMA	Resource Management Act (1991)
SCMP	Stakeholder Communication Management Plan
SID	Safety in Design
Stage of Work	Any physical works that require the development of an Outline Plan.
Start of Construction	The time when Construction Works (excluding Enabling Works) start.
Suitably Qualified and Experienced Person	A person (or persons) who can provide sufficient evidence to demonstrate their suitability and competence.
ULDMP	Urban and Landscape Design Management Plan

General Conditions

1. Activity in General Accordance with Plans and Information

(a) Except as provided for in the conditions below, and subject to final design and Outline Plan(s), works within the designation shall be undertaken in general accordance with the Project Description and Concept Plan in Schedule 1.

(b) Where there is inconsistency between:
- (i) the Project Description and Concept Plan in Schedule 1 and the requirements of the following conditions, the conditions shall prevail; and
- (ii) the Project Description and Concept Plan in Schedule 1, and the management plans under the conditions of the designation, the requirements of the management plans shall prevail.

2. Project Information

(a) A project website, or equivalent virtual information source, shall be established within 12 months of the date on which this designation is included in the AUP. The project website or virtual information source shall include these conditions and shall provide information on:
- (i) the status of the project;
- (ii) anticipated construction timeframes; and
- (iii) contact details for enquiries.

(b) At the start of detailed design for a Stage of Work, the project website or virtual information source shall be updated to provide information on the likely date for Start of Construction, and any staging of works.

3. Designation Review

(a) As soon as practicable following Completion of Construction the Requiring Authority shall:
- (i) review the extent of the designation to identify any areas of designated land that it no longer requires for the on-going operation, maintenance or mitigation of effects of the project; and
- (ii) give notice to Auckland Council in accordance with section 182 of the RMA for the removal of those parts of the designation identified above.

4. Lapse

In accordance with section 184(1)(c) of the RMA, this designation shall lapse if not given effect to within 20 years from the date on which it is included in the AUP.

5. Network Utility Operators (Section 176 Approval)

(a) Prior to the start of Construction Works, Network Utility Operators with existing infrastructure located within the designation will not require written consent under section 176 of the RMA for the following activities:
- (i) operation, maintenance and urgent repair works;
- (ii) minor renewal works to existing network utilities necessary for the on-going provision or security of supply of network utility operations;
- (iii) minor works such as new service connections; and
- (iv) the upgrade and replacement of existing network utilities in the same location with the same or similar effects as the existing utility.

(b) To the extent that a record of written approval is required for the activities listed above, this condition shall constitute written approval.

Pre-construction Conditions

6. Outline Plan(s)

(a) An Outline Plan (or Plans) shall be prepared in accordance with section 176A of the RMA.

(b) Outline Plans (or Plan) may be submitted in parts or in stages to address particular activities (e.g. design or construction aspects), or a Stage of Work of the project.

(c) Outline Plans shall include any management plan or plans that are relevant to the management of effects of those activities or Stage of Work, which may include:
- (i) Network Utilities Management Plan;
- (ii) Construction Noise and Vibration Management Plan;
- (iii) Urban and Landscape Design Management Plan; and
- (iv) Heritage and Archaeology Management Plan.

7. Management Plans

(a) Any management plan shall:
- (i) be prepared and implemented in accordance with the relevant management plan condition (refer to Conditions 8 to 23);
- (ii) be prepared by a Suitably Qualified and Experienced Person(s);
- (iii) include sufficient detail relating to the management of effects associated with the relevant activities and/or Stage of Work to which it relates;
- (iv) summarise comments received from Mana Whenua and other stakeholders as required by the relevant management plan condition, along with a summary of where comments have:
  - A. been incorporated; and
  - B. where not incorporated, the reasons why;
- (v) be submitted as part of an Outline Plan pursuant to s176A of the RMA, with the exception of SCMPs, CEMPs, CTMPs and CNVMP Schedules; and
- (vi) once finalised, uploaded to the project website or equivalent virtual information source.

(b) Any management plan developed in accordance with Condition 7(a) may:
- (i) be submitted in parts or in stages to address particular activities (e.g. design or construction aspects) a Stage of Work of the project, or to address specific activities authorised by the designation;
- (ii) except for material changes, be amended to reflect any changes in design, construction methods or management of effects without further process; and
- (iii) if there is a material change required to a management plan which has been submitted with an Outline Plan in accordance with Condition 6, the revised part of the plan shall be submitted to the Council as an update to the Outline Plan or for Certification as soon as practicable following identification of the need for a revision.

(c) Any material changes to the SCMPs, CEMPs or CTMPs are to be submitted to the Council for information.

8. Cultural Advisory Report

(a) At least six (6) months prior to the start of detailed design for a Stage of Work, Mana Whenua shall be invited to prepare a Cultural Advisory Report for the project.

(b) The objective of the Cultural Advisory Report is to assist in understanding and identifying Ngā Taonga Tuku Iho ('treasures handed down by our ancestors') affected by the project, to inform their management and protection. To achieve the objective, Requiring Authority shall invite Mana Whenua to prepare a Cultural Advisory Report that:
- (i) identifies the cultural sites, landscapes and values that have the potential to be affected by the construction and operation of the project;
- (ii) sets out the desired outcomes for management of potential effects on cultural sites, landscapes and values;

(iii) identifies traditional cultural practices within the area that may be impacted by the project;
(iv) identifies opportunities for restoration and enhancement of identified cultural sites, landscapes and values within the project area;
(v) taking into account the outcomes of (i) to (iv) above, identify cultural matters and principles that should be considered in the development of the Urban and Landscape Design Management Plan and Heritage and Archaeological Management Plan, and the Cultural Monitoring Plan referred to in Condition 16; and
(vi) identifies and (if possible) nominates traditional names along the project alignment. Noting there may be formal statutory processes outside the project required in any decision-making.

(c) The desired outcomes for management of potential effects on cultural sites, landscapes and values identified in the Cultural Advisory Report shall be discussed with Mana Whenua and those outcomes reflected in the relevant management plans where practicable.

(d) Conditions 8(b) and 8(c) above will cease to apply if:
(i) Mana Whenua have been invited to prepare a Cultural Advisory Report by a date at least 6 months prior to start of Construction Works; and
(ii) Mana Whenua have not provided a Cultural Advisory Report within six months prior to start of Construction Works.

9. Urban and Landscape Design Management Plan (ULDMP)

(a) A ULDMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the ULDMP(s) is to:
(i) enable integration of the project's permanent works into the surrounding landscape and urban context; and
(ii) ensure that the project manages potential adverse landscape and visual effects as far as practicable and contributes to a quality urban environment.

(c) To achieve the objective, the ULDMP(s) shall provide details of how the project:
(i) is designed to integrate with the adjacent urban (or proposed urban) and landscape context, including the surrounding existing or proposed topography, urban environment (i.e. centres and density of built form), landscape character and open space zones;
(ii) provides appropriate walking and cycling connectivity to, and interfaces with, existing or proposed adjacent land uses, and walking and cycling connections;
(iii) promotes inclusive access (where appropriate); and
(iv) promotes a sense of personal safety by aligning with best practice guidelines, such as:

A. Crime Prevention Through Environmental Design (CPTED) principles;

B. Safety in Design (SID) requirements; and

C. Maintenance in Design (MID) requirements and anti-vandalism/anti-graffiti measures.

10. (a) The ULDMP(s) shall include:
(i) a concept plan – which depicts the overall landscape and urban design concept, and explain the rationale for the landscape and urban design proposals;
(ii) developed design concepts, including principles for walking and cycling facilities and public transport; and
(iii) landscape and urban design details – that cover the following:

A. road design – elements such as earthworks contouring including cut and fill batters, benching, spoil disposal sites, median width and treatment, roadside width and treatment;

B. roadside elements – such as lighting, fencing, wayfinding and signage;

C. architectural and landscape treatment of all major structures, including bridges and retaining walls;

D. architectural and landscape treatment of noise walls;

E. landscape treatment of permanent stormwater control wetlands and swales;

F. integration of passenger transport;

G. pedestrian and cycle facilities including paths, road crossings and dedicated pedestrian/ cycle bridges or underpasses;

H. protected heritage items with reference to the HAMP in Condition 22; and

I. re-instatement of construction and site compound areas, driveways, accessways and fences.

11. (a) The ULDMP shall also include the following planting details and maintenance requirements:

(i) planting design details including:

A. street trees, shrubs and ground cover suitable for berms;
B. where practicable, mature trees and native vegetation should be retained;
C. treatment of fill slopes to integrate with adjacent land use, streams, riparian margins and open space zones;
D. planting of stormwater wetlands;
E. integration of any planting requirements required by conditions of any resource consents for the project; and
F. reinstatement planting of construction and site compound areas as appropriate;

(ii) a planting programme including the staging of planting in relation to the construction programme which shall, as far as practicable, include provision for planting within each planting season following completion of works in each Stage of Work; and

(iii) detailed specifications and a two year maintenance plan relating to the following:

A. weed control and clearance;

B. pest animal management (to support plant establishment);

C. ground preparation (top soiling and decompaction);

D. mulching; and

E. plant sourcing and planting, including hydroseeding and grassing.

(b) Mana Whenua shall be invited to participate in the development of the ULDMP(s) to provide input into relevant cultural landscape and design matters including how desired outcomes for management of potential effects on cultural sites, landscapes and values identified and discussed in accordance with Condition 8 may be reflected in the ULDMP.

12. Flood Hazard

(a) Where relevant to the Stage of Work, detailed design shall demonstrate that:

(i) the Waipokapū (Hays) Stream generally located at NZTM 1774655, 5894718 and shown in Schedule 1 shall be crossed by a bridge; and

(ii) the Waihoehoe Stream generally located at NZTM 1774158, 5892809 and shown in Schedule 1 shall be crossed by a bridge.

(b) The project shall be designed to achieve the following flood risk outcomes:

(i) no increase in flood levels for existing authorised habitable floors that are already subject to flooding;

(ii) no more than a 10% reduction in freeboard for existing authorised habitable floors;

(iii) no increase of more than 50mm in flood level on land zoned for urban or future urban development where there is no existing dwelling;

(iv) no new flood prone areas; and
(v) no more than a 10% average increase of flood hazard (defined as flow depth times velocity) for main access to authorised habitable dwellings.

(c) Compliance with this condition shall be demonstrated in the Outline Plan, which shall include flood modelling of the pre-project and post-project 100 year ARI flood levels (for Maximum Probable Development land use and including climate change).

(d) Where the above outcomes can be achieved through alternative measures outside of the designation such as flood stop banks, flood walls, raising existing authorised habitable floor level and new overland flow paths, the Outline Plan shall include confirmation that any necessary landowner and statutory approvals have been obtained for that work.

Construction Conditions

13. Construction Environmental Management Plan (CEMP)

(a) A CEMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the CEMP is to set out the management procedures and construction methods to be undertaken to, avoid, remedy or mitigate any adverse effects associated with Construction Works as far as practicable. To achieve the objective, the CEMP shall include:
(i) the roles and responsibilities of staff and contractors;
(ii) details of the site or project manager and the project Liaison Person, including their contact details (phone and email address);
(iii) the Construction Works programmes and the staging approach, and the proposed hours of work;
(iv) the proposed site layouts (including construction yards), locations of refuelling activities and construction lighting;
(v) methods for controlling dust and the removal of debris and demolition of construction materials from public roads or places;
(vi) methods for providing for the health and safety of the general public;
(vii) measures to mitigate flood hazard effects such as siting stockpiles out of floodplains, minimising obstruction to flood flows, actions to respond to warnings of heavy rain;
(viii) procedures for incident management;
(ix) procedures for the refuelling and maintenance of plant and equipment to avoid discharges of fuels or lubricants to Watercourses;
(x) measures to address the storage of fuels, lubricants, hazardous and/or dangerous materials, along with contingency procedures to address emergency spill response(s) and clean up;
(xi) procedures for responding to complaints about Construction Works; and
(xii) methods for amending and updating the CEMP as required.

(c) Any CEMP prepared for a Stage of Work shall be submitted to Council for information at least ten working days before the Start of Construction for *a* Stage of Work.

14. Stakeholder and Communication Management Plan (SCMP)

(a) A SCMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the SCMP is to identify how the public and stakeholders (including directly affected and adjacent owners and occupiers of land) will be communicated with throughout the Construction Works. To achieve the objective, the SCMP shall include:

(i) the contact details for the project Liaison Person. These details shall be on the project website, or equivalent virtual information source, and prominently displayed at the main entrance(s) to the site(s);

(ii) the procedures for ensuring that there is a contact person available for the duration of Construction Works, for public enquiries or complaints about the Construction Works;

(iii) methods for engaging with Mana Whenua, to be developed in consultation with Mana Whenua;

(iv) a list of stakeholders, organisations, businesses and persons who will be communicated with;

(v) methods to communicate the proposed hours of construction activities **including** outside of normal working hours and on weekends and public holidays, to surrounding businesses and residential communities; and

(vi) linkages and cross-references to communication methods set out in other conditions and management plans where relevant.

(c) Any SCMP prepared for a Stage of Work shall be submitted to Council for information ten working days prior to the Start of Construction for a Stage of Work.

15. Complaints Register

(a) At all times during Construction Works, a record of any complaints received about the Construction Works shall be maintained. The record shall include:

(i) the date, time and nature of the complaint;

(ii) the name, phone number and address of the complainant (unless the complainant wishes to remain anonymous);

(iii) measures taken to respond to the complaint (including a record of the response provided to the complainant) or confirmation of no action if deemed appropriate;

(iv) the outcome of the investigation into the complaint; and

(v) any other activities in the area, unrelated to the project that may have contributed to the complaint, such as non-project construction, fires, traffic accidents or unusually dusty conditions generally.

(b) A copy of the Complaints Register required by this condition shall be made available to the Manager upon request as soon as practicable after the request is made.

16. Cultural Monitoring Plan

(a) Prior to the start of Construction Works, a Cultural Monitoring Plan shall be prepared by a Suitably Qualified and Experienced Person(s) identified in collaboration with Mana Whenua.

(b) The objective of the Cultural Monitoring Plan is to identify methods for undertaking cultural monitoring to assist with management of any cultural effects during Construction Works.

(c) The Cultural Monitoring Plan shall include:

(i) requirements for formal dedication or cultural interpretation to be undertaken prior to start of Construction Works in areas identified as having significance to Mana Whenua;

(ii) requirements and protocols for cultural inductions for contractors and subcontractors;

(iii) identification of activities, sites and areas where cultural monitoring is required during particular Construction Works;

(iv) identification of personnel to undertake cultural monitoring, including any geographic definition of their responsibilities; and

(v) details of personnel to assist with management of any cultural effects identified during cultural monitoring, including implementation of any accidental discovery protocols under condition 22.

(d) If Enabling Works involving soil disturbance are undertaken prior to the start of Construction Works, an Enabling Works Cultural Monitoring Plan shall be prepared by a Suitably Qualified and Experienced Person identified in collaboration with Mana Whenua. This plan may be prepared as a standalone Enabling Works Cultural Monitoring Plan or be included in the main Construction Works Cultural Monitoring Plan.

Advice Note: *Where appropriate, the Cultural Monitoring Plan shall align with the requirements of other conditions of the designation and resource consents for the project which require monitoring during Construction Works.*

17. Construction Traffic Management Plan (CTMP)

(a) A CTMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the CTMP is to avoid, remedy or mitigate, as far as practicable, adverse construction traffic effects. To achieve this objective, the CTMP shall include:

(i) methods to manage the effects of temporary traffic management activities on traffic;
(ii) measures to ensure the safety of all transport users;
(iii) the estimated numbers, frequencies, routes and timing of traffic movements, including any specific non-working or non-movement hours to manage vehicular and pedestrian traffic near schools or to manage traffic congestion;
(iv) site access routes and access points for heavy vehicles, the size and location of parking areas for plant, construction vehicles and the vehicles of workers and visitors;
(v) identification of detour routes and other methods to ensure the safe management and maintenance of traffic flows, including pedestrians and cyclists, on existing roads;
(vi) methods to maintain vehicle access to property and/or private roads where practicable, or to provide alternative access arrangements when it will not be;
(vii) the management approach to loads on heavy vehicles, including covering loads of fine material, the use of wheel-wash facilities at site exit points and the timely removal of any material deposited or spilled on public roads; and
(viii) methods that will be undertaken to communicate traffic management measures to affected road users (e.g. residents/public/stakeholders/emergency services).

(c) Any CTMP prepared for a Stage of Work shall be submitted to Council for information ten working days prior to the Start of Construction for a Stage of Work.

18. Construction Noise Standards

(a) Construction noise shall be measured and assessed in accordance with NZS6803:1999 Acoustics – Construction Noise and shall comply with the noise standards set out in the following table as far as practicable:

Table 18.1: Construction noise standards

Day of week	Time period	$L_{Aeq(15min)}$	L_{AFmax}
Occupied activity sensitive to noise			
Weekday	0630h - 0730h	55 dB	75 dB
	0730h - 1800h	70 dB	85 dB
	1800h - 2000h	65 dB	80 dB
	2000h - 0630h	45 dB	75 dB

Saturday	0630h - 0730h 0730h - 1800h 1800h - 2000h 2000h - 0630h	55 dB 70 dB 45 dB 45 dB	75 dB 85 dB 75 dB 75 dB
Sunday and Public Holidays	0630h - 0730h 0730h - 1800h 1800h - 2000h 2000h - 0630h	45 dB 55 dB 45 dB 45 dB	75 dB 85 dB 75 dB 75 dB
Other occupied buildings			
All	0730h – 1800h 1800h – 0730h	70 dB 75 dB	

(b) Where compliance with the noise standards set out in the Table 18.1 above is not practicable, and unless otherwise provided for in the CNVMP, then the methodology in Condition 21 shall apply.

19. **Construction Vibration Standards**

(a) Construction vibration shall be measured in accordance with ISO 4866:2010 Mechanical vibration and shock – Vibration of fixed structures – Guidelines for the measurement of vibrations and evaluation of their effects on structures and shall comply with the vibration standards set out in the following table as far as practicable.

Table 19.1 Construction vibration criteria

Receiver	Details	Category A	Category B
Occupied Activities sensitive to noise	Night-time 2000h - 0630h	0.3mm/s ppv	2mm/s ppv
	Daytime 0630h - 2000h	2mm/s ppv	5mm/s ppv
Other occupied buildings	Daytime 0630h - 2000h	2mm/s ppv	5mm/s ppv
All other buildings	At all other times	Tables 1 and 3 of DIN4150-3:1999	

(b) Where compliance with the vibration standards set out in Table 19.1 above is not practicable, and unless otherwise provided for in the CNVMP as required by Condition 20(c)(x), then the methodology in Condition 21 shall apply.

20. Construction Noise and Vibration Management Plan (CNVMP)

(a) A CNVMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) A CNVMP shall be implemented during the Stage of Work to which it relates.

(c) The objective of the CNVMP is to provide a framework for the development and implementation of the Best Practicable Option for the management of construction noise and vibration effects to achieve the construction noise and vibration standards set out in Conditions 18 and 19 to the extent practicable. To achieve this objective, the CNVMP shall be prepared in accordance with Annex E2

of the New Zealand Standard NZS6803:1999 *'Acoustics – Construction Noise'* (NZS6803:1999) and shall as a minimum, address the following:

(i) description of the works and anticipated equipment/processes;
(ii) hours of operation, including times and days when construction activities would occur;
(iii) the construction noise and vibration standards for the project;
(iv) identification of receivers where noise and vibration standards apply;
(v) management and mitigation options, and identification of the Best Practicable Option;
(vi) methods and frequency for monitoring and reporting on construction noise and vibration;
(vii) procedures for communication and engagement with nearby residents and stakeholders, including notification of proposed construction activities, the period of construction activities, and management of noise and vibration complaints;
(viii) contact details of the project Liaison Person;
(ix) procedures for the regular training of the operators of construction equipment to minimise noise and vibration as well as expected construction site behaviours for all workers;
(x) identification of areas where compliance with the noise (Condition 18) and/or vibration standards (Condition 19 Category A or Category B) will not be practicable and the specific management controls to be implemented and consultation requirements with owners and occupiers of affected sites;
(xi) procedures and requirements for the preparation of a Schedule to the CNVMP (Schedule) for those areas where compliance with the noise (Condition 18) and/or vibration standards (Condition 19 Category B) will not be practicable and where sufficient information is not available at the time of the CNVMP to determine the area specific management controls Condition 17(c)(x);
(xii) procedures for:
  A. communicating with affected receivers, where measured or predicted vibration from construction activities exceeds the vibration criteria of Condition 19; and
  B. assessing, mitigating and monitoring vibration where measured or predicted vibration from construction activities exceeds the Category B vibration criteria of Condition 19, including the requirement to undertake building condition surveys before and after works to determine whether any damage has occurred as a result of construction vibration; and
(xiii) requirements for review and update of the CNVMP.

21. Schedule to a CNVMP

(a) Unless otherwise provided for in a CNVMP, a Schedule to the CNVMP (Schedule) shall be prepared in consultation with the owners and occupiers of sites subject to the Schedule, when:
  (i) construction noise is either predicted or measured to exceed the noise standards in Condition 18, except where the exceedance of the L_{Aeq} criteria is no greater than 5 decibels and does not exceed:
    A. 0630 – 2000: 2 period of up to 2 consecutive weeks in any 2 months; or
    B. 2000 - 0630: 1 period of up to 2 consecutive nights in any 10 days;
  (ii) construction vibration is either predicted or measured to exceed the Category B standard at the receivers in Condition 19.

(b) The objective of the Schedule is to set out the Best Practicable Option for the management of noise and/or vibration effects of the construction activity beyond those measures set out in the CNVMP. The Schedule shall include details such as:
  (i) construction activity location, start and finish dates;
  (ii) the nearest neighbours to the construction activity;
  (iii) the predicted noise and/or vibration level for all receivers where the levels are predicted or measured to exceed the applicable standards in Condition 21(a);
  (iv) the proposed mitigation;
  (v) the proposed communications with neighbours; and
  (vi) location, times and types of monitoring.

(c) The Schedule shall be submitted to the Manager Council for certification at least 5 working days, except in unforeseen circumstances, in advance of Construction Works that are covered by the scope of the Schedule and shall form part of the CNVMP.

22. Heritage and Archaeology Management Plan (HAMP)

(a) A HAMP shall be prepared in consultation with Council, HNZPT and Mana Whenua prior to the Start of Construction for a Stage of Work.

(b) The objective of the HAMP is to protect historic heritage and to remedy and mitigate any residual effects as far as practicable. To achieve the objective, the HAMP shall identify:
   (i) methods for the identification and assessment of potential built heritage and archaeological sites within the Designation to inform detailed design;
   (ii) known heritage places and archaeological sites and potential archaeological sites within the Designation, including identifying any archaeological sites for which an Archaeological Authority under the HNZPTA will be sought or has been granted;
   (iii) any unrecorded archaeological sites or post-1900 heritage sites within the Designation, which shall also be documented and recorded;
   (iv) roles, responsibilities and contact details of project personnel, Mana Whenua representatives, and relevant agencies involved with heritage and archaeological matters including surveys, monitoring of project works, compliance with AUP accidental discovery rule, and monitoring of conditions;
   (v) specific areas to be investigated, monitored and recorded to the extent these are directly affected by the project;
   (vi) the proposed methodology for investigating and recording post-1900 heritage sites (including buildings) that need to be demolished or relocated, including details of their condition, measures to mitigate any adverse effects and timeframe for implementing the proposed methodology, in accordance with the HNZPT guideline AGS 1A: Investigation and Recording of Buildings and Standing Structures (4 July 2014), or any subsequent version. This shall include a built heritage assessment of the Brick Utility Building (31 Ponga Road, CHI site 22281);
   (vii) methods to acknowledge cultural values identified through Condition 8 where archaeological sites also involve Ngā Taonga Tuku Iho (treasures handed down by our ancestors) and where feasible and practicable to do so;
   (viii) methods for protecting or minimising adverse effects on heritage and archaeological sites within the Designation during project works as far as practicable, (for example fencing around heritage and archaeological sites to protect them from damage during construction); and
   (ix) training requirements and inductions for contractors and subcontractors on heritage and archaeological sites within the Designation, and legal obligations relating to accidental discoveries. The training shall be undertaken prior to the Start of Construction, under the guidance of a Suitably Qualified and Experienced Person and Mana Whenua representatives (to the extent the training relates to cultural values identified under Condition 8).

Advice Note: *The requirements for accidental discoveries of heritage items are set out in Rule E11.6.1 of the AUP.*

23. Network Utility Management Plan (NUMP)

(a) A NUMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the NUMP is to set out a framework for protecting, relocating and working in proximity to existing network utilities. The NUMP shall include methods to:
   (i) provide access for maintenance at all reasonable times, or emergency works at all times during construction activities;

(ii) manage the effects of dust and any other material potentially resulting from construction activities and able to cause material damage, beyond normal wear and tear to overhead transmission lines in the project area; and

(iii) demonstrate compliance with relevant standards and Codes of Practice including, where relevant, the NZECP 34:2001 New Zealand Electrical Code of Practice for Electrical Safe Distances 2001; and AS/NZS 4853:2012 Electrical hazards on Metallic Pipelines.

(c) The NUMP shall be prepared in consultation with the relevant Network Utility Operator(s) who have existing assets that are directly affected by the project.

(d) The NUMP shall describe how any comments from the Network Utility Operator in relation to its assets have been addressed.

(e) Any comments received from the Network Utility Operator shall be considered when finalising the NUMP.

(f) Any amendments to the NUMP related to the assets of a Network Utility Operator shall be prepared in consultation with that asset owner.

Operational Conditions

24. Traffic Noise

For the purposes of Conditions 25 to 38:

(a) Building-Modification Mitigation – has the same meaning as in NZS 6806;

(b) Detailed Mitigation Options – means the fully detailed design of the Selected Mitigation Options, with all practical issues addressed;

(c) Habitable Space – has the same meaning as in NZS 6806;

(d) Identified Noise Criteria Category – means the Noise Criteria Category for a PPF identified in Schedule 4: Identified PPFs Noise Criteria Categories;

(e) Mitigation – has the same meaning as in NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads;

(f) Noise Criteria Categories – means the groups of preference for sound levels established in accordance with NZS 6806 when determining the Best Practicable Option for noise mitigation (i.e. Categories A, B and C);

(g) NZS 6806 – means New Zealand Standard NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads;

(h) P40 – means Waka Kotahi NZTA P40:2014 Specification for noise mitigation;

(i) Protected Premises and Facilities (PPFs) – means only the premises and facilities identified in Schedule 4: Identified PPFs Noise Criteria Categories;

(j) Selected Mitigation Options – means the preferred mitigation option resulting from a Best Practicable Option assessment undertaken in accordance with NZS 6806; and

(k) Structural Mitigation – has the same meaning as in NZS 6806.

25. The Noise Criteria Categories identified in Schedule 4: Identified PPFs Noise Criteria Categories at each of the PPFs shall be achieved where practicable and subject to Conditions 24 to 38.

The Noise Criteria Categories do not need to be complied with at a PPF where:

(a) the PPF no longer exists; or

(b) agreement of the landowner has been obtained confirming that the Noise Criteria Category does not need to be met.

Achievement of the Noise Criteria Categories for PPFs shall be by reference to a traffic forecast for a high growth scenario in a design year at least 10 years after the programmed opening of the project.

26. As part of the detailed design of the project, a Suitably Qualified and Experienced Person shall determine the Selected Mitigation Options for the PPFs identified on Schedule 4: Identified PPFs Noise Criteria Categories.

27. Prior to construction of the project, a Suitably Qualified and Experienced Person shall develop the Detailed Mitigation Options for the PPFs identified on Schedule 4: Identified PPFs Noise Criteria Categories, taking into account the Selected Mitigation Options.

28. If the Detailed Mitigation Options would result in the Identified Noise Criteria Category changing to a less stringent Category, e.g. from Category A to B or Category B to C, at any relevant PPF, a Suitably Qualified and Experienced Person shall provide confirmation to the Manager that the Detailed Mitigation Option would be consistent with adopting the Best Practicable Option in accordance with NZS 6806 prior to implementation.

29. Prior to the Start of Construction, a Noise Mitigation Plan written in accordance with Chapter 7 of P40 shall be provided to the Manager for information.

The purpose of the Noise Mitigation Plan is to confirm that the Detailed Mitigation Options meet the requirements of Conditions 25 to 38. The Noise Mitigation Plan shall include confirmation that consultation has been undertaken with affected property owners for site specific design requirements and the implementation programme.

30. The Detailed Mitigation Options shall be implemented prior to completion of construction of the project, with the exception of any low-noise road surfaces, which shall be implemented within twelve months of completion of construction.

31. Prior to the Start of Construction, a Suitably Qualified and Experienced Person shall identify those PPFs which, following implementation of all the Detailed Mitigation Options, will not be Noise Criteria Categories A or B and where Building-Modification Mitigation might be required to achieve 40 dB $L_{Aeq(24h)}$ inside Habitable Spaces ('Category C Buildings').

32. Prior to the Start of Construction in the vicinity of each Category C Building, the Requiring Authority shall write to the owner of the Category C Building requesting entry to assess the noise reduction performance of the existing building envelope. If the building owner agrees to entry within three months of the date of the Requiring Authority's letter, the Requiring Authority shall instruct a Suitably Qualified and Experienced Person to visit the building and assess the noise reduction performance of the existing building envelope.

33. For each Category C Building identified, the Requiring Authority is deemed to have complied with Condition 32 above if:

(a) the Requiring Authority's Suitably Qualified and Experienced Person has visited the building and assessed the noise reduction performance of the building envelope; or

(b) the building owner agreed to entry, but the Requiring Authority could not gain entry for some reason (such as entry denied by a tenant); or

(c) the building owner did not agree to entry within three months of the date of the Requiring Authority's letter sent in accordance with Condition 32 above (including where the owner did not respond within that period); or

(d) the building owner cannot, after reasonable enquiry, be found prior to completion of construction of the project.

If any of (b) to (d) above apply to a Category C Building, the Requiring Authority is not required to implement Building-Modification Mitigation to that building.

34. Subject to Condition 33 above, within six months of the assessment undertaken in accordance with Conditions 32 and 33, the Requiring Authority shall write to the owner of each Category C Building advising:

(a) if Building-Modification Mitigation is required to achieve 40 dB LAeq(24h) inside habitable spaces; and

(b) the options available for Building-Modification Mitigation to the building, if required; and

(c) that the owner has three months to decide whether to accept Building-Modification Mitigation to the building and to advise which option for Building-Modification Mitigation the owner prefers, if the Requiring Authority has advised that more than one option is available.

35. Once an agreement on Building-Modification Mitigation is reached between the Requiring Authority and the owner of a Category C Building, the mitigation shall be implemented, including any third party authorisations required, in a reasonable and practical timeframe agreed between the Requiring Authority and the owner.

36. Subject to Condition 33, where Building-Modification Mitigation is required, the Requiring Authority is deemed to have complied with Condition 35 if:

(a) the Requiring Authority has completed Building Modification Mitigation to the building; or

(b) an alternative agreement for mitigation is reached between the Requiring Authority and the building owner; or

(c) the building owner did not accept the Requiring Authority's offer to implement Building-Modification Mitigation within three months of the date of the Requiring Authority's letter sent in accordance with Condition 33 (including where the owner did not respond within that period); or

(d) the building owner cannot, after reasonable enquiry, be found prior to completion of construction of the project.

37. Within twelve months of completion of construction of the project, a post-construction review report written in accordance with Chapter 8 of P40 Specification for Noise Mitigation 2014 shall be provided to the Manager.

38. The Detailed Mitigation Options shall be maintained so they retain their noise reduction performance as far as practicable.

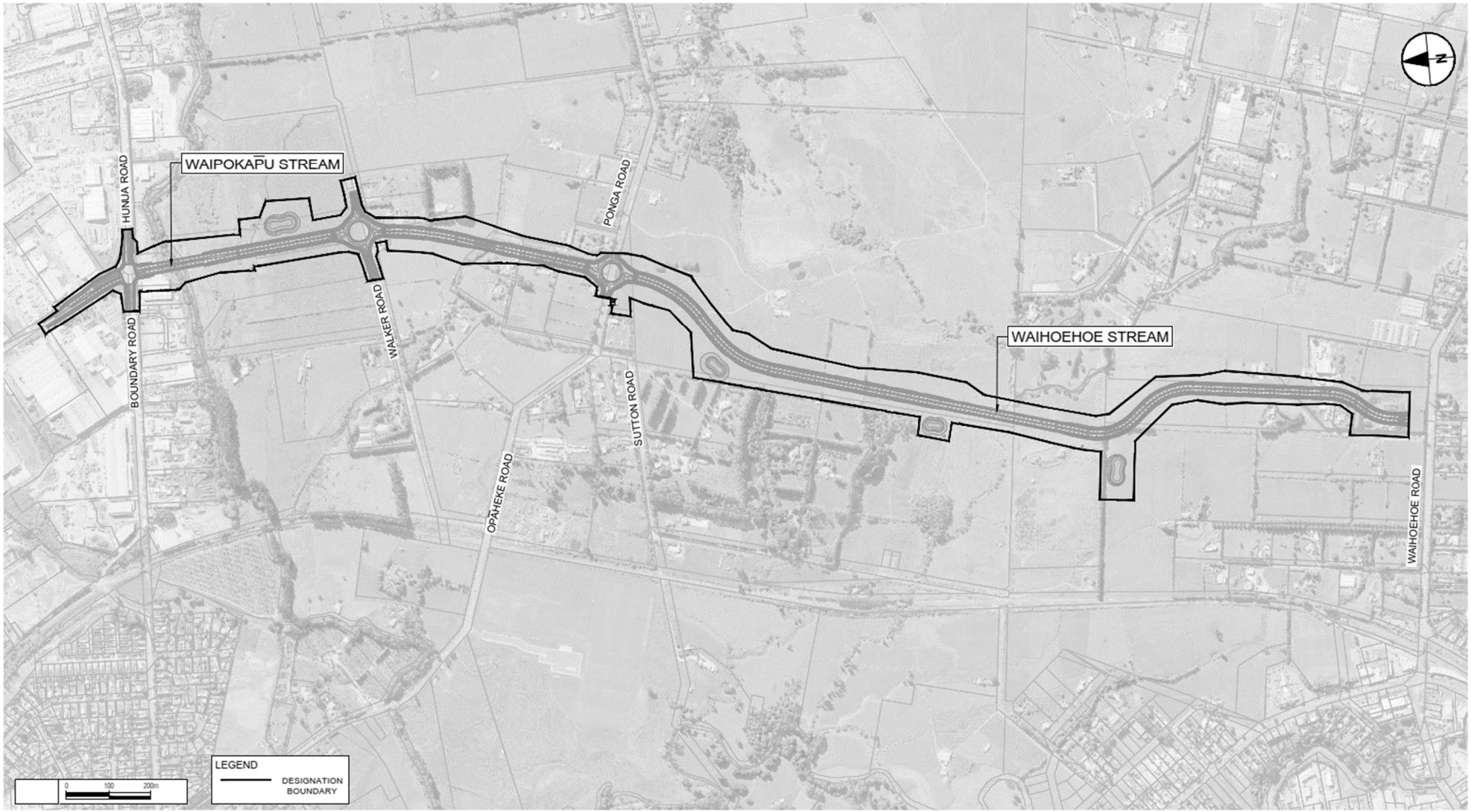
Schedule 1: General Accordance Plans and Information

Project Description

The proposed work is the construction, operation and maintenance of an arterial transport corridor in Drury-Ōpāheke between Waihoehoe Road and Hunua Road including active transport facilities and associated infrastructure. The proposed work is shown in the following Concept Plan and includes:

(a) A new arterial transport corridor with four lanes, including public transport and active transport facilities;
(b) Associated works including intersections, bridges, embankments, retaining, culverts and stormwater management systems;
(c) Changes to local roads, where the proposed work intersects with local roads; and
(d) Construction activities, including vegetation removal, construction compounds, lay down areas, bridge works area, construction traffic management and the re-grade of driveways.

Concept Plan



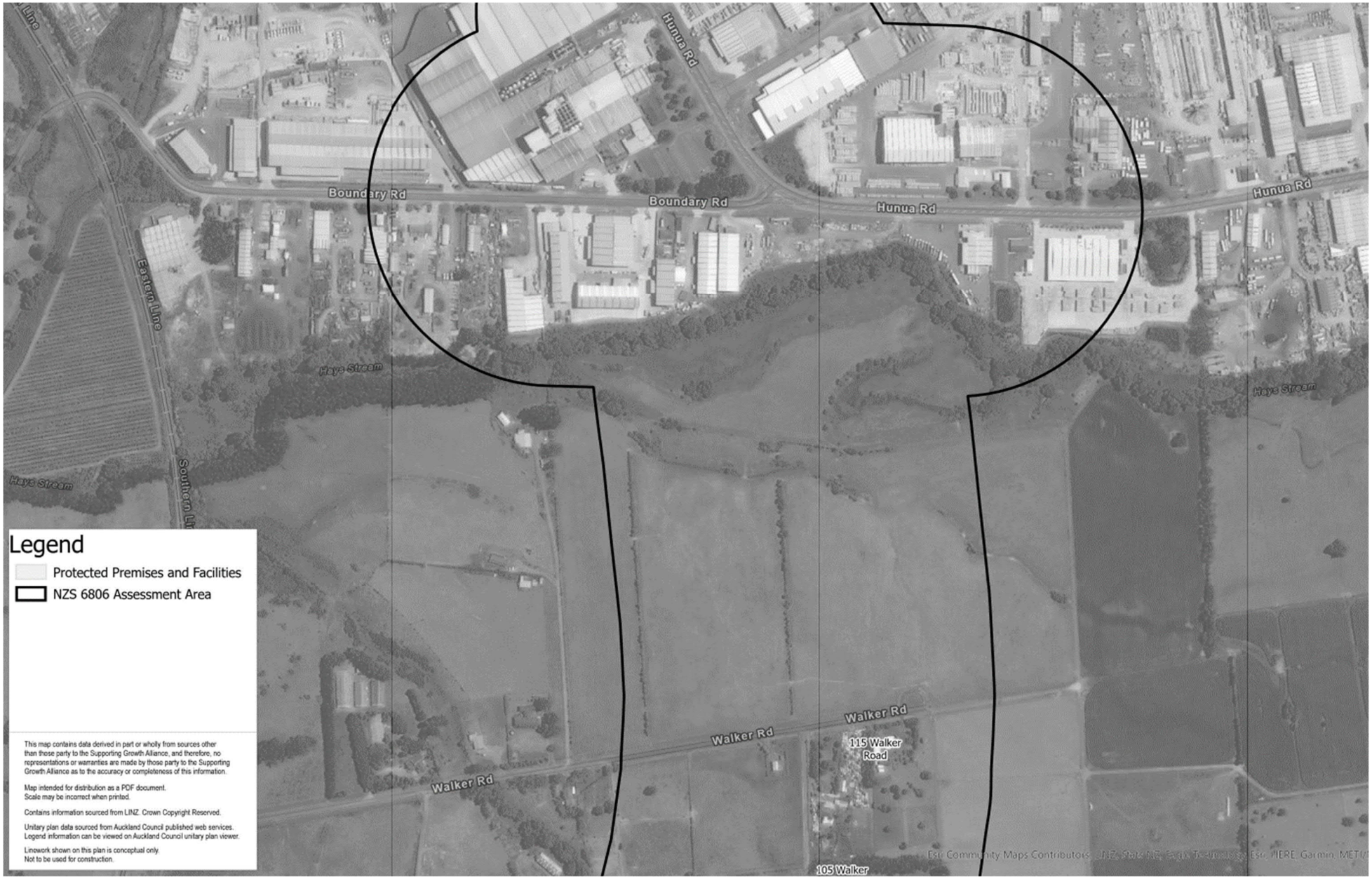
Schedule 2: Identified PPFs Noise Criteria Categories

Address	New or Altered Road	Noise Criteria Category
1 Fitzgerald Road	Altered	B
3 Fitzgerald Road	Altered	A
5 Fitzgerald Road	Altered	A
6 Fitzgerald Road	Altered	A
7 Fitzgerald Road	Altered	A
28 Fitzgerald Road	Altered	A
106 Harry Dodd Road	Altered	A
2 Ponga Road	New	A
6 Ponga Road	New	B
28 Ponga Road	Altered	A
36 Ponga Road	New	B
48 Ponga Road	Altered	A
61 Ponga Road	Altered	A
68 Ponga Road	New	B
70 Ponga Road	Altered	A
94 Ponga Road	New	A
201 Sutton Road	New	B
237 Sutton Road	New	A
249 Sutton Road	New	A
285 Sutton Road	New	A
97 Waihoehoe Road	Altered	A
101 Waihoehoe Road	Altered	B
112 Waihoehoe Road	New	A
115 Waihoehoe Road	Altered	B
95 Walker Road	New	A
105 Walker Road	New	A
115 Walker Road	New	A

PPF Location Plans


237 Sutton Road
Waiohiki Stream
Eastern Line
Sutton Rd
Waiohiki Stream
Symonds Stream
Sutton ISutton Rd
201 Sutton Road
Eastern Line
106 Harry Dodd Road
Harry Dodd Rd
Legend
Protected Premises and Facilities
NZS 6806 Assessment Area
This map contains data derived in part or wholly from sources other than those party to the Supporting Growth Alliance, and therefore, no representations or warranties are made by those party to the Supporting Growth Alliance as to the accuracy or completeness of this information.
Map intended for distribution as a PDF document.
Scale may be incorrect when printed.
Contains information sourced from LINZ. Crown Copyright Reserved.
Unitary plan data sourced from Auckland Council published web services.
Legend information can be viewed on Auckland Council unitary plan viewer.
Linework shown on this plan is conceptual only.
Not to be used for construction.


Opaheke Rd
Southern Line
Opaheke Rd
95 Walker Road
105 Walker Road
2 Ponga Road
6 Ponga Road
36 Ponga Road
68 Ponga Road
28 Ponga Road
94 Ponga Road
48 Ponga Road
70 Ponga Road
Ponga Rd
Ponga Rd
Sutton Rd
61 Ponga Road
285 Sutton Road
249 Sutton Road
237 Sutton
Symonds Stream
Legend
Protected Premises and Facilities
NZS 6806 Assessment Area
This map contains data derived in part or wholly from sources other than those party to the Supporting Growth Alliance, and therefore, no representations or warranties are made by those party to the Supporting Growth Alliance as to the accuracy or completeness of this information.
Map intended for distribution as a PDF document.
Scale may be incorrect when printed.
Contains information sourced from LINZ. Crown Copyright Reserved.
Unitary plan data sourced from Auckland Council published web services.
Legend information can be viewed on Auckland Council unitary plan viewer.
Linework shown on this plan is conceptual only.
Not to be used for construction.


Boundary Rd
Boundary Rd
Hunua Rd
Hunua Rd
Hunua Rd
Eastern Line
Southern Line
Haya Stream
Haya Stream
Haya Stream
Walker Rd
Walker Rd
Walker Rd
115 Walker Road
105 Walker
Legend
Protected Premises and Facilities
NZS 6806 Assessment Area
This map contains data derived in part or wholly from sources other than those party to the Supporting Growth Alliance, and therefore, no representations or warranties are made by those party to the Supporting Growth Alliance as to the accuracy or completeness of this information.
Map intended for distribution as a PDF document.
Scale may be incorrect when printed.
Contains information sourced from LINZ. Crown Copyright Reserved.
Unitary plan data sourced from Auckland Council published web services.
Legend information can be viewed on Auckland Council unitary plan viewer.
Linework shown on this plan is conceptual only.
Not to be used for construction.
Esri Community Maps Contributors, LINZ, Stats NZ, Esri, TomTom, Esri, HERE, Garmin, METI

NoR D5

Abbreviations and Definitions

Acronym/Term	Definition
AUP	Auckland Unitary Plan
ARI	Annual Recurrence Interval
Average increase in flood hazard	Flow depth times velocity.
BPO or Best Practicable Option	Has the same meaning as in section 2 of the RMA 1991.
CEMP	Construction Environmental Management Plan
Certification of material changes to management plans	Confirmation from the Manager that a plan or material change to a plan has been prepared in accordance with the condition to which it relates. A management plan shall be deemed certified: (a) where the Requiring Authority has received written confirmation from Council that a management plan is certified; or (b) five working days from the submission of a management plan where no written confirmation of certification has been received. A material change to a management plan shall be deemed certified: (a) where the Requiring Authority has received written confirmation from Council that the material change to the management plan is certified; or (b) ten working days from the submission of the material change to the management plan where no written confirmation of certification has been received.
CNVMP	Construction Noise and Vibration Management Plan
CNVMP Schedule or Schedule	A schedule to the CNVMP
Completion of Construction	When construction of the project (or part of the project) is complete and it is available for use.
Construction Works	Activities undertaken to construct the project excluding Enabling Works.
Council	Auckland Council
CPTED	Crime prevention through environmental design
CTMP	Construction Traffic Management Plan

Acronym/Term	Definition
Enabling works	Includes, but is not limited to, the following and similar activities: • geotechnical investigations (including trial embankments); • archaeological site investigations; • formation of access for geotechnical investigations; • establishment of site yards, site entrances and fencing; • constructing and sealing site access roads; • demolition or removal of buildings and structures; • relocation of services; and • establishment of mitigation measures (such as erosion and sediment control measures, temporary noise walls, earth bunds and planting).
Flood prone area	A potential ponding area that relies on a single culvert for drainage and does not have an overland flow path.
Habitable floor	Any room (floor) in an authorised building used for residential living activity, excluding a laundry, bathroom, toilet or any room used solely as an entrance hall, passageway or garage.
Habitable floor level that has existing flooding	Where the flood level using the pre project model scenario is above the existing authorised the habitable floor level.
HAMP	Heritage and Archaeology Management Plan
HNZPT	Heritage New Zealand Pouhere Taonga
HNZPTA	Heritage New Zealand Pouhere Taonga Act 2014
Manager	The Manager – Resource Consents of the Auckland Council, or authorised delegate.
Maximum Probable Development	Design case for consideration of future flows allowing for development within a catchment that takes into account the maximum impervious surface limits of the current zone or, if the land is zoned Future Urban in the Auckland Unitary Plan, the probable level of development arising from zone changes.
MID	Maintenance in Design
Network Utility Operator	Has the same meaning as set out in section 166 of the RMA.
NOR	Notice of Requirement
NUMP	Network Utilities Management Plan
NZAA	New Zealand Archaeological Association
NZTM	New Zealand Transverse Mercator [coordinates system]
Outline Plan	An outline plan prepared in accordance with section 176A of the RMA.

Acronym/Term	Definition
Project Liaison Person	The person or persons appointed for the duration of the project's Construction Works to be the main point of contact for persons wanting information about the project or affected by the Construction Works.
Pre-project development	Existing site condition prior to the project (including existing buildings and roadways).
Post-project development	Site condition after the project has been completed (including existing and new buildings and roadways).
Protected Premises and Facilities (PPF)	Protected Premises and Facilities as defined in New Zealand Standard NZS 6806:2010: *Acoustics – Road-traffic noise – New and altered roads.*
Requiring Authority	Has the same meaning as section 166 of the RMA and for this Designation is Auckland Transport (AT).
RMA	Resource Management Act (1991)
SCMP	Stakeholder Communication Management Plan
SID	Safety in Design
Stage of Work	Any physical works that require the development of an Outline Plan.
Start of Construction	The time when Construction Works (excluding Enabling Works) start.
Suitably Qualified and Experienced Person	A person (or persons) who can provide sufficient evidence to demonstrate their suitability and competence.
ULDMP	Urban and Landscape Design Management Plan

General Conditions

1. Activity in General Accordance with Plans and Information

(a) Except as provided for in the conditions below, and subject to final design and Outline Plan(s), works within the designation shall be undertaken in general accordance with the Project Description and Concept Plan in Schedule 1.

(b) Where there is inconsistency between:
- (i) the Project Description and Concept Plan in Schedule 1 and the requirements of the following conditions, the conditions shall prevail; and
- (ii) the Project Description and Concept Plan in Schedule 1, and the management plans under the conditions of the designation, the requirements of the management plans shall prevail.

2. Project Information

(a) A project website, or equivalent virtual information source, shall be established within 12 months of the date on which this designation is included in the AUP. The project website or virtual information source shall include these conditions and shall provide information on:
- (i) the status of the project;
- (ii) anticipated construction timeframes; and
- (iii) contact details for enquiries.

(b) At the start of detailed design for a Stage of Work, the project website or virtual information source shall be updated to provide information on the likely date for Start of Construction, and any staging of works.

3. Designation Review

(a) As soon as practicable following Completion of Construction the Requiring Authority shall:
- (i) review the extent of the designation to identify any areas of designated land that it no longer requires for the on-going operation, maintenance or mitigation of effects of the project; and
- (ii) give notice to Auckland Council in accordance with section 182 of the RMA for the removal of those parts of the designation identified above.

4. Lapse

In accordance with section 184(1)(c) of the RMA, this designation shall lapse if not given effect to within 20 years from the date on which it is included in the AUP.

5. Network Utility Operators (Section 176 Approval)

(a) Prior to the start of Construction Works, Network Utility Operators with existing infrastructure located within the designation will not require written consent under section 176 of the RMA for the following activities:
- (i) operation, maintenance and urgent repair works;
- (ii) minor renewal works to existing network utilities necessary for the on-going provision or security of supply of network utility operations;
- (iii) minor works such as new service connections; and
- (iv) the upgrade and replacement of existing network utilities in the same location with the same or similar effects as the existing utility.

(b) To the extent that a record of written approval is required for the activities listed above, this condition shall constitute written approval.

Pre-construction Conditions

6. Outline Plan(s)

(a) An Outline Plan (or Plans) shall be prepared in accordance with section 176A of the RMA.

(b) Outline Plans (or Plan) may be submitted in parts or in stages to address particular activities (e.g. design or construction aspects), or a Stage of Work of the project.

(c) Outline Plans shall include any management plan or plans that are relevant to the management of effects of those activities or Stage of Work, which may include:
- (i) Network Utilities Management Plan;
- (ii) Construction Noise and Vibration Management Plan;
- (iii) Urban and Landscape Design Management Plan;
- (iv) Heritage and Archaeology Management Plan; and
- (v) Tree Management Plan.

7. Management Plans

(a) Any management plan shall:
- (i) be prepared and implemented in accordance with the relevant management plan condition (refer to Conditions 8 to 24);
- (ii) be prepared by a Suitably Qualified and Experienced Person(s);
- (iii) include sufficient detail relating to the management of effects associated with the relevant activities and/or Stage of Work to which it relates;
- (iv) summarise comments received from Mana Whenua and other stakeholders as required by the relevant management plan condition, along with a summary of where comments have:
  - A. been incorporated; and
  - B. where not incorporated, the reasons why;
- (v) be submitted as part of an Outline Plan pursuant to s176A of the RMA, with the exception of SCMPs, CEMPs, CTMPs and CNVMP Schedules; and
- (vi) once finalised, uploaded to the project website or equivalent virtual information source.

(b) Any management plan developed in accordance with Condition 7(a) may:
- (i) be submitted in parts or in stages to address particular activities (e.g. design or construction aspects) a Stage of Work of the project, or to address specific activities authorised by the designation;
- (ii) except for material changes, be amended to reflect any changes in design, construction methods or management of effects without further process; and
- (iii) if there is a material change required to a management plan which has been submitted with an Outline Plan in accordance with Condition 6, the revised part of the plan shall be submitted to the Council as an update to the Outline Plan or for Certification as soon as practicable following identification of the need for a revision.

(c) Any material changes to the SCMPs, CEMPs or CTMPs are to be submitted to the Council for information.

8. Cultural Advisory Report

(a) At least six (6) months prior to the start of detailed design for a Stage of Work, Mana Whenua shall be invited to prepare a Cultural Advisory Report for the project.

(b) The objective of the Cultural Advisory Report is to assist in understanding and identifying Ngā Taonga Tuku Iho ('treasures handed down by our ancestors') affected by the project, to inform their management and protection. To achieve the objective, Requiring Authority shall invite Mana Whenua to prepare a Cultural Advisory Report that:
- (i) identifies the cultural sites, landscapes and values that have the potential to be affected by the construction and operation of the project;

(ii) sets out the desired outcomes for management of potential effects on cultural sites, landscapes and values;
(iii) identifies traditional cultural practices within the area that may be impacted by the project;
(iv) identifies opportunities for restoration and enhancement of identified cultural sites, landscapes and values within the project area;
(v) taking into account the outcomes of (i) to (iv) above, identify cultural matters and principles that should be considered in the development of the Urban and Landscape Design Management Plan and Heritage and Archaeological Management Plan, and the Cultural Monitoring Plan referred to in Condition 16; and
(vi) identifies and (if possible) nominates traditional names along the project alignment. Noting there may be formal statutory processes outside the project required in any decision-making.

(c) The desired outcomes for management of potential effects on cultural sites, landscapes and values identified in the Cultural Advisory Report shall be discussed with Mana Whenua and those outcomes reflected in the relevant management plans where practicable.

(d) Conditions 8(b) and 8(c) above will cease to apply if:
(i) Mana Whenua have been invited to prepare a Cultural Advisory Report by a date at least 6 months prior to start of Construction Works; and
(ii) Mana Whenua have not provided a Cultural Advisory Report within six months prior to start of Construction Works.

9. Urban and Landscape Design Management Plan (ULDMP)

(a) A ULDMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the ULDMP(s) is to:
(i) enable integration of the project's permanent works into the surrounding landscape and urban context; and
(ii) ensure that the project manages potential adverse landscape and visual effects as far as practicable and contributes to a quality urban environment.

(c) To achieve the objective, the ULDMP(s) shall provide details of how the project:
(i) is designed to integrate with the adjacent urban (or proposed urban) and landscape context, including the surrounding existing or proposed topography, urban environment (i.e. centres and density of built form), landscape character and open space zones;
(ii) provides appropriate walking and cycling connectivity to, and interfaces with, existing or proposed adjacent land uses, and walking and cycling connections;
(iii) promotes inclusive access (where appropriate); and
(iv) promotes a sense of personal safety by aligning with best practice guidelines, such as:

A. Crime Prevention Through Environmental Design (CPTED) principles;

B. Safety in Design (SID) requirements; and

C. Maintenance in Design (MID) requirements and anti-vandalism/anti-graffiti measures.

10. (a) The ULDMP(s) shall include:
(i) a concept plan – which depicts the overall landscape and urban design concept, and explain the rationale for the landscape and urban design proposals;
(ii) developed design concepts, including principles for walking and cycling facilities and public transport; and
(iii) landscape and urban design details – that cover the following:

A. road design – elements such as earthworks contouring including cut and fill batters, benching, spoil disposal sites, median width and treatment, roadside width and treatment;

B. roadside elements – such as lighting, fencing, wayfinding and signage;

C. architectural and landscape treatment of all major structures, including bridges and retaining walls;

D. architectural and landscape treatment of noise barriers;

E. landscape treatment of permanent stormwater control wetlands and swales;

F. integration of passenger transport;

G. pedestrian and cycle facilities including paths, road crossings and dedicated pedestrian/ cycle bridges or underpasses;

H. heritage items with reference to the HAMP in Condition 22; and

I. re-instatement of construction and site compound areas, driveways, accessways and fences.

11. (a) The ULDMP shall also include the following planting details and maintenance requirements:

(i) planting design details including:

A. identification of existing trees and vegetation that will be retained with reference to the Tree Management Plan in Condition 23. Where practicable, mature trees and native vegetation should be retained;

B. street trees, shrubs and ground cover suitable for berms;

C. treatment of fill slopes to integrate with adjacent land use , streams, riparian margins and open space zones;

D. planting of stormwater wetlands;

E. integration of any planting requirements required by conditions of any resource consents for the project; and

F. reinstatement planting of construction and site compound areas as appropriate;

(ii) a planting programme including the staging of planting in relation to the construction programme which shall, as far as practicable, include provision for planting within each planting season following completion of works in each Stage of Work; and

(iii) detailed specifications and a two year maintenance plan relating to the following:

A. weed control and clearance;

B. pest animal management (to support plant establishment);

C. ground preparation (top soiling and decompaction);

D. mulching; and

E. plant sourcing and planting, including hydroseeding and grassing.

(b) Mana Whenua shall be invited to participate in the development of the ULDMP(s) to provide input into relevant cultural landscape and design matters including how desired outcomes for management of potential effects on cultural sites, landscapes and values identified and discussed in accordance with Condition 8 may be reflected in the ULDMP.

12. Flood Hazard

(a) Where relevant to the Stage of Work, the project shall be designed to demonstrate that the Mangapū Stream (Symonds Stream) generally located at NZTM 1775480, 5893662 and shown in Schedule 1 shall be crossed by a bridge.

(b) The project shall be designed to achieve the following flood risk outcomes:
  (i) no increase in flood levels for existing authorised habitable floors that are already subject to flooding;
  (ii) no more than a 10% reduction in freeboard for existing authorised habitable floors;
  (iii) no increase of more than 50mm in flood level on land zoned for urban or future urban development where there is no existing dwelling;
  (iv) no new flood prone areas; and
  (v) no more than a 10% average increase of flood hazard (defined as flow depth times velocity) for main access to authorised habitable dwellings.

(c) Compliance with this condition shall be demonstrated in the Outline Plan, which shall include flood modelling of the pre-project and post-project 100 year ARI flood levels (for Maximum Probable Development land use and including climate change).

(d) Where the above outcomes can be achieved through alternative measures outside of the designation such as flood stop banks, flood walls, raising existing authorised habitable floor level and new overland flow paths, the Outline Plan shall include confirmation that any necessary landowner and statutory approvals have been obtained for that work.

Construction Conditions

13. Construction Environmental Management Plan (CEMP)

(a) A CEMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the CEMP is to set out the management procedures and construction methods to be undertaken to, avoid, remedy or mitigate any adverse effects associated with Construction Works as far as practicable. To achieve the objective, the CEMP shall include:
  (i) the roles and responsibilities of staff and contractors;
  (ii) details of the site or project manager and the project Liaison Person, including their contact details (phone and email address);
  (iii) the Construction Works programmes and the staging approach, and the proposed hours of work;
  (iv) the proposed site layouts (including construction yards), locations of refuelling activities and construction lighting;
  (v) methods for controlling dust and the removal of debris and demolition of construction materials from public roads or places;
  (vi) methods for providing for the health and safety of the general public;
  (vii) measures to mitigate flood hazard effects such as siting stockpiles out of floodplains, minimising obstruction to flood flows, actions to respond to warnings of heavy rain;
  (viii) procedures for incident management;
  (ix) procedures for the refuelling and maintenance of plant and equipment to avoid discharges of fuels or lubricants to Watercourses;
  (x) measures to address the storage of fuels, lubricants, hazardous and/or dangerous materials, along with contingency procedures to address emergency spill response(s) and clean up;
  (xi) procedures for responding to complaints about Construction Works; and
  (xii) methods for amending and updating the CEMP as required.

(c) Any CEMP prepared for a Stage of Work shall be submitted to Council for information at least ten working days before the Start of Construction for a Stage of Work.

14. Stakeholder and Communication Management Plan (SCMP)

(a) A SCMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the SCMP is to identify how the public and stakeholders (including directly affected and adjacent owners and occupiers of land) will be communicated with throughout the Construction Works. To achieve the objective, the SCMP shall include:

(i) the contact details for the project Liaison Person. These details shall be on the project website, or equivalent virtual information source, and prominently displayed at the main entrance(s) to the site(s);

(ii) the procedures for ensuring that there is a contact person available for the duration of Construction Works, for public enquiries or complaints about the Construction Works;

(iii) methods for engaging with Mana Whenua, to be developed in consultation with Mana Whenua;

(iv) a list of stakeholders, organisations, businesses and persons who will be communicated with;

(v) methods to communicate the proposed hours of construction activities **including** outside of normal working hours and on weekends and public holidays, to surrounding businesses and residential communities; and

(vi) linkages and cross-references to communication methods set out in other conditions and management plans where relevant.

(c) Any SCMP prepared for a Stage of Work shall be submitted to Council for information ten working days prior to the Start of Construction for a Stage of Work.

15. Complaints Register

(a) At all times during Construction Works, a record of any complaints received about the Construction Works shall be maintained. The record shall include:

(i) the date, time and nature of the complaint;

(ii) the name, phone number and address of the complainant (unless the complainant wishes to remain anonymous);

(iii) measures taken to respond to the complaint (including a record of the response provided to the complainant) or confirmation of no action if deemed appropriate;

(iv) the outcome of the investigation into the complaint; and

(v) any other activities in the area, unrelated to the project that may have contributed to the complaint, such as non-project construction, fires, traffic accidents or unusually dusty conditions generally.

(b) A copy of the Complaints Register required by this condition shall be made available to the Manager upon request as soon as practicable after the request is made.

16. Cultural Monitoring Plan

(a) Prior to the start of Construction Works, a Cultural Monitoring Plan shall be prepared by a Suitably Qualified and Experienced Person(s) identified in collaboration with Mana Whenua.

(b) The objective of the Cultural Monitoring Plan is to identify methods for undertaking cultural monitoring to assist with management of any cultural effects during Construction Works.

(c) The Cultural Monitoring Plan shall include:

(i) requirements for formal dedication or cultural interpretation to be undertaken prior to start of Construction Works in areas identified as having significance to Mana Whenua;

(ii) requirements and protocols for cultural inductions for contractors and subcontractors;

(iii) identification of activities, sites and areas where cultural monitoring is required during particular Construction Works;

(iv) identification of personnel to undertake cultural monitoring, including any geographic definition of their responsibilities; and

(v) details of personnel to assist with management of any cultural effects identified during cultural monitoring, including implementation of any accidental discovery protocols under condition 22.

(d) If Enabling Works involving soil disturbance are undertaken prior to the start of Construction Works, an Enabling Works Cultural Monitoring Plan shall be prepared by a Suitably Qualified and Experienced Person identified in collaboration with Mana Whenua. This plan may be prepared as a standalone Enabling Works Cultural Monitoring Plan or be included in the main Construction Works Cultural Monitoring Plan.

Advice Note: *Where appropriate, the Cultural Monitoring Plan shall align with the requirements of other conditions of the designation and resource consents for the project which require monitoring during Construction Works.*

17. Construction Traffic Management Plan (CTMP)

(a) A CTMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the CTMP is to avoid, remedy or mitigate, as far as practicable, adverse construction traffic effects. To achieve this objective, the CTMP shall include:

(i) methods to manage the effects of temporary traffic management activities on traffic;
(ii) measures to ensure the safety of all transport users;
(iii) the estimated numbers, frequencies, routes and timing of traffic movements, including any specific non-working or non-movement hours to manage vehicular and pedestrian traffic near schools or to manage traffic congestion;
(iv) site access routes and access points for heavy vehicles, the size and location of parking areas for plant, construction vehicles and the vehicles of workers and visitors;
(v) identification of detour routes and other methods to ensure the safe management and maintenance of traffic flows, including pedestrians and cyclists, on existing roads;
(vi) methods to maintain vehicle access to property and/or private roads where practicable, or to provide alternative access arrangements when it will not be;
(vii) the management approach to loads on heavy vehicles, including covering loads of fine material, the use of wheel-wash facilities at site exit points and the timely removal of any material deposited or spilled on public roads; and
(viii) methods that will be undertaken to communicate traffic management measures to affected road users (e.g. residents/public/stakeholders/emergency services).

(c) Any CTMP prepared for a Stage of Work shall be submitted to Council for information ten working days prior to the Start of Construction for a Stage of Work.

18. Construction Noise Standards

(a) Construction noise shall be measured and assessed in accordance with NZS6803:1999 Acoustics – Construction Noise and shall comply with the noise standards set out in the following table as far as practicable:

Table 18.1: Construction noise standards

Day of week	Time period	$L_{Aeq(15min)}$	L_{AFmax}
Occupied activity sensitive to noise			
Weekday	0630h - 0730h	55 dB	75 dB
	0730h - 1800h	70 dB	85 dB
	1800h - 2000h	65 dB	80 dB
	2000h - 0630h	45 dB	75 dB

Saturday	0630h - 0730h 0730h - 1800h 1800h - 2000h 2000h - 0630h	55 dB 70 dB 45 dB 45 dB	75 dB 85 dB 75 dB 75 dB
Sunday and Public Holidays	0630h - 0730h 0730h - 1800h 1800h - 2000h 2000h - 0630h	45 dB 55 dB 45 dB 45 dB	75 dB 85 dB 75 dB 75 dB
Other occupied buildings			
All	0730h – 1800h 1800h – 0730h	70 dB 75 dB	

(b) Where compliance with the noise standards set out in the Table 18.1 above is not practicable, and unless otherwise provided for in the CNVMP, then the methodology in Condition 21 shall apply.

19. **Construction Vibration Standards**

(a) Construction vibration shall be measured in accordance with ISO 4866:2010 Mechanical vibration and shock – Vibration of fixed structures – Guidelines for the measurement of vibrations and evaluation of their effects on structures and shall comply with the vibration standards set out in the following table as far as practicable.

Table 19.1 CNV2 Construction vibration criteria

Receiver	Details	Category A	Category B
Occupied Activities sensitive to noise	Night-time 2000h - 0630h	0.3mm/s ppv	2mm/s ppv
	Daytime 0630h - 2000h	2mm/s ppv	5mm/s ppv
Other occupied buildings	Daytime 0630h - 2000h	2mm/s ppv	5mm/s ppv
All other buildings	At all other times	Tables 1 and 3 of DIN4150-3:1999	

(b) Where compliance with the vibration standards set out in Table 19.1 above is not practicable, and unless otherwise provided for in the CNVMP as required by Condition 20(c)(x), then the methodology in Condition 21 shall apply.

20. Construction Noise and Vibration Management Plan (CNVMP)

(a) A CNVMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) A CNVMP shall be implemented during the Stage of Work to which it relates.

(c) The objective of the CNVMP is to provide a framework for the development and implementation of the Best Practicable Option for the management of construction noise and vibration effects to achieve the construction noise and vibration standards set out in Conditions 18 and 19 to the extent practicable. To achieve this objective, the CNVMP shall be prepared in accordance with Annex E2

of the New Zealand Standard NZS6803:1999 *'Acoustics – Construction Noise'* (NZS6803:1999) and shall as a minimum, address the following:

(i) description of the works and anticipated equipment/processes;
(ii) hours of operation, including times and days when construction activities would occur;
(iii) the construction noise and vibration standards for the project;
(iv) identification of receivers where noise and vibration standards apply;
(v) management and mitigation options, and identification of the Best Practicable Option;
(vi) methods and frequency for monitoring and reporting on construction noise and vibration;
(vii) procedures for communication and engagement with nearby residents and stakeholders, including notification of proposed construction activities, the period of construction activities, and management of noise and vibration complaints;
(viii) contact details of the project Liaison Person;
(ix) procedures for the regular training of the operators of construction equipment to minimise noise and vibration as well as expected construction site behaviours for all workers;
(x) identification of areas where compliance with the noise (Condition 18) and/or vibration standards (Condition 19 Category A or Category B) will not be practicable and the specific management controls to be implemented and consultation requirements with owners and occupiers of affected sites;
(xi) procedures and requirements for the preparation of a Schedule to the CNVMP (Schedule) for those areas where compliance with the noise (Condition 18) and/or vibration standards (Condition 19 Category B) will not be practicable and where sufficient information is not available at the time of the CNVMP to determine the area specific management controls Condition 17(c)(x);
(xii) procedures for:
  A. communicating with affected receivers, where measured or predicted vibration from construction activities exceeds the vibration criteria of Condition 19; and
  B. assessing, mitigating and monitoring vibration where measured or predicted vibration from construction activities exceeds the Category B vibration criteria of Condition 19, including the requirement to undertake building condition surveys before and after works to determine whether any damage has occurred as a result of construction vibration; and
(xiii) requirements for review and update of the CNVMP.

21. Schedule to a CNVMP

(a) Unless otherwise provided for in a CNVMP, a Schedule to the CNVMP (Schedule) shall be prepared in consultation with the owners and occupiers of sites subject to the Schedule, when:
  (i) construction noise is either predicted or measured to exceed the noise standards in Condition 18, except where the exceedance of the L_{Aeq} criteria is no greater than 5 decibels and does not exceed:
    A. 0630 – 2000: 2 period of up to 2 consecutive weeks in any 2 months; or
    B. 2000 - 0630: 1 period of up to 2 consecutive nights in any 10 days;
  (ii) construction vibration is either predicted or measured to exceed the Category B standard at the receivers in Condition 19.

(b) The objective of the Schedule is to set out the Best Practicable Option for the management of noise and/or vibration effects of the construction activity beyond those measures set out in the CNVMP. The Schedule shall include details such as:
  (i) construction activity location, start and finish dates;
  (ii) the nearest neighbours to the construction activity;
  (iii) the predicted noise and/or vibration level for all receivers where the levels are predicted or measured to exceed the applicable standards in Condition 21(a);
  (iv) the proposed mitigation;
  (v) the proposed communications with neighbours; and
  (vi) location, times and types of monitoring.

(c) The Schedule shall be submitted to the Manager Council for certification at least 5 working days, except in unforeseen circumstances, in advance of Construction Works that are covered by the scope of the Schedule and shall form part of the CNVMP.

22. Heritage and Archaeology Management Plan (HAMP)

(a) A HAMP shall be prepared in consultation with Council, HNZPT and Mana Whenua prior to the Start of Construction for a Stage of Work.

(b) The objective of the HAMP is to protect historic heritage and to remedy and mitigate any residual effects as far as practicable. To achieve the objective, the HAMP shall identify:
  (i) methods for the identification and assessment of potential built heritage and archaeological sites within the Designation to inform detailed design.
  (ii) known heritage places and archaeological sites and potential archaeological sites within the Designation, including identifying any archaeological sites for which an Archaeological Authority under the HNZPTA will be sought or has been granted;
  (iii) any unrecorded archaeological sites or post-1900 heritage sites within the Designation, which shall also be documented and recorded;
  (iv) roles, responsibilities and contact details of project personnel, Mana Whenua representatives, and relevant agencies involved with heritage and archaeological matters including surveys, monitoring of project works, compliance with AUP accidental discovery rule, and monitoring of conditions;
  (v) specific areas to be investigated, monitored and recorded to the extent these are directly affected by the project;
  (vi) methods for the removal and storage of the stone marking of the World War II Ōpāheke East Camp during project works and identification of a suitable location to place it once project works are complete;
  (vii) the proposed methodology for investigating and recording post-1900 heritage sites (including buildings) that need to be demolished or relocated, including details of their condition, measures to mitigate any adverse effects and timeframe for implementing the proposed methodology, in accordance with the HNZPT guideline AGS 1A: Investigation and Recording of Buildings and Standing Structures (4 July 2014), or any subsequent version;
  (viii) methods to acknowledge cultural values identified through Condition 8 where archaeological sites also involve Ngā Taonga Tuku Iho (treasures handed down by our ancestors) and where feasible and practicable to do so;
  (ix) methods for protecting or minimising adverse effects on heritage and archaeological sites within the Designation during project works as far as practicable, (for example fencing around heritage and archaeological sites to protect them from damage during construction); and
  (x) training requirements and inductions for contractors and subcontractors on heritage and archaeological sites within the Designation, and legal obligations relating to accidental discoveries. The training shall be undertaken prior to the Start of Construction, under the guidance of a Suitably Qualified and Experienced Person and Mana Whenua representatives (to the extent the training relates to cultural values identified under Condition 8.

Advice Note: *The requirements for accidental discoveries of heritage items are set out in Rule E11.6.1 of the AUP.*

23. Tree Management Plan

a) Prior to the Start of Construction for a Stage of Work, a Tree Management Plan shall be prepared.

b) The objective of the Tree Management Plan is to manage effects of construction activities on trees identified in Schedule 2.

c) The Tree Management Plan shall:
   (i) confirm that the trees listed in Schedule 2 still exist; and
   (ii) demonstrate how the design and location of project works has avoided, remedied or mitigated any effects on any tree listed in Schedule 2. This may include:
      A. planting to replace trees that require removal (with reference to the ULDMP planting design details in Condition 11);
      B. tree protection zones and tree protection measures such as protective fencing, ground protection and physical protection of roots, trunks and branches; and
      C. methods for work within the rootzone of trees that are to be retained in line with accepted arboricultural standards.
   (iii) **demonstrate how the tree management measures (outlined in A – C above) are consistent with conditions of any resource consents granted for the project in relation to managing construction effects on trees.**

24. Network Utility Management Plan (NUMP)

(a) A NUMP shall be prepared prior to the Start of Construction for a Stage of Work.

(b) The objective of the NUMP is to set out a framework for protecting, relocating and working in proximity to existing network utilities. The NUMP shall include methods to:
   (i) provide access for maintenance at all reasonable times, or emergency works at all times during construction activities;
   (ii) manage the effects of dust and any other material potentially resulting from construction activities and able to cause material damage, beyond normal wear and tear to overhead transmission lines in the project area; and
   (iii) demonstrate compliance with relevant standards and Codes of Practice including, where relevant, the NZECP 34:2001 New Zealand Electrical Code of Practice for Electrical Safe Distances 2001; and AS/NZS 4853:2012 Electrical hazards on Metallic Pipelines.

(c) The NUMP shall be prepared in consultation with the relevant Network Utility Operator(s) who have existing assets that are directly affected by the project.

(d) The NUMP shall describe how any comments from the Network Utility Operator in relation to its assets have been addressed.

(e) Any comments received from the Network Utility Operator shall be considered when finalising the NUMP.

(f) Any amendments to the NUMP related to the assets of a Network Utility Operator shall be prepared in consultation with that asset owner.

Operational Conditions

25. Traffic Noise

For the purposes of Conditions 26 to 39:

(a) Building-Modification Mitigation – has the same meaning as in NZS 6806;

(b) Detailed Mitigation Options – means the fully detailed design of the Selected Mitigation Options, with all practical issues addressed;

(c) Habitable Space – has the same meaning as in NZS 6806;

(d) Identified Noise Criteria Category – means the Noise Criteria Category for a PPF identified in Schedule 3: Identified PPFs Noise Criteria Categories;

(e) Mitigation – has the same meaning as in NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads;

(f) Noise Criteria Categories – means the groups of preference for sound levels established in accordance with NZS 6806 when determining the Best Practicable Option for noise mitigation (i.e. Categories A, B and C);

(g) NZS 6806 – means New Zealand Standard NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads;

(h) P40 – means Waka Kotahi NZTA P40:2014 Specification for noise mitigation;

(i) Protected Premises and Facilities (PPFs) – means only the premises and facilities identified in in Schedule 3: Identified PPFs Noise Criteria Categories;

(j) Selected Mitigation Options – means the preferred mitigation option resulting from a Best Practicable Option assessment undertaken in accordance with NZS 6806; and

(k) Structural Mitigation – has the same meaning as in NZS 6806.

26. The Noise Criteria Categories identified in Schedule 3: Identified PPFs Noise Criteria Categories at each of the PPFs shall be achieved where practicable and subject to Conditions 25 to 39.

The Noise Criteria Categories do not need to be complied with at a PPF where:

(a) the PPF no longer exists; or

(b) agreement of the landowner has been obtained confirming that the Noise Criteria Category does not need to be met.

Achievement of the Noise Criteria Categories for PPFs shall be by reference to a traffic forecast for a high growth scenario in a design year at least 10 years after the programmed opening of the project.

27. As part of the detailed design of the project, a Suitably Qualified and Experienced Person shall determine the Selected Mitigation Options for the PPFs identified on Schedule 3: Identified PPFs Noise Criteria Categories.

28. Prior to construction of the project, a Suitably Qualified and Experienced Person shall develop the Detailed Mitigation Options for the PPFs identified on Schedule 3: Identified PPFs Noise Criteria Categories, taking into account the Selected Mitigation Options.

29. If the Detailed Mitigation Options would result in the Identified Noise Criteria Category changing to a less stringent Category, e.g. from Category A to B or Category B to C, at any relevant PPF, a Suitably Qualified and Experienced Person shall provide confirmation to the Manager that the Detailed Mitigation Option would be consistent with adopting the Best Practicable Option in accordance with NZS 6806 prior to implementation.

30. Prior to the Start of Construction, a Noise Mitigation Plan written in accordance with Chapter 7 of P40 shall be provided to the Manager for information.

The purpose of the Noise Mitigation Plan is to confirm that the Detailed Mitigation Options meet the requirements of Conditions 26 to 39. The Noise Mitigation Plan shall include confirmation that

consultation has been undertaken with affected property owners for site specific design requirements and the implementation programme.

31. The Detailed Mitigation Options shall be implemented prior to completion of construction of the project, with the exception of any low-noise road surfaces, which shall be implemented within twelve months of completion of construction.

32. Prior to the Start of Construction, a Suitably Qualified and Experienced Person shall identify those PPFs which, following implementation of all the Detailed Mitigation Options, will not be Noise Criteria Categories A or B and where Building-Modification Mitigation might be required to achieve 40 dB $L_{Aeq(24h)}$ inside Habitable Spaces ('Category C Buildings').

33. Prior to the Start of Construction in the vicinity of each Category C Building, the Requiring Authority shall write to the owner of the Category C Building requesting entry to assess the noise reduction performance of the existing building envelope. If the building owner agrees to entry within three months of the date of the Requiring Authority's letter, the Requiring Authority shall instruct a Suitably Qualified and Experienced Person to visit the building and assess the noise reduction performance of the existing building envelope.

34. For each Category C Building identified, the Requiring Authority is deemed to have complied with Condition 33 above if:

(a) the Requiring Authority's Suitably Qualified and Experienced Person has visited the building and assessed the noise reduction performance of the building envelope; or

(b) the building owner agreed to entry, but the Requiring Authority could not gain entry for some reason (such as entry denied by a tenant); or

(c) the building owner did not agree to entry within three months of the date of the Requiring Authority's letter sent in accordance with Condition 33 above (including where the owner did not respond within that period); or

(d) the building owner cannot, after reasonable enquiry, be found prior to completion of construction of the project.

If any of (b) to (d) above apply to a Category C Building, the Requiring Authority is not required to implement Building-Modification Mitigation to that building.

35. Subject to Condition 34 above, within six months of the assessment undertaken in accordance with Conditions 33 and 34, the Requiring Authority shall write to the owner of each Category C Building advising:

(a) if Building-Modification Mitigation is required to achieve 40 dB LAeq(24h) inside habitable spaces; and

(b) the options available for Building-Modification Mitigation to the building, if required; and

(c) that the owner has three months to decide whether to accept Building-Modification Mitigation to the building and to advise which option for Building-Modification Mitigation the owner prefers, if the Requiring Authority has advised that more than one option is available.

36. Once an agreement on Building-Modification Mitigation is reached between the Requiring Authority and the owner of a Category C Building, the mitigation shall be implemented, including any third party authorisations required, in a reasonable and practical timeframe agreed between the Requiring Authority and the owner.

37. Subject to Condition 34, where Building-Modification Mitigation is required, the Requiring Authority is deemed to have complied with Condition 36 if:

(a) the Requiring Authority has completed Building Modification Mitigation to the building; or

(b) an alternative agreement for mitigation is reached between the Requiring Authority and the building owner; or

(c) the building owner did not accept the Requiring Authority's offer to implement Building-Modification Mitigation within three months of the date of the Requiring Authority's letter sent in accordance with Condition 34 (including where the owner did not respond within that period); or

(d) the building owner cannot, after reasonable enquiry, be found prior to completion of construction of the project.

38. Within twelve months of completion of construction of the project, a post-construction review report written in accordance with Chapter 8 of P40 Specification for Noise Mitigation 2014 shall be provided to the Manager.

39. The Detailed Mitigation Options shall be maintained so they retain their noise reduction performance as far as practicable.

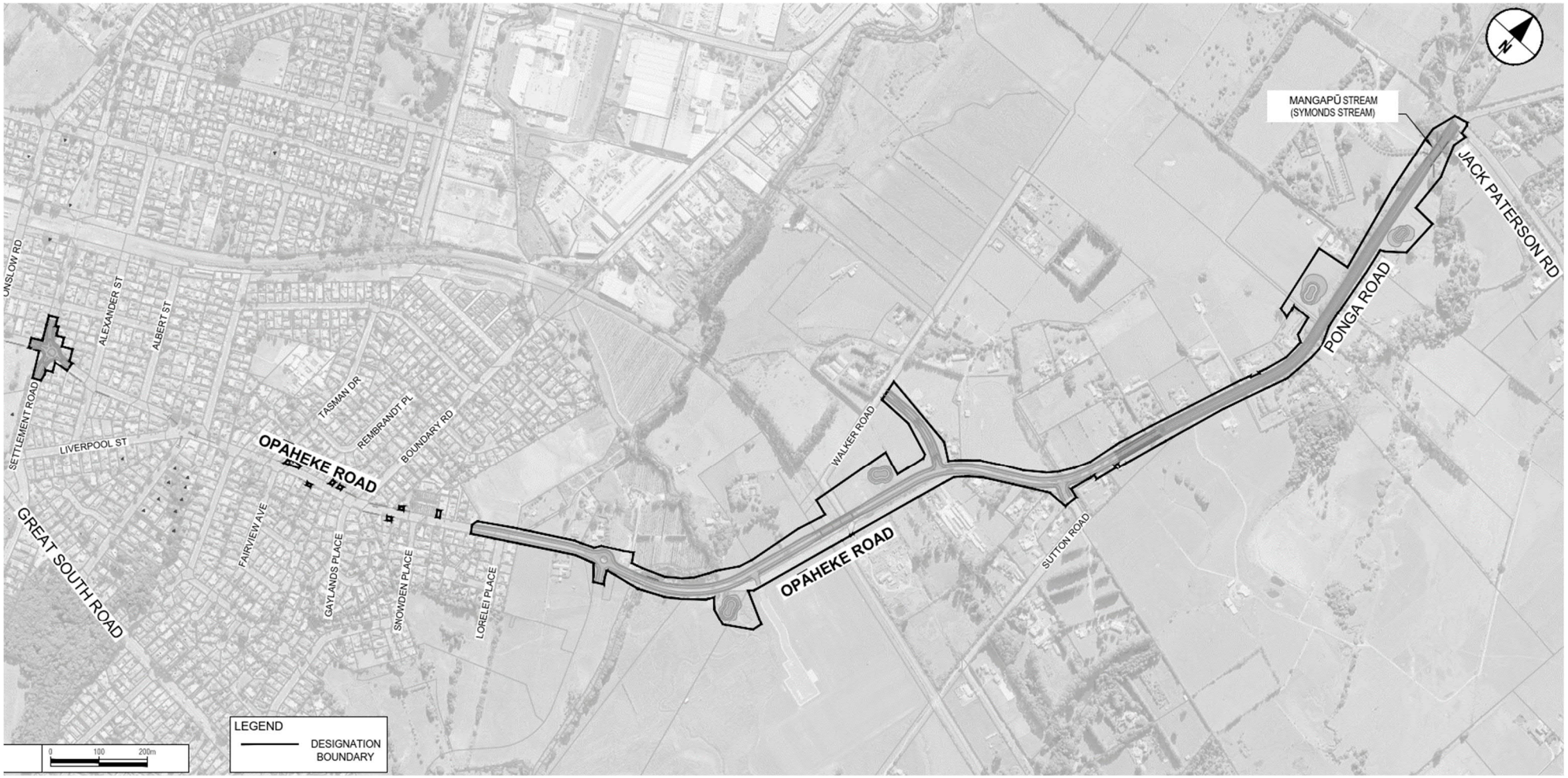
Schedule 1: General Accordance Plans and Information

Project Description

The proposed work is the construction, operation and maintenance an arterial transport corridor in Ōpāheke along Ponga Road and Ōpāheke Road from Jack Paterson Road to Settlement Road including active transport facilities and associated infrastructure. The proposed work is shown in the following Concept Plan and includes:

(a) An upgraded transport corridor with two lanes and active transport facilities;
(b) Associated works including intersections, bridges, embankments, retaining, culverts and stormwater management systems;
(c) Changes to local roads, where the proposed work intersects with local roads, including a new connection between Walker Road and Ōpāheke Road; and
(d) Construction activities, including vegetation removal, construction compounds, lay down areas, bridge works area, construction traffic management and the re-grade of driveways.

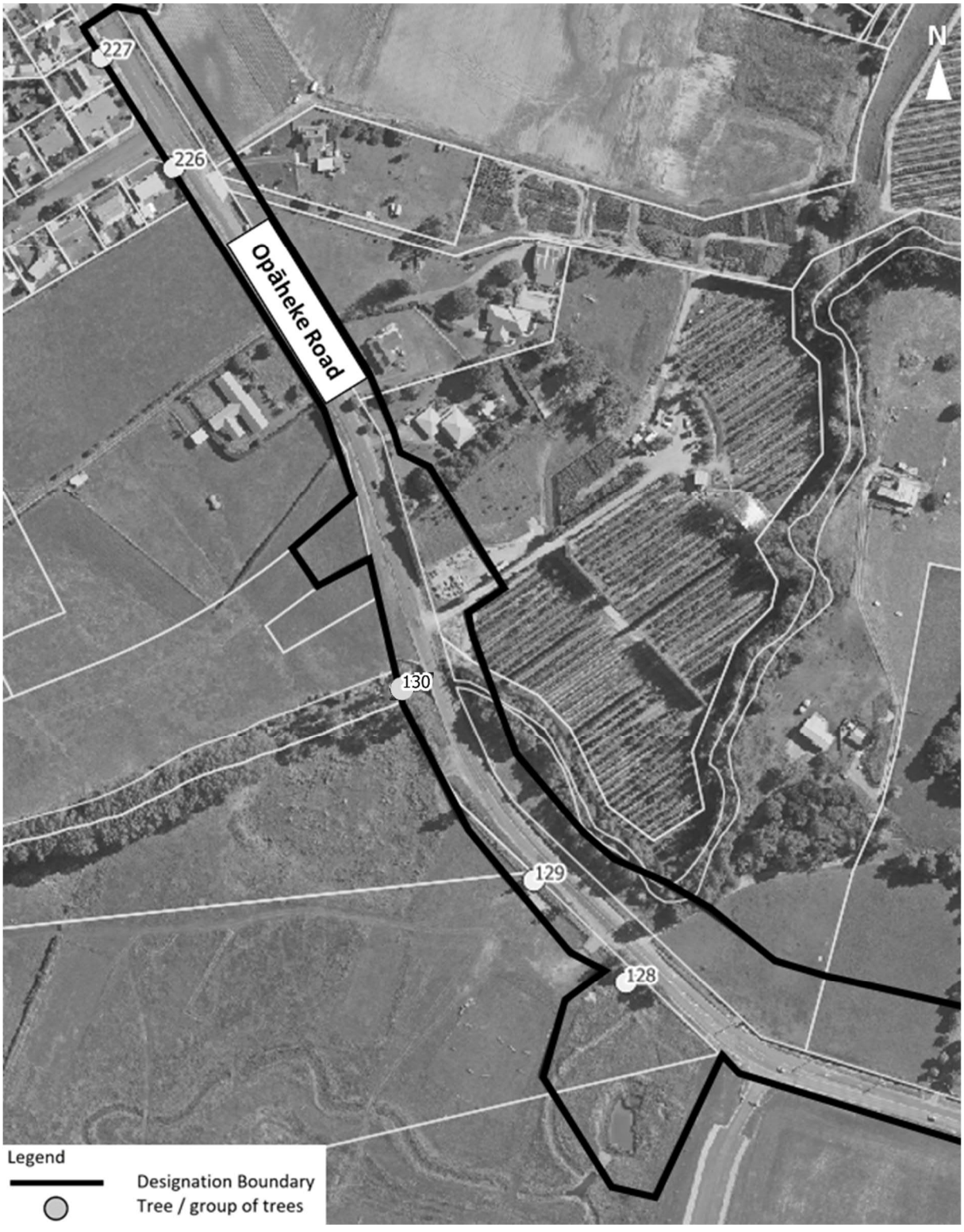
Concept Plan



Schedule 2: Trees to be Included in the Tree Management Plan

Tree Number	Tree or Group	Number of trees	Species List	Location (refer to Tree Location Plan)	Reason for protection in the AUP (District Plan rules) as at January 2021 when the Notice of Requirement was lodged
128	Tree group	4	Taxodium distichum	Within 165 Opaheke Road (Part Allot 52 PSH OF Opaheke) adjacent to the road corridor	Road
129	Tree group	3	Taxodium distichum, Cryptomeria japonica	Within 165 Opaheke Road (Part Allot 52 PSH OF Opaheke) adjacent to the road corridor	Road
130	Tree group	4	Populus nigra	West of Hays Stream Bridge within riparian margin	Open space, Riparian
226	Tree group	4	Betula pendula, Knightia excelsa, Michelia figo, Schinus terebinthifolius	Within the Opaheke Road road corridor outside 2 Loralei Place (Lot 4 DP 83044)	Road
227	Single Tree	1	Fraxinus angustifolia subsp. oxycarpa 'Raywood'	Within the Opaheke Road road corridor outside 97 Opaheke Road (Lot 1 DP 83044)	Road

Tree Location Plan



Schedule 3: Identified PPFs Noise Criteria Categories

Address	New or Altered Road	Noise Criteria Category
4 Alexander Street	Altered	A
1/6 Alexander Street	Altered	A
2/6 Alexander Street	Altered	A
3/6 Alexander Street	Altered	A
8 Alexander Street	Altered	A
8 A Alexander Street	Altered	A
8 B Alexander Street	Altered	A
1/9 Alexander Street	Altered	A
2/9 Alexander Street	Altered	A
1/11 Alexander Street	Altered	A
2/11 Alexander Street	Altered	A
1/12 Alexander Street	Altered	A
2/12 Alexander Street	Altered	A
3/12 Alexander Street	Altered	A
1/13 Alexander Street	Altered	A
2/13 Alexander Street	Altered	A
3/13 Alexander Street	Altered	A
1/14 Alexander Street	Altered	A
2/14 Alexander Street	Altered	A
3/14 Alexander Street	Altered	A
1/15 Alexander Street	Altered	A
2/15 Alexander Street	Altered	A
1/16 Alexander Street	Altered	A
16 Alexander Street	Altered	A
16B Alexander Street	Altered	A
1/17 Alexander Street	Altered	A
Bellfield Unit 1	Altered	A
Bellfield Unit 2	Altered	A
Bellfield Unit 3	Altered	A
Bellfield Unit 4	Altered	A
Bellfield Unit 5	Altered	A
Bellfield Unit 6	Altered	A
Bellfield Unit 7	Altered	A
Bellfield Unit 8	Altered	A
Bellfield Unit 9	Altered	A
Bellfield Unit 10	Altered	A
Bellfield Unit 11	Altered	A

Address	New or Altered Road	Noise Criteria Category
Bellfield Unit 12	Altered	A
Bellfield Unit 13	Altered	A
Bellfield Unit 14	Altered	A
Bellfield Unit 15	Altered	A
Bellfield Unit 16	Altered	A
Bellfield Unit 17	Altered	A
Bellfield Unit 18	Altered	A
Bellfield Unit 29	Altered	A
Bellfield Unit 30	Altered	A
Bellfield Unit 31	Altered	A
Bellfield Unit 32	Altered	B
Bellfield Unit 33	Altered	A
Bellfield Unit 34	Altered	A
Bellfield Unit 35	Altered	A
Bellfield Unit 77	Altered	A
Bellfield Unit 78	Altered	A
Bellfield Unit 79	Altered	A
Bellfield Unit 80	Altered	A
Bellfield Unit 81	Altered	A
Bellfield Unit 82	Altered	A
Bellfield Unit 83	Altered	A
Bellfield Unit 84	Altered	A
Bellfield Unit 85	Altered	A
Bellfield Unit 86	Altered	A
Bellfield Unit 87	Altered	A
Bellfield Unit 88	Altered	A
Bellfield Unit 89	Altered	A
Bellfield Unit 90	Altered	A
Bellfield Unit 91	Altered	A
Bellfield Unit 98	Altered	B
Bellfield Unit 99	Altered	B
7 Boundary Road	Altered	A
9 Boundary Road	Altered	A
11 Boundary Road	Altered	A
11A Boundary Road	Altered	A
17 Boundary Road	Altered	A
19 Boundary Road	Altered	A
1/19 Boundary Road	Altered	A

Address	New or Altered Road	Noise Criteria Category
2/19 Boundary Road	Altered	A
1/13 King Edward Avenue	Altered	A
1/14 King Edward Avenue	Altered	A
2/14 King Edward Avenue	Altered	A
3/14 King Edward Avenue	Altered	A
1/16 King Edward Avenue	Altered	A
2/16 King Edward Avenue	Altered	A
3/16 King Edward Avenue	Altered	A
4/16 King Edward Avenue	Altered	A
5/16 King Edward Avenue	Altered	A
1/17 King Edward Avenue	Altered	B
1/18 King Edward Avenue	Altered	A
2/18 King Edward Avenue	Altered	A
3/18 King Edward Avenue	Altered	A
4/18 King Edward Avenue	Altered	A
5/18 King Edward Avenue	Altered	A
19 King Edward Avenue	Altered	A
1/21 King Edward Avenue	Altered	A
2/21 King Edward Avenue	Altered	A
1/22 King Edward Avenue	Altered	A
2/22 King Edward Avenue	Altered	A
1/23 King Edward Avenue	Altered	A
2/23 King Edward Avenue	Altered	A
24 King Edward Avenue	Altered	A
1/25 King Edward Avenue	Altered	A
1 Korakora Lane	Altered	A
3 Korakora Lane	Altered	A
5 Korakora Lane	Altered	A
7 Korakora Lane	Altered	A
9 Korakora Lane	Altered	A
11 Korakora Lane	Altered	A
13 Korakora Lane	Altered	A
15 Korakora Lane	Altered	A
17 Korakora Lane	Altered	A
19 Korakora Lane	Altered	A
5 Leatham Crescent	Altered	A
7 Leatham Crescent	Altered	A
9 Leatham Crescent	Altered	A

Address	New or Altered Road	Noise Criteria Category
11 Leatham Crescent	Altered	A
13 Leatham Crescent	Altered	A
15 Leatham Crescent	Altered	A
17 Leatham Crescent	Altered	A
19 Leatham Crescent	Altered	A
1 Lorelei Place	Altered	A
2 Lorelei Place	Altered	A
3 Lorelei Place	Altered	A
4 Lorelei Place	Altered	A
5 Lorelei Place	Altered	A
6 Lorelei Place	Altered	A
7 Lorelei Place	Altered	A
8 Lorelei Place	Altered	A
9 Lorelei Place	Altered	A
10 Lorelei Place	Altered	A
11 Lorelei Place	Altered	A
12 Lorelei Place	Altered	A
13 Lorelei Place	Altered	A
14 Lorelei Place	Altered	A
15 Lorelei Place	Altered	A
16 Lorelei Place	Altered	A
17 Lorelei Place	Altered	A
18 Lorelei Place	Altered	A
19 Lorelei Place	Altered	A
20 Lorelei Place	Altered	A
22 Lorelei Place	Altered	A
24 Lorelei Place	Altered	A
26 Lorelei Place	Altered	A
28 Lorelei Place	Altered	A
30 Lorelei Place	Altered	A
32 Lorelei Place	Altered	A
34 Lorelei Place	Altered	A
1 Onslow Road	Altered	A
2 Onslow Road	Altered	A
1/3 Onslow Road	Altered	A
12 Opaheke Road	Altered	A
15 Opaheke Road	Altered	A
1/19 Opaheke Road	Altered	A

Address	New or Altered Road	Noise Criteria Category
2/19 Opaheke Road	Altered	A
3/19 Opaheke Road	Altered	A
4/19 Opaheke Road	Altered	A
20 Opaheke Road	Altered	B
20A Opaheke Road	Altered	A
1/21 Opaheke Road	Altered	A
2/21 Opaheke Road	Altered	A
22 Opaheke Road	Altered	A
1/23 Opaheke Road	Altered	A
2/23 Opaheke Road	Altered	A
72 Opaheke Road	Altered	A
74A Opaheke Road	Altered	A
74B Opaheke Road	Altered	A
74C Opaheke Road	Altered	A
74D Opaheke Road	Altered	A
76A Opaheke Road	Altered	A
76B Opaheke Road	Altered	A
76C Opaheke Road	Altered	A
78A Opaheke Road	Altered	A
78B Opaheke Road	Altered	A
78C Opaheke Road	Altered	A
78D Opaheke Road	Altered	A
80 Opaheke Road	Altered	A
81 Opaheke Road	Altered	A
1/82 Opaheke Road	Altered	A
2/82 Opaheke Road	Altered	A
84A Opaheke Road	Altered	A
84B Opaheke Road	Altered	A
84C Opaheke Road	Altered	A
84D Opaheke Road	Altered	A
86 Opaheke Road	Altered	A
86A Opaheke Road	Altered	A
86B Opaheke Road	Altered	A
87 Opaheke Road	Altered	A
88 Opaheke Road	Altered	A
89 Opaheke Road	Altered	A
91 Opaheke Road	Altered	A
93 Opaheke Road	Altered	A

Address	New or Altered Road	Noise Criteria Category
95 Opaheke Road	Altered	A
97 Opaheke Road	Altered	A
106 Opaheke Road	Altered	A
114 Opaheke Road (2 PPFs)	Altered	A
122 Opaheke Road	Altered	A
156 Opaheke Road	Altered	A
174 Opaheke Road	Altered	A
211 Opaheke Road	Altered	A
216 Opaheke Road (2 PPFs)	Altered	A
231 Opaheke Road	Altered	A
235 Opaheke Road (2 PPFs)	Altered	A
28 Ponga Road	Altered	A
36 Ponga Road	Altered	A
48 Ponga Road	Altered	A
61 Ponga Road	Altered	A
68 Ponga Road	Altered	A
70 Ponga Road	Altered	A
74 Ponga Road	Altered	A
94 Ponga Road	Altered	A
101 Ponga Road (2 PPFs)	Altered	A
109 Ponga Road	Altered	A
117 Ponga Road (2 PPFs)	Altered	A
120 Ponga Road	Altered	A
125 Ponga Road	Altered	A
126 Ponga Road	Altered	A
145 Ponga Road	Altered	A
174 Ponga Road	Altered	A
215 Ponga Road	Altered	A
221 Ponga Road	Altered	A
233 Ponga Road	Altered	A
1/7 Settlement Road	Altered	A
3/7 Settlement Road	Altered	B
4/7 Settlement Road	Altered	B
1/9 Settlement Road	Altered	A
2/9 Settlement Road	Altered	A
3/9 Settlement Road	Altered	A
1/11 Settlement Road	Altered	A
2/11 Settlement Road	Altered	A

Address	New or Altered Road	Noise Criteria Category
3/11 Settlement Road	Altered	A
13 Settlement Road	Altered	A
13A Settlement Road	Altered	A
1/14 Settlement Road	Altered	B
2/14 Settlement Road	Altered	B
1/15 Settlement Road	Altered	A
2/15 Settlement Road	Altered	A
1/16 Settlement Road	Altered	A
2/16 Settlement Road	Altered	A
3/16 Settlement Road	Altered	B
1/17 Settlement Road	Altered	B
20B Settlement Road	Altered	A
21 Settlement Road	Altered	A
1/23 Settlement Road	Altered	A
2/23 Settlement Road	Altered	A
25 Settlement Road	Altered	A
1/27 Settlement Road	Altered	A
2/27 Settlement Road	Altered	A
29 Settlement Road	Altered	B
1 Snowden Place	Altered	A
2 Snowden Place	Altered	A
3 Snowden Place	Altered	A
4 Snowden Place	Altered	A
5 Snowden Place	Altered	A
6 Snowden Place	Altered	A
7 Snowden Place	Altered	A
8 Snowden Place	Altered	A
10 Snowden Place	Altered	A
12 Snowden Place	Altered	A
14 Snowden Place	Altered	A
282 Sutton Road	Altered	A
300 Sutton Road	Altered	A
2 Tautaiao Lane	Altered	A
4 Tautaiao Lane	Altered	A
6 Tautaiao Lane	Altered	A
8 Tautaiao Lane	Altered	A
10 Tautaiao Lane	Altered	A
12 Tautaiao Lane	Altered	A

Address	New or Altered Road	Noise Criteria Category
14 Tautaiao Lane	Altered	A
16 Tautaiao Lane	Altered	A
18 Tautaiao Lane	Altered	A
20 Tautaiao Lane	Altered	A
22 Tautaiao Lane	Altered	A
24 Tautaiao Lane	Altered	A
95 Walker Road (2 PPFs)	Altered	A
110 Walker Road	Altered	A
120 Walker Road	Altered	A

PPF Location Plans


Bellfield Units 85-91
Bellfield Units 77-84
156 Opaheke Road
174 Opaheke Road
120 Walker Road
110 Walker Road
95 Walker Road
216 Opaheke Road
95 Walker Road
216 Opaheke Road
211 Opaheke Road
36 Ponga Road
231 Opaheke Road
68 Ponga Road
28 Ponga Road
235 Opaheke Road
282 Sutton Road
235 Opaheke Road
300 Sutton Road
48 Ponga Road
70 Ponga Road
61 Ponga Road
Legend
NZS 6806 Assessment Area
Protected Premises and Facilities
This map contains data derived in part or wholly from sources other than those party to the Supporting Growth Alliance, and therefore, no representations or warranties are made by those party to the Supporting Growth Alliance as to the accuracy or completeness of this information.
Map intended for distribution as a PDF document.
Scale may be incorrect when printed.
Contains information sourced from LINZ. Crown Copyright Reserved.
Unitary plan data sourced from Auckland Council published web services.
Legend information can be viewed on Auckland Council unitary plan viewer.
Linework shown on this plan is conceptual only.
Not to be used for construction.
Auckland Council, LINZ


7 Boundary Road
9 Boundary Road
12 Boundary Road
1/19 Boundary Road
5 Leatham Crescent
72 Opaheke Road
2-8 Tautaiao Lane
11 Boundary Road
11 A Boundary Road
19 Boundary Road
7 Leatham Crescent
81 Opaheke Road
10-16 Tautaiao Lane
2/19 Boundary Road
1 Snowden Place
74A-D Opaheke Road
76A-C Opaheke Road
18-24 Tautaiao Lane
84 B Opaheke Road
84 C Opaheke Road
84 D Opaheke Road
9 Leatham Crescent
3 Snowden Place
78A-D Opaheke Road
13 Leatham Crescent
5 Snowden Place
2 Snowden Place
84 A Opaheke Road
11 Leatham Crescent
15 Leatham Crescent
7 Snowden Place
80 Opaheke Road
1/82 Opaheke Road
17 Leatham Crescent
19 Leatham Crescent
4 Snowden Place
87 Opaheke Road
86 B Opaheke Road
2/82 Opaheke Road
6 Snowden Place
89 Opaheke Road
86 A Opaheke Road
14 Snowden Place
8 Snowden Place
34 Lorelei Place
91 Opaheke Road
86 Opaheke Road
10 Snowden Place
88 Opaheke Road
32 Lorelei Place
12 Snowden Place
19 Lorelei Place
93 Opaheke Road
30 Lorelei Place
17 Lorelei Place
95 Opaheke Road
28 Lorelei Place
15 Lorelei Place
26 Lorelei Place
97 Opaheke Road
24 Lorelei Place
11 Lorelei Place
13 Lorelei Place
1 Lorelei Place
106 Opaheke Road
22 Lorelei Place
3 Lorelei Place
9 Lorelei Place
20 Lorelei Place
5 Lorelei Place
2 Lorelei Place
7 Lorelei Place
18 Lorelei Place
4 Lorelei Place
16 Lorelei Place
6 Lorelei Place
Bellfield Units 32-35
8 Lorelei Place
14 Lorelei Place
10 Lorelei Place
12 Lorelei Place
114 Opaheke Road
Bellfield Units 29-31
114 Opaheke Road
Bellfield Units 11-18, 97-99
122 Opaheke Road
Bellfield Units 1-10
Bellfield Units 85-91
Bellfield
Legend
NZS 6806 Assessment Area
Protected Premises and Facilities
This map contains data derived in part or wholly from sources other than those party to the Supporting Growth Alliance, and therefore, no representations or warranties are made by those party to the Supporting Growth Alliance as to the accuracy or completeness of this information.
Map intended for distribution as a PDF document.
Scale may be incorrect when printed.
Contains information sourced from LINZ. Crown Copyright Reserved.
Unitary plan data sourced from Auckland Council published web services.
Legend information can be viewed on Auckland Council unitary plan viewer.
Linework shown on this plan is conceptual only.
Not to be used for construction.


2 Onslow Road
15 Opaheke Road
1 /3 Onslow Road
1 Onslow Road
12 Opaheke Road
1 /13 King Edward Avenue
7 Korakora Lane
9 Korakora Lane
11 Korakora Lane
15 Korakora Lane
13 Korakora Lane
17 Korakora Lane
19 Korakora Lane
1 Korakora Lane
3 Korakora Lane
5 Korakora Lane
2 , 3 / 14 King Edward Avenue
1 /14 King Edward Avenue
3-5/16 King Edward Avenue
2 /16 King Edward Avenue
20 B Settlement Road
1 /16 King Edward Avenue
3-5/18 King Edward Avenue
1 /18 King Edward Avenue
2 /18 King Edward Avenue
1/17 King Edward Road
2 /16 Settlement Road
3 /16 Settlement Road
1/14 Settlement road
1/16 Settlement Road
2/14 Settlement Road
29 Settlement Road
1 /27 Settlement Road
2 /27 Settlement Road
1 /22 King Edward Avenue
2 /22 King Edward Avenue
24 King Edward Avenue
19 King Edward Avenue
25 Settlement Road
2/23 Settlement Road
2 /21 King Edward Avenue
1 /21 King Edward Avenue
1/23 King Edward Avenue
1/23 Settlement Road
21 Settlement Road
2/23 King Edward Avenue
1/25 King Edward Avenue
3/14 Alexander Street
16 B Alexander Street
1/16 Alexander Street
20 A Opaheke Road
2/14 Alexander Street
16 Alexander Street
20 Opaheke Road
1/14 Alexander Street
1/12 Alexander Street
3 /12 Alexander Street
2 /12 Alexander Street
1/17 Settlement Road
1-4/19 Opaheke Road
1/15 Settlement Road
2/15 Settlement Road
1/11 Settlement Road
13 Settlement Road
1/9 Settlement Road
13 A Settlement Road
2/11 Settlement Road
8 B Alexander Street
2/9 Settlement Road
3/11 Settlement Road
3-4/7 Settlement Road
1 /21 Opaheke Road
2 /21 Opaheke Road
1 /23 Opaheke Road
3/9 Settlement Road
1 /7 Settlement Road
3 /6 Alexander Street
8 Alexander Street
2 /6 Alexander Street
8 A Alexander Street
2 /23 Opaheke Road
1 /6 Alexander Street
4 Alexander Street
1/17 Alexander Street
3 /13 Alexander Street
1-2/15 Alexander Street
1-2/11 Alexander Street
1 , 2 / 13 Alexander Street
1 /9 Alexander Street
2 /9 Alexander Street
22 Opaheke Road
Legend
NZS 6806 Assessment Area
Protected Premises and Facilities
This map contains data derived in part or wholly from sources other than those party to the Supporting Growth Alliance, and therefore, no representations or warranties are made by those party to the Supporting Growth Alliance as to the accuracy or completeness of this information.
Map intended for distribution as a PDF document.
Scale may be incorrect when printed.
Contains information sourced from LINZ. Crown Copyright Reserved.
Unitary plan data sourced from Auckland Council published web services.
Legend information can be viewed on Auckland Council unitary plan viewer.
Linework shown on this plan is conceptual only.
Not to be used for construction.

Appendix B – Further Engagement Details

Response to Request 4.

Engagement with Project partners, stakeholders and affected landowners was considered in the identification of preferred options, design refinement, designation boundaries and assessment of effects on the environment. It was also used to provide sufficient land to undertake the works and undertake any mitigation measures to avoid, remedy and mitigate any potential adverse effects on those parties.

The following sections provide further information to support the information provided in Part C of the Assessment of Effects on the Environment and Appendix A – Assessment of Alternatives and should be read in conjunction with these reports.

Ngā Manawhenua

Feedback received from Manawhenua fed into the identification of preferred alignments. Table 2 below summarises the feedback and project responses.

Table 7: Manawhenua feedback summary

Project	Feedback	Project response
State Highway 22 upgrade	During hui on 30 August 2019, manawhenua suggested widening to the southeast at the northern extent, to avoid the significant ecological area (Ngakoroa Stream) and to then widen to the northwest further south (central part of SH22 options) where it starts to straighten, to reduce stream loss and impact on Ngakoroa Reserve. Manawhenua also identified that the developers of Auranga town centre intend to develop around the artificial wetland so suggested widening to the east in that location.	Manawhenua suggestions were considered and widening was confirmed in line with their feedback. The design did however result in fill slopes extending into the Ngakoroa Reserve. Fill slopes in the northern extent of the reserve are due to the need to raise the approach to the Ngakoroa Stream bridge to achieve required flood levels. Surrounding Great South Road and the southern half of the reserve to MacPherson Road, fill slopes into the reserve are required to provide for road widening and a tie into Great South Road, achieving the required horizontal curvature and reducing superelevation. Impacts were minimised where possible.
Jesmond Road	Feedback from Manawhenua was received at two hui, on 30 August and 3 October 2019. Manawhenua noted the existing streams but that none of them were major enough for waka route. Manawhenua see this as an opportunity for stream enhancement, and to replace culverts with bridges.	Opportunities for stream enhancement and stream works will be explored during detailed design and regional consenting phases.
Bremner Road (Central)	Feedback from manawhenua was received at two hui, on 30 August and 3 October 2019. Manawhenua indicated the Ngakoroa Stream was a major travel route for Maori therefore there is potential for undiscovered	Option B - widen to the south was confirmed as the preferred option, reducing impacts on the coastal marine area. An Assessment of Effects on Historic Heritage was undertaken.

Project	Feedback	Project response
	archaeological remains. A heritage/archaeological investigation was requested to be undertaken. Option B was preferred by manawhenua, to avoid effects on marine significant ecological areas. Reclamation of the coastal marine area is not supported by manawhenua.	
Bremner Road (East)	Feedback from Manawhenua was received at two hui, on 30 August and 3 October 2019. Manawhenua expressed preferences for Option B1, D or D1 due to stormwater constraints and these options having the most direct transport connection. Manawhenua indicated stormwater management was a key concern for the alignment through the floodplain and upstream/downstream effects. Ngati Tamaoho indicated a preference for bridges instead of reclaiming land or culverting, and that stormwater treatment devices should be located outside of the floodplain. Ngati Tamaoho indicated an opportunity for a green corridor to be established underneath the bridge of Option D1.	Manawhenua feedback was considered in determining the preferred option. Feedback on flooding was taken forward to design, constructing a new bridge over Hingaia Stream and removing the Norrie Road Bridge will have a positive impact on flooding effects. Opportunities were noted for future detailed design and regional resource consenting phases.
Waihoehoe Road (West)	Feedback from Manawhenua was received at two hui, on 30 August and 3 October 2019. Manawhenua did not identify a preference of any option. At the second hui, Ngāti Tamaoho expressed their desire for the existing industrial sites that connect / go through the awa to be removed. Te Ākitai Waiohua expressed concerned about the potential social impact of a rail station being located on a large number of properties.	The Project team noted no preference for options expressed by Manawhenua. Feedback on industrial properties and rail station were not within the scope of this Project.
Waihoehoe Road (East)	The three options and the emerging preferred option were shared with manawhenua at hui on 20 February 2020. No specific concerns or comments were raised by manawhenua.	Project team noted no concerns and no preference for options expressed by Manawhenua.
Ōpāheke North-South connection	Feedback from Manawhenua was received at two hui, on 30 August and 3 October 2019. Manawhenua did not express an option preference. However, they recommended that bridges should cross the entire floodplain and embankments should be minimised. Their preference was to amend the design to keep embankments out of the floodplain.	The project team noted no preference for options expressed by Manawhenua. For the indicative design it was explained that the bridges have been designed to mitigate flood hazard effects. The Project team also explained that there will be a number of factors that will influence the design of bridges at the detailed design phase. This includes flood hazard effects, cost and regional consenting matters such as ecology

Project	Feedback	Project response
	Manawhenua also noted the desire to avoid kahikatea trees that were known in the area.	as well as input from Manawhenua at this stage. Kahikatea trees have been avoided by the Project.
Ponga Road	The three options and the emerging preferred option was shared with manawhenua at hui on 20 February 2020. No specific concerns or comments were raised by mana whenua about the options. Manawhenua raised an area of interest in the high section of Ponga Road (out of the project area).	Project team noted no concerns and no preference for options expressed by Manawhenua.
Ōpāheke Road (Rural section)	The three options and the emerging preferred option was shared with manawhenua at hui on 20 February 2020. No specific concerns or comments were raised by manawhenua.	Project team noted no concerns and no preference for options expressed by Manawhenua.
Ōpāheke Road (Urban Section) Settlement Road intersection	The options and the emerging preferred option were shared with Manawhenua at hui on 2 July 2020. Manawhenua noted any upgrade to the intersection is a good outcome. They also noted they would prefer to retain any native vegetation.	Project team noted Manawhenua view that any option would be a good outcome. Retention of native vegetation was considered in the assessment of preferred options.

Proposed designation conditions were drafted in collaboration with Manawhenua which require Manawhenua to be invited by Auckland Transport and Waka Kotahi to prepare a Cultural Advisory Report and require a Cultural Monitoring Plan to be prepared for the Projects. These conditions will assist in understanding and identifying Ngā Taonga Tuku Iho ('treasures handed down by our ancestors') affected by the projects, to inform their management and protection, and will identify methods for undertaking cultural monitoring to assist with management of any cultural effects during construction.

KiwiRail

KiwiRail is a Project Partner and the southern rail network forms a key part of the Supporting Growth Indicative Strategic Transport Network. Following engagement with KiwiRail and collaborative work on the wider transport network, the Drury Arterial Network has provided for the future upgrade of the rail corridor, and KiwiRail's interests, including:

- Raising and widening Waihoehoe Road West rail bridge to the north of the existing road corridor to enable suitable clearance and acceptable curve radii for future four tracking of the rail network.
- Providing safe grade separation of Ōpāheke Road and the NIMT for general traffic, pedestrians and cyclists.
- s176 approval is required from KiwiRail for any works within their existing designation
- A Network Utility Management Plan is proposed as a condition on the designations which will be prepared in consultation with KiwiRail.

Heritage New Zealand Pouhere Taonga

Information provided in the AEE sufficiently describes the engagement with HNZPT. The Drury Arterial Network has avoided key scheduled sites of historic heritage and proposes management measures through the proposed Heritage and Archaeology Management Plan(s), Cultural Advisory Report(s), Cultural Monitoring Plan(s) and future HNZPT authorities.

Ministry of Education

Information provided in the AEE sufficiently describes the engagement with the Ministry of Education. NoR D2 largely avoids the future Drury West Primary School site and the preferred alignment for the Jesmond to Bremner Link sought to avoid severing the future MoE site at 281 Jesmond Road. The Crown (MoE) has sold a southern portion of the site to Auckland Council to facilitate the future Jesmond to Bremner Link. The final alignment is expected to adjoin the southern boundary of the school. However, AT has proposed to designate enough land to ensure the road can be constructed in the existing environment, including sufficient space for earthworks and construction area. There are ongoing communications with MoE on the timing and proposed design of both the MoE's and Auckland Transport's respective works.

Department of Conservation (DOC)

Information provided in the AEE sufficiently describes the engagement with DOC.

Fire and Emergency New Zealand

As a result of engagement with FENZ, a site for a proposed fire station was identified by FENZ along the SH22 corridor. Prior to this engagement the Project Team had proposed to designate the site for a construction area. Following engagement, and with ongoing communication with FENZ, the construction area was able to be reduced on the site to make it viable for FENZ proposed use. Ongoing engagement with FENZ is being undertaken by Waka Kotahi to discuss the operational requirements of the site on SH22 (this is outside the scope of this Project).

Network Utilities providers

Information provided in the AEE sufficiently describes the engagement with Network Utility Providers. Effects on network utility providers are managed through the proposed NUMP and that Network Utility Operators with existing infrastructure located within the proposed designation will not require written consent under section 176 of the RMA for those activities identified in the AEE.

Developers

Information provided in the AEE sufficiently describes the engagement with developers that resulted in design refinement.

Landowners and community

Overview of engagement undertaken and key themes raised throughout these phases are provided in Section 5.2.3 of the AEE. The table below expands on the information provided in Section 5.2.3 of the AEE and should be read in conjunction with that section.

Table 8: Landowner and Community feedback summary

Phase	Ref	Key Themes Raised	Project Response
Phase 1: June – July 2019	(a)	Access to properties during and after construction	Access to all existing properties will be maintained during construction and operation of the projects. The management of access during construction is provided for in the CTMP condition 17[10](b)(vi).
	(b)	Loss of amenity/rural lifestyle and change of sense of place	It was acknowledged by the community and landowners that the area is changing and it is understood that most of the land impacted by the Drury Arterial Network has been signalled for urban development and growth by Auckland Council through Future Urban Zoning in the Auckland Unitary Plan, the Drury-Ōpāheke Structure Plan and proposed private plan changes to rezone land. The proposed road upgrades will respond to this growth in a changing environment. Amenity and landscape effects of the Drury Arterial Network have been considered, and any required mitigation proposed (fed into the proposed conditions) in the following assessments lodged to Council: • Assessment of Landscape and Visual Effects and conditions proposed under the ULDMP • Assessment of Construction Noise and Vibration Effects and conditions proposed under the CNVMP and Schedules • Assessment of Traffic Nosie and Vibration Effects and conditions proposed under the CTMP.
	(c)	Loss of value and ability to sell	Concerned landowners were informed of the Public Works Act 1981 (PWA) and Resource Management Act 1991 (RMA) processes.
	(d)	Site acquisition / land development	Concerned landowners were informed of the PWA processes and ability to develop sites in agreement with the requiring authority through RMA s176 approval processes.
	(e)	Alignment concerns	Alternatives assessment process and outcomes was explained to concerned landowners and reasons for the preferred alignments discussed.
	(f)	Uncertainty and project timing	The Project Team provided project updates and confirmation of the proposed designation boundary once investigations were complete. The Project Team also advised landowners and the community that there is commitment to route protect but there is currently no funding to construct the projects and they would likely occur ten to 20 years in the future.

[10] Conditions 17(b)(vi) for NoR D1, D3, D4 and D5. Condition 18(b)(vi) for NoR D2.

Phase	Ref	Key Themes Raised	Project Response
			Condition 2[11] *Project Information* is proposed which ensures a Project website, or equivalent virtual information source, will be established. The Project website will provide information on the status of the Projects, anticipated construction timeframes and contact details for enquiries.
Phase 2: December 2019	(g)	Alignment concerns	See (e) above.
	(h)	Loss of property	Landowners were informed of the PWA processes for acquisition of property or temporary use of land during construction. At detailed design in the future, exact land requirement will be confirmed with the affected landowner at that time. It was also explained that the requiring authority will review the designation boundary after works have been completed. This is provided for in Condition 3[12], Designation Review.
	(i)	Loss of amenity	See (b) above.
	(j)	Timing for construction	See (f) above.
Phase 3: May to June 2020	(k)	Active transport paths as an alternative to cars	The Drury Arterial Network includes active mode facilities on all corridors.
	(l)	Highlighted the existing dangerous environment for active transport and the importance of lowering road speeds	The Drury Arterial Network includes active mode facilities on all corridors. Road speeds will be reduced as the areas are urbanised.
	(m)	property (acquisition/loss of value/access)	See (a), (b), (c), (d) and (h) above.

[11] Condition 2 for NoR D2, D3, D4 and D5. Condition 3 for NoR D1.
[12] Condition 3 for NoR D2, D3, D4 and D5. Condition 4 for NoR D1.

Phase	Ref	Key Themes Raised	Project Response
	(n)	Alignment concerns	See (e) above.
	(o)	impact to property boundaries	See (h) above.
	(p)	Timing of construction	See (f) above.
	(q)	Timing of property acquisition	Property owners were informed of the PWA processes and that the requiring authority would reach out 2-3 years prior to construction to discuss property acquisition. Condition 2[13] *Project Information* (as noted above in (f)) will keep property owners, and the public, updated on project timing.
	(r)	Ongoing tenure of property	Concerned landowners were informed of the PWA processes, that they were able to continue using their properties as they exist and the ability to develop sites in agreement with the requiring authority through RMA s176 approval processes.
Phase 4: October 2020	(s)	property (acquisition/loss of value/access)	See (a), (b), (c), (d) and (h) above.
	(t)	alignment of the proposed intersection	See (e) above.
	(u)	Timing for construction of the project	See (f) above.
	(v)	Safety issues with the existing intersection and considered that a roundabout would not improve safety (specifically for NoR D5).	In response, the Project team drafted a memo to the Papakura Local Board to address the concerns and encouraged local board members to share this information with any community members and/or direct any queries to the Project team.

[13] Condition 2 for NoR D2, D3, D4 and D5. Condition 3 for NoR D1.

Appendix C –Properties predicted to receive over the 70dB LAeq adopted limit for construction noise before mitigation

NoR D1

Receiver Addresses exceeding 70dB criteria pre-mitigation	Type
14 Burberry Road	Residential
15 Burberry Road	
160 Karaka Road	
18 Burberry Road	
200 Karaka Road	
250 Karaka Road	
332 Karaka Road	
351 Karaka Road	
36 Pitt Road	
370 Karaka Road	
373 Karaka Road	
41 Jesmond Road	
411 Karaka Road	
435 Karaka Road	
462 Karaka Road	
5 Burberry Road	
7 Woodlyn Drive	
73 Mercer Street	Commercial
81 Mercer Street	
90 Karaka Road	
26 Mercer Street	
300 Karaka Road	
415 Karaka Road	
60 Mercer Street	
64 Jesmond Road	

NoR D2

Receiver addresses exceeding 70dB criteria pre-mitigation	Type
125 Jesmond Road	Residential
288 Jesmond Road	
101 Waihoehoe Road	
31 Waihoehoe Road	
235 Jesmond Road	
169 Jesmond Road	
201 Jesmond Road	
5 Fitzgerald Road	
97 Waihoehoe Road	
28 Waihoehoe Road	
31 Bremner Road	
71 Waihoehoe Road	
131 Jesmond Road	
256 Jesmond Road	
81 Waihoehoe Road	
45 Waihoehoe Road	
64 Jesmond Road	
7 Fitzgerald Road	
171 Waihoehoe Road	
28 Fitzgerald Road	
14 Cameron Place	
341 Jesmond Road	
97 Waihoehoe Road	
201 Jesmond Road	
224 Jesmond Road	
236 Great South Road	Commercial
222 Great South Road	
11 Bremner Road	
11 Bremner Road	
38 Firth Street	
141 Jesmond Road	
64 Jesmond Road	
38 Bremner Road	
233 Great South Road	
35 Firth Street	
48 Creek Street	
22 Norrie Road	
40 Firth Road	

Receiver addresses exceeding 70dB criteria pre-mitigation	Type
67 Waihoehoe Road	
233 Great South Road	
251 Great South Road	
39 Firth Street	
48 Firth Street	
35 Creek Street	
262 Jesmond Road	
43 Firth Street	
38 Bremner Road	
38 Bremner Road	
16 Norrie Road	
137 Jesmond Road	
38 Bremner Road	
10 Tui Street	
48 Creek Street	
45 Firth Street	
214 Great South Road	

NoR D3

Receiver addresses exceeding 70dB criteria pre-mitigation	Type
168 Waihoehoe Road	Residential
432 Waihoehoe Road	
201 Waihoehoe Road	
185 Waihoehoe Road	
221 Cossey Road	
412 Waihoehoe Road	
171 Waihoehoe Road	
336 Waihoehoe Road	
460 Waihoehoe Road	
26 Fielding Road	
196 Waihoehoe Road	
297 Waihoehoe Road	
10 Appleby Road	
297 Waihoehoe Road	
211 Waihoehoe Road	
319 Waihoehoe Road	

NoR D4

Receiver addresses exceeding 70dB criteria pre-mitigation	Type
105 Walker Road	Residential
115 Walker Road	
201 Sutton Road	
28 Ponga Road	
285 Sutton Road	
36 Ponga Road	
48 Ponga Road	
6 Ponga Road	
68 Ponga Road	
70 Hunua Road	Commercial
85 Boundary Road	
141 Boundary Road	
35 Hunua Road	

NoR D5

Receiver addresses exceeding 70dB criteria pre-mitigation	Type
Bellfield Units 10	Residential - Rural
Bellfield Units 11	
Bellfield Units 12	
Bellfield Units 13	
Bellfield Units 14	
Bellfield Units 15	
Bellfield Units 16	
Bellfield Units 17	
Bellfield Units 18	
Bellfield Units 2	
Bellfield Units 3	
Bellfield Units 32	
Bellfield Units 33	
Bellfield Units 4	
Bellfield Units 5	
Bellfield Units 6	
Bellfield Units 7	
Bellfield Units 8	
Bellfield Units 9	
Bellfield Units 97	
Bellfield Units 98	

Receiver addresses exceeding 70dB criteria pre-mitigation	Type
Bellfield Units 99	
1 Lorelei Place	
106 Opaheke Road	
114 Opaheke Road	
120 Ponga Road	
122 Opaheke Road	
126 Ponga Road	
2 Lorelei Place	
211 Opaheke Road	
215 Ponga Road	
216 Opaheke Road	
231 Opaheke Road	
235 Opaheke Road	
300 Sutton Road	
4 Lorelei Place	
61 Ponga Road	
70 Ponga Road	
74 Ponga Road	
86 Opaheke Road	
88 Opaheke Road	
93 Opaheke Road	
95 Opaheke Road	
97 Opaheke Road	
Bellfield Units 34	
1/15 Settlement Road	Residential - Urban
2/15 Settlement Road	
1 /21 Opaheke Road	
1-4/19 Opaheke Road	
1/17 Settlement Road	
20 Opaheke Road	
20 A Opaheke Road	
2/14 Alexander Street	
3/14 Alexander Street	
16 B Alexander Street	
21 Settlement Road	
1/23 Settlement Road	
2/23 Settlement Road	
25 Settlement Road	
19 King Edward Avenue	

Receiver addresses exceeding 70dB criteria pre-mitigation	Type
1/17 King Edward Road	
3 /16 Settlement Road	
2/14 Settlement Road	
1/16 Settlement Road	
2 /16 Settlement Road	
1/14 Settlement road	
17 Korakora Lane	
19 Korakora Lane	
154 Ponga Road	Commercial
174 Ponga Road	

Appendix D – Properties exceeding construction vibration amenity criteria of DIN 4150 before mitigation

NoR D1

Receiver Address Exceeding Amenity criteria pre-mitigation	Type
160 Karaka Road	Residential
200 Karaka Road	
329 Karaka Road	
335 Karaka Road	
351 Karaka Road	
370 Karaka Road	
435 Karaka Road	
462 Karaka Road	
5 Burberry Road	

NoR D2

Receiver Address Exceeding Amenity criteria pre-mitigation	Type
201 Jesmond Road	Historic/Sensitive
9 Cameron Place	
101 Waihoehoe Road	Residential
125 Jesmond Road	
131 Jesmond Road	
144 Bremner Road	
169 Jesmond Road	
235 Jesmond Road	
28 Waihoehoe Road	
281 Jesmond Road	
288 Jesmond Road	
3 Fitzgerald Road	
31 Bremner Road	
31 Waihoehoe Road	
5 Fitzgerald Road	
71 Waihoehoe Road	
8 Flanagan Road	
97 Waihoehoe Road	
37 Bremner Road	
256 Jesmond Road	
11 Bremner Road	Commercial
110 Karaka Road	

Receiver Address Exceeding Amenity criteria pre-mitigation	Type
141 Jesmond Road	
16 Norrie Road	
22 Norrie Road	
222 Great South Road	
233 Great South Road	
236 Great South Road	
251 Great South Road	
262 Jesmond Road	
35 Creek Street	
35 Firth Street	
38 Bremner Road	
38 Firth Street	
39 Firth Street	
48 Creek Street	
48 Firth Street	
5 Bremner Road	
64 Jesmond Road	
67 Waihoehoe Road	
14 Bremner Road	
15 Bremner Road	
16 Bremner Road	
17 Bremner Road	
223 Great South Road	
40 Firth Street	

NoR D3

Receiver Address exceeding amenity criteria pre-mitigation	Type
168 Waihoehoe Road	Residential
196 Waihoehoe Road	
201 Waihoehoe Road	
221 Cossey Road	
251 Waihoehoe Road	
31 Appleby Road	
336 Waihoehoe Road	
412 Waihoehoe Road	
432 Waihoehoe Road	
185 Waihoehoe Road	Commercial

NoR D4

Receiver Address Exceeding Amenity criteria pre-mitigation	Type
105 Walker Road	Residential
115 Walker Road	
201 Sutton Road	
28 Ponga Road	
36 Ponga Road	
48 Ponga Road	
6 Ponga Road	
68 Ponga Road	
70 Hunua Road	Commercial
85 Boundary Road	
9 Ponga Road	
128 Waihoehoe Road	
141 Boundary Road	

NoR D5

Receiver Address Exceeding Amenity criteria pre-mitigation	Type
154 Ponga Road	Commercial
223 Opaheke Road	
31 Ponga Road	
9 Ponga Road	
74A-D Opaheke Road	Residential
78A-D Opaheke Road	
Bellfield Units 1	
Bellfield Units 10	
Bellfield Units 11	
Bellfield Units 12	
Bellfield Units 13	
Bellfield Units 14	
Bellfield Units 15	
Bellfield Units 16	
Bellfield Units 17	
Bellfield Units 18	
Bellfield Units 2	
Bellfield Units 3	
Bellfield Units 32	
Bellfield Units 33	
Bellfield Units 4	

Receiver Address Exceeding Amenity criteria pre-mitigation	Type
Bellfield Units 5	
Bellfield Units 6	
Bellfield Units 7	
Bellfield Units 8	
Bellfield Units 9	
Bellfield Units 97	
Bellfield Units 98	
Bellfield Units 99	
1 /12 Alexander Street	
1 Lorelei Place	
1/14 Settlement road	
1/15 Settlement Road	
1/16 Settlement Road	
1/17 King Edward Road	
1/17 Settlement Road	
1/21 Opaheke Road	
1/23 Settlement Road	
114 Opaheke Road	
117 Ponga Road	
120 Ponga Road	
122 Opaheke Road	
126 Ponga Road	
1-4/19 Opaheke Road	
145 Ponga Road	
15 Korakora Lane	
17 Korakora Lane	
174 Ponga Road	
18-24 Tautaiao Lane	
19 King Edward Avenue	
19 Korakora Lane	
2 Lorelei Place	
2/14 Alexander Street	
2/14 Settlement Road	
2/16 Settlement Road	
2/21 King Edward Avenue	
2/23 Settlement Road	
2/82 Opaheke Road	
20 A Opaheke Road	
20 Opaheke Road	
21 Settlement Road	

Receiver Address Exceeding Amenity criteria pre-mitigation	Type
211 Opaheke Road	
216 Opaheke Road	
235 Opaheke Road	
25 Settlement Road	
28 Ponga Road	
3/14 Alexander Street	
3/16 Settlement Road	
48 Ponga Road	
70 Ponga Road	
72 Opaheke Road	
74 Ponga Road	
80 Opaheke Road	
81 Opaheke Road	
88 Opaheke Road	
93 Opaheke Road	
95 Opaheke Road	
97 Opaheke Road	