6800 Busway between Western Springs and Ian McKinnon Drive

Designation Number	6800
Requiring Authority	New Zealand Transport Agency
Location	Busway between Western Springs station and Ian McKinnon Drive
Lapse Date	The designation lapses if not given effect to within 25 years from the date on which it is included in the AUP

Purpose

The purpose of the designation is to construct, operate, maintain, and improve a rapid transit corridor, and ancillary structures, works and activities.

Conditions

The table below defines the acronyms and terms used in the designation conditions. Defined terms are capitalised.

Acronyms and defined terms

Acronym/term	Definition/meaning
Arterial Roads	As identified in the planning maps of the Auckland Unitary Plan
AUP	Auckland Unitary Plan 2026
BPO	Means the best method for preventing or minimising the adverse effects on the environment having regard, among other things, to: (a) the nature of the discharge or emission and the sensitivity of the receiving environment to adverse effects (b) the financial implications, and the effects on the environment, of that option when compared with other options (c) the current state of technical knowledge and the likelihood that the option can be successfully applied
CNVMP	Construction Noise and Vibration Management Plan
Completion of Construction	When construction of the Project (or part of the Project) is complete and it is available for use
CTMP	Construction Traffic Management Plan
Council	Auckland Council
Manager	The Manager – Resource Consents of Council, or authorised delegate
Outline Plan	An outline plan prepared in accordance with section 176A of the RMA
Project	Te Ara Hauāuru Northwest Rapid Transit
Requiring Authority	NZ Transport Agency
RMA	Resource Management Act 1991
SQEP	A suitably qualified and experienced person, being a person who can provide sufficient evidence to demonstrate their suitability and competence.

Schedule A **Project Boundary for the Northwest Rapid Transit Project**

Schedule B **Danger Rating Matrix and Flood Hazard Ratings**

Schedule C **Arch Hill Scenic Reserve**

Schedule D **Tree Schedule**

Schedule E **Geotechnical Design Statement area**

Schedule F **Identified PPFs**

Condition number	Condition
1.	This designation authorises the Project, being the construction, operation and maintenance of new bus rapid transit facilities alongside and connected to State Highway 16 from the Brigham Creek Road/SH16 intersection through to Ian McKinnon Drive in the Auckland City Centre and includes seven rapid transit stations and one Park and Ride facility, associated connections to the local bus and road network, ancillary structures, works, facilities and activities, all within the boundary shown in Schedule A*, including the following works: (a) A busway; (b) Bus stations, including facilities for the convenience of passengers; (c) With respect to designations 6791 and 6794, a Park and Ride facility; (d) Ancillary structures, works, facilities and activities, including: (i) bridges, underpasses, embankments, retaining walls; (ii) lighting, signs, gantries, acoustic barriers, landscaping; (iii) stormwater management, culverts, outfalls; (e) Realignment of, and connections to, the Northwestern Shared User Path; (f) Changes and connections to local roads to enable connectivity to bus stations; (g) Protection and relocation of existing utilities; and (h) All construction activities for the Project. If there is any inconsistency between the above description of the Project and the conditions, then the conditions prevail. * Except if there is any inconsistency between Schedule A and the boundary shown in the AUP (which shall accord with the Designation Plans at Part 6.4 of the Application), then the AUP will prevail.
2.	**Lapse** The designation lapses if not given effect to within 25 years from the date on which it is included in the AUP.
3.	**Primary Designation *(Augier* condition*)*** This designation must be considered as the primary (earlier) designation where it overlaps with designation 6802 Western Springs Station.
4.	**Outline Plan(s) and Management Plans** (a) Outline Plan(s) may be submitted in parts or in stages to address particular activities (e.g., design or construction aspects), or to reflect the staged implementation of the Project. (b) Outline Plans must include (as relevant): (i) Form and Landscaping Statement (ii) Construction Noise and Vibration Management Plan (iii) Tree Protection Methodology unless otherwise stated in the conditions below.
5.	**Conditions following Completion of Construction** Following Completion of Construction, all conditions except Condition 32 cease to have effect and do not apply to any subsequent work associated with the on-going operation and maintenance of the Project.
PRE CONSTRUCTION CONDITIONS	
6.	**Cultural Values *(Augier* condition*)*** (a) The Requiring Authority must engage with Ngāti Whātua Ōrākei, Te Ākitai Waiohua and Ngaati Te Ata Waiohua during detailed design to identify how their cultural values will be reflected in the Project. (b) A statement summarising how engagement undertaken in accordance with (a) has informed how cultural values are reflected in the Project is to be provided to the Council for information only with an Outline Plan(s).
7.	**Flood Hazard** For the purposes of Condition 8: (a) Danger Rating means low (green), moderate (yellow) or high (red) danger rating determined in

Condition number	Condition
	accordance with Schedule B. (b) Building/s means any residential, commercial or community building that has been lawfully established, or is authorised by a building consent at the time the Outline Plan is submitted. Sheds, garages and other ancillary buildings are excluded. (c) Maximum Probable Development is the maximum impervious area permitted in the zone/s in the AUP at the time the Outline Plan is submitted, or 70% impervious area if the land is zoned Future Urban in the AUP. (d) Pre-Project Development means the Maximum Probable Development at the time the Outline Plan is submitted. (e) Project Development means the Pre-Project Development and the Project.
8.	(a) The Project must be designed so that it does not cause the following beyond the Designation: (i) An increase in Danger Rating; and (ii) Either: A. A more than 50mm increase in flood level on land parcels with Building(s) and a Low Danger Rating; or B. A more than 100mm increase in flood level on: I. land parcels with no Building(s) present; and II. land parcels with Building(s) and a Moderate or High Danger Rating. (b) Compliance with (a) must be demonstrated through flood modelling: (i) To show the difference in the 1% Annual Exceedance Probability (AEP) flood levels for Pre-Project Development and Project Development; (ii) Using 332mm for the 24 hour rainfall depth that includes a 3.8 degree Celsius increase in temperature for climate change; and (iii) Undertaken by a SQEP. (c) The Requiring Authority does not need to comply with (a) if the relevant landowner agrees to an alternative approach. (d) In the Outline Plan, the Requiring Authority must: (i) demonstrate how (a) will be complied with by reference to flood modelling undertaken in accordance with (b); or (ii) provide confirmation of any written agreement secured to reflect landowner agreement pursuant to (c) above. ***Advice Note:*** *Where the diversion and discharge of stormwater runoff is to the reticulated public stormwater network, it must comply with the requirements of Auckland Council Healthy Waters & Flood Resilience Regionwide Network Discharge Consent.*
9.	**Crime Prevention through Environmental Design** The Requiring Authority must design the Project to provide for personal safety by taking into account the National Guidelines for Crime Prevention through Environmental Design in New Zealand (November 2005), or any subsequent version.
10.	**Form and Landscaping Statement** (a) The Requiring Authority must prepare a Form and Landscaping Statement to be submitted with the relevant outline plan(s) for each stage of work. The objective of the Form and Landscaping Statement is to describe how the design of the permanent Project works has responded to the immediately adjoining environment. (b) To achieve the objective noted in (a) above, the Form and Landscaping Statement must provide a summary description of how the design of the permanent Project works for that stage of work has approached:

Condition number	Condition
	(i) the height, shape, and bulk of major structures - including stations, bridges, underpasses, retaining walls and noise barriers, where relevant; (ii) any walking and cycling connections with the adjacent network; (iii) the likely finished contour – including the extent and angle of batter slopes; (iv) the landscaping - including the location of any planting that is required under Condition 19 (Landscape Planting); and (v) the interface with adjacent land use including open space zones. **Advice note:** *During development of design for the Project, the Requiring Authority will work collaboratively with the Council when considering the above matters. The Form and Landscaping Statement will be informed by that work.*
11.	**Project information** The Requiring Authority must maintain a website page, or equivalent online information source (Project website) which provides information updates on progress being made towards implementation of the Project. Prior to commencement of construction, the information provided on the Project website will be updated at six (6) monthly intervals. After commencement of construction of a particular stage of the Project, the information in relation to that part under construction will be updated at a minimum of three (3) monthly intervals until that part is completed.
CONSTRUCTION CONDITIONS	
12.	**Construction Traffic Management Plan (CTMP)** (a) The CTMP must be prepared prior to the start of construction works and must be provided to the Manager for information. The objective of the CTMP is to appropriately manage any adverse traffic safety and efficiency impacts on other road users and impacts on access to existing properties. (b) To achieve this objective, the CTMP must include: (i) Methods to manage the effects of temporary traffic management activities on the network; (ii) Measures to manage 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 congestion near schools or to manage traffic congestion; (iv) Site access routes 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 for the safe management and maintenance of traffic flows, including public transport, pedestrians and cyclists; (vi) Measures to maintain the function of the existing North-Western Shared User Path to a reasonable level of service, to the extent that is reasonably practicable, and where this is not practicable, provide safe detour routes that provide a reasonable level of service; (vii) Measures to maintain safe and practicable access to and from properties and/or private roads where practicable, or to provide alternative arrangements when it will not be. The measures must include, as relevant, details of how access is managed for customer and staff access, service vehicles' loading and unloading of goods, rubbish collection, mail/courier deliveries, emergency access and access for active modes; (viii) 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; (ix) Methods that will be undertaken to communicate traffic management measures to affected road users and to communicate the measures to manage impacts on existing access to affected landowners and occupiers; (x) Details of how sequencing of Project works to mitigate effects on adjacent Arterial Roads has been considered;

Condition number	Condition
	(xi) Details of how programming of Project works in relation to any known concurrent construction of infrastructure projects within SH16 or adjacent Arterial Roads has been considered; (xii) Details of minimum network performance parameters during the construction phase including the basis for those parameters and measures to monitor compliance; (xiii) Details of any measures proposed to be implemented in the event of minimum network performance parameters identified in Condition 12(b)(xii) above are not achieved, including monitoring frequency and corrective actions; (xiv) Where Project works are within or directly adjacent to open space zoned land, methods to address Condition 13; (xv) Details of a Construction Traffic Issues Resolution Process for receiving, investigating and responding to construction traffic and access complaints. The process must include: A. Contact details for lodging a complaint; B. A process for acknowledging receipt of a complaint within two working days, or within 24 hours where the complaint relates to safety or access; C. A process for investigating the complaint and implementing reasonable corrective actions where the subject of the complaint is caused or exacerbated by the construction works; and D. A requirement to respond to the person who raised the issue or complaint to advise them of the outcome of the investigation and any corrective actions proposed or taken; (xvi) Auditing, monitoring and reporting relating to traffic management activities shall be undertaken in accordance with the requirements of the Road Controlling Authority.
13.	**Open Space – Construction Access** The Requiring Authority must maintain safe and clearly identifiable public access (walking and cycling) through affected open space zoned land available for use during construction, as far as practicable. Such access must seek to minimise significant detours.
14.	**Permanent Vehicle Access** (a) Prior to submission of an Outline Plan for any part of the Project that will permanently alter an existing lawful vehicle access to a property, the Requiring Authority must consult with the relevant landowner and occupier about the proposed access arrangement. (b) The relevant Outline Plan must demonstrate how safe and practicable permanent vehicle access to that property will be provided, whether by reconfiguration of the existing access or by an alternative access arrangement. (c) This condition does not apply where the relevant landowner has agreed in writing to the access arrangement, or where the relevant property interest has been acquired by the Requiring Authority.
15.	**Construction Noise** (a) Construction noise must be measured and assessed in accordance with NZS6803:1999 Acoustics – Construction Noise and must comply with the noise standards set out in Table 1 as far as practicable. **Table 1: Construction noise standards**

Time of week	Time period	dB L_{Aeq}	dB L_{AFmax}
Activities sensitive to noise			
Weekdays	0630-0730	55	75
	0730-1800	70	85
	1800-2000	65	80
	2000-0630	45	75

Condition number	Condition

Saturdays	0630-0730	45	75
	0730-1800	70	85
	1800-2000	45	75
	2000-0630	45	75
Sundays and public holidays	0630-0730	45	75
	0730-1800	55	85
	1800-2000	45	75
	2000-0630	45	75
All other buildings occupied during the works			
All days	0730-1800	70	N/A
	1800-0730	75	N/A

(b) Where compliance with the noise standards set out in Table 1 is not practicable, the methodology in Condition 17 must apply.

16. **Construction Vibration Criteria**

(a) Construction vibration must 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.

(b) Construction vibration must comply with the vibration criteria set out in Table 2 as far as practicable.

Table 2: Construction vibration criteria

Receiver	Location	Details	Category A	Category B
Occupied sensitive use buildings *	Inside the building	2000-0630	0.3mm/s ppv	1mm/s ppv
		0630-2000	1mm/s ppv	5mm/s ppv
Other occupied buildings	Inside the building	0630-2000	2mm/s ppv	5mm/s ppv
All other buildings	Building foundation	Vibration – transient	5mm/s ppv	BS 5228-2 Table B.2
		Vibration - continuous		BS 5228-2 50% of Table B.2 values

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

(c) Where compliance with the vibration criteria set out in Table 2 is not practicable, the methodology in Condition 17 shall apply.

17. **Construction Noise and Vibration Management Plan**

(a) The Requiring Authority must engage a SQEP to prepare CNVMP prior to the start of construction.

(b) The objective of the CNVMP is to identify:

(i) How Conditions 15 and 16 will be achieved; and

Condition number	Condition
	(ii) The Best Practicable Option for managing construction noise and vibration effects where compliance with Conditions 15 and 16 cannot practicably be achieved. (c) The CNVMP must be prepared in accordance with Annex E2 of the New Zealand Standard NZS6803:1999 'Acoustics – Construction Noise' and shall, as a minimum, address: (i) a 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 criteria identified in Conditions 15 and 16; (iv) identification of receivers where noise and vibration criteria apply; (v) a hierarchy of management and mitigation options; (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 a 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) procedures and requirements for the preparation of a Schedule to the CNVMP in accordance with Condition 18; (xi) 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; (xii) the methodology and programme of desktop and field audits and inspections to be undertaken so that that the CNVMP, Schedules and the best practicable option for management of effects are being implemented; and (xiii) requirements for review and updates of the CNVMP.
18.	**Schedule to a CNVMP** (a) A Schedule to the CNVMP (Schedule) must be prepared by a SQEP prior to the start of construction for an activity to which it relates, 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 15; or (ii) construction vibration is either predicted or measured to exceed the Category A standard at the receivers in Condition 16. (b) The objective of the Schedule is to set out the Best Practicable Option measures to manage noise and/or vibration effects of the construction activity beyond those measures set out in the CNVMP. (c) To achieve the objective, 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 for all receivers where the levels are predicted or measured to exceed the applicable standards in Conditions 15 and 16 and the predicted duration of the exceedance; (iv) for works proposed between 2000h and 0630h, the reasons why the proposed works must be undertaken during these hours and why they cannot be practicably undertaken during the daytime; (v) the proposed mitigation options that have been selected, and any mitigation options that have been discounted as being impracticable and the reasons why; (vi) a summary of the consultation undertaken with owners and occupiers of sites subject to the Schedule, and how consultation has and has not been taken into account; and

Condition number	Condition
	(vii) location, times and types of monitoring. (d) The Schedule must be submitted to the Manager for information at least five working days (except in unforeseen circumstances) in advance of the start of construction that are covered by the scope of the Schedule. (e) Where material changes are made to a Schedule required by this condition, the Requiring Authority must consult the owners and/or occupiers of sites subject to the Schedule prior to submitting the amended Schedule to the Manager for information in accordance with (d) above.
19.	**Landscape Planting** (a) The Requiring Authority must, where practicable: (i) Retain existing mature, native vegetation; (ii) Plant at stations and batter slopes; (iii) Use eco-sourced native vegetation; (iv) Re-instatement planting of construction and site compound areas as appropriate; and (v) Integrate planting with any planting required by Designation Condition 20 and resource consents for the Project. (b) For planting under (a), the Requiring Authority must: (i) Undertake planting within the first planting season following Completion of Construction; (ii) undertake ground preparation (top soiling and decompaction) and mulching where appropriate; (iii) undertake pest plant control for a five year period; and (iv) monitor planted areas and undertake replacement planting as necessary for a five year period or until 80% canopy cover is achieved (whichever is less). (c) The measures described in (a) must be shown in the Form and Landscaping Statement submitted with the Outline Plan.

Condition number	Condition
20.	**Arch Hill Scenic Reserve – Native Vegetation Removal** (a) If native vegetation within the Designation is removed in Arch Hill Scenic Reserve shown in Schedule C, the Requiring Authority must: (i) for temporary construction works, plant native vegetation in those areas where vegetation was removed. (ii) for permanent works, plant an equal area (in m^2) within Arch Hill Scenic Reserve or if not practicable elsewhere within the Designation. (b) For planting under (a) the Requiring Authority must: (i) engage a SQEP to advise on location and determine plant species and sourcing, density and sizing; (ii) undertake eco-sourced planting within the first planting season following completion of construction where practicable; (iii) undertake pest plant control for a five year period; and (iv) monitor planted areas and undertake replacement planting for a five year period or until 80% native canopy cover is achieved (whichever is less).
21.	**Tree Protection Methodology** (a) Prior to the start of construction, the Requiring Authority must engage a SQEP to prepare a tree protection methodology for the trees identified in Schedule D (existing at the time of construction). The tree protection methodology must demonstrate how the design and location of the Project has avoided, remedied or mitigated effects on any tree listed in Schedule D. (b) The methodology must include: (i) Procedures such as protective fencing, ground protection and physical protection of roots, trunks and branches; and (ii) Methods and procedures to be used when the trees are pruned and/or work is undertaken within the rootzone.
22.	**Geotechnical Design Statement** Prior to the start of construction at Waterview Interchange or Arch Hill Scenic Reserve as shown in Schedule E, the Requiring Authority must provide a copy of a Geotechnical Design Statement to the Council for information purposes. The Geotechnical Design Statement must be prepared by a SQEP and confirm that there will be no material adverse effects to land, buildings or infrastructure beyond the designation boundary arising from both temporary and permanent works associated with the Project.
OPERATIONAL CONDITIONS	
23.	**Operational Traffic** **Low Noise Road Surface** The Requiring Authority must implement an asphalt surface or similar low noise road surface throughout the Project (excluding any existing local roads with chip seal).
24.	For the purposes of Conditions 25 to 33: (a) NZS 6806 – means NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads; (b) Building-Modification Mitigation – has the same meaning as in NZS 6806; (c) Noise Barrier is any barrier that has a minimum surface density of 15 kg/m^2 and is designed to have no gaps between the panels and the ground and between panels (d) Habitable Space – has the same meaning as in NZS 6806; (e) Mitigation – has the same meaning as in NZS 6806; (f) Protected Premises and Facilities (PPFs) – means only the premises and facilities identified in Schedule F “Identified PPFs”; (g) Structural mitigation – has the same meaning as in NZS 6806;

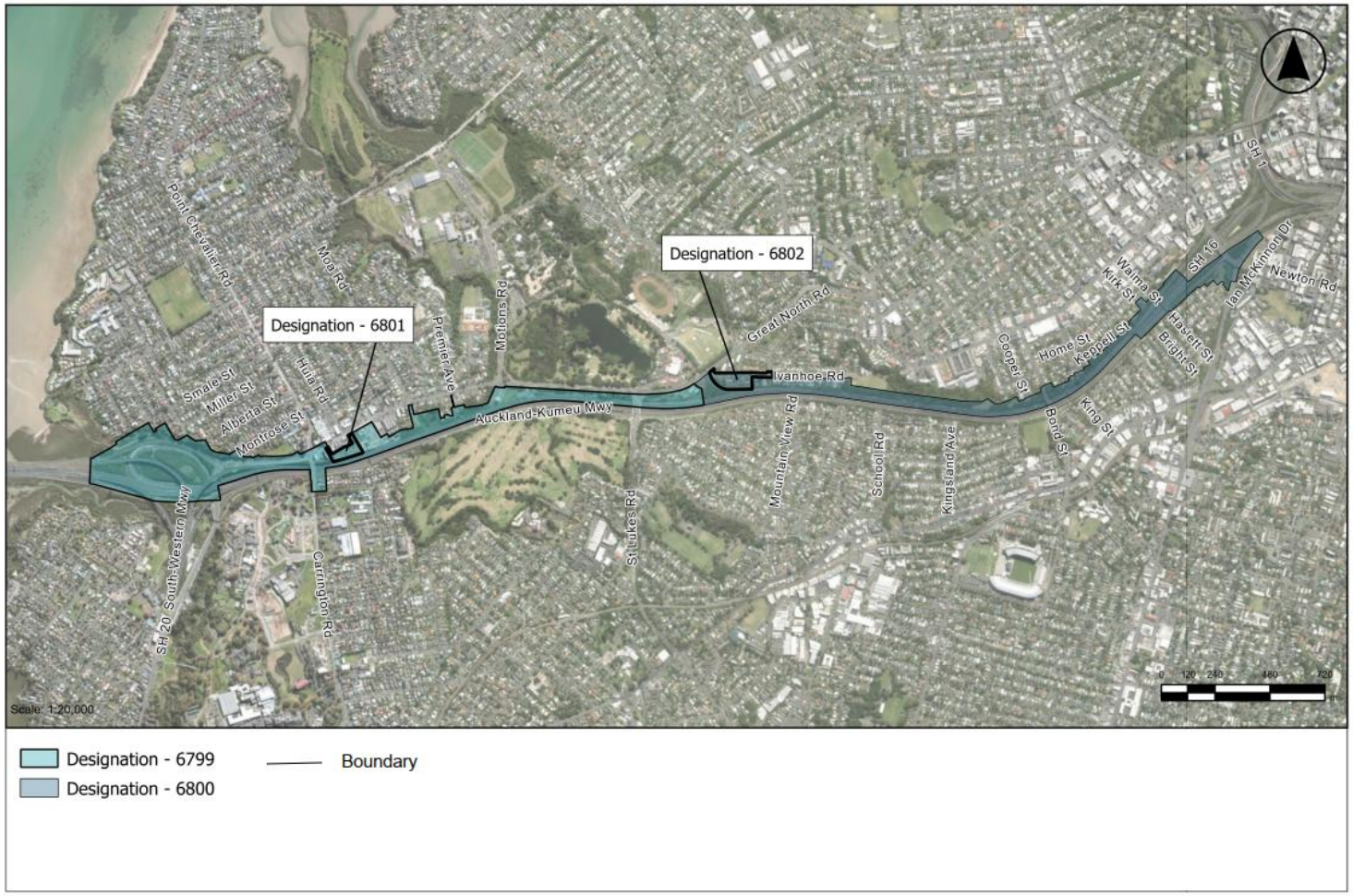
Condition number	Condition
	(h) Design Year – means the year 2051; (i) Do-nothing scenario – has the same meaning as in NZS 6806; and (j) Detailed design scenario – means the Project and State Highway 16 with traffic volumes for the Design Year, with any BPO structural mitigation implemented.
25.	As part of the detailed design of the Project, a SQEP must determine the BPO structural mitigation for mitigating noise effects on PPFs. The SQEP must, as part of the BPO, consider if existing Noise Barriers could be retained or altered.
26.	(a) Prior to the start of construction works, a SQEP must identify those PPFs where, following implementation of BPO structural mitigation: (i) The external traffic-noise level at the façade facing the Project is higher than 67 dB $L_{Aeq(24h)}$; and (ii) A noise level increase of 1 dB or more will occur due to the Project implementation; and (iii) where Building-Modification Mitigation might be required to achieve 40 dB $L_{Aeq(24h)}$ inside Habitable Spaces ('Category C Buildings') as far as reasonably practicable. Such PPFs will be classified as "Category C Buildings". (b) The noise level increases discussed above must be based on a comparison of the Do-nothing scenario and the Detailed design scenario.
27.	Prior to the start of construction in the vicinity of each Category C Building, the Requiring Authority must 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 12 months of the date of the Requiring Authority's letter, the Requiring Authority must instruct a SQEP to visit the building and assess the noise reduction performance of the existing building envelope.
28.	For each Category C Building identified, the Requiring Authority is deemed to have complied with Condition 27 above if: (a) the Requiring Authority's Suitably Qualified Person has visited the building and assessed the noise reduction performance of the building envelope; or (b) the building owner did not agree to entry, or the building owner agreed to entry but the Requiring Authority could not gain entry, within 12 months of the date of the Requiring Authority's letter sent in accordance with Condition 27 above (including where the owner did not respond or entry was denied by a tenant within that period); or (c) the building owner cannot, after reasonable enquiry, be found prior to Completion of Construction of the Project. If (b) or (c) above apply to a Category C Building, the Requiring Authority is not required to offer to implement Building-Modification Mitigation to that building.
29.	Subject to Condition 28 above, within six months of the assessment undertaken in accordance with Condition 27, the Requiring Authority must write to the owner of each Category C Building advising: (a) if Building-Modification Mitigation is required and reasonably practicable to achieve 40 dB $L_{Aeq(24h)}$ inside habitable spaces; and (b) the options available for Building-Modification Mitigation to the building, if required and reasonably practicable; 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.
30.	Once Building-Modification Mitigation has been agreed, it shall be implemented in a reasonable and practical timeframe by arrangement with the owner.
31.	Subject to Condition 27, where Building-Modification Mitigation is required, the Requiring Authority is deemed to have complied with Condition 26 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

Condition number	Condition
	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 26 (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.
32.	All noise barriers required as determined by the BPO assessment in accordance with Condition 25 must be installed prior to the opening of the Project.
33.	The Noise Barriers that are part of the BPO must be maintained so they retain their noise reduction performance as far as practicable.
34.	**Designation removal** As soon as practicable following completion of construction of the entire Project, the Requiring Authority shall give notice to Auckland Council in accordance with section 182 of the RMA (or its equivalent) for removal of those parts of the designation that are not required for the long-term operation, maintenance and mitigation of effects of the Project.

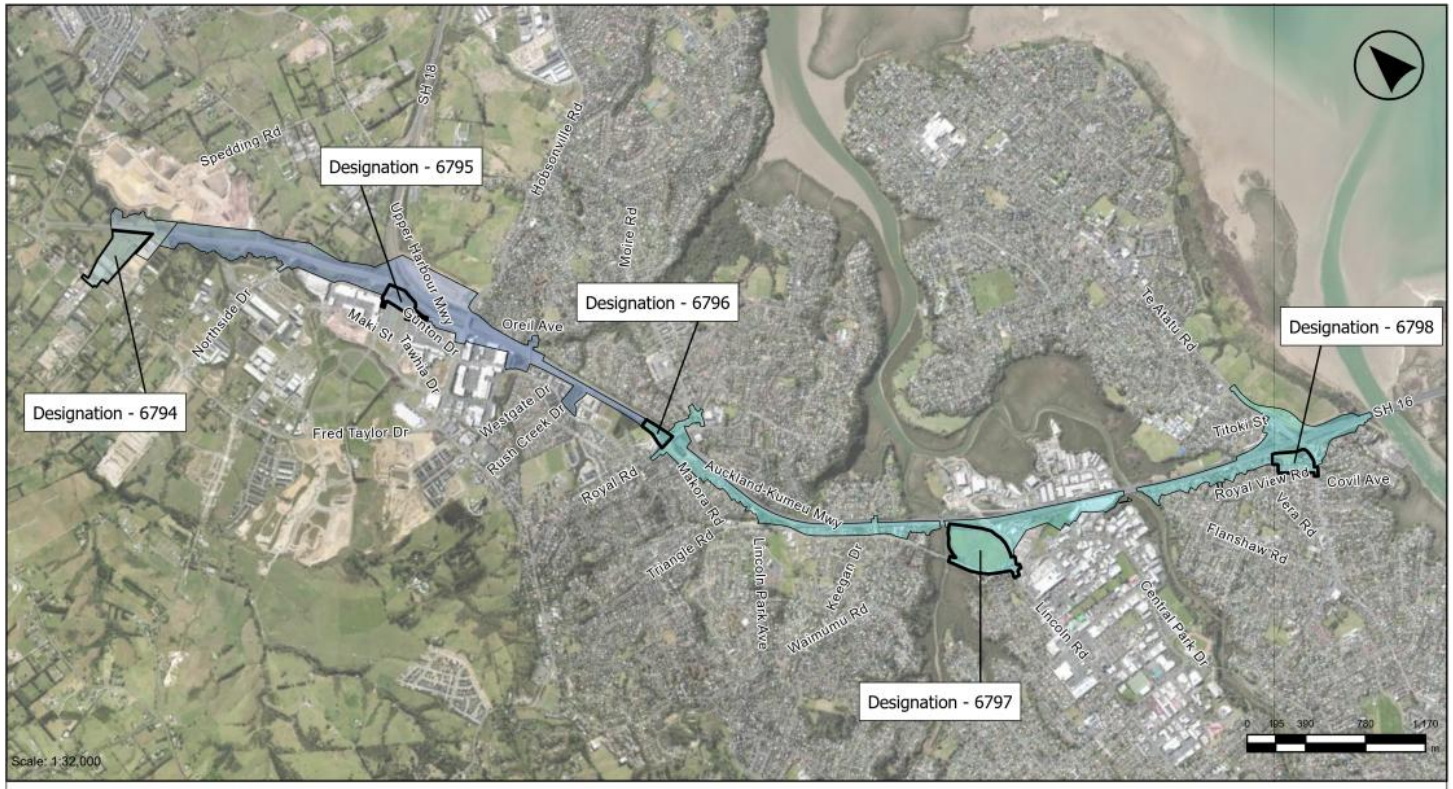
Attachments

Schedule A: Project Boundary for the Northwest Rapid Transit Project

Schedule A - Designations for the Northwest Rapid Transit Project



Schedule A - Designations for the Northwest Rapid Transit Project



Designation - 6791
Designation - 6792
Designation - 6793
Boundary

Schedule B: Danger Rating Matrix and Flood Hazard Ratings

Danger Rating Matrix

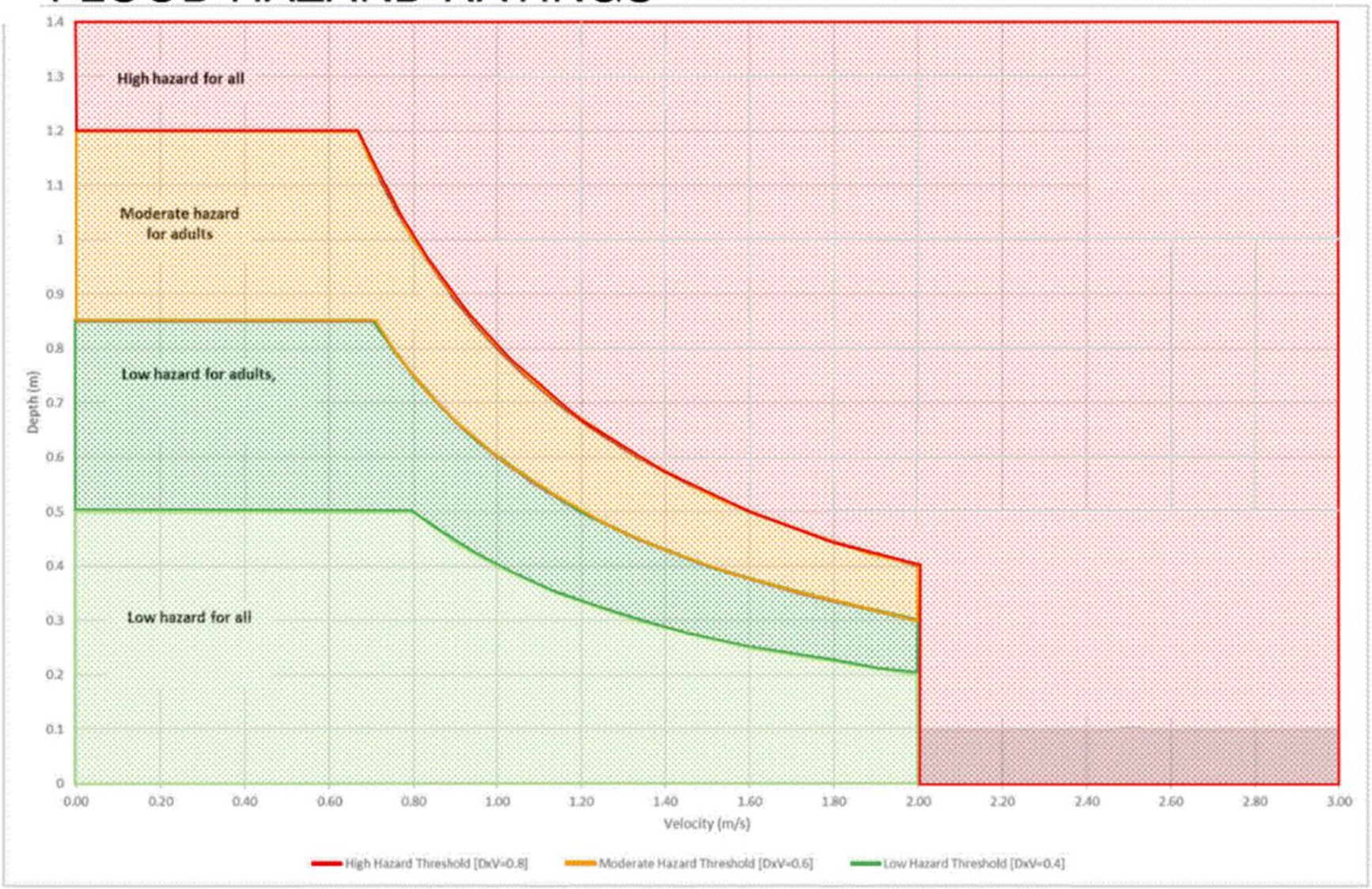
Hazard				Hazard to People Outside				
	The Danger Rating is determined based on the combination of the assessed Hazard Inside and Hazard Outside in accordance with this matrix.			Assess flood hazard along most likely evacuation route using the Flood Hazard Ratings Chart.				
	Conditions			An evacuation route is available and does not require wading	An evacuation route may be available but requires wading. Hazard is a function of depth and velocity of flooding along the evacuation route. (Refer to Flood Hazard Ratings Chart)			
		Hazard Rating		Very Low	Low hazard for all	Low hazard for adults	Moderate hazard	High hazard for all
			D & V Thresholds	n/a	(Refer to Flood Hazard Ratings Chart)	(Refer to Flood Hazard Ratings Chart)	(Refer to Flood Hazard Ratings Chart)	(Refer to Flood Hazard Ratings Chart)
Hazard to People Inside	Habitable floor remains dry	Very Low	Floodwaters are NOT touching the building footprint. Nil depth over habitable floor.					
			Floodwaters are touching the building footprint. Nil depth over habitable floor.					
	Habitable floor is wet.	Low hazard for all	Depth (D) over habitable floor: 0 ≤ D < 0.5m					
		Low hazard for able-bodied adults /	Depth (D) over habitable floor: 0.5 ≤ D < 0.85m					
		Moderate hazard	Depth (D) over habitable floor: 0.85 ≤ D < 1.2m					
		High hazard for all	Depth (D) over habitable floor: D ≥ 1.2m					

Assess flood hazard inside the building based on depth over building flood level (assuming V = 0 m/s inside the building). Building floor levels are to be based on existing available information or desk top assessment methods.

Intolerable Risk Threshold @ 1% AEP

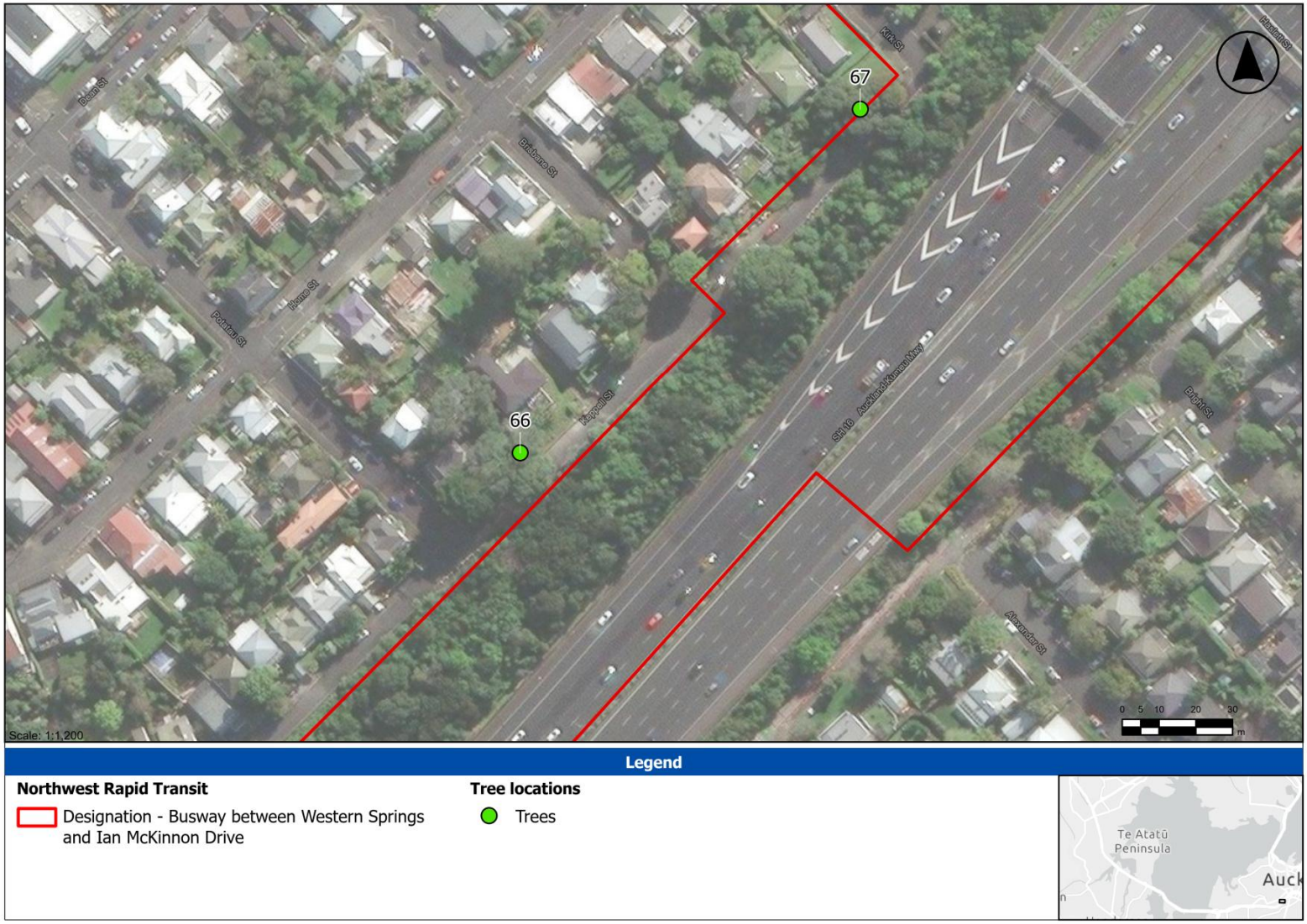
DANGER RATING KEY
- HIGH DANGER
- MODERATE DANGER
- LOW DANGER

FLOOD HAZARD RATINGS



Schedule C: Arch Hill Scenic Reserve

Schedule D: Tree Schedule



Schedule E: Geotechnical Design Statement

Schedule F: Identified PPFs

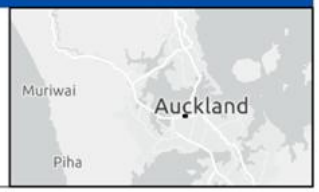
Legend

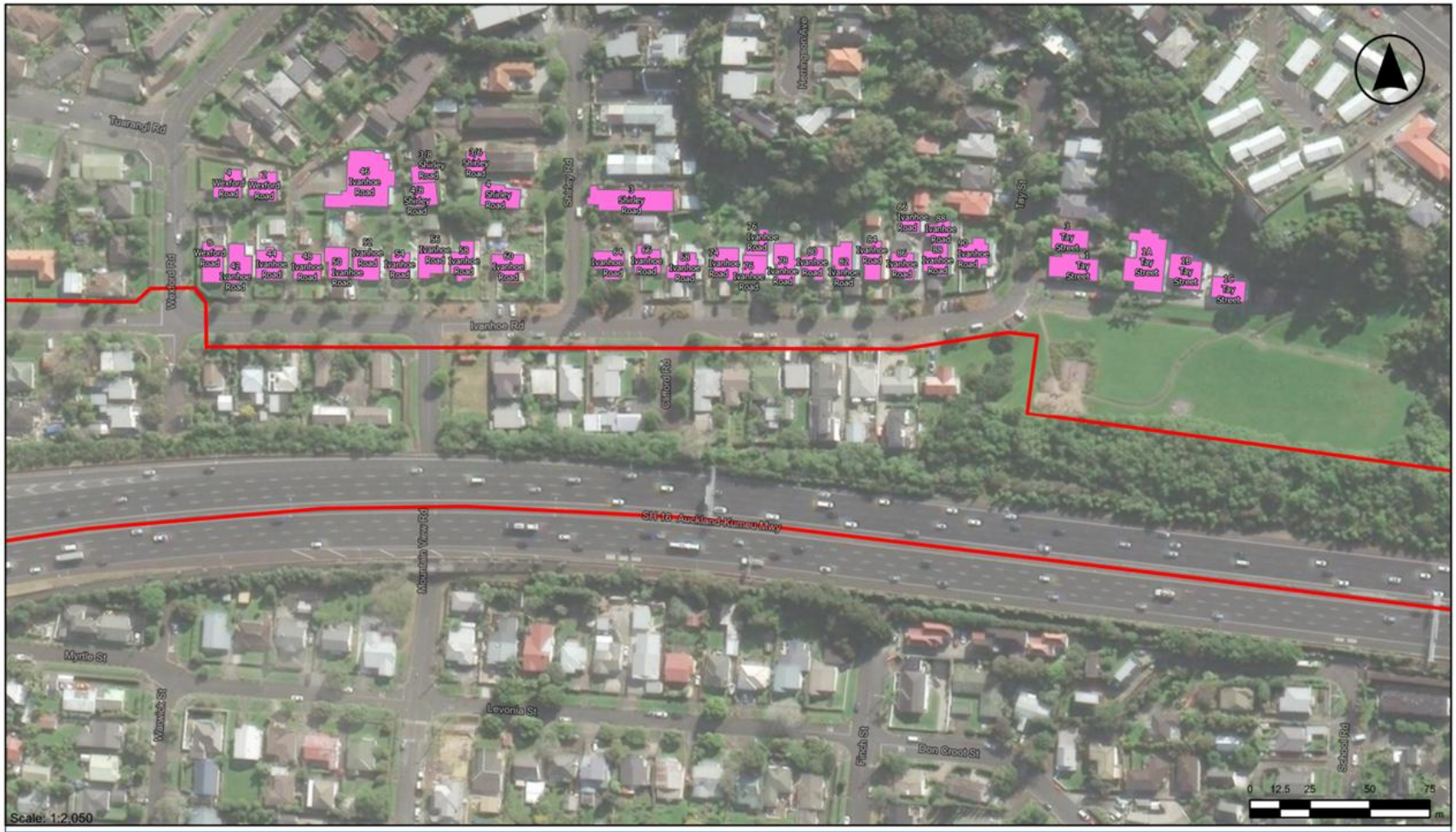
Northwest Rapid Transit

Designation - Busway between Western Springs and Ian McKinnon Drive

Protected Premises and Facilities

Building Outline





Legend

Northwest Rapid Transit

Designation - Busway between Western Springs and Ian McKinnon Drive

Protected Premises and Facilities

Building Outline

Legend

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