

ANNEXURE E: PROPOSED TRAFFIC NOISE CONDITIONS¹⁴⁸

Noise and Vibration Management – Operation	
DC.38	<p>For the purposes of Conditions DC.39 – DC.48, the following terms will have the following meanings:</p> <ul style="list-style-type: none"> ■ BPO – means Best Practicable Option ■ Building-modification Mitigation – has the same meaning as in NZS6806:2010 ■ Habitable space – has the same meaning as in NZS6806:2010 ■ Noise Criteria Categories – means groups of preference for time-averaged sound levels established in accordance with NZS6806:2010 when determining the selected mitigation option considered to be the BPO; i.e. Category A – primary noise criterion, Category B – secondary noise criterion, Category C – internal noise criterion. ■ NZS6806:2020 – means NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads. ■ PPFs – has the same meaning as in NZS6806:2010, and are generally identified in green, yellow or red in Appendix B of Technical Report 15. ■ Sector – means Sectors 1 to 4 of the Project as set out in the AEE. ■ Structural Mitigation – has the same meaning as in NZS6806:2010, which includes bunds and low noise road surfaces; ■ Traffic Noise Assessment – means Technical Report 15 submitted as part of the AEE for this Designation.
DC.39	<p>The detailed design of any structural mitigation measures shall be undertaken by a suitably qualified acoustics specialist prior to construction of the Project, and, subject to Condition DC.40, shall include, as a minimum, the following:</p> <ol style="list-style-type: none"> a) The location, length and height of noise barriers in general accordance with Appendix B of the traffic noise assessment; and b) A requirement that Open Graded Porous Asphalt ("OGPA") or equivalent low-noise generating road surface be used in general accordance with Appendix B of the traffic noise assessment.
DC.40	<ol style="list-style-type: none"> a) Where the design of the Detailed Mitigation Measures identifies a need to revise the noise mitigation measures as identified in Technical Report 15, EN-NV-020 to EV-NV-094 <u>EN-NV-001 to EN-NV-012</u> (for example, because it is not practicable to implement a particular mitigation in the same location, length, or height), the Requiring Authority shall submit the revised Detailed Mitigation Measures to the Council to certify either: <ol style="list-style-type: none"> i) If the design of the Structural Mitigation could be changed and the measure would still achieve the same Identified Category at all relevant PPFs, that the changed Structural Mitigation would be consistent with adopting the BPO in accordance with NZS6806:2010, the Detailed Mitigation Options may include the changed Structural Mitigation measures, or ii) If the changed design of the Structural mitigation would change the Noise Criteria Category at any PPF to a less stringent Noise Criteria Category, that the changed Structural Mitigation measure would be

¹⁴⁸ As contained in the documentation lodged with the EPA. The underlining or strike through and yellow highlighting shows the correction of various typographical errors.

	<p>consistent with adopting the BPO in accordance with NZS6806:2010.</p> <p>b) The information submitted with the Detailed Mitigation Measures shall include information to demonstrate that:</p> <p>i) The Best Practicable Option process was followed, involving acoustic, landscape, urban design, and other relevant expertise; and</p> <p>ii) The principles of the Landscape and Urban Design Framework (Technical Report 5) were applied.</p>
DC.41	<p>a) The Requiring Authority shall implement the traffic noise mitigation measures identified as the "Selected Mitigation Options" in Appendix B of the Traffic Noise Assessment as part of the Project, in order to achieve the Noise Criteria Categories indicated in Appendix B ("Identified Categories"), where practicable and subject to Conditions DC.39-40 above.</p> <p>b) The Detailed Mitigation options shall be implemented prior to completion of construction of the Project.</p>
DC.42	<p>Prior to construction of the Project, a suitably qualified acoustics specialist shall identify those PPFs which, following implementation of all the structural mitigation measures included in the Detailed Mitigation Options, are not in Noise Criteria Categories A or B and where Building-modification Mitigation in accordance with NZS 6806:2010 may be required to achieve 40 dB $L_{Aeq(24h)}$ inside habitable spaces ("Category C Buildings").</p>
DC.43	<p>a) Prior to commencement of construction of the Project in the vicinity of a Category C Building, the Requiring Authority shall write to the owner of each Category C Building seeking access to such building for the purpose of measuring internal noise levels and assessing the existing building envelope in relation to noise reduction performance.</p> <p>b) If the owner(s) of the Category C Building approve the Requiring Authority's access to the property within 12 months of the date of the Requiring Authority's letter (sent pursuant to Condition DC.43a), then no more than six months prior to commencement of construction of the Project in any Sector, the Requiring Authority shall instruct a suitably qualified acoustics specialist to visit the building to measure internal noise levels and assess the existing building envelope in relation to noise reduction performance.</p>
DC.44	<p>a) Where a Category C Building is identified, the Requiring Authority shall be deemed to have complied with Condition DC.43 above where:</p> <p>i) The Requiring Authority (through its acoustics specialist) has visited the building; or</p> <p>ii) The owner of the Category C Building consented to the Requirement Authority's request for access, but the Requiring Authority could not gain entry for some reason (such as entry being denied by a tenant); or</p> <p>iii) The owner of the Category C Building did not approve the Requiring Authority's access to the property within the time period set out in Conditions DC.43b) (including where the owner(s) did not respond to the Requiring Authority's letter (sent pursuant to Condition DC.43a) within that period)); or</p> <p>iv) The owner of the Category C Building cannot, after reasonable enquiry, be found prior to completion of construction of the Project.</p> <p>b) If any of (ii) to (iv) above apply to a particular Category C Building, the Requiring Authority shall not be required to implement any Building-modification Mitigation at that Category C Building.</p>

DC.45	<p>Subject to Condition DC.44, within six months of the assessment required under Condition DC.43b), the Requiring Authority shall give notice to the owner of each PPF identified under Condition DC.42:</p> <ul style="list-style-type: none"> a) Advising of the options available for Building-modification Mitigation to the building; and b) Advising that the owner has three months within which to decide and advise the Requiring Authority whether to accept Building- modification Mitigation for the building, and if the Requiring Authority has advised the owner that more than one option for Building-modification Mitigation is available, to advise the Requiring Authority which of those options the owner prefers.
DC.46	<p>Once an agreement on Building-Requiring Authority and the owner of an affected building, the mitigation shall be implemented in a reasonable and practical timeframe agreed between the Requiring Authority and the owner.</p>
DC.47	<p>Subject to Condition DC.46, where Building-modification Mitigation is required, the Requiring Authority DC.43(b) above where:</p> <ul style="list-style-type: none"> a) The Requiring Authority has completed Building-modification Mitigation to the Category C Building; or b) The owner(s) of the Category C Building did not accept the Requiring Authority's offer to implement Building-modification Mitigation prior to the expiry of the timeframe stated in Condition DC.43b) above (including where the owner(s) did not respond to the Requiring Authority within that period); or c) The owner of the Category C Building cannot, after reasonable enquiry, be found prior to completion of construction of the Project.
DC.48	<p>The Requiring Authority shall manage and maintain the Detailed Mitigation Options to ensure that, to the extent practicable, those mitigation measures retain their noise reduction performance.</p>
DC.50	<ul style="list-style-type: none"> a) Prior to construction, the Requiring Authority shall arrange for a suitably qualified and experienced acoustics specialist approved by the Manager to undertake a minimum of 8 (eight) representative measurements of ambient noise levels. Measurements shall be undertaken in accordance with the requirements of section 5.2 of NZS6806:2010. b) Following completion of the work, the NZTA shall arrange for a suitably qualified and experienced acoustics specialist approved by the Manager to undertake traffic noise monitoring at the same sites surveyed in Condition DC.50a) above, within 2 to 3 years following completion of construction of the Project. Measurements shall be undertaken in accordance with the requirements of section 5.2 of NZS6806:2010. c) The results of the noise level monitoring undertaken in accordance with Conditions DC.50a) and b) above shall be used to verify the computer noise model of the Detailed Mitigation Options. A report describing the findings of the verification shall be provided to the Manager within one month of it being completed.