



## APPENDIX 1 – DESIGNATIONS



## APPENDIX 2 – COASTAL PERMITS



## APPENDIX 3 – EXISTING AND PROPOSED DESIGNATION BOUNDARY MAPS



## APPENDIX 4 – SCHEDULE OF AFFECTED PROPERTIES



## APPENDIX 5 – WRITTEN APPROVALS

## 6722 State Highway 16 - Waterview Connection causeway to Patiki Road

Designation Number	6722
Requiring Authority	New Zealand Transport Agency
Location	State Highway 16 from the causeway to north of Patiki Road on-ramp, Avondale
Rollover Designation	Yes
Legacy Reference	Designation A07-01D, Auckland Council District Plan (Isthmus Section) 1999
Lapse Date	The period within which this designation shall lapse if not given effect to shall be June 2021, being ten years from the date on which it was confirmed in accordance with Section 184(1) of the Resource Management Act 1991

### Purpose

To alter designation 6722 (formerly A07-01), SH16, causeway and Rosebank Peninsula – NOR2. Alteration to existing designation at Rosebank Interchange and Patiki bridges, including part of Rosebank Park Domain; modifications to land on existing causeway, ancillary safety and operational services, and maintenance, relocation of services, pedestrian and cycleway, landscaping and planting etc.

### Conditions

For a complete set of conditions, refer to the Waterview Connection Proposal Board of Inquiry decision titled "Final Report and Decision of the Board of Inquiry into the New Zealand Transport Agency Waterview Connection Proposal - Volume 2" dated June 2011.

#### General Designation Conditions

DC.1

Except as modified by the conditions below, the works shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency (NZTA being the Requiring Authority), the Notice(s) of Requirement and the supporting documents, and supplementary information provided in evidence. This information is summarised as follows:

- (a) Waterview Connection Project. Assessment of Environmental Effects Report (dated August 2010). Parts A-E;
- (b) Waterview Connection Project. Assessment of Environmental Effects Report (dated August 2010). Part F: Plans and Drawings, except as updated through the hearing (Refer Schedule A for current plan and drawing references); and
- (c) Waterview Connection Project. Assessment of Environmental Effects Report (dated August 2010). Part G: Technical Reports:
  - (i) Technical Report G.1 Assessment of Air Quality Effects
  - (ii) Technical Report G.2 Assessment of Archaeological Effects
  - (iii) Technical Report G.3 Assessment of Avian Ecological Effects
  - (iv) Technical Report G.4 Assessment of Coastal Processes
  - (v) Technical Report G.5 Assessment of Construction Noise Effects
  - (vi) Technical Report G.6 Assessment of Freshwater Ecological Effects
  - (vii) Technical Report G.7 Assessment of Groundwater Effects
  - (viii) Technical Report G.8 Assessment of Herpetofauna Ecological Effects
  - (ix) Technical Report G.9 Assessment of Land and Groundwater Contamination
  - (x) Technical Report G.10 Assessment of Lighting Effects

- (xi) Technical Report G.11 Assessment of Marine Ecological Effects
- (xii) Technical Report G.12 Assessment of Operational Noise Effects
- (xiii) Technical Report G.13 Assessment of Ground Settlement Effects
- (xiv) Technical Report G.14 Assessment of Social Effects
- (xv) Technical Report G.15 Assessment of Stormwater and Streamworks Effects
- (xvi) Technical Report G.16 Assessment of Temporary Traffic Effects
- (xvii) Technical Report G.17 Assessment of Terrestrial Vegetation Effects
- (xviii) Technical Report G.18 Assessment of Transport Effects
- (xix) Technical Report G.19 Assessment of Vibration Effects
- (xx) Technical Report G.20 Assessment of Visual and Landscape Effects
- (xxi) Technical Report G.21 Construction Environmental Management Plan (CEMP)
- (xxii) Technical Report G.22 Erosion and Sediment Control Plan (ESCP)
- (xxiii) Technical Report G.23 Coastal Works
- (xxiv) Technical Report G.24 Geotechnical Interpretive Report
- (xxv) Technical Report G.25 Traffic Modelling Report
- (xxvi) Technical Report G.26 Operational Model Validation Report
- (xxvii) Technical Report G.27 Stormwater Design Philosophy Statement
- (xxviii) Technical Report G.28 Geotechnical Factual Report – 500 Series
- (xxix) Technical Report G.29 Geotechnical Factual Report – 700 Series
- (xxx) Technical Report G.30 Assessment of Associated Sediment and Contaminant Loads
- (xxxi) Technical Report G.31: Technical Addendum Report (September 2010)
- (d) PT & Active Mode Transport Routes Existing and Proposed (Refer Schedule A, Row 22).
- (e) Waterview Connection Project, Evidence and Supplementary Information provided to the Board of Inquiry:
  - (i) Evidence in Chief (Numbers 1-37)
  - (ii) Rebuttal Evidence (Numbers 1-33)
  - (iii) Supplementary Information (Numbers 1-8)

#### DC.1A

Within 3 months of the designations being confirmed for the Project (or at least 1 month prior to any Auckland Council approvals or certifications required by these Conditions, whichever is the earlier), the NZTA shall update and finalise to the satisfaction of the Major Infrastructure Team Manager, Auckland Council all drawings and Plans cited in Schedule A, and provide a full set of the information and documentation referred to in Condition DC.1 to the Major Infrastructure Team Manager Auckland Council. At the same time the NZTA shall prepare to the satisfaction of the Major Infrastructure Team Leader, Auckland Council, a document for each designation which sets out the designation and have attached to it in text format a comprehensive set of the conditions imposed by the Board of Inquiry in its Final Decision as summarised in Schedule B, inclusive of any standard conditions and advice notes.

In particular (but not limited to), the following Plans will need to be amended in light of these Final Conditions:

- (a) F.2 Operational Scheme Plans (refer Schedule A, Row 3) require amendment detailing the amended location of the ventilation stacks and southern ventilation buildings;
- (b) F.5 Construction Scheme Plans (refer Schedule A, Row 4) require amendment to detail changes to the construction footprint for the amended location of the ventilation stacks and southern ventilation buildings and reconfiguration of Construction Yard 1);
- (c) F.6 Construction Yard Plans 101 and 107 (refer Schedule A, Row 7), detailing amendments to the Construction Yard 1 in light of the reconfiguration of this Yard and for Construction Yard 7 in light of the relocation of the northern ventilation stack (refer Schedule A, Row 34);
- (d) F.8 Plans of Structures and Architectural Features (refer Schedule A, Row 9), detailing the amended location of the northern ventilation stack and the design and location of the southern ventilation building and stack;
- (e) The CNVMP (including flow diagram and the supplementary evidence produced by Ms Wilkening) (refer Schedule A, Rows 36, 37 and 39);
- (f) The areas of the Open Space Restoration Plans (Schedule A, Row 30) to:
  - (i) Extend these areas in geographic extent to provide for the works identified in the Management Plan notations

identified in the OS Conditions (in particular OS.5 and OS.6 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent) (e.g. these areas will (as relevant) include Eric Armishaw Park, Howlett Reserve and Waterview Esplanade Reserve); and

(ii) Exclude the operational area of designation required for the northern ventilation stack (as identified through the OPW process (refer Condition DC.8 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent)); and

(g) Schedule A, Row 28 the Plan detailing proposed open space impacts and replacements needs to be updated to recolour the two land parcels on Hendon Avenue (which are excluded from the replacement calculations) to 'brown' to confirm they are part of the operational impact and will not be returned as open space.

#### DC.2

The period within which this designation shall lapse if not given effect to shall be June 2021, being ten years from the date on which it was confirmed in accordance with Section 184(1) of the Resource Management Act 1991.

#### DC.3

The NZTA shall update and finalise the relevant Construction and Operational Management Plans required under these conditions to ensure compliance with the designation conditions imposed by the Board of Inquiry. The relevant Management Plans shall be submitted to the Major Infrastructure Team Manager, Auckland Council within the timeframes specified in the following conditions. No works shall be undertaken until the relevant management plans have been finalised and certified or approved in accordance with the relevant conditions.

#### DC.4

Any Management Plans submitted to the Major Infrastructure Team Manager, Auckland Council for approval or certification may be submitted in stages to reflect any proposed staging of the physical works. Plans submitted shall clearly show the integration with adjacent stages and interrelated activities.

#### DC.5

In the event of any dispute, disagreement or inaction arising as to any Auckland Council Manager certification/ approvals required by the designation conditions, or as to the implementation of or monitoring required by the conditions, matters shall be referred in the first instance to the NZTA Regional State Highway Manager and to the Resource Consents Manager, Auckland Council to determine a process of resolution. If a resolution cannot be agreed, then the matter may be referred to an independent appropriately qualified expert, agreeable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree. The independent appropriately qualified expert shall be appointed within 10 working days of the NZTA or Auckland Council giving notice of their intention to seek expert determination. The expert shall, as soon as possible, issue his or her decision on the matter. In making the decision, the expert shall be entitled to seek further information and hear from the parties as he or she sees fit.

Advice note: The dispute resolution process provided for in this condition does not prejudice any party's right to take enforcement action in relation to the implementation of the designation conditions. However, the dispute resolution process will be applied before any formal enforcement action is taken by the Council, except in urgent situations.

#### DC.6

Except for Conditions DC.7, DC.8 and DC.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, the NZTA shall be exempt from providing an Outline Plan of Works for the Project, as provided for in Section 176A (2)(a) and (b) of the RMA.

Advice note: The Construction and Operational Management Plans, together with the provision of detailed drawings required by Condition DC.1(b) are considered sufficient detail in all aspects of the Project, with the exception of proposed works for the northern and southern ventilation buildings and stacks where further details



are required.

#### DC.10

The NZTA shall give notice to the Manager Regional and Local Planning, Auckland Council in accordance with Section 182 and 181 respectively of the RMA for:

(a) Within six months of the State highway opening (being operational), removal of those parts of the designation that are not required for the long term operation, maintenance and mitigation of effects of the State highway.

Note: this condition is specific to land no longer required for construction purposes once the Project is completed and includes the land of 6 Barrymore Road, refer Condition OS.17 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

(b) The designation to be altered to remove those conditions no longer required for long term operation and maintenance of the Project.

#### DC.12

Unless otherwise provided for by Condition RC.2 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, if any monitoring required to be undertaken by any party by the designation conditions indicates non-compliance with any designation condition, the NZTA must provide written notice to the Major Infrastructure Team Manager Auckland Council as soon as it becomes aware of same, stating the following:

(a) A description of the non-compliance; and

(b) The measures NZTA proposes for addressing the non-compliance, including any additional mitigation measures.

Subject to the Council's approval, the NZTA must implement the additional mitigation measures to address the non-compliance.

#### DC.13

Pursuant to Section 36(1)(d) of the RMA, the requiring authority is required to pay to Auckland Council any administrative charge for the carrying out by the local authority of its functions in relation to the administration, monitoring, and supervision of designation conditions.

#### DC.14

The servants of agents of Auckland Council shall be permitted to have access to relevant parts of the Project at all reasonable times for the purpose of carrying out inspections, investigations, tests, measurements and/or to take samples.

### **Construction Environment Management Plan Conditions**

#### CEMP.1

Except where provided for in Condition CEMP.1A of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, the NZTA shall update and finalise the draft Construction Environmental Management Plan (CEMP) including all the Management Plans which form part of the CEMP and are included as appendices, submitted with this application to ensure compliance with the consent and designation conditions imposed by the Board of Inquiry. The CEMP shall be provided to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to the commencement of works to certify compliance and consistency with the conditions. Construction shall not commence until certification is obtained.

Advice note: For clarity the CEMP will be updated and finalised in accordance with the conditions. Any amendments will be limited to reflecting the requirements of the conditions, specifying personnel, and completing the Environmental Risk Register.

Advice note: Particular care must be taken with development and operation of Construction Yard 7. When the CEMP is being updated and finalised, consideration must be given to the contents of the draft SSCEMP prepared for Construction Yard 7 (Row 41, Schedule A) recognising changes required by inclusion of the ventilation stack in

this yard.

#### CEMP.2

The certification process of the CEMP (and its appendices) shall confirm that the CEMP gives effect to the relevant conditions, as well as those matters in CEMP.6, and that it includes details of:

- (a) Staff and contractors' responsibilities;
- (b) Training requirements for employees, sub-contractors and visitors;
- (c) Environmental incident and emergency management;
- (d) Communication and interface procedures (in accordance with the Communication Plan required under Condition PI.2);
- (e) Environmental complaints management (including the procedures required under Condition PI.4);
- (f) Compliance monitoring;
- (g) Reporting (including detail on the frequency of reporting to the Auckland Council);
- (h) Environmental auditing; and
- (i) Corrective action.

#### CEMP.3

The management of key environmental effects associated with the construction phase of the Project is detailed within environmental management plans that are included in the CEMP as appendices. This suite of management plans as shown on Figure CEMP.A comprises:

- (a) Construction Noise and Vibration Management Plan (CNVMP);
- (b) Construction Air Quality Management Plan (CAQMP);
- (c) Erosion and Sediment Control Plan (ESCP);
- (d) Temporary Stormwater Management Plan (TSMP);
- (e) Ecological Management Plan (ECOMP);
- (f) Groundwater Management Plan (GWMP);
- (g) Settlement Effects Management Plan (SEMP);
- (h) Contaminated Soils Management Plan (CSMP);
- (i) Hazardous Substances Management Plan (HSMP);
- (j) Archaeological Site Management Plan (ASMP);
- (k) Construction Traffic Management Plan (CTMP);
- (l) Concrete Batching and Crushing Plant Management Plan (CBCPMP);
- (m) Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP) (to be prepared in accordance with Condition CEMP.15);
- (n) Waste Management Plan (to be prepared in accordance with Condition CEMP.10); and
- (o) Temporary Construction Lighting Management Plan (to be prepared in accordance with Condition L.2).

#### CEMP.4

The CEMP shall be implemented and maintained throughout the entire construction period.

#### CEMP.5

A copy of the CEMP shall be held on each construction site at all times and be available for inspection on request by the Auckland Council.

#### CEMP.6

The finalised CEMP shall include specific details on demolition, construction and management of all works associated with the Project. The certification process of the CEMP shall confirm that the CEMP includes details of the following:

- (a) Details of the site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- (b) The location of large notice boards that clearly identify the NZTA and the Project name, together with the name, telephone, email address and address for service of the site or Project manager and the community liaison person;

- (c) An outline construction programme of the work indicating in particular likely time periods for road closures and anticipated traffic diversion effects;
- (d) The hours of work, which should reflect the need to ensure that residents enjoy reasonable freedom from noisy or intrusive construction activity in their neighbourhood at night, on Sundays and during public holidays;
- (e) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/ storage of rubbish, storage and unloading of building materials and similar construction activities;
- (f) Location of worker's offices and conveniences (e.g. portaloos);
- (g) Procedures of controlling sediment run-off, dust and the removal of soil, debris and demolition and construction materials from public roads or places. Dust mitigation measures should include use of water sprays to control dust nuisance on dry or windy days;
- (h) Methods to stabilise ingress and egress points to construction sites, to the standard required by ARC Technical Publication 90 (Nov 2007);
- (i) Procedures for ensuring that residents within 100m of construction areas or other people whose use of an area may be disrupted by construction works (for example the Te Atatu Boating Club for works on the Whau River) are given notice of the commencement of construction activities and are informed about the expected duration of the works, including potentially through the community liaison person;
- (j) Procedures to be followed to ensure that those working in the vicinity of identified heritage and ecological features are aware of the heritage or ecological values of these features and the steps which need to be taken to meet the conditions applying to work on the site;
- (k) Means of ensuring the safety of the general public;
- (l) Procedures for the community liaison person to receive and respond to complaints about construction activities, including dust and odour from the works;
- (m) Methods of mitigating the local and network wide effects of construction of individual elements of the Project, including measures to ensure that parking of staff vehicles on surrounding streets is restricted;
- (n) All temporary boundary/ security fences shall be maintained in good order, with any graffiti removed as soon as possible;
- (o) Confirmation of a Project Arborist and completion of a STEM assessment of the preliminary list of Amenity Trees in Schedule E.7 of the AEE to confirm the final Amenity Trees; and
- (p) The process to minimise removal of Amenity Trees, maximise the protection of those retained, undertake relocation of Amenity Trees and replacement planting of specimen trees (in accordance with Conditions LV.10 and ARCH.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent)).
- (q) Advice note: For the purposes of CEMP.6(o) and (p), Amenity Tree is defined as a tree or trees that contribute significantly to amenity, taking into account its form, size, health, ecological or historical significance (a preliminary list of these trees is provided in Appendix E.7 of the AEE).

#### CEMP.7

The layout of the 12 Construction Yards, including associated buildings, fencing and site access shall be developed in accordance with Waterview Connection Project Construction Yards Plans (Refer Schedule A, Row 7). The layout drawings shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to the occupation of the yard, for review and certification that the final layout of the construction yards is in accordance with the conditions. The layout drawings shall incorporate the following:

- (a) The main access to the construction yards to be located as far as practicable from residential dwellings, taking into account site and public safety and environmental constraints, in the locations shown on Waterview Connection Project Construction Yards Drawings (Refer Schedule A, Row 7);
  - (b) Noisy construction activities to be located as far as practicable, and preferably no less than 100m, from residential dwellings; Construction of temporary boundary/ security fences to be undertaken in a manner which minimises impacts on existing trees;
  - (c) Temporary acoustic fences and visual barriers;
  - (d) Temporary buildings greater than 8 metres in height to be located in a position which minimises visual impact on adjacent residential dwellings; and
- Location of workers' and Project vehicle parking.

#### CEMP.8

All storage of material and equipment associated with the construction works shall take place within the boundaries of the designation.

#### CEMP.9

Temporary protection shall be installed to prevent vehicles damaging drains, footpaths, berms, kerbs, vehicle crossings and the roads during the site preparation and construction phase of the Project. Any damage to the drains, footpaths, berms, kerbs, vehicle crossings and the road attributable to any vehicle associated with construction activities shall be repaired to the same or similar standards as existed prior to such damage at no cost to the Auckland Council.

#### CEMP.10

The NZTA shall finalise and implement the Hazardous Substances Management Plan (HSMP), through the CEMP (as per Condition CEMP.1), submitted with this application, prior to works commencing on site. The certification process of the CEMP shall confirm that the HSMP clearly identifies the requirements for proper storage, handling, transport and disposal of hazardous substances during the construction phase of the Project and confirm that there shall be no storage of explosives on the Project site.

#### CEMP.11

The NZTA shall develop and implement a Waste Management Plan in accordance with the waste management principles, controls and methods set out in the CEMP. The Plan shall be provided to the Major Infrastructure Team Manager, Auckland Council and be implemented throughout the entire construction period.

#### CEMP.12

The CEMP shall be reviewed by the NZTA at least annually or as a result of a material change to the Project. The review shall take into consideration:

- (a) Compliance with designation and consent conditions;
- (b) Any changes to construction methods;
- (c) Key changes to roles and responsibilities within the Project;
- (d) Changes in industry best practice standards;
- (e) Changes in legal or other requirements;
- (f) Results of inspections, monitoring, incidents, corrective actions, internal or external assessments; and
- (g) Public complaints.

A summary of the review process undertaken shall be kept by the NZTA, provided annually to the Major Infrastructure Team Manager, Auckland Council and made available (with any related data) to the Auckland Council upon request.

#### CEMP.13

Following the review process (as described in Condition CEMP.12), the CEMP may require updating. Any material change proposed to the CEMP (including appended Management Plans) shall be submitted for approval to the Major Infrastructure Team Manager, Auckland Council at least 10 working days prior to the proposed changes taking effect.

#### Advice Note:

Material change will include amendment to any base information informing the CEMP or any process, procedure or method of the CEMP (such as the environmental constraints map, compliance monitoring process, complaints procedure or mitigation / remedial methods identified) which has the potential to increase adverse effects on a particular value. For clarity changes to personnel and contact schedules do not constitute a material change.

#### CEMP.14

The CEMP shall include, as an appendix, an Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP). The EISDCMP shall be provided to the Major Infrastructure Team Manager, Auckland Council, and include:

- (a) Methods and measures:

- (i) To ensure that the existing high voltage infrastructure can be accessed for maintenance at all reasonable times, or emergency works at all times, during and after construction activities.
  - (ii) To appropriately 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 the overhead transmission lines
  - (iii) To ensure that no activity is undertaken during construction that would result in ground vibrations and/or ground instability likely to cause material damage to the transmission lines, including support structures.
  - (iv) To ensure that changes to the drainage patterns and runoff characteristics do not result in adverse effects from stormwater on the foundations for any high voltage transmission line support structure.
- (b) Sufficient detail to confirm that new planting and maintenance of vegetation will comply with the New Zealand Electricity (Hazard from Trees) Regulations 2003, including, but not limited to, the provisions of Schedule (Growth Limit Zones) to those Regulations.
- (c) Sufficient detail to confirm that the works will comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001), including, but not limited to, the provisions of:
- (i) Clause 2.2 with respect to excavations near overhead support structures;
  - (ii) Clause 2.4 with respect to buildings near overhead support structures;
  - (iii) Section 3 with respect to minimum separation between buildings and conductors;
  - (iv) Section 5 with respect to minimum safe distances for the operation of mobile plant; and,
  - (v) Table 4 with respect to minimum safe separation distances between the ground and the overhead conductors.
- (d) Confirmation that Transpower has been provided a copy of the EISCDMP for their review at least 20 working days prior to construction.

Advice note: With respect to clause (c), specific consideration must be given to the height and location of temporary structures (such as Project offices and other construction site facilities) and permanent structures (such as lighting poles, signage, gantries and acoustic barriers).

#### CEMP.15

The NZTA will be responsible for all service relocations required for construction of the Project. The NZTA shall liaise with the providers of infrastructure service networks (including, but not limited to water, gas, stormwater, wastewater, power and telecommunications), and private property owners with on-site services to develop methodologies and timing for necessary services relocation required for the Project, with the objective of minimising disruption to the operation of these service networks and onsite services.

Advice note:

- (a) It is noted that if separate consents are required for relocations for any services of network utility operators or landowners, such consents will be obtained before construction commences in the relevant area, and any effects of those relocations would be considered at that time. The same applies to any alteration of consents if required.
- (b) Network infrastructure owned and operated by Watercare Services is located within the designations. An operating agreement will be developed by the NZTA and Watercare Services which will include appropriate notification and access protocols where works are to be undertaken by either network operator on or adjacent to Watercare Services infrastructure within the designations.

#### **Public Information Conditions**

##### PI.1.

A community liaison person shall be appointed by the NZTA for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the Project. The liaison person's name and contact details shall be made available in the CEMP and on site signage by the NZTA. This person must be reasonably available for on-going consultation on all matters of concern to affected parties arising from the Project.

##### PI.2.

The NZTA shall prepare and implement a Communications Plan that sets out procedures detailing how the public, Ministry of Social Development, Housing New Zealand Corporation and other organisations representing

the particular demographic characteristics of the community (including but not limited to Primary Health Organisations, general practitioners, youth, education organisations, aged care groups and groups representing ethnic and migrant communities) will be communicated with throughout the construction and monitoring periods (as prescribed in the designation and consent conditions).

In preparing the Communications Plan, the NZTA will liaise with Auckland Council to access its community liaison databases. The Communications Plan will include details of:

- (a) The site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- (b) In accordance with these Conditions, the database of the key construction activities and monitoring requirements that are the subject of the Communications Plan;
- (c) The database of stakeholders and residents who will be communicated with;
- (d) Communication methods, an assessment of how these methods reach the different audience/ stakeholder groups (including those methods set out in Condition CEMP.6), and detail on when each of these methods will be used (e.g. regular communication or event specific methods);
- (e) The appointed specialist in Environmental and Occupational Medicine, including contact details (as per Condition SO.13 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- (f) Any stakeholder specific communication plans required; and
- (g) Monitoring and review procedures for the Communications Plan.

The Communications Plan shall be written in accordance with the external communication procedures set out in the CEMP and provided at least 20 working days prior to construction commencing, to the Major Infrastructure Team Manager, Auckland Council, Working Liaison Group and the Community Liaison Group(s) established by Condition PI.5. The structure of the communication groups set out in these conditions is attached as Figure PI.A.

#### PI.3.

At least 15 working days prior to the commencement of construction, and at 15 working day intervals thereafter, or as required depending on the scale of works and effects on the community, advertisements will be placed in the relevant local newspapers and community notice boards (as identified in Condition CEMP.6(b)) detailing the nature of the forthcoming works, the location of the forthcoming works and hours of operation. All advertisements will include reference to a 24 hour toll free complaints telephone number. Where relevant, advertisements will also include but not be limited to details of:

- (a) Any traffic disruptions or controls or changes to property access, pedestrian/ cycle routes and bus stops; and
- (b) Any other construction activities, including night time works, blasting, and structure-borne noise, as identified in the conditions.

#### PI.4.

The NZTA shall manage, investigate and resolve (as appropriate) all complaints for the duration of the construction works in accordance with the environmental complaints section of the CEMP. The implementation strategy for complaints includes:

- (a) A 24 hour toll free telephone number and email address, which shall be provided to all potentially affected residents and businesses. The number shall be available and answered at all times during the entire duration of the works for the receipt and management of any complaints. A sign containing the contact details shall be located at each site specific work activity;
- (b) The NZTA shall maintain a record of all complaints made to this number, email or any site office, including the full details of the complainant and the nature of the complaint;
- (c) Upon receiving a complaint, within 10 days of complaint receipt, a formal written response will be provided to the complainant and Auckland Council;
- (d) The NZTA shall undertake corrective action where necessary to resolve any problem identified. All action taken and relevant information shall be documented. For the avoidance of doubt, 'where necessary' refers to where the works are not being carried out in accordance with conditions of this designation;
- (e) Where issues and complaints about effects cannot be resolved through the CEMP complaints management process, a meeting shall be held between the NZTA, the complainant and the Auckland Council representative(s) to discuss the complaint and ways in which the issue may be resolved. If parties cannot agree

on a resolution, an independent qualified mediator will be appointed, agreeable to all parties and at the shared cost of all parties, to undertake mediation of the dispute or concerns; and

(f) All information collected in Conditions PI.4 (b), (c) and (d) shall be detailed in a Construction Compliance Report (including the means by which the complaint was addressed, whether resolution was reached and how the response was carried out) prepared by the NZTA. This Report shall be submitted to the Major Infrastructure Team Manager, Auckland Council on a quarterly basis commencing at the beginning of the works and for the entire duration of construction.

#### PI.5.

The NZTA shall establish Community Liaison Group(s) at least two months prior to construction commencing in each of the following key construction areas:

- (a) Te Atatu (including the SH16 Causeway)
- (b) Waterview (including works to St Lukes on SH16 and on the Waterview Estuary and Causeway Bridges)
- (c) Owairaka

and hold regular meetings (at least three monthly) throughout the construction period and up to 24 months following construction completion relevant to these areas (or less if the members of the Group agree), so that on-going monitoring information can continue to be disseminated.

The Community Liaison Group(s) shall be open to all interested parties within the Project area including, but not limited to the following groups:

- (a) Auckland Council and Auckland Transport;
- (b) Educational facilities within the Project area (including schools, kindergartens, childcare facilities and Unitec Institute of Technology);
- (c) Relevant community/ environmental groups (including but not limited to Friends of Oakley Creek, Star Mills Preservation Group, Cycle Action Auckland and representatives from those organisations identified in the Communications Plan (as required by Condition PI.2) and local residents;
- (d) Department of Conservation;
- (e) Local Boards;
- (f) Iwi groups with Mana Whenua;
- (g) Public transport providers; and
- (h) Housing New Zealand Corporation.

Advice note: The purpose of the Community Liaison Group(s) is to provide a regular forum through which information about the Project can be provided to the community, and an opportunity for concerns or issues to be raised.

#### PI.6.

The Community Liaison Group(s) shall be provided opportunities to review and comment on the following (amongst other things):

- (a) The Outline Plan of Works detailing designs for the northern and southern ventilation buildings and stacks (the outcomes of this consultation will be reported in accordance with the processes required in Condition DC.8(n) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent and Condition DC.9(k);
- (b) The Open Space Restoration Plans (as required by Condition OS.3);
- (c) Finalisation and amendment to Urban Design and Landscape Plans (UDL Plans) (as required by Condition LV.1);
- (d) The Oakley Inlet Heritage Plan (as required by Conditions OS.5(b)(i) and ARCH.6 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- (e) The detail of the Oakley Creek restoration (as required by Condition STW.20 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- (f) Publicly available results of environmental monitoring as required by the designation and/or these Consents (e.g. air quality monitoring); and
- (g) The finalisation of the STEM assessment required by CEMP.6(o) and a schedule of trees that are required to be removed for consideration of timber use in heritage projects (as required by Condition SO.7).

Advice Note: Attention is drawn to the Vegetation conditions concerning identification and protection of Significant Vegetation and Valued Vegetation.

(h) Detailed design features of the Te Atatu underpass (e.g. lighting and architectural treatment).

### **Temporary Traffic Conditions**

#### **TT.1**

The NZTA shall update and finalise the Construction Traffic Management Plan (CTMP) submitted with this application, in accordance with these conditions, and implement it through the CEMP.

In finalising the CTMP, the NZTA shall:

- (a) Provide simulation modelling demonstrations to better understand the effects of construction of the Project on the affected road network;
- (b) Include measures to avoid road closures and restrictions of vehicle, bus, cycle and pedestrian movements;
- (c) Where road closures or restrictions cannot reasonably be avoided the particular vulnerabilities and sensitivities of pedestrian diversions and restricted conditions shall be taken into account in the planning of any closures or restrictions.

#### **TT.2**

The CTMP shall require the development of Site Specific Traffic Management Plans (SSTMPs) and their approval by the Traffic Management Project Governance Group (as defined by the CTMP), for each construction activity that may affect traffic or transportation infrastructure and services. The SSTMPs shall be provided to the Traffic Management Coordinator(s) for the relevant Road Controlling Authority at least 10 working days prior to each construction activity.

#### **TT.3**

Each SSTMP shall describe the measures that will be undertaken to avoid, remedy or mitigate the local and network wide effects of construction of the Project. In particular, the SSTMP shall include the following matters:

- (a) Traffic management measures to address and maintain, traffic capacity, including bus services, at peak traffic periods during weekdays (6:00 to 9:00 and 16:00 to 19:00) and peak traffic periods at weekends (including Te Atatu Road, Great North Road and Richardson Road);
- (b) Methods to manage the effects of traffic during construction including the requirement to detour or divert traffic. These methods shall seek to avoid, remedy or mitigate effects on access to and from businesses and other organisations in the area;
- (c) Any road closures that will be required and the nature and duration of any traffic management measures that will result, including any temporary restrictions, detours or diversions for general traffic and buses;
- (d) Methods to avoid, remedy or mitigate the local and network wide effects of the construction of individual elements of the project (e.g. intersections/ overbridges) and the use of staging to allow sections of the Project to be opened to the traffic while other sections are still under construction;
- (e) Methods to manage the effects of the delivery of construction material, plant and machinery (including cranes and oversized trucks) during construction;
- (f) Any routes where construction traffic movements will be restricted (either for particular times for construction periods);
- (g) Measures to maintain existing vehicle access, as far as practicable, or where the existing property access is to be removed or becomes unsafe as a result of the construction works, measures to provide alternative access arrangements in consultation with the Auckland Council and the affected landowner; and
- (h) Measures to maintain pedestrian and cycle access with thoroughfare to be maintained on all roads and footpaths adjacent to the construction works, where practicable (e.g. unless provision of such access is severed by the works or such access will become unsafe as a result of the construction works). Such access shall be safe, clearly identifiable, provide permanent surfacing and seek to minimise significant detours. (This Condition does not act as a qualification to the commitment to maintain access to open space and education facilities, as required in Condition OS.13).

#### **TT.4**



The SSTMPs shall include traffic management measures developed in consultation with the Auckland Transport, Bus and Coach Association and the Auckland Council, to address and maintain, where practicable, existing levels of service for buses particularly at peak periods (6:00 to 9:00 and 16:00 to 19:00) on weekdays.

#### TT.5

The NZTA shall consult with the Traffic Operations Manager, Auckland Transport with regard to the most appropriate means for providing access on Council roads within and adjacent to the designation. The NZTA shall also coordinate and consult directly with the proponents of any major construction or major traffic generating event occurring concurrently with, and in the vicinity of the Project.

#### TT.6

The SSTMPs shall include measures developed in consultation with Auckland Transport to, as far as practicable, enable continued public walking and cycling passage along the existing Northwestern Cycleway (between Te Atatu Interchange and St Lukes Interchange) and along Great North Road and the public walkway along Oakley Creek, with any interruptions being as short as feasible.

#### TT.7

The NZTA shall undertake construction works so as to avoid significant long duration impacts or the full closure of Te Atatu Road for all road users heading to or from the Te Atatu Peninsula and to ensure that access for emergency service vehicles is maintained.

#### TT.8

The NZTA shall restrict construction truck movements during peak hours (6:00 to 9:00 and 16:00 to 19:00) on weekdays and during the peak periods at the weekends to avoid the following:

- (a) Te Atatu Road Interchange, during both morning and afternoon peak hours
- (b) Great North Road Interchange, city bound during the morning peak hours
- (c) Great North Road Interchange, west bound onto SH16 and southbound onto Great North road during the afternoon peak.

Construction truck movements during these hours shall only be allowed under exceptional circumstances agreed in advance with the Traffic Management Project Governance Group.

#### TT.9

The NZTA shall maintain at least the existing active traffic lane configuration capacity on SH16, at the Te Atatu Interchange area, Te Atatu Road, Richardson Road and on Great North Road during peak periods being 6:00 to 9:00 and 16:00 to 19:00 on weekdays and during the peak periods on weekends, for the duration of the temporary construction programme.

#### TT.10

The NZTA shall monitor the impact of construction traffic in terms of traffic speeds and volumes on SH16, Great North Road, Te Atatu Road and Richardson Road throughout the construction period to confirm the expected traffic effects as set out in the Temporary Traffic Assessment (Technical Report G.16) submitted with this application.

- (a) This monitoring will be undertaken on a daily, weekly and monthly basis; and
- (b) Monitoring results will be made available to the Traffic Operations Manager, Auckland Transport on request.

#### TT.11

If monitoring undertaken pursuant to Condition TT.10 indicates that traffic volumes or traffic conditions are significantly different from those expected, the SSTMPs will be reviewed and as appropriate amended to the satisfaction of the Traffic Management Project Governance Group.

### **Operational Traffic Conditions**

#### **Integration with Local Road Network**

#### OT.1

The NZTA shall prepare in collaboration with Auckland Transport a Network Integration Plan (NIP) for the Project, or relevant Project phases, to demonstrate how the Project integrates with the existing local road network and with future improvements (identified in the Western Ring Route (Northwest) Network Plan) planned by the Auckland Council. The NIP shall include details of proposed physical works at the interface between the State highway and the local road network, and shall address such matters as pedestrian/ cycle ways, lane configuration, traffic signal co-ordination, signage and provision for buses

In addition, the NIP will address:

- (a) The commitment of the NZTA to progress bus priority measures northbound on Great North Road as part of the reinstatement of Great North Road, as proposed by Auckland Transport and indicated on the Plans Great North Road Option 1 Proposed Road Marking (Schedule A, Row 33), subject to the agreement with Auckland Transport;
- (b) How the works committed to by the NZTA for pedestrian and cycle ways, as detailed in the PT and Active Mode Transport Routes Plan Set (Condition DC.1(d) (refer Schedule A, Row 22)), integrate with pedestrian and cycle ways on the wider transport network;
- (c) The Richardson Road Bridge, which shall be designed in general accordance with the structural plans (Schedule A, Row 9) and the commitment of the NZTA to provide a 2m footpath on Richardson Road Bridge, subject to confirming appropriate bus stop locations with Auckland Transport;
- (d) Integration of the works proposed on Te Atatu Road to appropriately transition between the Waterview Connection Project and any projects being progressed by Auckland Transport;
- (e) Opportunities to review traffic signal timings at the Te Atatu Interchange with a view to minimising delays to all users, including cyclists on the SH16 cycle way; and
- (f) The commitment of the NZTA to provide for cycle “aspects” (cycle signal lights) at the Great North Road Interchange; and
- (g) As part of detailed design at the Te Atatu Interchange, the installation of underpasses and/or overbridges, provided however that should some not prove feasible in civil or traffic engineering design terms, the installation of coordinated traffic signal operation for cyclists on the north-western cycleway by means of synchronised cycle lights which seek to reduce delays for cyclists.

Works identified in the NIP which are the responsibility of the NZTA, will be undertaken as at the time of construction works for the Project.

#### **Noise and Vibration Conditions – Construction**

##### CNV.1

The NZTA shall finalise and implement through the CEMP, a Construction Noise and Vibration Management Plan (CNVMP) throughout the entire construction period of the Project.

The CNVMP shall describe the measures adopted to meet:

- (a) the noise criteria set out in Condition CNV.2 and Condition CNV.3 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent;
- (b) the vibration criteria set out in Condition CNV.4 below; or
- (c) where (a) or (b) cannot be met, the process that will be followed to appropriately mitigate noise and vibration effects including methods that may be applied outside the designation.

The CNVMP shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to construction activities being undertaken for review and certification that the CNVMP, as a minimum, addresses the following:

- (i) Construction noise and vibration criteria (Condition CNV.2, Condition CNV.3 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, and Condition CNV.4);
- (ii) Hours of operation, including times and days when noisy and/or vibration inducing construction activities would occur;
- (iii) Machinery and equipment to be used;
- (iv) Vibration testing of equipment to confirm safe distances to buildings prior to construction;
- (v) Preparation of building condition surveys of critical dwellings prior to, during and after completion of

construction works;

(vi) Roles and responsibilities of personnel on site;

(vii) Construction operator training procedures;

(viii) Methods for monitoring and reporting on construction noise and vibration;

(ix) A hierarchy of mitigation options that will be assessed for the Project noise mitigation, including alternative strategies where full compliance with the relevant noise and/or vibration criteria cannot be achieved;

(x) Management schedules containing site specific information;

(xi) Measures for liaising with and notifying potentially affected receivers of proposed construction activities and the potential for noise and vibration effects, specifically:

- PPFs located within a horizontal distance of 35 metres of underground excavation works, along the tunnel alignment shall receive prior notification not greater than 7 days (and not less than 24 hours) prior to the commencement of works.

- Methods for ensuring residents affected by night works (within 100m of the construction site night works, as defined on the maps (refer Schedule A, Row 35)) are notified of such works (i.e. any works during the hours of 20:00 to 06:30) at least 5 days prior to the commencement of any such work.

- The maps showing PPFs to be notified of night works (refer Schedule A, Row 35), shall be reviewed and included within the CNVMP.

(xii) Methods for receiving and handling complaints about construction noise and vibration;

(xiii) Measures for preventing the occurrence of rogue fly rock, including management of charge weights and face loading procedures, stemming of charge holes and profiling of the face to maintain minimum burden (face cover);

(xiv) Investigations on the practicability of implementing permanent noise mitigation works for construction mitigation (as per Condition CNV.7);

(xv) Investigations of the practicability of implementing Building Modification mitigation, as required in accordance with Conditions ON.6 and ON.11, prior to commencement of construction within 100m of the relevant PPFs (including those on the Unitec site); and

(xvi) The process for developing Site Specific Noise Management Plans (SSNMP), in accordance with the SSNMP Flow Chart (refer Schedule A, Row 36), including templates and a certification process for the Major Infrastructure Team Manager, Auckland Council (in accordance with Condition CNV.13) to confirm the process of SSNMP review of noise mitigation options where, the modelled/predicted levels or subsequent actual levels exceed the criteria in Conditions CNV.2 and/or CNV.4.

#### CNV.2

Except where certified by the Council through the SSNMP (in accordance with Condition CNV.13), construction noise (excluding noise from blasting Monday to Saturday inclusive) shall be measured and assessed in accordance with NZS 6803:1999 "Acoustics - Construction Noise" and shall comply with the following criteria:

Note: In Condition CNV.2 (T) means a duration between 15 minutes and 60 minutes, in accordance with NZS6803:1999.

#### (a) Project Construction Noise Criteria: Residential Receivers

Time of Week	Time period	Project Construction Noise Criteria (Long Term Construction)		
		dB		
		Sectors 1-7	Sectors 8-9	All Sectors
		LAeq(T)	LAeq(T)	LAeq(T)
Monday- Saturday	0630-0730	60	45	75
	0730-1800	70	70	85
	1800-2000	65	65	80
	2000-0630	60	45	75
Sundays and Public Holidays	0630-0730	45	45	75
	0730-1800	60	45	85
	1800-2000	45	45	75
	2000-0630	45	45	75

(b) Project Construction Noise Criteria: Commercial and Industrial Receivers

Time Period	Project Construction Noise Criteria (Long Term Construction) dB
	LAeq(T)
0730-1800	70
1800-0730	75

(c) Project Construction Noise Criteria: Internal Structure-borne Noise from tunnelling for Residential Receivers

Time Period	Project Construction Noise Criteria Inside	
0600-2200	35 dB LAeq(T)	All habitable rooms
2200-0600	30 dB LAeq(T)	Bedrooms

(d) Project Construction Noise Criteria: Internal noise for Licensed Educational Facilities

Time Period (School Days)	Project Construction Noise Criteria Inside	
Teaching Hours	45 dB LAeq(T)	Classrooms, library, offices, teaching, laboratories, manual arts, workshops
Teaching Hours	40 dB LAeq(T)	School hall, lecture theatres

Note: In Condition CNV.2(d) "Teaching hours" means: Primary schools and Kindergartens: 9am to 3pm Unitec: 8am to 9pm

CNV.4

Except where certified by the Council through the SSNMP (in accordance with Condition CNV.13), construction vibration received by any building shall be measured and assessed in accordance with the German Standard DIN 4150-3:1999 "Structural vibration – Part 3: Effects of vibration on structures", and shall comply with the criteria set out as follows:

Type of Structure	Short-term vibration			Long-term vibration	
	PPV at the foundation at a frequency of			PPV at horizontal plane of highest floor (mm/s)	PPV at horizontal plane of highest floor (mm/s)
	1-10 Hz (mm/s)	1-50 Hz (mm/s)	50-100 Hz (mm/s)		
Commercial/Industrial	20	20-40	40-50	40	10
Residential/School	5	5-15	15-20	15	5
Historic or Sensitive structures	3	3-8	8-10	8	2.5

CNV.5

Notwithstanding Condition CNV.3 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent,

(a) Blasting activities shall be conducted so that 95% of the blasts undertaken (measured over any twenty blasts on the foundation of any building outside the designation boundary) shall produce peak particle velocities not exceeding 5mm/s and 100% of the blasts undertaken shall produce peak particle velocities not exceeding 10mm/s irrespective of the frequency of the blast measured.

(b) Construction activities, which occur within Sectors 1, 6, 8 and 9 which are identified in Technical Report no. G.19 Assessment of Vibration Effects, as being at a 'High Risk' of exceeding the DIN 4150-3:1999 criteria (being excavation, piling, compaction and drilling) shall be conducted so that 95% of the activities undertaken (measured over at least 20 representative samples of the relevant activity on any residential building) shall produce peak particle velocities not exceeding the relevant criterion in DIN 4150-3:1999 and 100% of the

activities undertaken shall not exceed 10mm/s irrespective of the frequency of the activity measured.

#### CNV.7

Where practicable, permanent (traffic) noise barriers, required in any Sector as Detailed Mitigation Options for operational noise following completion of the Project (in accordance with Conditions ON.3 to ON.5) shall be erected prior to noise generating construction works commencing. Where this is not practicable, temporary noise mitigation measures shall be implemented in accordance with the CNVMP, prior to noise generating construction works commencing.

#### CNV.8

Pile driving or pile removal shall not be undertaken at night (i.e. during the hours of 20:00 – 06:30).

#### CNV.13

SSNMPs (required by Condition CNV.1(xvi)) above, shall be submitted to Major Infrastructure Team Manager, Auckland Council for review and certification at least 7 working days prior to the proposed works commencing. A decision will be provided by the Council within 5 working days of receipt of the SSNMP.

Works will not commence until certification is received from the Major Infrastructure Team Manager, Auckland Council. The Council may, at its discretion, waive the requirement for SSNMPs to be submitted to the Council where an SSNMP is required.

If monitoring shows that levels specified in a SSNMP are being exceeded, work generating the exceedance will stop and not recommence until further mitigation is implemented in accordance with an amended SSNMP certified by Council.

Advice note: It is accepted that the criteria of CNV.2 and CNV.4 may not be met at all times, but that the NZTA will take all practical steps to achieve compliance, taking into account the hierarchy of mitigation options outlined in Condition CNV.1 (ix).

### **Noise Conditions – Operation**

#### ON.1

For the purposes of Conditions ON.2-ON.14 the following terms will have the following meanings:

- Appendix E – means Appendix E to the Technical Report G.12 ‘Assessment of Operational Noise Effects’ submitted with this application.
- BPO – means Best Practicable Option.
- Building Modification Mitigation – has the same meaning as in NZS 6806:2010.
- Design Year – means a point in time that is 10 years after the opening of the Project to the public
- Emergency Mechanical Services – means mechanical services used for emergency situations only.
- Habitable room – has the same meaning as in NZS 6806:2010.
- Noise Criteria Categories – means groups of preference for time-averaged sound levels established in accordance with NZS 6806:2010 when determining the BPO mitigation option; i.e. Category A - primary noise criterion, Category B - secondary noise criterion and Category C - internal noise criterion.
- NZS 6806:2010 – means NZS 6806:2010 Acoustics – Road-Traffic Noise – New and Altered Roads.
- PPFs – means only the premises and facilities identified in green, yellow or red in Appendix E.
- Structural mitigation – has the same meaning as in NZS 6806:2010.

#### ON.2

The NZTA shall implement the traffic noise mitigation measures identified as the “Preferred Mitigation Options” in Appendix E as part of the Project, in order to achieve the Noise Criteria Categories indicated in Appendix E (“Identified Categories”), where practicable and subject to Conditions ON.3-ON.11 below.

#### ON.3

The detailed design of the structural mitigation measures of the “Preferred Mitigation Options” (the Detailed Mitigation Options) shall be undertaken by a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council prior to construction of the Project, and, subject

to Condition ON.4, shall include, as a minimum, the following:

- (a) Noise barriers with the location, length and height in general accordance with Appendix E and designed in accordance with the ULDF (Section B) (refer Schedule A, Row 38); and
- (b) A requirement that Open Graded Porous Asphalt ("OGPA") or equivalent low-noise generating road surface be used on all surface roads throughout the Project, except at the Great North Road Interchange; and
- (c) For the Great North Road Interchange, a requirement that Twin Layer Open Graded Porous Asphalt ("Twin Layer OGPA") or equivalent low-noise generating road surface be used as shown in Appendix E.

#### ON.4

Where the design of the Detailed Mitigation Options identifies that it is not practicable to implement a particular structural mitigation measure in the location or of the length or height included in the "Preferred Mitigation Options", either:

- (a) If the design of the structural mitigation measures could be changed and would still achieve the same Identified Category at all relevant PPFs, and a suitably qualified expert approved by the Major Infrastructure Team Manager, Auckland Council, certifies to the Auckland Council that the changed structural mitigation measure would be consistent with adopting BPO in accordance with NZS 6806:2010, the Detailed Mitigation Options may include the changed mitigation measures; or
- (b) If the changed design of the structural mitigation measure would change the Noise Criteria Category at any relevant PPF from Category A or B to Category C but Major Infrastructure Team Manager, Auckland Council confirms that the changed structural mitigation measure would be consistent with adopting BPO in accordance with NZS 6806:2010, the Detailed Mitigation Options may include the changed structural mitigation measures.

#### ON.5

The Detailed Mitigation Options shall be implemented prior to completion of construction of the Project.

#### ON.6

(a) Sectors 1 to 8 - Prior to construction of the Project, a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council shall identify those PPFs within 100m of the edge of the closest traffic lane of the motorway carriageway where, following implementation of all the structural mitigation measures included in the Detailed Mitigation Options:

- i. A noise level increase of 3 decibels or more will occur due to road-traffic noise from the Project; and
- ii. Habitable spaces are likely to receive in excess of 45 dB LAeq(24h) from motorway operational noise with windows closed, in the Design Year.

For those PPFs, following the process set out in Conditions ON.7 to ON.11, it shall be determined which Building Modification Mitigation is required to achieve 40 dB LAeq inside habitable spaces.

(b) Sector 9 - Prior to construction of the Project, a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council shall identify those PPFs within 100m of the edge of the closest traffic lane of the motorway carriageway where, following implementation of all the structural mitigation measures included in the Detailed Mitigation Options, habitable spaces are likely to receive in excess of 40 dB LAeq(24h) from motorway operational noise with windows closed, in the Design Year. For those PPFs, following the process set out in ON.7 and ON.8, it shall be determined if Building Modification Mitigation may be required to achieve 40 dB LAeq inside habitable spaces. For those PPFs where Building Modification Mitigation is required to achieve 40 dB LAeq inside habitable spaces, this shall be implemented following the process set out in ON.9 to ON.11.

#### ON.7

(a) Prior to commencement of construction of any sector of the Project in the vicinity of a PPF identified under Condition ON.6, the NZTA shall write to the owner of each such building seeking access for the purpose of measuring internal noise levels and assessing the existing building envelope in relation to noise reduction performance.

(b) If the owner(s) of the building approve the NZTA's access to the property within 12 months of the date of the NZTA's letter (sent pursuant to Condition ON.7(a)), then no more than six months prior to commencement of construction in any sector of the Project, the NZTA shall instruct a suitably qualified and experienced acoustics

specialist approved by the Major Infrastructure Team Manager, Auckland Council, to visit the building to measure internal noise levels and assess the existing building envelope in relation to noise reduction performance.

#### ON.8

Where a PPF identified under Condition ON.6 is identified, the NZTA shall be deemed to have complied with Condition ON.7 above where:

- (a) The NZTA (through its acoustics specialist) has visited the building; or
- (b) The owner(s) of the building approved the NZTA's access, but the NZTA could not gain entry for some reason after repeated attempts; or
- (c) The owner(s) of the building did not approve the NZTA's access to the property within the time period set out in Condition ON.7(b) (including where the owner(s) did not respond to the NZTA's letter (sent pursuant to Condition ON.7(a) within that period); or
- (d) The owner(s) of the building cannot, after reasonable enquiry, be found prior to completion of construction of the Project.

If any of (b) to (d) above apply to a particular Building, the NZTA shall not be required to implement any Building Modification Mitigation at that Building

#### ON.9

Subject to Condition ON.8, within 6 months of the assessment required under Condition ON.7(b), the NZTA shall give written notice to the owner of each PPF identified under Condition ON.6:

- (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 whether to accept Building Modification Mitigation for the building, and if the NZTA has advised the owner that more than one options for building modification mitigation is available, to advise which of those options the owner prefers.

#### ON.10

Once an agreement on Building Modification Mitigation is reached between the NZTA and the owner of an affected building, the mitigation shall be implemented (including the NZTA undertaking any required third party authorisation) in a reasonable and practical timeframe agreed between the NZTA and the owner. Building Modification Mitigation shall be to the standard specified in section 8.3.2 of NZS 6806:2010.

Advice Note: The NZTA will be responsible for obtaining any necessary building consents or other approvals to undertake the above Building Modification Mitigation.

#### ON.11

Subject to Condition ON.8, where Building Modification Mitigation is required, the NZTA shall be deemed to have complied with Condition ON.10 above where:

- (a) The NZTA has completed Building Modification Mitigation to the Building; or
- (b) The owner(s) of the Building did not accept the NZTA's offer to implement Building Modification Mitigation prior to the expiry of the timeframe stated in Condition ON.9(b) above (including where the owner(s) did not respond to the Requiring Authority within that period); or
- (c) The owner of the Building cannot, after reasonable enquiry, be found prior to completion of construction of the Project.

#### ON.12

The NZTA shall manage and maintain the Detailed Mitigation Options to ensure that, those mitigation works are maintained to retain their noise attenuation performance indefinitely.

#### ON.14

(a) Prior to construction, the NZTA shall arrange for a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council 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 Major Infrastructure Team Manager, Auckland Council to undertake traffic noise monitoring at the same sites surveyed in Condition ON.14 (a) 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 in accordance with ON.14(b) above shall be used to verify the computer noise model of the Detailed Mitigation Option. A report describing the findings of the verification shall be provided to the Major Infrastructure Team Manager, Auckland Council within one month of it being completed.

### **Vibration Conditions - Operation**

#### **OV.1**

Existing ambient vibration levels shall be measured at critical locations nominated by the NZTA, and submitted to the Major Infrastructure Team Manager, Auckland Council for approval prior to the commencement of works. These baseline measurements will establish pre-Project vibration levels for comparison with future vibration levels.

### **Air Quality Conditions – Construction**

#### **GENERAL CONDITIONS**

##### **AQ.1.**

The NZTA shall finalise and implement, through the CEMP, the Construction Air Quality Management Plan (CAQMP) and Concrete Batching and Crushing Management Plan (CBCMP) submitted with the application. The CAQMP and CBCMP shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to construction activities being undertaken for review and certification that the CAQMP and CBCMP includes the following details:

- (a) Daily visual monitoring of dust emissions;
- (b) Procedures for responding to process malfunctions and accidental dust discharges;
- (c) Criteria, including consideration of weather conditions and procedures for use of water sprays on stockpiles and operational areas of the site;
- (d) Continuous monitoring of Total Suspended Particulate (TSP) concentrations and meteorology;
- (e) Monitoring of the times of detectable odour emissions from the ground;
- (f) Procedures for responding to discharges of odour (including in the event of excavation of contaminated sites);
- (g) Monitoring of construction vehicle maintenance;
- (h) Process equipment inspection, maintenance, monitoring and recording, including baghouses, pressure relief valves and high level alarms;
- (i) Complaints investigation, monitoring and reporting; and
- (j) The identification of staff and contractors' responsibilities.

##### **AQ.2.**

The NZTA shall review the CAQMP and CBCMP at least annually and as a result of any material change to the Project. Any consequential changes will be undertaken in accordance with Condition CEMP.13.

##### **AQ.3.**

All construction activities shall be operated, maintained, supervised, monitored and controlled at all times so that all emissions authorised by this consent are maintained at the minimum practicable level.

##### **AQ.4.**

The NZTA shall undertake construction activities in accordance with the CEMP, CAQMP and CBCMP, such that:

- (a) Hard surfaced areas of the construction yards and active construction areas are vacuum swept or scraped down at least twice each week and additionally as reasonably required;
- (b) All unsealed areas of the site used for vehicle movement are maintained visibly damp by the use of water



sprays or a water cart during weather conditions where the potential for dust emissions exist;

(c) Wheel wash systems are installed at all truck exits from unpaved areas of the site onto public roads are used for all trucks that depart from the site;

(d) All stockpiles are constructed and positioned to minimise the potential for dust emissions. The surfaces of all stockpiles are maintained adequately damp at all times to minimise the release of particulate matter;

(e) Belt conveyors for moving dry materials are fitted with water sprays or enclosed to minimise wind entrainment of dust. Where installed, water suppression is used whenever the conveyors are used for moving dry materials.

**AQ.5.**

Unless expressly provided for by conditions of this consent, there shall be no odour, dust or fumes beyond the site boundary caused by discharges from the site which, in the opinion of an enforcement officer, is noxious, offensive or objectionable.

**AQ.6.**

All offensive or objectionable dust beyond the boundary of the site caused as a result of processes on the site shall be mitigated forthwith in accordance with the requirements of the Construction Air Quality Management Plan.

**AQ.7.**

Beyond the site boundary there shall be no hazardous air pollutant caused by discharges from the site that causes, or is likely to cause, adverse effects on human health, environment or property.

**AQ.8**

No discharges from any activity on site shall give rise to visible emissions, other than water vapour, to an extent which, in the opinion of an enforcement officer, is noxious, dangerous, offensive or objectionable.

**MONITORING**

**AQ.14**

The NZTA shall undertake visual inspections of dust emissions as follows:

- (a) Visual inspections of all active construction areas at least three times daily during October to April inclusive, whenever there are construction activities. The results of visual monitoring shall be logged.
- (b) Visual inspections of dust emissions from the concrete batching plants and rock crushing plant shall be undertaken daily while the plant is operating

**AQ.15**

The operation of water sprays shall be checked at least once each day.

**REPORTING**

**AQ.19.**

All records, logs, monitoring and test results that are required by the conditions of this consent shall be made available on request, during operating hours, to an Auckland Council enforcement officer and shall be kept for the duration of the consent.

**AQ.22.**

Log books shall be maintained that record all relevant information that is required to demonstrate compliance with the conditions of this consent. This information shall include, but is not limited to:

- (a) Visual assessments of any dust emissions from the site and the source;
- (b) Any dust control equipment malfunction and any remedial action taken;
- (c) When a water cart was used and, if so, the frequency of use and the volume of water used (including identification of location);
- (d) All relevant details of the TSP and meteorological monitoring required by Conditions AQ.16 and AQ.17;
- (e) Any additional dust control measures undertaken; and

(f) The date and time of the entry and the signature of the person entering the information.

#### AQ.23.

The NZTA shall maintain a log of any complaints received relating to air quality. Details of each complaint received shall be forwarded to the Major Infrastructure Team Manager, Auckland Council within 24 hours of receipt of the complaint. The log shall include any complaints lodged with the Auckland Council where the Council has informed the NZTA of the complaint. The log shall include, but not be limited to the following:

- (a) The date, time, location and nature of the complaint;
- (b) Weather conditions at the time of the complaint (including approximate wind speed, wind direction, cloud cover);
- (c) Any possible other contributing factors (such as a fire, smoky vehicle, a local chimney emission, etc.);
- (d) The name, phone number and address of the complainant (unless the complainant elects not to supply these details);
- (e) Any remedial actions undertaken; and
- (f) The date and time of the entry and the signature of the person entering the information.

### **Landscape and Visual Conditions**

#### LV.1.

The Urban Design and Landscape Plans (UDL Plans) (Plan Set F.16, refer Schedule A, Row 17) shall be reviewed and revised in accordance with the conditions and submitted to the Major Infrastructure Team Manager, Auckland Council for certification that they comply with the conditions of the consents/ designation prior to construction of the relevant Project stage, at least 20 working days prior to the commencement of construction.

The UDL Plans shall be updated to:

- (a) Reflect relevant details from the PT and Active Mode Transport Routes Plan Set (Schedule A, Row 23);
- (b) Remove the playing field at Waterview Reserve;
- (c) Confirm the reconfigured bund design at Alwyn Avenue (Schedule A, Row 42);
- (d) Reflect landscaping required in relation to the northern vent stack in Waterview Glades pursuant to Conditions DC.8 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

#### LV.2.

In certifying the UDL Plans, prepared in accordance with Condition LV.1, the Major Infrastructure Team Manager, Auckland Council shall be satisfied the UDL plans includes:

- (a) The visual mitigation of infrastructure as detailed in Section B of the UDLF (refer Schedule A, Row 38).
- (b) Incorporation of art or art through design of structures, particularly as it relates to noise barriers and the Great North Road Interchange piers and ramps (Refer to clauses (g) and (i) below).
- (c) Planting to screen houses and noise walls (including cross section details);
- (d) Planting along the corridor on Traherne Island, in accordance with these conditions and the Ecological Management Plan;
- (e) Specimen planting on the Great North Road Interchange and the Te Atatu Road Interchange;
- (f) Specimen planting at the tunnel portals (except where this is within the OPW area);
- (g) Finalisation of the noise barriers (as required by Condition ON.3(a)) in accordance with the design principles for noise walls (refer Schedule A, Row 32);
- (h) Delineation of the final areas of the Open Space Restoration Plans in accordance with the Open Space Restoration Plans (Schedule A, Row 30), and reference that all works within the Open Space Restoration Plan Areas are subject to Conditions OS.1 – OS.4 and OS.5 - OS.8 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent;
- (i) Oakley Inlet Heritage Plan, prepared in accordance with Conditions OS.5 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, and in particular, consideration shall be given to the design treatment of the Great North Road Interchange piers and ramps to take into consideration the impact of the structures on the visual quality of the open space beneath;

- (j) Ecological Management Plan, prepared in accordance with Conditions V.1, A.1, H.1, F.1 and M.1 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent;
- (k) Western Ring Route: Maioro Street Interchange and Waterview Connection - Oakley Creek Rehabilitation and Restoration Guidelines (Boffa Miskell, 2010); and
- (l) Details of artworks or art through design of structures within the Project (e.g. design detailing of median barriers, bridge railings, safety barriers, piers, retaining walls and tunnel portals), in accordance with Section B of the Urban Landscape and Design Framework (UDLF June 2010) (refer Schedule A, Row 38) and F.8:Plans of Structures and Architectural Features, but excluding the north and south ventilation buildings, plans sections and elevations.

LV.3.

The NZTA shall have implemented the UDL Plans within 6 months of practical completion of construction of the Project.

LV.4.

The landscaping shall be implemented in accordance with the UDL Plans within the first planting season following the completion of the construction works, provided that climatic conditions are suitable, otherwise at the first practicable opportunity thereafter, and shall be maintained for a period of 10 years thereafter. Should the landscaping be implemented in stages (depending on construction phases), landscaping shall be implemented in accordance with this Condition for each stage unless subsequent construction staging requires use of the proposed landscaping area.

Advice note: On-going control and management of the landscaping within the designation is the responsibility of the NZTA.

LV.5.

The NZTA shall implement the UDL Plans taking into account the pest plant management guidelines detailed in the Ecological Management Plan (as required by Condition CEMP.3).

LV.7.

The NZTA shall ensure that the Temporary Embankments constructed for the Causeway are located on the seaward side of SH16 between the motorway end of Rosebank Road and the bridge over the Waterview Inlet.

LV.8.

The NZTA shall ensure that any areas within the designation affected by construction activities have sub-soil rehabilitated and top-soil replaced so that the hydrological response including the volume of stormwater runoff generated is as close as practicable to the predevelopment situation. The methodologies to achieve this shall be documented and provided to the Major Infrastructure Team Manager, Auckland Council with the revised UDL Plans submitted pursuant to Condition LV.1.

LV.9.

The UDL Plans shall make provision for the rehabilitation of Construction Yard 2 at the completion of SH16 construction works through the close planting of native coastal species within that part of the yard area seaward of the proposed stormwater filter strip. All planting shall be consistent with the native coastal planting referenced in the ECOMP and Condition V.10.

LV.10.

The UDL Plans shall identify all Amenity Trees required to be removed over the construction of the Project (in accordance with Condition CEMP.6(o) and (p)). Replacement trees shall be sized at 160Lt and will either draw from the Coastal Forest or Basalt Rock Forest ecotypes listed in the Landscape Planting Schedules (provided in F.16, refer Schedule A, 17) or an agreed alternative species (confirmed by Major Infrastructure Team Manager, Auckland Council), except in the case of those trees subject to Condition ARCH.9 of the Final Report

and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

Advice note: This does not necessarily apply to any replacement planting in the Open Space Restoration Plan areas, which will be confirmed in approval from Auckland Council and will be in accordance with relevant Auckland Council Park guidelines (see Condition OS.4).

## **Open Space Conditions**

### **OS.1**

For the purposes of Conditions OS.2 – OS.15 the following terms will have the following meanings:

- Full size – means a football (soccer) field with the dimensions 100m x 60m.
- Half size – means a football (soccer) field with the dimensions less than 100m x 60m but no smaller than 50m x 30m.
- Toddler – means a playground specifically designed for children between the ages of 1 and 3
- Junior – means a playground specifically designed for children between the ages of 4 and 8
- Youth – means a playground specifically designed for children between the ages of 9 – 14 years
- Open Space Restoration Plans – means those plans listed in Schedule A, row 30.
- Open for Play - means the sports field has a level surface and a dense weed-free sward of mature grass, goal posts and lighting if indicated in the Open Space Restoration Plans approved by the Auckland Council.
- Sand - carpeted - means the field has been levelled and irrigated, and conventional sub-soil drains, slit drains and a 50mm deep sand carpet have been installed. The field has been stolonised with a warm season grass such as kikuyu or couch.
- Auckland Council Park Guidelines – means the document by Auckland City Council titled “Furnishing our parks: design guidelines for park furniture”, dated September 2009
- Park furniture – means those items described in the Auckland Council Park Guidelines
- AS2560 – means the Australia New Zealand Standard for lighting of sports fields.
- AS4282 – means the Australia New Zealand Standard for the control of the obtrusive effects of outdoor lighting.
- Way finding exercise – means a process for determining the number, size, location and content of signage to provide clear direction for all park users.
- Skate-park for the purpose of condition OS.5(b)(iii) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent means a skate park with a size of approximately 1,400 sq. m. (generally 25 wide x 55m long), incorporating a range of design variations. Suitable for beginners (providing training facilities to develop their skills) but primarily catering for intermediate to advanced level skaters.
- BMX bike track for the purpose of condition OS.5(b)(iii) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent means a low maintenance, non-competition BMX bike track, incorporating a range of design variations. Primarily catering for beginner and intermediate riders.

### **OS.2**

The NZTA shall prepare Open Space Restoration Plans to outline how the open space replacement land, as defined in the Open Space Restoration Plan Areas (Schedule A, Row 30) (including land occupied during construction) will be reinstated or replaced on completion of construction, for handover to Auckland Council and those areas identified in Condition DC.1A(f) and RC.3(f) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent. Following the consultation detailed in Condition OS.3 below, the Open Space Restoration Plans listed in Condition OS.3(a) to (f) shall be submitted within 12 months of construction commencing in the specific areas affecting the reserves or within 12 months of occupation of open space, whichever is the sooner, to the Major Infrastructure Team Manager, Auckland Council.

Advice note: Conditions OS.9 and OS.10 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent require certain works to be provided prior to occupation of Construction Yards 6 and 7 (Waterview Reserve) and Construction Yards 9- 12 (Alan Wood

Reserve) and this may impact on the timing of Open Space Restoration Plans for these areas.

### OS.3

The Open Space Restoration Plans shall be prepared in consultation with the Auckland Council, Iwi, the Community Liaison Groups (Condition PI.5), Heritage New Zealand, and other recreation users and other user representatives identified by Auckland Council. The Open Space Restoration Plans shall comprise the following specific plans:

- (a) Waterview Reserve Restoration Plan;
- (b) Alan Wood Restoration Plan (including Hendon Park and 25 Valonia Street);
- (c) Oakley Creek Esplanade (Waterview Glades) Restoration Plan;
- (d) Jack Colvin Park Restoration Plan;
- (e) Rosebank Domain Restoration Plan;
- (f) Harbourview-Orangihina Reserve Restoration Plan; and
- (g) The areas of the Open Space Restoration Plans are shown in the Open Space Restoration Plan Areas (Refer Schedule A, Row 30).

### OS.4

All Open Space Restoration Plans shall be prepared in general accordance with the UDL Plans (Schedule A, Row 30), and shall include, but not be limited to, the following:

- (a) Details of, including the location, of any artworks and educational signage, and directional signage. In the case of Alan Wood Reserve, Waterview Reserve and Oakley Creek Esplanade (Waterview Glade) this shall include a "way-finding exercise" in accordance with Auckland Council practice, to determine all signage to be provided; and
- (b) Evidence of integration with the Oakley Creek restoration works required under Conditions STW.5, STW.20, V.16 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent and LV.2(i); and a summary of the consultation undertaken (as required by Condition OS.3) and the response received; and
- (c) Details of any vehicle access through the reserves and parking areas; and
- (d) Park furniture (including quantity and quality) to be provided in accordance with relevant Auckland Council Park guidelines, except for:
  - (i) The riparian area within Alan Wood Reserve where the only furniture required is a maximum of 10 seats; and
  - (ii) Oakley Creek Esplanade (Waterview Glades) where the only furniture required is replacement of 3 existing seats; and
- (e) The inclusion and integration of the design for all pedestrian and cycleway linkages and facilities detailed on the PT and Active Mode Transport Routes (Schedule A, Row 22). The design integration shall be in accordance with CPTED principles; and
- (f) Implementation programme, including sequencing of works and completion dates. This shall include works that could be implemented prior to practical completion of construction works or are outside the Project area (e.g. upgrading of the Waterview Esplanade Reserve set out in Condition OS.5(b)(vii) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- (g) Implementation programmes for planting and field reinstatement. This shall include:
  - (i) A 12 month maintenance period for built structures and soft landscaping; and
  - (ii) For any landscaping accessible to horses an assessment to demonstrate that the planting schedule is not toxic to horses and that consultation on this has been undertaken with the Te Atatu Pony Club;
- (h) The specific requirements for each Restoration Plan area as set out in Conditions OS.5 – OS.8 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent; and
- (i) Documentation of consultation undertaken required by Condition OS.3 and the views and concerns expressed by this consultation and the written approval of the Manager Community and Cultural Policy.

Advice note: For the avoidance of doubt provision of (a) to (h) above will require elevations, cross sections, engineering drawings and written documentation to supplement the UDL Plans. It is also noted that the UDL Plans identify landscaping, planting and other works beyond the Open Space Restoration Plans (refer Conditions LV.1 – LV.6, LV.9 and LV.10 with Condition LV.5 confirmed in the Final Report and Decision of the

Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent). Educational signs and artworks are particularly encouraged.

#### OS.13

During construction, the NZTA shall maintain pedestrian accessways to all open space available for public use during construction and education facilities where access is affected by the works, including any public access that crosses private land. Such access shall be safe, clearly identifiable, provide appropriate surfacing and seek to minimise significant detours. The access shall be of a same or similar standard as that disrupted and will be provided and maintained by the NZTA.

Advice note: This specifically includes the existing pedestrian access that provides a connection to the crossing over Oakley Creek between 1510 Great North Road and Unitec Mt Albert Campus.

### **Social Conditions**

#### SO.1

In addition to the Community Liaison Groups established pursuant to Condition PI.5, the NZTA shall establish an Education Liaison Group (including representatives from local schools, kindergartens, childcare facilities, Unitec Institute of Technology, the Ministry of Education and Housing New Zealand Corporation), to provide a forum through which:

- (a) Relevant monitoring data can be provided (e.g. air quality monitoring);
- (b) Notice can be provided of when particularly noisy activities will occur in close proximity to schools and education facilities, to enable the opportunity to identify any potential conflict with particular sensitive periods, and the requirement for specific mitigation strategies (e.g. rescheduling of construction activities where practicable);
- (c) Particular concerns can be raised by educational facilities or parents, discussed and potentially addressed;
- (d) Notice can be provided of potential construction impacts on school transport routes (including pedestrian/cycle access) to enable the opportunity to identify specific mitigation preferences of the education facilities (e.g. any detour routes) and to enable these facilities to appropriately inform students and/or parents; and
- (e) Learning and teaching opportunities for educational facilities to participate in Project works (e.g. planting or artworks).

The Education Liaison Group shall be established at least 2 months prior to construction commencing and shall have regular meetings (at least three monthly) throughout the construction period. The Education Liaison Group shall continue to meet for at least 12 months following the completion of the Project (or less if the members of the Education Liaison Group agree), so that ongoing monitoring information can continue to be disseminated.

#### SO.2

In addition to Condition SO.1(b) above, where noisy construction activities (that are projected to exceed the Noise Criteria in the CNVMP) are proposed in close proximity or adjacent to schools/ childcare centres, the NZTA shall, when preparing their SSNMP (in accordance with Condition CNV.1) give specific consideration to options to carry out these works outside school hours or during school holidays as a mitigation option.

#### SO.6

In addition to the Community Liaison Group established pursuant to Condition PI.5, the NZTA shall establish a Working Liaison Group (WLG) inviting the following:

- (a) Auckland Council;
- (b) Housing New Zealand Corporation;
- (c) Te Kawerau Iwi Tribal Authority;
- (d) Ngati Whatua o Orakei;
- (e) KiwiRail;
- (f) Department of Conservation;
- (g) Ministry of Education; and
- (h) Local Boards.

The purpose of this WLG will be to provide a forum through which:

- (a) Opportunities for public work development (including social housing, passenger transport or recreation / open space) are identified in areas where the NZTA confirms that the designation is no longer required (e.g. following construction activities);
- (b) Comment can be provided on updated Urban Design and Landscape Plans, including the finalised designs of structural elements for the Project (prior to their submission to the Auckland Council);
- (c) Opportunities for integration of other environmental projects (e.g. restoration plantings) are identified;
- (d) Consideration is given to appropriate protocols for commencement and completion of construction activities (including blessings for commencement of construction phases); and
- (e) Comment can be provided by Te Kawerau a Maki on the detailed lighting design of SH16, to consider how lighting effects on cultural sites and practices might be mitigated without compromising traffic safety or those performance standards identified in Condition L.1.

The Working Liaison Group shall be established at least 2 months prior to construction commencing and shall have regular meetings (at least three monthly) throughout the construction period.

#### SO.7

A schedule of trees that require removal for construction of the Project will be identified and reported to the Community Liaison Group for their consideration of potential provision of timber for heritage projects (including in particular the provision of Robinia wood for heritage boat building). If the demand for this timber is identified to the Construction Team, appropriate measures for felling and removal from the site will be confirmed.

### **Vegetation Conditions**

#### V.1

The NZTA shall finalise the ECOMP submitted with this application, prior to works commencing on site. The ECOMP shall be implemented through the CEMP. The ECOMP shall clearly identify the location and identity of:

- (a) All Significant Vegetation within the designation that is to be fully protected or relocated; and
- (b) All Valued Vegetation within the designation that is affected by the works (protected or removed).

Note: Significant and Valued Vegetation shall be as defined in the ECOMP.

#### V.2

The NZTA shall employ a suitably experienced botanist ('nominated botanist') for the duration of the works to monitor, supervise and direct all works affecting or otherwise in close proximity to the Significant Vegetation and Valued Vegetation identified in the ECOMP.

#### V.3

Prior to any site works commencing, a pre-commencement site meeting shall be held so that the conditions that pertain to the Significant Vegetation and Valued Vegetation and all vegetation in general (both native and exotic) are explained by the nominated botanist to all contractors or sub-contractors who will be working on site within the close vicinity of that vegetation.

#### V.4

The NZTA shall minimise the amount of vegetation (both native and exotic) which is to be cleared, with the exception of weeds (both woody and otherwise, unless agreed with the Major Infrastructure Team Manager, Auckland Council and the Community Liaison Group that the retention of these 'weeds' has other environmental or ecological benefits that warrant their retention). All vegetation clearance shall be undertaken in accordance with the measures set out in the ECOMP.

#### V.5

The NZTA shall install protective fencing around, or otherwise clearly demarcate, all of the Significant Vegetation identified in the ECOMP as requiring full protection, under the supervision of the nominated botanist.

#### V.6

The NZTA shall replace any terrestrial Valued Vegetation that is required to be removed as a result of construction activities, in accordance with the ECOMP and the Urban Design and Landscape Plans.

V.7

The nominated botanist shall supervise all trimming, pruning and relocation work associated with the Significant Vegetation and Valued Vegetation required as part of the works.

V.8

Immediately prior to planting, and for a period of 2 years following completion of construction, the NZTA shall undertake weed control and management of all invasive plant pests within the vegetated areas of the surface designation for the Project. Following this 2 year period, on-going control and management of all invasive plant pests within these areas will be the responsibility of the NZTA.

V.9

The nominated botanist shall undertake a monitoring programme throughout the construction period, including monitoring of:

- (a) The condition, repair and location of the temporary protective fencing or other forms of demarcation used to identify the Significant Vegetation;
- (b) Any works within the vicinity of the Significant Vegetation and Valued Vegetation;
- (c) The general health of the Significant Vegetation and Valued Vegetation (including any Significant or Valued Vegetation that has been relocated away from the works area); and
- (d) Compliance with the vegetation conditions of designation by way of fortnightly inspections during the construction period.

V.10

Any planting utilising native plants shall use plants genetically sourced from the Tamaki Ecological District where possible or otherwise shall use plants that have been genetically sourced from within the Auckland Ecological Region.

V.11

Prior to commencement of works adjacent to Traherne Island, the NZTA shall employ a suitably qualified and experienced plant translocation expert to uplift and protect all areas of *Mimulus repens* on Traherne Island that will be affected by the work. The *Mimulus repens* shall be relocated to suitable and safe habitat away from the works area, or otherwise held and protected for the duration of the works in the vicinity of their original location and be replanted back at that location (or in close proximity to it) upon completion of the works. The location of the recipient sites will be determined in consultation with the Department of Conservation and in general accordance with the Traherne Island Natural Heritage Restoration Plan (2009 – 2014). Trials shall be undertaken to identify appropriate recipient sites, with these trial sites being monitored for a period of no less than 5 years, or until their failure. Where possible, recipient sites shall be located in currently weed-free areas. Where recipient sites may potentially be affected by weeds, they shall be subject to an on-going weed management plan. Should translocation attempts fail at all trial sites then the NZTA, in consultation with DOC, shall determine an alternative appropriate form of mitigation.

V.15

Planting along and within the rock revetment of the widened SH16 causeway shall be undertaken by the NZTA at locations in general accordance with the Urban Design and Landscape Plans and planting schedules (Refer Schedule A, Row 17), as identified in those plans under the label "Rock Armour with Saltwater Revetment Planting". The planting treatments will be in accordance with the concepts of the ECOMP, Appendix I 'Conceptual Rock Revetment Planting Designs'.

V.17

Prior to commencement of works adjacent to or on Traherne Island, the NZTA shall employ a suitably qualified and experienced ecologist for the preparation of a Traherne Island Weed and Pest Management Plan. The Plan



shall be prepared in consultation with the Department of Conservation and be submitted to the Auckland Council for approval at least 20 working days prior to construction commencing.

#### V.18

The NZTA shall implement the approved Traherne Island Weed and Pest Management Plan. Every 5 years, a suitably qualified and experienced ecologist engaged by NZTA shall review the plan in consultation with the Department of Conservation. The plan shall then be submitted to the Auckland Council for approval.

### **Avian Conditions**

#### A.1

The NZTA shall finalise, and implement through the CEMP, ECOMP submitted with this application to include the matters set out in Conditions A.2 to A.6.

#### A.2

The NZTA shall provide temporary high tide roosting structure(s) adjacent to the Causeway during construction, in accordance with the ECOMP, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council. The temporary bird roosts shall be sized in accordance with the ECOMP, and located within the Waterview Estuary adjacent to the southern side of the causeway and in the vicinity of the existing Causeway bridge.

#### A.3

The NZTA shall employ a suitably qualified ecologist to undertake monitoring of the roosting areas located at:

- (a) The existing high tide roost in Harbourview-Orangihina Park; and
- (b) The temporary construction roosting structure(s) pursuant to Condition A.2.

Monitoring shall be undertaken on a monthly basis, with a monitoring report prepared on a quarterly basis. The monitoring report shall be made available to the Major Infrastructure Team Manager, Auckland Council and Department of Conservation upon request.

#### A.4

Should the monitoring results indicate that the roosting sites have been abandoned, consultation shall be undertaken with the Department of Conservation and the Major Infrastructure Team Manager, Auckland Council to determine the need for and type of further management strategies (if any) required.

#### A.5

Vegetation clearance at Traherne Island shall occur outside the bird breeding season of September to December. Elsewhere, vegetation clearance shall occur outside the bird breeding season of September to December where practicable.

#### A.6

Animal pest control shall be undertaken by the NZTA on Traherne Island (northern and southern sides) and on the Coastal Marine Area (CMA) frontage of SH16 from Traherne Island North to Whau Creek, and on the southern side of SH16 from Traherne Island South to Whau River (in accordance with Condition V.17).

### **Herpetofauna Conditions**

#### H.1

The NZTA shall finalise and implement through the CEMP, the ECOMP submitted with this application to include details of lizard management to be undertaken, including the following:

- (a) Lizard capture methodology, including timing;
- (b) Lizard release locations(s);
- (c) Lizard habitat enhancement at population release sites, including a detailed pest control programme for a minimum of one month prior to release and for a minimum of three consecutive years' duration after release;
- (d) Location(s), monitoring and maintenance of lizard protective fencing;
- (e) Post-release monitoring methodology; and

(f) Lizard captive management methodology.

## **Lighting Conditions**

### **Operation**

#### **L.1**

Lighting shall be designed and screened to minimise the amount of lighting overspill and illumination of residential areas, in general accordance with the Waterview Connection Lighting Plan (Drawing Set F.11 (Refer Schedule A, Row 12):

- a) All motorway lighting shall be designed in accordance with "Roadlighting Standard AS/NZS1158";
  - b) All other lighting shall be designed in accordance with relevant rules in the Unitary Plan;
  - c) Fully cut off luminaires shall be used on SH20 from the Southern Tunnel Portal to the Maioro Street Interchange to minimised lighting overspill, as shown on Drawing Set F.11 (Refer Schedule A, Row 12).
- Construction Zones and Construction Yards

#### **L.2**

A Temporary Construction Lighting Management Plan shall be prepared for all construction zones and construction yards prior to commencement of any night time works within the construction zones and construction yards. The Temporary Construction Lighting Management Plan shall be independently verified by a lighting specialist and provided to the Major Infrastructure Team Manager, Auckland Council for certification of compliance 10 working days prior to any night time work commencing.

The certification process shall ensure that the Plan includes (but is not be limited to):

- a) The layout and arrangement of all temporary lighting required for night time works, and shall show how this avoids the "Light Spill Restriction Zone" identified on the Construction Yard Plans (Refer Schedule A, Row 7) submitted with the application, and that the temporary lighting complies with relevant rules provided in the Unitary Plan;
- b) Provision for a 10m buffer between the night time work and any residential boundary at all times to minimise potential for light spill; and
- c) General operating procedures outlined in the CEMP.

#### **L.3**

Asymmetrical floodlights with horizontal glass visors that are not raised more than 3 degrees above the horizontal plane shall be used for any temporary construction night time lighting requirements. Alternative temporary lighting arrangements may be used, subject to the prior approval of the Major Infrastructure Team Manager, Auckland Council, where it can be demonstrated that the proposed lighting is similar or better to asymmetrical floodlights with glass visors. Glare shall be kept below the recommendation given in AS 4282 – 1997 "Control of the Obtrusive Effects of Outdoor Lighting" Tables 2.1 and 2.2.

## **Archaeology Conditions**

### **ARCH.1**

The NZTA shall complete, and implement through the CEMP, the Archaeological Site Management Plan (ASMP) submitted with the notice of requirement, to include, but not be limited to:

- a) Identification of the Project archaeologist, their role and responsibility on the Project;
- b) Who reports to the Project archaeologist;
- c) Specific sites requiring supervision, and measures to be undertaken to protect and manage these sites;
- d) Whether Heritage New Zealand and/or Auckland Council heritage and/or iwi supervision is required for the specific site (the latter to be determined through consultation with the relevant iwi groups); and
- e) Accidental discovery protocols in the event that unknown archaeological sites are uncovered.

### **ARCH.2**

The NZTA shall employ at its expense a qualified archaeologist (the Project archaeologist) who shall be on site to monitor all initial earthworks, including surface stripping of the site, for all specific areas identified in the ASMP to establish whether any sub-surface archaeological features are present. This includes, but is not

limited to, the following areas:

- (a) All unmodified areas in the vicinity of Rosebank Road;
- (b) All works in the vicinity of the "Oakley Inlet Heritage Area", located adjacent to the Great North Road Interchange;
- (c) Works in the vicinity of two midden sites (recorded R11/2214 and R11/2215) within Great North Road Interchange, and all previously unmodified areas near the banks of the Oakley Inlet;
- (d) Any ground disturbance works in Construction Yard 7 within Oakley Creek Reserve.

#### ARCH.3

If any archaeological sites, including human remains are exposed during site works, then the following procedures shall apply:

- (a) Immediately it becomes apparent that a possible archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease;
- (b) The site supervisor shall immediately secure the area in a way that ensures that any artefacts or remains are untouched and notify the Project archaeologist;
- (c) The Project archaeologist shall inspect the site to assess the relevance of the find, and then the Auckland Council shall be advised of the significance;
- (d) If the site is confirmed to be an archaeological site by the Project archaeologist, the site supervisor shall then notify tangata whenua, Heritage New Zealand, and the Auckland Council that an archaeological site has been exposed so that appropriate action can be taken;
- (e) In the case of human remains, the NZ Police, shall be notified.

#### ARCH.4

In accordance with the ASMP, the following archaeological sites shall be fenced off and protected to the satisfaction of the Project archaeologist, prior to construction activities being undertaken:

- (a) Recorded sites R11/2504, R11/2505, R11/2506 and R11/2507, located on the northern boundary of the designation adjacent to the Rosebank Road peninsula.
- (b) Recorded site R11/2383 in the Oakley Creek Esplanade Reserve construction yard.

#### ARCH.8

All contractors and subcontractors working on the Project shall be trained on the archaeological requirements set out in the ASMP.

Advice note:

Any archaeological sites within the area affected by the Project shall not be modified or disturbed in any way unless written authorisation has been obtained from Heritage New Zealand.

### **Contaminated Land and Contaminated Discharges Conditions**

#### CL.1

The NZTA shall finalise and implement through the CEMP, the Contaminated Soil Management Plan (CSMP) submitted with this application prior to commencement of any site works. The CSMP shall include, but not be limited to:

- (a) Measures to be undertaken in the handling, storage and disposal of all material excavated during the construction works;
- (b) Soil validation testing and groundwater testing;
- (c) Soil verification testing to be undertaken to determine the nature of the excavated spoil and potential reuse or disposal options;
- (d) Measures to be undertaken in the event of unexpected contamination being identified during construction activities; and
- (e) Measures to be undertaken for the handling of asbestos containing material.

#### CL.4

All excavated soil shall be tested by the NZTA in general accordance with the CSMP, prior to either reuse on

site or disposal off site. The testing regime shall be submitted for approval by the Major Infrastructure Team Manager, Auckland Council.

CL.5

The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council within 5 working days of identification of any contamination at the site which was not identified in the reports submitted in support of this application, including contaminated soil, surface water or groundwater. The removal of any excavated contaminated soil shall be in accordance with the CSMP. The removal and disposal of any contaminated groundwater/ surface water from the site shall be in accordance with the GWMP and the ESCP.

CL.6

The removal of any excavated contaminated soil shall be in accordance with the CSMP. The removal and disposal of any contaminated groundwater/ surface water from the site shall be in accordance with the GWMP and the ESCP.

CL.7

The NZTA shall engage a suitably qualified contaminated land specialist to supervise the works, excavation and removal of any contaminated soils from the site and undertake sampling (if required) of imported material.

CL.8

All testing / sampling techniques shall be carried out in accordance with the Ministry for the Environment's Contaminated Land Management Guidelines or other equivalent standards approved in writing by the Major Infrastructure Team Manager, Auckland Council.

CL.11

The NZTA shall submit to the Major Infrastructure Team Manager, Auckland Council, a Site Closure Report no later than three (3) months after the completion of the earthworks. The Report shall be prepared in accordance with the Ministry for the Environment's Contaminated Land Management Guidelines and include:

- (a) Results of any soil reuse and imported material testing carried out to ensure compliance with the CSMP;
- (b) Volumes of soil removed from site;
- (c) Copies of the waste disposal receipts; and
- (d) Reports of any non-compliance with the CSMP procedures or complaints received while undertaking the site works.

## Attachments

### Figure CEMP.A - Construction Environmental Management Framework

Figure CEMP.A - Construction Environmental Management Framework

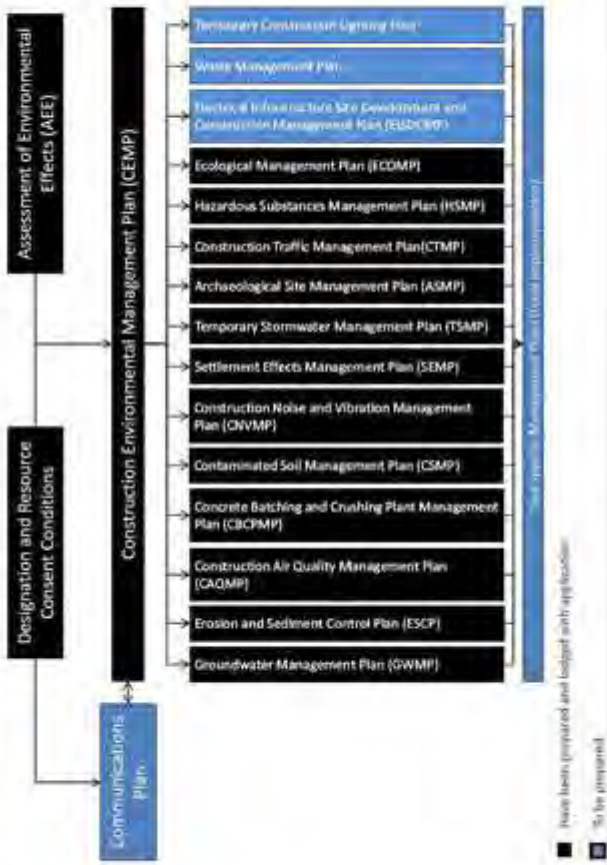
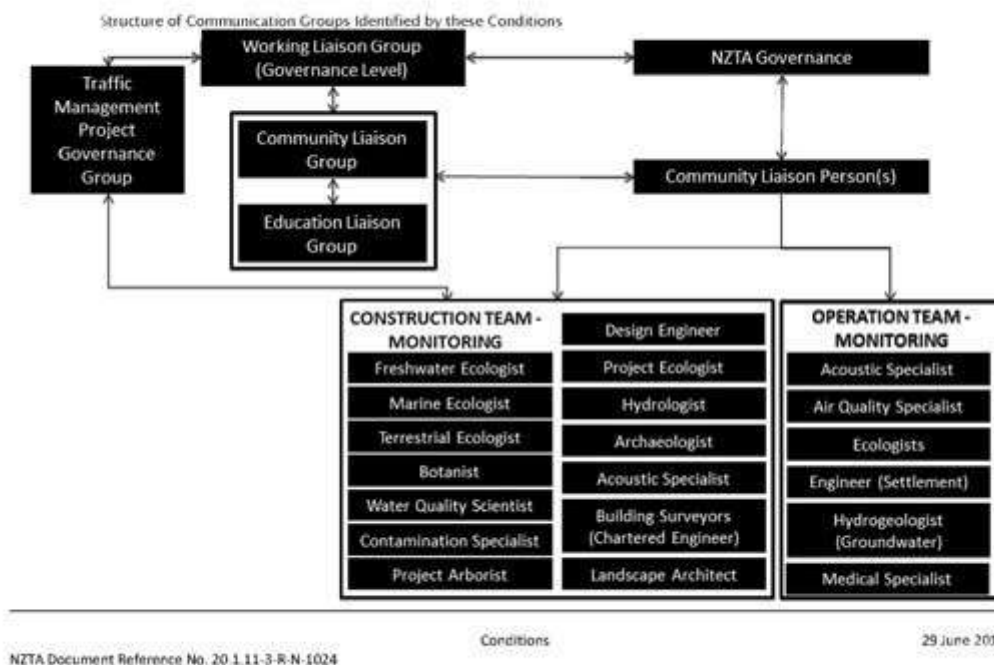


Figure PI.A - Structure of Communication Groups



## 6723 State Highway 16 - Waterview Connection Waterview to Western Springs –

Designation Number	6723
Requiring Authority	New Zealand Transport Agency
Location	State Highway 16 from Great North Road, Avondale to St Lukes Road, Western Springs
Rollover Designation	Yes
Legacy Reference	Designation A07-01E, Auckland Council District Plan (Isthmus Section) 1999
Lapse Date	This alteration to designation will lapse if not given effect to before the expiry of February 2018, being 5 years from the date on which it is included in the District Plan under section 184(1) of the Resource Management Act 1991 (“the Act”)

### Purpose

To alter designation 6718 (formerly A07-01), SH16, between Great North Road and St Lukes Interchange – NOR3. Addition of properties to existing designation, and construction of two new lanes, stormwater treatment, wetland pond, ancillary works and services, vegetation removal and restoration works, relocation of services, works on existing cycleway, landscaping and planting.

### Conditions

1. The SH16 St Lukes Western Ring Route Project shall be carried out in accordance with the plans submitted with the application, being:

Reference Number	Rev	Title	Date
<b>Planting Details</b>			
215023-D-A-919-001	B	Planting Details 1 of 10	31.05.2013
215023-D-A-919-002	E	Planting Details 2 of 10	15.07.2013
215023-D-A-919-004	D	Planting Details 4 of 10	04.07.2013
215023-D-A-919-005	C	Planting Details 5 of 10	24.06.2013
215023-D-A-919-006	C	Planting Details 6 of 10	24.06.2013
215023-D-A-919-007	C	Planting Details 7 of 10	24.06.2013
215023-D-A-919-008	B	Planting Details - 8 of 10	31.05.2013
215023-D-A-919-009	E	Planting Schedule 9 of 10	30.08.2013
215023-D-A-919-010	D	Planting Schedule 10 of 10	30.08.2013
<b>Landscape Master Plans</b>			
215023-D-A-919-011	E	Landscape Master Plan Sheet 1 of 4	15.07.2013
215023-D-A-919-013	D	Landscape Master Plan Sheet 3 of 4	04.07.2013
215023-D-A-919-014	C	Landscape Master Plan Sheet 4 of 4	24.06.2013
<b>Noise Wall Details</b>			

215023-D-A-919-051	B	Noise Wall Details 1 of 3	31.05.2013
215023-D-A-919-052	B	Noise Wall Details 2 of 3	31.05.2013
215023-D-A-919-053	B	Noise Wall Details 3 of 3	31.05.2013
<b>St Lukes Interchange</b>			
215023-D-A-919-054	B	St Lukes Bridge Barrier Decorative Detail 1 of 1	31.05.2013
215023-D-A-919-055	B	St Lukes Motat Handrail 1 of 1	31.05.2013
215023-D-A-919-056	B	L Shapes Barrier Template 1 of 2	31.05.2013
215023-D-A-919-057	B	L Shapes Barrier Template Setout 1 of 2	31.05.2013
215023-D-A-919-071	B	Northern Abutment and Wall Detail	31.05.2013
215023-D-A-919-072	B	Bridge Barrier Concept Detail 1	31.05.2013
215023-D-A-919-073	B	Bridge Barrier Concept Detail 2	31.05.2013
215023-D-A-919-074	B	L-Shapes Barrier Concept Detail	31.05.2013
215023-D-A-919-075	B	Noise Wall Concept Details	31.05.2013
215023-D-A-919-076	B	Golf Course Pedestrian Bridge Concept Detail	31.05.2013
215023-D-A-919-077	B	Motat Handrails Detail ConceptSheet Layout	31.05.2013
215023-D-A-919-100	B	Sheet Layout	24.06.2013
215023-D-A-919-303	A	Single Left Turn Lane Option - Great North Road - Planting Details- Sheet 3 of 10	10.10.2013
215023-D-A-919-312	A	Single Left Turn Lane Option - Great North Road - Master Plan - Sheet 2 of 4	01.10.2013
<b>St Lukes Bridge</b>			
215023-D-B-600-CS0	B	St Lukes Bridge Cover Sheet	31.05.2013
215023-D-B-600-001	B	St Lukes Bridge General Notes Sheet 1	31.05.2013
215023-D-B-600-002	B	St Lukes Bridge General Notes Sheet 2	31.05.2013
215023-D-B-600-004	B	St Lukes Bridge General Arrangement Sheet 2	31.05.2013
215023-D-B-600-005	A	St Lukes Bridge Construction Sequence Sheet 1 of 4	31.05.2013
215023-D-B-600-006	A	St Lukes Bridge Construction Sequence Sheet 2 of 4	31.05.2013



215023-D-B-600-007	A	St Lukes Bridge Construction Sequence Sheet 3 of 4	31.05.2013
215023-D-B-600-008	A	St Lukes Bridge Construction Sequence Sheet 4 of 4	31.05.2013
215023-D-B-600-009	B	St Lukes Bridge Pile/Column Concrete and Reinforcement – Sheet 1	31.05.2013
215023-D-B-600-010	B	St Lukes Bridge Pile/Column Concrete and Reinforcement – Sheet 2	31.05.2013
215023-D-B-600-015	B	St Lukes Bridge New Abutment A Concrete	31.05.2013
215023-D-B-600-016	B	St Lukes Bridge New Abutment A Reinforcement Sheet 1	31.05.2013
215023-D-B-600-017	B	St Lukes Bridge New Abutment A Reinforcement Sheet 2	31.05.2013
215023-D-B-600-020	B	St Lukes Bridge Abutment C Concrete	31.05.2013
215023-D-B-600-021	B	St Lukes Bridge Abutment C Reinforcement Sheet 1	31.05.2013
215023-D-B-600-022	B	St Lukes Bridge Abutment C Reinforcement Sheet 2	31.05.2013
215023-D-B-600-025	B	St Lukes Bridge Pier B Alterations to Existing and New Pier Concrete	31.05.2013
215023-D-B-600-026	B	St Lukes Bridge Pier B Alterations to Existing and New Pier Reinf. Sheet 1	31.05.2013
215023-D-B-600-027	B	St Lukes Bridge Pier B Alterations to Existing and New Pier Reinf. Sheet 2	31.05.2013
215023-D-B-600-028	B	St Lukes Bridge Bearing Layout and Details	31.05.2013
215023-D-B-600-030	B	St Lukes Bridge Girder Layout Plan	31.05.2013
215023-D-B-600-031	B	St Lukes Bridge Girder Types N1-1 to N1-13 Inclusive Concrete	31.05.2013
215023-D-B-600-032	B	St Lukes Bridge Girder Types N2 and N3 Concrete	31.05.2013
215023-D-B-600-033	B	St Lukes Bridge Girder Types S1-1 to S1-13 Incl. Concrete	31.05.2013
215023-D-B-600-034	B	St Lukes Bridge Girder Types S2 and S3 Concrete	31.05.2013
215023-D-B-600-035	B	St Lukes Bridge Girder Prestressing Details	31.05.2013

215023-D-B-600-036	B	St Lukes Bridge Girder Type N1-1 to N1-13 Incl. Reinforcement Details Sheet 1	31.05.2013
215023-D-B-600-037	B	St Lukes Bridge Girder Types N2 and N3 Incl. Reinforcement Details Sheet 1	31.05.2013
215023-D-B-600-038	B	St Lukes Bridge Girder Types S1-1 to S1-13 Incl. Reinforcement Details Sheet 1	31.05.2013
215023-D-B-600-039	B	St Lukes Bridge Girder Types S2 and S3. Reinforcement Details Sheet 1	31.05.2013
215023-D-B-600-040	B	St Lukes Bridge Girder Types N1-1 to N1-13 Incl. N2 and N3. Reinforcement Sheet 2	31.05.2013
215023-D-B-600-041	B	St Lukes Bridge Girder Types S1-1 to S1-13 Incl. S2 and S3. Reinforcement Sheet 2	31.05.2013
215023-D-B-600-042	B	St Lukes Bridge Reinforcement Shape Codes Ferrule Set Out Super T Girder N3	31.05.2013
215023-D-B-600-043	A	St Lukes Bridge Girder Types S1-13 and N1-13 Miscellaneous Details	31.05.2013
215023-D-B-600-045	B	St Lukes Bridge Deck Layout and Reinforcement	31.05.2013
215023-D-B-600-046	B	St Lukes Bridge Abutment Diaphragm Concrete and Reinforcement	31.05.2013
215023-D-B-600-047	B	St Lukes Bridge Pier Diaphragm Concrete and Reinforcement	31.05.2013
215023-D-B-600-049	A	St Lukes Bridge Expansion Joint Details	31.05.2013
215023-D-B-600-050	B	St Lukes Bridge Approach Slab Concrete and Reinforcement	31.05.2013
215023-D-B-600-060	B	St Lukes Bridge Precast Barriers Sheet 1	31.05.2013
215023-D-B-600-061	B	St Lukes Bridge Precast Barriers Sheet 2	31.05.2013
215023-D-B-600-062	B	St Lukes Bridge Temporary Barrier Details	31.05.2013
215023-D-B-600-063	B	St Lukes Bridge Expansion Joint Cover Plates	31.05.2013
215023-D-B-600-064	B	St Lukes Bridge Wingwall Details	31.05.2013
215023-D-B-600-070	A	St Lukes Bridge Parapet Handrail Steelwork Details	31.05.2013

215023-D-B-600-081	B	St Lukes Bridge Services and Lighting Sheet 2	31.05.2013
215023-D-B-600-082	B	St Lukes Bridge Services and Lighting Sheet 3	31.05.2013
215023-D-B-600-083	B	St Lukes Bridge Services and Lighting Sheet 4	31.05.2013
215023-D-B-600-084	E	St Lukes Bridge Services Details Sheet 5	05.11.2013
<b>Chamberlain Park Golf Course Meola Creek Bridge</b>			
215023-D-B-600-100	B	Chamberlain Park Golf Course Meola Creek Bridge & Cycleway Cover Sheet	31.05.2013
215023-D-B-600-101	B	Chamberlain Park Golf Course Meola Creek Bridge General Notes – Sheet 1	31.05.2013
215023-D-B-600-102	B	Chamberlain Park Golf Course Meola Creek Bridge General Notes – Sheet 2	31.05.2013
215023-D-B-600-103	B	Chamberlain Park Golf Course Meola Creek Bridge General Arrangement	31.05.2013
215023-D-B-600-104	B	Chamberlain Park Golf Course Meola Creek Bridge – Eastern Abutment Concrete & Reinforcement	31.05.2013
215023-D-B-600-105	B	Chamberlain Park Golf Course Meola Creek Bridge – Western Abutment Concrete & Reinforcement	31.05.2013
215023-D-B-600-106	B	Chamberlain Park Golf Course Meola Creek Bridge Beam Concrete & Reinforcement	31.05.2013
215023-D-B-600-107	B	Chamberlain Park Golf Course Meola Creek Bridge Balustrade Details – Sheet 1	31.05.2013
215023-D-B-600-108	B	Chamberlain Park Golf Course Meola Creek Bridge Balustrade Details – Sheet 2	31.05.2013
215023-D-B-600-109	B	Chamberlain Park Golf Course Meola Creek Bridge Retaining Walls	31.05.2013
215023-D-B-600-110	B	Chamberlain Park Golf Course Meola Creek Cycleway Structural Slab Sheet 1	31.05.2013
215023-D-B-600-111	B	Chamberlain Park Golf Course Meola Creek Cycleway Structural Slab Sheet 2	31.05.2013

215023-D-B-600-303	A	Single Left Turn Lane Option - St Lukes Bridge - General Arrangement- Sheet 1	14.10.2013
215023-D-B-600-380	A	Single Left Turn Lane Option - St Lukes Bridge - Services & Lighting - Sheet 1	05.11.2013
<b>St Lukes Bridge General Arrangement</b>			
215023-D-C-100-001	D	General Arrangement Sheet 1 of 8	31.05.2013
215023-D-C-100-002	D	General Arrangement Sheet 2 of 8	31.05.2013
215023-D-C-100-004	D	General Arrangement Sheet 4 of 8	31.05.2013
215023-D-C-100-005	D	General Arrangement Sheet 5 of 8	31.05.2013
215023-D-C-100-006	D	General Arrangement Sheet 6 of 8	31.05.2013
215023-D-C-100-007	D	General Arrangement Sheet 7 of 8	31.05.2013
215023-D-C-100-008	B	General Arrangement Sheet 8 of 8	31.05.2013
215023-D-C-100-100	D	General Arrangement Layout Plan	31.05.2013
215023-D-C-100-303	A	Single Left Turn Lane Option - Great North Road - General Arrangement - Sheet 3 of 8	01.11.2013
<b>Existing Designation Plan</b>			
215023-D-C-100-201	A	Existing Designation Plan	29.05.2013
<b>Barriers</b>			
215023-D-C-105-303	A	Single Left Turn Lane Option - Great North Road - Barrier Plan - Sheet 3 of 8	01.11.2013
<b>Erosion &amp; Sediment Control</b>			
215023-D-C-740-003	C	Erosion & Sediment Control - Sheet 3 of 8	07.10.2013
215023-D-C-740-006	D	Erosion & Sediment Control - Sheet 6 of 8	07.10.2013
<b>Noise Walls and Fences</b>			
215023-D-C-918-001	B	Noise Walls and Fences Sheet 1 of 8	31.05.2013
215023-D-C-918-002	B	Noise Walls and Fences Sheet 2 of 8	31.05.2013
215023-D-C-918-004	B	Noise Walls and Fences Sheet 4 of 8	31.05.2013

215023-D-C-918-005	B	Noise Walls and Fences Sheet 5 of 8	31.05.2013
215023-D-C-918-006	B	Noise Walls and Fences Sheet 6 of 8	31.05.2013
215023-D-C-918-007	B	Noise Walls and Fences Sheet 7 of 8	31.05.2013
215023-D-C-918-008	B	Noise Walls and Fences Sheet 8 of 8	31.05.2013
215023-D-C-918-051	B	Noise Walls and Fences Notes and Standard Details Sheet 1	31.05.2013
215023-D-C-918-052	B	Noise Walls and Fences Notes and Standard Details Sheet 2	31.05.2013
215023-D-C-918-053	B	Noise Walls and Fences Notes and Standard Details Sheet 3	31.05.2013
215023-D-C-918-054	B	Noise Walls and Fences Notes and Standard Details Sheet 4	31.05.2013
215023-D-C-918-933	A	Single Left Turn Lane Option - Great North Road - Noise Walls & Fences - Sheet 3 of 8	10.12.2013
<b>Land Requirement</b>			
215023-D-C-951-001	B	Land Requirement	02.10.2013
215023-D-C-951-004	B	Land Requirement and Existing Designations - Sheet 1 of 1	02.10.2013
<b>Existing Stormwater</b>			
215023-D-D-300-001	C	Existing Stormwater Drainage - Sheet 1 of 8	15.07.2013
215023-D-D-300-002	D	Existing Stormwater Drainage - Sheet 2 of 8	09.10.2013
215023-D-D-300-003	E	Existing Stormwater Drainage - Sheet 3 of 8	09.10.2013
215023-D-D-300-004	C	Existing Stormwater Drainage - Sheet 4 of 8	15.07.2013
215023-D-D-300-005	C	Existing Stormwater Drainage - Sheet 5 of 8	15.07.2013
215023-D-D-300-006	D	Existing Stormwater Drainage - Sheet 6 of 8	09.10.2013
215023-D-D-300-007	C	Existing Stormwater Drainage - Sheet 7 of 8	15.07.2013
215023-D-D-300-008	C	Existing Stormwater Drainage - Sheet 8 of 8	15.07.2013
<b>Proposed Stormwater Catchment Plan</b>			
215023-D-D-310-001	B	Proposed Stormwater Catchment Plan Sheet 1 of 8	31.05.2013

215023-D-D-310-002	C	Proposed Stormwater Catchment Plan Sheet 2 of 8	14.10.2013
215023-D-D-310-004	B	Proposed Stormwater Catchment Plan Sheet 4 of 8	31.05.2013
215023-D-D-310-005	B	Proposed Stormwater Catchment Plan Sheet 5 of 8	31.05.2013
215023-D-D-310-006	B	Proposed Stormwater Catchment Plan Sheet 6 of 8	31.05.2013
215023-D-D-310-007	B	Proposed Stormwater Catchment Plan Sheet 7 of 8	31.05.2013
215023-D-D-310-008	B	Proposed Stormwater Catchment Plan Sheet 8 of 8	31.05.2013
215023-D-D-310-101	D	Stormwater Catchment Plan Proposed Treatment/ Extended Detention Areas Sheet 1 of 4	14.10.2013
215023-D-D-310-103	B	Stormwater Catchment Plan Proposed Treatment/ Extended Detention Areas Sheet 3 of 4	12.09.2013
215023-D-D-310-104	B	Stormwater Catchment Plan Proposed Treatment/ Extended Detention Areas Sheet 4 of 4	12.09.2013
215023-D-D-310-302	A	Single Left Turn Lane Option - Great North Road - Prop Treatment/Extended Detention Areas SW Catchment Plan - Sheet 2 of 4	14.10.2013
215023-D-D-310-303	A	Single Left Turn Lane Option - Great North Road - SW Catchment Plan - Sheet 3 of 8	14.10.2013
<b>Proposed Stormwater Catchment Plan</b>			
215023-D-D-320-001	C	Proposed Stormwater Drainage - Sheet 1 of 8	15.07.2013
215023-D-D-320-002	D	Proposed Stormwater Drainage - Sheet 2 of 8	9.10.2013
215023-D-D-320-004	C	Proposed Stormwater Drainage - Sheet 4 of 8	15.07.2013
215023-D-D-320-005	C	Proposed Stormwater Drainage - Sheet 5 of 8	15.07.2013
215023-D-D-320-006	D	Proposed Stormwater Drainage - Sheet 6 of 8	9.10.2013
215023-D-D-320-007	C	Proposed Stormwater Drainage - Sheet 7 of 8	15.07.2013
215023-D-D-320-008	C	Proposed Stormwater Drainage - Sheet 8 of 8	15.07.2013
215023-D-D-320-010	F	Water Quality Pond - Plan	09.10.2013

215023-D-D-320-011	C	Water Quality Pond - Cross Sections	15.07.2013
215023-D-D-320-303	A	Single Left Turn Lane Option - Great North Road – Proposed Stormwater Drainage - Sheet 3 of 8	14.10.2013
<b>General Drainage Standard Details</b>			
215023-D-D-330-051	C	General Drainage Standard Details - Edge Treatment Details - Sheet 1 of 13	15.07.2103
215023-D-D-330-051A	A	General Drainage Standard Details - Edge Treatment Details - Swale 3 and 4 Details	09.10.2013
215023-D-D-330-052	C	General Drainage Standard Details - Catchpit Details - Sheet 2 of 13	15.07.2013
215023-D-D-330-053	C	General Drainage Standard Details - Pipe Bedding - Sheet 3 of 13	15.07.2013
215023-D-D-330-054	C	General Drainage Standard Details - Typical Manhole Details - Sheet 4 of 13	15.07.2013
215023-D-D-330-055	C	General Drainage Standard Details - Catchpit Details - Sheet 5 of 13	15.07.2013
215023-D-D-330-056	C	General Drainage Standard Details - Catchpit Details - Sheet 6 of 13	15.07.2013
215023-D-D-330-057	C	General Drainage Standard Details - Catchpit Details Adjacent - Sheet 7 of 13	15.07.2013
215023-D-D-330-058	C	General Drainage Standard Details - Drop Manhole Details Types 1 & 2 - Sheet 8 of 13	15.07.2013
215023-D-D-330-059	C	General Drainage Standard Details - Cut Pipe Rockwall (HW4) - Sheet 9 of 13	15.07.2013
215023-D-D-330-060	D	General Drainage Standard Details - Soakhole Details - Sheet 10 of 13	9.10.2013
215023-D-D-330-061	D	General Drainage Standard Details - Stormfilter Detail - Stormfilter 1 - Sheet 11 of 13	9.10.2013
215023-D-D-330-062	B	General Drainage Standard Details - Stormfilter Detail - Stormfilter 3/4 - Sheet 12 of 13	9.10.2013
215023-D-D-330-063	A	General Drainage Standard Details - Stormfilter Detail - Stormfilter 3/4 - Sheet 13 of 13	9.10.2013

215023-D-D-330-070	C	Water Quality Pond - Details	15.07.2013
215023-D-D-330-100	D	SH16 St Lukes Stormwater - Pipe Schedules - Sheet 1 of 2	9.10.2013
215023-D-D-330-101	D	SH16 St Lukes Stormwater - Pipe Schedules - Sheet 2 of 2	9.10.2013
215023-D-D-330-102	D	SH16 St Lukes Stormwater - Catchpit/Manhole Schedule - Sheet 1 of 2	9.10.2013
215023-D-D-330-103	D	SH16 St Lukes Stormwater - Catchpit/Manhole Schedule - Sheet 2 of 2	9.10.2013
215023-D-D-330-104	C	SH16 St Lukes Stormwater - Catchpit/Manhole Schedule	15.07.2013
<b>Proposed Stormwater Longsections</b>			
215023-D-D-340-001	C	Proposed Stormwater Long Sections - Sheet 1 of 16	15.07.2013
215023-D-D-340-002	D	Proposed Stormwater Long Sections - Sheet 2 of 16	9.10.2013
215023-D-D-340-003	C	Proposed Stormwater Long Sections - Sheet 3 of 16	15.07.2013
215023-D-D-340-004	D	Proposed Stormwater Long Sections - Sheet 4 of 16	9.10.2013
215023-D-D-340-005	D	Proposed Stormwater Long Sections - Sheet 5 of 16	9.10.2013
215023-D-D-340-006	C	Proposed Stormwater Long Sections - Sheet 6 of 16	15.07.2013
215023-D-D-340-007	C	Proposed Stormwater Long Sections - Sheet 7 of 16	15.07.2013
215023-D-D-340-008	C	Proposed Stormwater Long Sections - Sheet 8 of 16	15.07.2013
215023-D-D-340-009	C	Proposed Stormwater Long Sections - Sheet 9 of 16	15.07.2013
215023-D-D-340-010	D	Proposed Stormwater Long Sections - Sheet 10 of 16	9.10.2013
215023-D-D-340-011	D	Proposed Stormwater Long Sections - Sheet 11 of 16	9.10.2013
215023-D-D-340-012	D	Proposed Stormwater Long Sections - Sheet 12 of 16	9.10.2013
215023-D-D-340-014	D	Proposed Stormwater Long Sections - Sheet 14 of 16	9.10.2013
215023-D-D-340-016	D	Proposed Stormwater Long Sections - Sheet 16 of 16	9.10.2013
215023-D-D-340-050	C	Water Quality Pond - Long Section	15.07.2013



215023-D-D-340-313	A	Single Left Turn Lane Option - Great North Road - Proposed Int Stormwater LS - Sheet 13 of 16	05.11.2013
215023-D-D-340-315	A	Single Left Turn Lane Option - Great North Road - Proposed Int Stormwater LS - Sheet 15 of 16	05.11.2013
215023-D-D-340-316	A	Single Left Turn Lane Option - Great North Road - Proposed Int Stormwater LS - Sheet 16 of 16	05.11.2013
<b>Road Lighting</b>			
215023-D-E-161-001	C	Road Lighting Sheet 1 of 8	31.05.2013
215023-D-E-161-002	C	Road Lighting Sheet 2	31.05.2013
215023-D-E-161-004	C	Road Lighting Sheet 4	31.05.2013
215023-D-E-161-005	C	Road Lighting Sheet 5	31.05.2013
215023-D-E-161-006	C	Road Lighting Sheet 6	31.05.2013
215023-D-E-161-007	C	Road Lighting Sheet 7	31.05.2013
215023-D-E-161-008	B	Road Lighting Sheet 8	31.05.2013
<b>Schematic Montrose Box</b>			
215023-D-E-161-052	B	Schematic Montrose Box MB1	31.05.2013
215023-D-E-161-053	B	Schematic Montrose Box MB2	31.05.2013
215023-D-E-161-054	B	Schematic Montrose Box MB3	31.05.2013
215023-D-E-161-055	B	Schematic Montrose Box MB4	31.05.2013
215023-D-E-161-056	B	Schematic Montrose Box MB5	31.05.2013
215023-D-E-161-057	B	Schematic Montrose Box MB6	31.05.2013
<b>Proposed Gearplate Cable Termination</b>			
215023-D-E-161-058	B	Typical Details Gearplate Cable Termination Within Single Arm Lighting Pole	31.05.2013
215023-D-E-161-059	B	Typical Details Gearplate Cable Termination Within Double Arm Lighting Pole	31.05.2013
215023-D-E-161-060	B	Typical Details Gearplate Cable Termination Single Phase Power Supply	31.05.2013
215023-D-E-161-061	B	Underground Reticulation Typical Vector's Cable and Duct Configurations	31.05.2013
<b>Lighting</b>			
215023-D-E-161-070	B	Lighting Standard Details	31.05.2013

215023-D-E-161-071	B	Lighting Standard Details Sheet 2	31.05.2013
215023-D-E-161-072	B	Lighting Standard Details Sheet 3	31.05.2013
215023-D-E-161-100	A	Legend Sheet	31.05.2013
215023-D-E-161-101	B	Road Lighting Sheet 1	31.05.2013
215023-D-E-161-303	A	Single Left Turn Lane Option - Great North Road - Road Lighting Sheet 3	05.11.2013
215023-D-E-161-312	A	Single Left Turn Lane Option - Great North Road - Road Lighting Sheet 2	05.11.2013
<b>Retaining Walls Elevation and Plans</b>			
215023-D-J-240-001	B	Retaining Walls General Arrangement Sheet 1 of 3	31.05.2013
215023-D-J-240-003	B	Retaining Walls General Arrangement Sheet 3 of 3	31.05.2013
215023-D-J-240-100	B	Retaining Walls Sheet Layout	31.05.2013
215023-D-J-240-101	B	General Integral TL5 Barrier Wall Notes and Details	31.05.2013
215023-D-J-240-102	B	General Integral TL5 Barrier Wall Typical Details	31.05.2013
215023-D-J-240-201	B	RW-102 Meola Creek MSE Stone Strong Wall General Notes	31.05.2013
215023-D-J-240-202	B	RW-102 Meola Creek MSE Stone Strong Wall Elevation and Plan	31.05.2013
215023-D-J-240-203	B	RW-102 Meola Creek MSE Stone Strong Wall Details – Sheet 1 of 2	31.05.2013
215023-D-J-240-204	B	RW-102 Meola Creek MSE Stone Strong Wall Details – Sheet 2 of 2	31.05.2013
215023-D-J-240-301	B	RW-104 Chamberlain park Stone Strong Wall Elevation and Plan – Sheet 1 of 2	31.05.2013
215023-D-J-240-302	B	RW-104 Chamberlain park Stone Strong Wall Elevation and Plan – Sheet 2 of 2	31.05.2013
215023-D-J-240-303	B	RW-104 Chamberlain park Stone Strong Wall General Notes and Details	31.05.2013
215023-D-J-240-311	B	RW-120 Great North Road Stone Strong Wall Elevation and Plan	31.05.2013

215023-D-J-240-312	B	RW-120 Great North Road Stone Strong Wall General Notes and Details	31.05.2013
215023-D-J-240-321	B	RW-124 Cycle Path Stone Strong Wall Elevation and Plan	31.05.2013
215023-D-J-240-322	B	RW-124 Cycle Path Stone Strong Wall General Notes and Details	31.05.2013
215023-D-J-240-401	B	RW-105 Western Springs Community Centre L-Shape Barrier Elevation and Plan – Sheet 1 of 5	31.05.2013
215023-D-J-240-402	B	RW-105 Western Springs Community Centre L-Shape Barrier Elevation and Plan – Sheet 2 of 5	31.05.2013
215023-D-J-240-403	B	RW-105 Western Springs Community Centre L-Shape Barrier Elevation and Plan – Sheet 3 of 5	31.05.2013
215023-D-J-240-404	B	RW-105 Western Springs Community Centre L-Shape Barrier Elevation and Plan – Sheet 4 of 5	31.05.2013
215023-D-J-240-405	B	RW-105 Western Springs Community Centre L-Shape Barrier Elevation and Plan – Sheet 5 of 5	31.05.2013
215023-D-J-240-406	B	RW-105 Western Springs Community Centre L-Shape Barrier General Notes and Details	31.05.2013
215023-D-J-240-411	B	RW-122 Great North Road Carpark L-Shape Wall General Notes and Details	31.05.2013
215023-D-J-240-412	B	RW-122 Great North Road Carpark L-Shape Wall Elevation and Plan – Sheet 1 of 2	31.05.2013
215023-D-J-240-413	B	RW-122 Great North Road Carpark L-Shape Wall Elevation and Plan – Sheet 2 of 2	31.05.2013
215023-D-J-240-501	A	St Lukes Road Interchange General Basalt Cut Slope General Notes	31.05.2013
215023-D-J-240-502	A	St Lukes Road Interchange General Basalt Cut Slope Detail – Sheet 1 of 2	31.05.2013
215023-D-J-240-503	A	St Lukes Road Interchange General Basalt Cut Slope Detail – Sheet 2 of 2	31.05.2013

215023-D-J-240-504	A	RW-111 St Lukes Road Interchange Southern Abutment Basalt Cut Slope Elevation and Plan – Sheet 1 of 2	31.05.2013
215023-D-J-240-505	A	RW-111 St Lukes Road Interchange Southern Abutment Basalt Cut Slope Elevation and Plan – Sheet 2 of 2	31.05.2013
215023-D-J-240-510	B	RW-112 St Lukes Road Interchange Northern Abutment Basalt Cut Slope Elevation and Plan – Sheet 1 of 4	31.05.2013
215023-D-J-240-511	B	RW-112 St Lukes Road Interchange Northern Abutment Basalt Cut Slope Elevation and Plan – Sheet 2 of 4	31.05.2013
215023-D-J-240-512	B	RW-112 St Lukes Road Interchange Northern Abutment Basalt Cut Slope Elevation and Plan – Sheet 3 of 4	31.05.2013
215023-D-J-240-513	B	RW-112 St Lukes Road Interchange Northern Abutment Basalt Cut Slope Elevation and Plan – Sheet 4 of 4	31.05.2013
215023-D-J-240-520	B	RW-123 Westbound On-ramp Basalt Cut Slope Elevation and Plan	31.05.2013
215023-D-J-240-605	B	St Lukes Bridge Southern Abutment Pile Ground Improvement Details	31.05.2013
215023-D-J-240-606	A	St Lukes Bridge Southern Abutment Pile Ground Improvement Elevation	31.05.2013
215023-D-J-240-701	A	RW-115 St Lukes Road Interchange Stone Strong Pile Wall General Notes	31.05.2013
215023-D-J-240-702	A	RW-115 St Lukes Road Interchange Stone Strong Pile Wall Elevation and Plan – Sheet 1 of 2	31.05.2013
215023-D-J-240-703	A	RW-115 St Lukes Road Interchange Stone Strong Pile Wall Elevation and Plan – Sheet 2 of 2	31.05.2013
215023-D-J-240-704	A	RW-115 St Lukes Road Interchange Stone Strong Pile Wall Details – Sheet 1	31.05.2013
215023-D-J-240-705	A	RW-115 St Lukes Road Interchange Stone Strong Pile Wall Details – Sheet 2	31.05.2013

215023-D-J-240-706	E	Southern Abutment and Wall Detail (Previously 215023-D-A-919-070)	26.08.2013
215023-D-J-240-801	B	RW-119 Eastbound On-ramp Gabion Wall Elevation and Plan	31.05.2013
215023-D-J-240-802	B	RW-119 Eastbound On-ramp Gabion Wall General Notes and Details	31.05.2013
215023-D-J-240-811	B	RW-121 St Lukes Road Gabion Wall Elevation and Plan	31.05.2013
215023-D-J-240-812	B	RW-121 St Lukes Road Gabion Wall General Notes and Details	31.05.2013
215023-D-J-240-932	A	RW- Single Left Turn Lane Option Great North Road	10.12.2013
<b>Proposed Vector Relocations</b>			
215023-D-U-146-001	A	Proposed Vector Plans Electricity and Gas Sheet 1 of 8	18.03.2013
215023-D-U-146-002	A	Proposed Vector Plans Electricity and Gas Sheet 2 of 8	18.03.2013
215023-D-U-146-004	A	Proposed Vector Plans Electricity and Gas Sheet 3 of 8	18.03.2013
215023-D-U-146-005	A	Proposed Vector Plans Electricity and Gas Sheet 4 of 8	18.03.2013
215023-D-U-146-006	A	Proposed Vector Plans Electricity and Gas Sheet 5 of 8	18.03.2013
215023-D-U-146-007	A	Proposed Vector Plans Electricity and Gas Sheet 7 of 8	18.03.2013
215023-D-U-146-008	A	Proposed Vector Plans Electricity and Gas Sheet 8 of 8	18.03.2013
215023-D-U-146-303	A	Single Left Turn Lane Option - Great North Road - Proposed Vector Plans Electricity and Gas Sheet 3 of 8	01.11.2013
<b>Proposed Chorus Relocations</b>			
215023-D-U-148-001	A	Proposed Chorus Plans Sheet 1 of 8	18.03.2013
215023-D-U-148-002	A	Proposed Chorus Plans Sheet 2 of 8	18.03.2013
215023-D-U-148-004	A	Proposed Chorus Plans Sheet 4 of 8	18.03.2013
215023-D-U-148-005	A	Proposed Chorus Plans Sheet 5 of 8	18.03.2013
215023-D-U-148-006	A	Proposed Chorus Plans Sheet 6 of 8	18.03.2013
215023-D-U-148-007	A	Proposed Chorus Plans Sheet 7 of 8	18.03.2013

215023-D-U-148-008	B	Proposed Chorus Plans Sheet 8 of 8	18.03.2013
215023-D-U-148-303	A	Single Left Turn Lane Option - Great North Road - Proposed Chorus Plans Sheet 3 of 8	01.11.2013
<b>Proposed Telstra Clear Relocations</b>			
215023.D-U-149-001	A	Proposed Telstra Clear Plans Sheet 1 of 8	31.05.2013
215023-D-U-149-002	B	Proposed Telstra Clear Plans Sheet 2 of 8	31.05.2013
215023-D-U-149-004	B	Proposed Telstra Clear Plans Sheet 4 of 8	31.05.2013
215023-D-U-149-005	B	Proposed Telstra Clear Plans Sheet 5 of 8	31.05.2013
215023-D-U-149-006	B	Proposed Telstra Clear Plans Sheet 6 of 8	31.05.2013
215023-D-U-149-007	A	Proposed Telstra Clear Plans Sheet 7 of 8	31.05.2013
215023-D-U-149-008	B	Proposed Telstra Clear Plan-Sheet 8 of 8	31.05.2013
215023-D-U-149-303	A	Single Left Turn Lane Option - Great North Road - Proposed Telstra Clear Plan-Sheet 3 of 8	01.11.2013
<b>Existing Designation</b>			
215023-SK-C-100-021	B	General Arrangement Existing Designations Sheet 1 of 1	03.10.2013
<b>Great North Rd – Single Left Turn Lane Option</b>			
215023-SK-C-100-500	A	Single Left Turn Lane Option - Great North Road - General Arrangement	03.10.2013
215023-SK-C-103-503	A	Single Left Turn Lane Option - GNR Cross Sections - MCG0 - Sheet 1 of 4	03.10.2013
215023-SK-C-103-504	A	Single Left Turn Lane Option - GNR Cross Sections - MCG0 - Sheet 2 of 4	03.10.2013
215023-SK-C-103-505	A	Single Left Turn Lane Option - GNR Cross Sections - MCG0 - Sheet 3 of 4	03.10.2013
215023-SK-C-103-506	A	Single Left Turn Lane Option - GNR Cross Sections - MCG0 - Sheet 4 of 4	03.10.2013
<b>Earthworks</b>			
215023-SK-C-400-001	A	Earthworks General Arrangement Sheet 1 of 3	23.09.2013

215023-SK-C-400-002	A	Earthworks General Arrangement Sheet 2 of 3	03.10.2013
215023-SK-C-400-003	A	Earthworks General Arrangement Sheet 3 of 3	03.10.2013
<b>Watercare Works Over Approval</b>			
215023-SK-C-300-010	B	Water Quality Pond - Cut/Fill Depth Bands	15.07.2013
215023-SK-C-300-011	A	Watercare Works Over Approval (Construction Works)	11.10.2013
215023-SK-D-001	A	Orakei Main Sewer - Section Layout Plan	18.09.2013
215023-SK-D-002	A	Orakei Main Sewer - Earthworks Sections - Sheet 1 of 3	18.09.2013
215023-SK-D-003	A	Orakei Main Sewer - Earthworks Sections - Sheet 2 of 3	18.09.2013
215023-SK-D-004	A	Orakei Main Sewer - Earthworks Sections - Sheet 3 of 3	18.09.2013
215023-SKE-LT-001	03	Spill Lighting Assessment - Area: Eastern Designation	15.10.2013
215023-SKE-LT-002	03	Spill Lighting Assessment - Area: Western Designation	15.10.2013
215023-SKE-LT-003	03	Spill Lighting Assessment - Area: St Lukes Interchange Southern Area	15.10.2013
215023-SKE-LT-004	03	Spill Lighting Assessment - Area: St Lukes Interchange Northern Area	15.10.2013

and all information and methodologies, being:

<b>Reference Number</b>	<b>Title</b>	<b>Author</b>	<b>Date</b>
Updated Planning Assessment	Project: SH16 St Lukes Western Ring Route Project Planning Assessment	Aurecon	6 November 2013, received by the Auckland Council on 29 November 2013
Appendix B	State Highway Management Team Report Rev 15	NZTA	Undated, lodged with application on 12 July 2013
Appendix C	Project: SH16 St Lukes Western Ring Route Project St Lukes Interchange Options Assessment	Aurecon	27 May 2013

Appendix D	Waterview Connection – SH16 to St Lukes Landscape and Urban Design Masterplan	LA4 Landscape Architects	31 May 2013
Appendix E	SH16 Waterview Connection St Lukes Road/Great South Road Intersection	LA4 Landscape Architects	May 2013
Appendix E	SH16 Waterview Connection St Lukes/Great North Road Intersection Landscape and Visual Assessment	LA4 Landscape Architects	September 2013
Appendix E	SH16 Waterview Connection St Lukes/Great North Road Intersection Landscape and Visual Assessment – Addendum	LA4 Landscape Architects	October 2013
Appendix F	Project: Waterview St Lukes Interchange Stormwater Design Report	Aurecon	17 May 2013
Appendix G	Project: SH16 St Lukes Detailed Design Report: Stormwater	Aurecon	15 July 2013
Appendix H	An Arboricultural Implication Report on the Proposed Realignment of the Waterview Connection St Lukes Interchange, Western Springs, Auckland	The Specimen Tree Company Ltd	April 2013
Appendix H	Arboricultural Implication Report	The Specimen Tree Company Ltd	October 2013
Appendix H	Addendum Arboricultural Implication Report	The Specimen Tree Company Ltd	October 2013
Appendix J	Project: SH16 St Lukes Interchange Project Indicative Constructability Report	Aurecon	24 April 2013
Appendix K	Auckland SH16 Motorway Widening St Lukes Interchange (St Lukes to Great North Road) Preliminary Design Safety Audit	Traffic Planning Consultants Ltd, MWH and O'Brien Traffic	13 December 2013
Appendix L	SH16 – Sector 6 Road – Traffic Noise Assessment	Aurecon	7 May 2013
Appendix M	Project: SH16 St Lukes Erosion and Sediment Control Plan	Aurecon	22 May 2013
Appendix N	Land Requirement Plan 215023-D-C-951-001B	Aurecon	2 October 2013



Appendix O	Bol conditions – Waterview Connection Project	LA4 Landscape Architects	19 April 2013
Appendix Q	Consultation records	NZTA/AT	various
Appendix R	Iwi letters	NZTA/AT	various
Appendix S	Landowner Approval application letter	Aurecon	4 October 2013 and 30 October 2013
Appendix T	Objectives and policies	Aurecon	N/A
S92 Response	Letter titled “Section 92 Request for Further Information” dated 10 September 2013 Including Appendices as bound.	Aurecon	10 September 2013
S92 Response	Letter titled “Section 92 Request for Further Information” dated 23 September 2013 Including Appendices as bound.	Aurecon	23 September 2013
S92 Response	Letter titled “Section 92 Request for Further Information Dated 23 August and 2, 4 and 7 October 2013” dated 15 October 2013 Including Appendices as bound.	Aurecon	15 October 2013
Urban Design and Landscape Design Framework	Western Ring Route – Waterview Connection Urban Design and Landscape Design Framework	Beca/Jasmax/ Stephen Brown Environments	June 2010

and referenced by the Council as “R/LUC/2013/2533, R/LUC/2013/2535, R/REG/2013/2539, R/REG/2013/2541, R/REG/2013/2542, R/REG/2013/4722, R/REG/2013/2616, R/LUC/2013/2545, R/LUC/2013/5030, R/REG/2013/2550, R/REG/2013/2551, R/REG/2013/2552 AND R/REG/2013/4724”. If there is any conflict between the application documents and the specific conditions which follow, the specific conditions are to prevail. If there is any conflict between the plans in the stated volumes and the plans revised/updated/produced during processing the application, the later plans prevail.

### Disputes Resolution

2. In the event of any dispute, disagreement or inaction arising as to any Auckland Council Manager certification/ approvals required by the designation conditions, or as to implementation of, or monitoring required by, the conditions, the disputed matters shall be referred in the first instance to the NZTA Regional State Highway Manager and to the Resource Consents Manager, Auckland Council to determine a resolution process.

If a resolution cannot be agreed, then the matter may be referred to an independent and appropriately qualified expert in resource management and/or roading matters, agreeable to both parties (such agreement not to be unreasonably withheld by either party), setting out in writing the details of the matter to be referred for determination and the reasons the parties have not agreed.

The independent and appropriately qualified expert shall be appointed within 10 working days of the NZTA or the Auckland Council giving notice to the other of its intention to seek an expert determination. The expert shall, as soon as possible, issue a written decision on the matter including the reasons for his or

her decision. In making the decision, the expert shall be entitled to seek further information and to hear from the parties as he or she sees fit in his or her sole discretion. The reasonable fees of the expert, including GST (if any), shall be paid equally by both disputing parties.

*Advice note: The dispute resolution process provided for by this condition does not prejudice any party's right to take enforcement action in relation to implementation of the designation conditions. However, the dispute resolution process will be applied before any formal enforcement action is taken by the Council, except for urgent situations.*

3. This alteration to designation will lapse if it is not given effect to before the expiry of February 2018, being 5 years from the date on which it is included in the District Plan under section 184(1) of the Resource Management Act 1991 ("the Act").

4. Except as modified by the conditions below, the works shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency ("NZTA", being the Requiring Authority), the Notice(s) of Requirement ("NoR") and the supporting documents, and supplementary information provided. In summary, this information is:

- a. Waterview Connection Project. Assessment of Environmental Effects report (dated August 2010). Parts A-E;
- b. Waterview Connection Project. Assessment of Environmental Effects report (dated August 2010). Part F: Plans and Drawings, except as updated through processing the NoR and applications (Refer Schedule A for current plan and drawing references); and
- c. Waterview Connection Project. Assessment of Environmental Effects report (dated August 2010). Part G: Technical Reports:
  - i. Technical Report G.1 Assessment of Air Quality Effects
  - ii. Technical Report G.2 Assessment of Archaeological Effects
  - iii. Technical Report G.3 Assessment of Avian Ecological Effects
  - iv. Technical Report G.4 Assessment of Coastal Processes
  - v. Technical Report G.5 Assessment of Construction Noise Effects
  - vi. Technical Report G.6 Assessment of Freshwater Ecological Effects
  - vii. Technical Report G.7 Assessment of Groundwater Effects
  - viii. Technical Report G.8 Assessment of Herpetofauna Ecological Effects
  - ix. Technical Report G.9 Assessment of Land and Groundwater Contamination
  - x. Technical Report G.10 Assessment of Lighting Effects
  - xi. Technical Report G.11 Assessment of Marine Ecological Effects
  - xii. Technical Report G.12 Assessment of Operational Noise Effects
  - xiii. Technical Report G.13 Assessment of Ground Settlement Effects
  - xiv. Technical Report G.14 Assessment of Social Effects
  - xv. Technical Report G.15 Assessment of Stormwater and Streamworks Effects
  - xvi. Technical Report G.16 Assessment of Temporary Traffic Effects
  - xvii. Technical Report G.17 Assessment of Terrestrial Vegetation Effects
  - xviii. Technical Report G.18 Assessment of Transport Effects
  - xix. Technical Report G.19 Assessment of Vibration Effects
  - xx. Technical Report G.20 Assessment of Visual and Landscape Effects
  - xxi. Technical Report G.21 Construction Environmental Management Plan (CEMP)
  - xxii. Technical Report G.22 Erosion and Sediment Control Plan (ESCP)
  - xxiii. Technical Report G.23 Coastal Works
  - xxiv. Technical Report G.24 Geotechnical Interpretive Report
  - xxv. Technical Report G.25 Traffic Modelling Report
  - xxvi. Technical Report G.26 Operational Model Validation Report
  - xxvii. Technical Report G.27 Stormwater Design Philosophy Statement
  - xxviii. Technical Report G.28 Geotechnical Factual Report – 500 Series
  - xxix. Technical Report G.29 Geotechnical Factual Report – 700 Series
  - xxx. Technical Report G.30 Assessment of Associated Sediment and Contaminant Loads
  - xxxi. Technical Report G.31: Technical Addendum Report (September 2010)

- d. PT & Active Mode Transport Routes Existing and Proposed (Refer Schedule A, Row 22).
- e. Waterview Connection Project, evidence and supplementary information provided to the Board of Inquiry:
  - i. Evidence in Chief (Numbers 1-37)
  - ii. Rebuttal Evidence (Numbers 1-33)
  - iii. Supplementary Information (Numbers 1-8)
- f. SH16 St Lukes Western Ring Route Project Planning Assessment and supporting documentation.

**Construction Environmental Management Plan (“CEMP”)**

5. The NZTA shall update and finalise the draft Construction Environmental Management Plan (“CEMP”) submitted with the NZTA Waterview Connection Project, including all the Management Plans which form part of the CEMP and are included as appendices, submitted with this application, to ensure compliance with the consent and designation conditions imposed by the Board of Inquiry. The CEMP shall be provided to the Major Infrastructure Projects Team Manager, Auckland Council, for review at least 20 working days prior to the commencement of works to certify compliance and consistency with the conditions. Construction shall not commence until the certification is obtained.

*Advice note: For clarity, the CEMP will be updated and finalised in accordance with the Board of Inquiry conditions for both the resource consents and designations. Any amendments will be limited to reflecting the requirements of the conditions, specifying personnel, and completing the Environmental Risk Register.*

6. As some works may commence well in advance of others, for the purposes of staging works, NZTA may provide staged or site-specific CEMPs for those works to the Major Infrastructure Team Manager, Auckland Council. The NZTA shall consult with the Major Infrastructure Team Manager about the need and timing for any other site-specific or staged CEMPs and shall provide any required site-specific or staged CEMPs to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to commencement of such the specific stage (including enabling) or site works.

*Note: This condition has been carried over from the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent (CEMP.1B).*

7. The certification process of the CEMP (and its appendices), as required by condition 5, shall confirm that the CEMP gives effect to the relevant conditions, as well as those matters in condition 11 (CEMP.6), and that it includes details of:

- a. Staff and contractors’ responsibilities;
- b. Training requirements for employees, sub-contractors and visitors;
- c. Environmental incident and emergency management;
- d. Communication and interface procedures (in accordance with the Communication Plan required under condition PI.2 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent;
- e. Environmental complaints management (including the procedures required under condition PI.4 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent;
- f. Compliance monitoring;
- g. Reporting (including detail on the frequency of reporting to the Auckland Council);
- h. Environmental auditing; and
- i. Corrective action.

8. The management of key environmental effects associated with the construction phase of the project is detailed in environmental management plans included in the CEMP as appendices. This suite of management plans as shown on Figure CEMP.A comprises:

- a. Construction Noise and Vibration Management Plan (“CNVMP”);
- b. Construction Air Quality Management Plan (“CAQMP”);
- c. Erosion and Sediment Control Plan (“ESCP”);
- d. Temporary Stormwater Management Plan (“TSMP”);

- e. Ecological Management Plan (“ECOMP”);
- f. Groundwater Management Plan (“GWMP”);
- g. Settlement Effects Management Plan (“SEMP”);
- h. Contaminated Soils Management Plan (“CSMP”);
- i. Hazardous Substances Management Plan (“HSMP”);
- j. Archaeological Site Management Plan (“ASMP”);
- k. Construction Traffic Management Plan (“CTMP”);
- l. Concrete Batching and Crushing Plant Management Plan (“CBCPMP”);
- m. Electrical Infrastructure Site Development and Construction Management Plan (“EISDCMP”) (to be prepared in accordance with condition CEMP.15 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- n. Waste Management Plan (to be prepared in accordance with condition CEMP.10 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent; and
- o. Temporary Construction Lighting Management Plan (to be prepared in accordance with condition L.2 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

9. The CEMP shall be implemented and maintained throughout the entire construction period.

10. A copy of the CEMP shall be held on each construction site at all times and shall be available for inspection on request by the Auckland Council.

11. The finalised CEMP shall include specific details on demolition, construction and management of all works associated with the project. The certification process for the CEMP shall confirm that the CEMP includes details of the following:

- a. Details of the site or project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- b. The location of large notice boards that clearly identify NZTA and the project name, together with the name, telephone, email address and address for service of the site or project manager and the community liaison person;
- c. An outline construction programme of the work indicating in particular likely time periods for road closures and anticipated traffic diversion effects;
- d. The hours of work, which should reflect the need to ensure that residents enjoy reasonable freedom from noisy or intrusive construction activity in their neighbourhood at night, on Sundays and during public holidays;
- e. Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/ storage of rubbish, storage and unloading of building materials and similar construction activities;
- f. Location of worker’s offices and conveniences (e.g. portaloos);
- g. Procedures of controlling sediment run-off, dust and the removal of soil, debris and demolition and construction materials from public roads or places. Dust mitigation measures should include use of water sprays to control dust nuisance on dry or windy days;
- h. Methods to stabilise ingress and egress points to construction sites, to the standard required by the former ARC’s Technical Publication 90 (Nov 2007) (“TP 90”);
- i. Procedures for ensuring that residents within 100 metres of construction areas or other people whose use of an area may be disrupted by construction works are given notice of the commencement of construction activities and are informed about the expected duration of the works, including potentially through the community liaison person;
- j. Procedures to be followed to ensure that those working in the vicinity of identified heritage and ecological features are aware of the heritage or ecological values of these features and the steps which need to be taken to meet the conditions applying to work on the site;
- k. Means of ensuring the safety of the general public;
- l. Procedures for the community liaison person to receive and respond to complaints about construction activities, including dust and odour from the works;
- m. Methods of mitigating the local and network wide effects of construction of individual elements of the

- project, including measures to ensure that parking of staff vehicles on surrounding streets is restricted;
- n. All temporary boundary/ security fences shall be maintained in good order, with any graffiti removed as soon as possible;
  - o. Confirmation of a project arborist; and completion of a “STEM” assessment of the preliminary list of Amenity Trees in Schedule E.7 of the AEE lodged with the Board of Inquiry for the Waterview Connection Project to confirm the final amenity trees; and
  - p. The process to minimise the removal of amenity trees, maximise the protection of those retained, undertake relocation of amenity trees and replacement of specimen trees (in accordance with conditions LV.10 and ARCH.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

*Advice note: For the purposes of this condition, “amenity tree” in o) and p) is defined as a tree or trees that contribute significantly to amenity, taking account of its form, size, health, ecological or historical significance (a preliminary list of these trees is provided in Appendix E.7 of the AEE lodged with the Board of Inquiry for the Waterview Connection Project).*

12. The layout of the construction yards, including associated buildings, fencing and site access shall be developed in accordance with Waterview Connection Project Construction Yards Plans submitted as part of the AEE for the Waterview Connection Project. The layout drawings shall be provided to the Major Infrastructure Projects Team Manager, Auckland Council, at least 20 working days prior to occupation of the yard, for review and certification that the final layout of the construction yards is in accordance with the conditions. The layout drawings shall incorporate the following:

- a. The main access to the construction yards to be located as far as practicable from residential dwellings, taking into account site and public safety and environmental constraints, in the locations shown on Waterview Connection Project Construction Yards Plans;
- b. Noisy construction activities to be located as far as practicable, and preferably no less than 100m, from residential dwellings;
- c. Construction of temporary boundary/ security fences to be undertaken in a manner which minimises impacts on existing trees;
- d. Temporary acoustic fences and visual barriers;
- e. Temporary buildings greater than 8 metres in height to be located in a position which minimises visual impact on adjacent residential dwellings; and
- f. Location of workers’ and project vehicle parking.

13. All storage of material and equipment associated with the construction works shall take place within the boundaries of the designation.

14. Temporary protection shall be installed to prevent vehicles damaging drains, footpaths, berms, kerbs, vehicle crossings and the roads during the site preparation and construction phase of the project. Any damage to the drains, footpaths, berms, kerbs, vehicle crossings and the road attributable to any vehicle associated with construction activities shall be repaired to the same or similar standards as existed prior to such damage at no cost to the Auckland Council.

15. The NZTA shall finalise and implement the Hazardous Substances Management Plan (“HSMP”), through the CEMP (as required by condition 5; CEMP.1), submitted with the NZTA Waterview Connection Project, prior to works commencing on the site. The certification process of the CEMP shall confirm that the HSMP clearly identifies the requirements for proper storage, handling, transport and disposal of hazardous substances during the construction phase of the project and confirm that there shall be no storage of explosives on the project site.

16. The NZTA shall develop and implement a Waste Management Plan in accordance with the waste management principles, controls and methods set out in the certified CEMP. The Plan shall be provided to the Major Infrastructure Projects Team Manager, Auckland Council for approval and the approved Plan is to be implemented throughout the entire construction period.

17. The approved CEMP shall be reviewed by the NZTA at least annually or as a result of a material change to the project. The review shall take into consideration:

- a. Compliance with designation and consent conditions;
- b. Any changes to construction methods;
- c. Key changes to roles and responsibilities for the project;
- d. Changes in industry best practice standards;
- e. Changes in legal or other requirements;
- f. Results of inspections, monitoring, incidents, corrective actions, internal or external assessments; and
- g. Public complaints.

A summary of the review process undertaken shall be kept by the NZTA, provided annually to the Major Infrastructure Projects Team Manager, Auckland Council and made available (with any related data) to the Auckland Council on request.

18. Following the review process (as described in condition 17 and CEMP.12 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent) the CEMP may require updating. Any material change proposed to the CEMP (including appended Management Plans) shall be submitted for approval to the Major Infrastructure Projects Team Manager, Auckland Council at least 10 working days prior to the proposed changes taking effect.

*Advice Note: "Material change" will include amendment to any base information informing the CEMP or any process, procedure or method of the CEMP (such as the environmental constraints map, compliance monitoring process, complaints procedure or mitigation / remedial methods identified) which has the potential to increase adverse effects on a particular value. For clarity changes to personnel and contact schedules do not constitute a material change.*

19. The CEMP shall include, as an appendix, an Electrical Infrastructure Site Development and Construction Management Plan ("EISDCMP"). The EISDCMP shall be provided to the Major Infrastructure Projects Team Manager, Auckland Council, and include:

- a. Methods and measures:
  - i. To ensure that the existing high voltage infrastructure can be accessed for maintenance at all reasonable times, or emergency works at all times, during and after construction activities.
  - ii. To appropriately 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 the overhead transmission lines
  - iii. To ensure that no activity is undertaken during construction that would result in ground vibrations and/or ground instability likely to cause material damage to the transmission lines, including support structures.
  - iv. To ensure that changes to the drainage patterns and runoff characteristics do not result in adverse effects from stormwater on the foundations for any high voltage transmission line support structure.
- b. Sufficient detail to confirm that new planting and maintenance of vegetation will comply with the New Zealand Electricity (Hazard from Trees) Regulations 2003, including, but not limited to, the provisions of Schedule (Growth Limit Zones) to those Regulations.
- c. Sufficient detail to confirm that the works will comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001), including, but not limited to, the provisions of:
  - i. Clause 2.2 with respect to excavations near overhead support structures;
  - ii. Clause 2.4 with respect to buildings near overhead support structures;
  - iii. Section 3 with respect to minimum separation between buildings and conductors;
  - iv. Section 5 with respect to minimum safe distances for the operation of mobile plant; and,
  - v. Table 4 with respect to minimum safe separation distances between the ground and the overhead conductors.
- d. Confirmation that Transpower has been provided a copy of the EISDCMP for its review at least 20 working days prior to construction.

*Advice note: With respect to clause (c), specific consideration must be given to the height and location of temporary structures (such as project offices and other construction site facilities) and permanent structures (such as lighting poles, signage, gantries and acoustic barriers).*

20. The NZTA will be responsible for all service relocations required for construction of the project. The NZTA shall liaise with the providers of infrastructure service networks (including, but not limited to, water, gas, stormwater, wastewater, power and telecommunications) and private property owners with on-site services to develop methodologies and timing for necessary services relocation required for the project, with the objective of minimising disruption to the operation of these service networks and on-site services.

*Advice note:*

*a. It is noted that if separate consents are required for relocations for any services of network utility operators or landowners, such consents will be obtained before construction commences in the relevant area, and any effects of those relocations would be considered at that time. The same applies to any alteration of consents if required.*

*b. Network infrastructure owned and operated by Watercare Services is located within the designation. An operating agreement will be developed by NZTA and Watercare Services which will include appropriate notification and access protocols where works are to be undertaken by either network operator on or adjacent to Watercare Services infrastructure within the designations.*

### **Landscape, Urban Design, Visual**

21. The requiring authority shall implement the project planting in accordance with the Landscape and Urban Design Masterplan and planting details (referenced in condition 1) during the first planting season following completion of the construction works, the project planting shall be maintained in a healthy state for a period of 10 years thereafter.

*Advice note: Ongoing control and management of the landscaping within the designation is the responsibility of the NZTA.*

22. The requiring authority shall ensure that any areas within the project area affected by construction activities have sub-soil rehabilitated and topsoil replaced so that the hydrological response including the volume of stormwater runoff generated is as close as practicable to the pre-development situation. The methodologies to achieve this shall be documented and provided to the Major Infrastructure Projects Team Manager on completion of construction works.

23. Where possible the requiring authority shall use locally eco-sourced native plants in the project area.

24. All noise walls shall be located in accordance with the Noise Walls and Fences plans (rather than the Landscape and Urban Design Masterplans) referenced in plan series '215023-D-C-918-001'.

25. In certifying the Urban Design and Landscape Masterplan prepared in accordance with condition LV.1 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, the Major Infrastructure Projects Team Manager, Auckland Council shall be satisfied the plans include:

- a. Planting to screen houses and noise walls (including cross section details);
- b. Ecological Management Plan, prepared in accordance with Conditions V.1, A.1, H.1, F.1 and M.1 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent;

26. The NZTA shall have implemented the Urban Design and Landscape Masterplan plans within 6 months of practical completion of construction of the project.

27. The NZTA shall implement the Urban Design and Landscape Masterplan taking into account the pest plant management guidelines detailed in the Ecological Management Plan (as required by condition 18, CEMP.3 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

## **Air Quality**

28. The NZTA shall finalise and implement, through the CEMP, the Construction Air Quality Management Plan (“CAQMP”) submitted with the Waterview Connection Project notices of requirement and resource consent applications.

At least 20 working days prior to construction activities being undertaken the CAQMP shall be provided by the requiring authority to the Major Infrastructure Projects Team Manager, Auckland Council for review and certification that it includes the following details:

- a. Daily visual monitoring of dust emissions;
- b. Procedures for responding to process malfunctions and accidental dust discharges;
- c. Criteria, including consideration of weather conditions and procedures for use of water sprays on stockpiles and operational areas of the site;
- d. Continuous monitoring of Total Suspended Particulate (“TSP”) concentrations and meteorology;
- e. Monitoring of the times of detectable odour emissions from the ground;
- f. Procedures for responding to discharges of odour (including in the event of excavation of contaminated sites);
- g. Monitoring of construction vehicle maintenance;
- h. Process equipment inspection, maintenance, monitoring and recording, including baghouses, pressure relief valves and high level alarms;
- i. Complaints investigation, monitoring and reporting; and
- j. The identification of staff and contractors’ responsibilities.

29. The NZTA shall review the CAQMP at least annually and at any time there is a material change to the project. Any consequential changes will be undertaken in accordance with condition 18 (CEMP.13) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

30. All construction activities shall be operated, maintained, supervised, monitored and controlled at all times so that all emissions authorised by this consent are maintained at the minimum practicable level.

31. The NZTA shall undertake construction activities in accordance with the approved CEMP and CAQMP, such that:

- a. Hard surfaced areas of the construction yards and active construction areas are vacuum swept or scraped down at least twice each week and additionally as reasonably required;
- b. All unsealed areas of the site used for vehicle movement are maintained visibly damp by the use of water sprays or a water cart during weather conditions where the potential for dust emissions exist;
- c. Wheelwash systems are installed at all truck exits from unpaved areas of the site onto public roads are used for all trucks that depart from the site;
- d. All stockpiles are constructed and positioned to minimise the potential for dust emissions. The surfaces of all stockpiles are maintained adequately damp at all times to minimise the release of particulate matter;
- e. Belt conveyors for moving dry materials are fitted with water sprays or enclosed to minimise wind entrainment of dust. Where installed, water suppression is used whenever the conveyors are used for moving dry materials.

32. Unless expressly provided for by conditions of this designation, there shall be no odour, dust or fumes beyond the site boundary caused by discharges from the site which, in the opinion of a Council enforcement officer, is noxious, offensive or objectionable.

33. All offensive or objectionable dust beyond the designation boundaries caused as a result of construction processes shall be mitigated forthwith in accordance with the requirements of the Construction Air Quality Management Plan.

34. Beyond the designation boundaries there shall be no hazardous air pollutant caused by discharges that causes, or is likely to cause, adverse effects on human health, environment or property.



35. No discharges from any activity carried out as part of the project works shall give rise to visible emissions, other than water vapour, to an extent which, in the opinion of a Council enforcement officer, is noxious, dangerous, offensive or objectionable.

36. The NZTA shall undertake visual inspections of dust emissions as follows:

- a. Visual inspections of all active construction areas at least three times daily during October to April inclusive, whenever there are construction activities. The results of visual monitoring shall be logged.
- b. Visual inspections of dust emissions from the concrete batching plants and rock crushing plant shall be undertaken daily while the plant is operating.

37. The operation of water sprays shall be checked by or on behalf of the requiring authority at least once each day.

38. All records, logs, monitoring and test results that are required by the conditions of this designation shall be made available on request, during operating hours, to an Auckland Council enforcement officer and shall be kept by the consent holder for the duration of the designation.

39. Construction logbooks shall be maintained that record all relevant information that is required to demonstrate compliance with the conditions of this designation. This information shall include, but is not limited to:

- a. Visual assessments of any dust emissions from the site and the source;
- b. Any dust control equipment malfunction and any remedial action taken;
- c. When a water cart was used and, if so, the frequency of use and the volume of water used (including identification of location);
- d. Any additional dust control measures undertaken; and
- e. The date and time of the entry and the signature of the person entering the information.

40. The NZTA shall maintain a log of any complaints received relating to air quality. Details of each complaint received shall be forwarded to the Major Infrastructure Projects Team Manager, Auckland Council, within 24 hours of receipt of the complaint. The log shall include any complaints lodged with the Auckland Council where the Council has informed the NZTA of the complaint. The log shall include, but not be limited to the following:

- a. The date, time, location and nature of the complaint;
- b. Weather conditions at the time of the complaint (including approximate wind speed, wind direction, cloud cover);
- c. Any possible other contributing factors (such as a fire, smoky vehicle, a local chimney emission, etc.);
- d. The name, phone number and address of the complainant (unless the complainant elects not to supply these details);
- e. Any remedial actions undertaken; and
- f. The date and time of the entry and the signature of the person entering the information.

### **Traffic**

41. The NZTA shall update and finalise the Construction Traffic Management Plan ("CTMP") submitted with the Waterview Connection Project AEE, in accordance with these conditions, and implement it through the CEMP. In finalising the CTMP, the NZTA shall:

- a. Provide simulation modelling demonstrations to understand the effects of construction of the project on the affected road network better;
- b. Include measures to avoid road closures and restrictions of vehicle, bus, cycle and pedestrian movements;
- c. Where road closures or restrictions cannot reasonably be avoided, the particular vulnerabilities and sensitivities of pedestrian diversions and restricted conditions shall be taken into account in the planning of any closures or restrictions.

42. The CTMP shall require the development of Site Specific Traffic Management Plans ("SSTMPs") and

their approval by the Traffic Management Project Governance Group (as defined by the CTMP) for each construction activity that may affect traffic or transportation infrastructure and services. The SSTMPs shall be provided to the Traffic Management Coordinator(s) for the relevant road controlling authority at least 10 working days prior to each construction activity.

43. Each SSTMP shall describe the measures that will be undertaken to avoid, remedy or mitigate the local and network wide effects of construction of the project. In particular, the SSTMP shall include the following matters:

- a. Traffic management measures to address and maintain, traffic capacity, including bus services, at peak traffic periods during weekdays (6:00 to 9:00 and 16:00 to 19:00) and peak traffic periods at weekends (including Great North Road );
- b. Methods to manage the effects of traffic during construction including the requirement to detour or divert traffic. These methods shall seek to avoid, remedy or mitigate effects on access to and from businesses and other organisations in the area;
- c. Any road closures that will be required and the nature and duration of any traffic management measures that will result, including any temporary restrictions, detours or diversions for general traffic and buses;
- d. Methods to avoid, remedy or mitigate the local and network-wide effects of the construction of individual elements of the project (e.g. intersections/ overbridges) and the use of staging to allow sections of the project to be opened to the traffic while other sections are still under construction;
- e. Methods to manage the effects of the delivery of construction material, plant and machinery (including cranes and oversized trucks) during construction;
- f. Any routes where construction traffic movements will be restricted (either for particular times for construction periods);
- g. Measures to maintain existing vehicle access, as far as practicable, or where the existing property access is to be removed or becomes unsafe as a result of the construction works, measures to provide alternative access arrangements in consultation with the Auckland Council and the affected landowner; and
- h. Measures to maintain pedestrian and cycle access with thoroughfare to be maintained on all roads and footpaths adjacent to the construction works, where practicable (e.g. unless provision of such access is severed by the works or such access will become unsafe as a result of the construction works). Such access shall be safe, clearly identifiable, provide permanent surfacing and seek to minimise significant detours. (This condition does not act as a qualification to the commitment to maintain access to open space and education facilities as required in condition OS.13 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent).

44. The SSTMPs shall include traffic management measures developed in consultation with Auckland Transport, Bus and Coach Association and the Auckland Council, to address and maintain, where practicable, existing levels of service for buses particularly at peak periods (6:00 to 9:00 and 16:00 to 19:00) on weekdays.

45. The NZTA shall consult with the Traffic Operations Manager, Auckland Transport with regard to the most appropriate means for providing access on Council roads within and adjacent to the designation. The NZTA shall also coordinate and consult directly with the proponents of any major construction or major traffic generating event occurring concurrently with, and in the vicinity of, the project.

46. The SSTMPs shall include measures developed in consultation with Auckland Transport to enable, as far as practicable, continued public walking and cycling passage along the existing North-western Cycleway (between the Te Atatu Interchange and the St Lukes Interchange) and along Great North Road and the public walkway along Oakley Creek, with any interruptions being as short as feasible.

47. The NZTA shall restrict construction truck movements during peak hours (6:00 to 9:00 and 16:00 to 19:00) on weekdays and during the peak periods at the weekends to avoid the following:

- a. Great North Road Interchange, city bound during the morning peak hours
- b. Great North Road Interchange, west bound onto SH16 and southbound onto Great North road during the afternoon peak.
- c. St Lukes Interchange, during afternoon peak hours, and morning peak hours from eastbound onto

SH16.

Construction truck movements during these hours shall be allowed only under exceptional circumstances agreed in advance with the Traffic Management Project Governance Group.

48. The NZTA shall maintain at least the existing active traffic lane configuration capacity on SH16, at St Lukes Road at the St Lukes interchange and on Great North Road during peak periods being 6:00 to 9:00 and 16:00 to 19:00 on weekdays and during the peak periods on weekends, for the duration of the temporary construction programme.

49. The NZTA shall monitor the impact of construction traffic in terms of traffic speeds and volumes on SH16, Great North Road and St Lukes Road at the St Lukes interchange throughout the construction period to confirm the expected traffic effects as set out in the Temporary Traffic Assessment (Technical Report G.16) submitted with the Notice of Requirement.

- a. This monitoring will be undertaken on a daily, weekly and monthly basis; and
- b. Monitoring results will be made available to the Traffic Operations Manager, Auckland Transport on request.

50. If monitoring undertaken pursuant to condition 49 (TT.10) indicates that traffic volumes or traffic conditions are significantly different from those expected, the SSTMPs will be reviewed by the requiring authority and as appropriate amended to the satisfaction of the Traffic Management Project Governance Group.

51. In collaboration with Auckland Transport, the NZTA shall prepare a Network Integration Plan ("NIP") for the project, or relevant project phases, to demonstrate how the project integrates with the existing local road network and with future improvements (identified in NZTA's Western Ring Route (Northwest) Network Plan, dated September 2010) planned by the Auckland Council. The NIP shall include details of proposed physical works at the interface between the State Highway and the local road network, and shall address such matters as pedestrian/ cycleways, lane configuration, traffic signal co-ordination, signage and provision for buses. In addition, the NIP is to address:

- a. The commitment of the NZTA to progress bus priority measures northbound on Great North Road as part of the reinstatement of Great North Road, as proposed by Auckland Transport. This is subject to the agreement with Auckland Transport;
- b. How the works committed to by the NZTA for pedestrian and cycleways, as detailed in the PT and Active Mode Transport Routes Plan Set (condition DC.1(d) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent) integrate with pedestrian and cycleways on the wider transport network;
- c. The commitment of the NZTA to provide for cycle "aspects" (cycle signal lights) at the Great North Road Interchange.

Works identified in the NIP which are the responsibility of the NZTA will be undertaken as at the time of construction works for the project.

### **Geotechnical**

52. The proposed development must be generally located as indicated on the Aurecon drawings "General Arrangement Sheets 1 to 8" dated 31-05-2013 (ref: 215023-D-C-100-001 Rev D to 007 Rev D and 215023-D-C-100-008 Rev B).

53. A further detailed geotechnical investigation must be undertaken to confirm design parameters including foundation depths for the St Lukes interchange widening (including both the proposed new bridge and any widening to the approach ramps, including the new retaining wall for Chamberlain Golf Course) plus the new cycleway bridge and abutments and the stormwater pond.

54. Any foundations and piles plus the excavation for these must be specifically designed by a chartered professional structural engineer based on the above detailed geotechnical investigation and the Aurecon study (Ref: 'Indicative Constructability Report: SH16 St Lukes Interchange Project, prepared by Aurecon

and dated 24 April 2013).

55. A chartered professional engineer with experience of geotechnics shall inspect and certify any pile holes for foundations and any retaining works.

56. Any foundations in the vicinity or that span over the reinforced earth retaining structure of the current St Lukes Rd overbridge must be suitably designed to ensure the retaining structure is not damaged.

57. A chartered professional engineer with appropriate experience shall design the groundwater control measures.

58. All temporary excavations (except those in rock) unless suitably designed by a chartered professional engineer are limited to an open face of not more than 3 metres horizontal distance at any one time and shall be limited to an unsupported gradient of 1 vertical to 2 horizontal.

59. Excavations through any basalt shall be inspected by a chartered professional engineer with experience of geotechnical engineering or an experienced engineering geologist who shall advise the Major Infrastructure Projects Team Manager on the stability of the excavation and any requirement for support measures (including any necessity for rock bolting or netting etc).

60. All excavations (other than in rock) that intercept a line 1 vertical to 2 horizontal from an adjacent boundary are to be retained with a suitable retaining structure designed for at-rest conditions.

61. Construction works shall be under the control of a chartered professional engineer with experience of geotechnical engineering. The construction works shall follow the recommendations of the detailed geotechnical report for foundation types (including depth of foundations required), retaining works and earthworks, including temporary works and any required stability measures) provided with the AEE (Ref: 'Indicative Constructability Report: SH16 St Lukes Interchange Project', prepared by Aurecon and dated 24 April 2013). This will include supervision of piling, excavations, the foundations, retention measures and floor slabs. Provision must be made for over deepening of any foundations where soft or weak soils are encountered.

62. Prior to commencement of any works on the site, the requiring authority shall provide to the Major Infrastructure Projects Team Manager, a site management plan ("SMP") that includes an excavation and construction methodology acceptable to the Council that shall include specific details relating to the construction/management/monitoring of all works associated with the SH16 St Lukes Western Ring Route Project. The Major Infrastructure Projects Team Manager shall have approved the SMP prior to construction works commencing. The approved SMP shall be implemented and maintained throughout the entire works period. Items to be included in the construction methodology are:

- a. Key inspection stages during excavation, retaining and foundation construction;
- b. Timeframes for exposed excavated ground;
- c. Monitoring procedures for vibration and noise;
- d. Location and timeframes for temporary support of excavations.

63. No fill material shall be placed as part of the final development without being supervised by a chartered professional engineer with geotechnical experience.

64. Excavations in exposed ground shall be protected from the detrimental effects of weathering e.g. by the use of polythene, basecourse or other similar methods. Alternatively, material damaged by the weather shall be removed to a depth determined by a chartered professional engineer with experience of geotechnics.

65. All spread foundations should be founded a minimum of 600mm below cleared ground level and into natural ground or engineered made ground (fill). If non-engineered made ground exists at this level, then the excavation must be deepened to penetrate through the made ground and into the natural materials. For

made ground greater than 1m depth, specific design of foundations is required.

66. All stormwater from any new hard surfaces and any groundwater collected from behind retaining walls is to be collected and disposed of to an appropriate reticulated or otherwise Council approved system.

67. The requiring authority shall implement appropriate sediment control measures prior to and during all earthworks to ensure that all stormwater runoff from the site is managed and controlled to ensure that no silt, sediment or water containing silt or sediment is discharged into stormwater pipes, drains, channels or soakage systems in accordance with the Auckland Council District Plan: Isthmus Section, Annexure 14 guidelines for sediment control.

68. Prior to any work commencing on the site, the requiring authority shall submit to the Major Infrastructure Projects Team Manager for approval, a plan of action to arrest and remedy any adverse effects that may occur to any adjacent structure in the event the structure may be affected during construction.

### **Lighting**

69. Lighting shall be designed and screened to minimise the amount of lighting overspill and illumination of residential areas in general accordance with the 'SH16 St Lukes Adverse Environmental Effects Report – Street Lighting', prepared by Aurecon and dated 30 September 2013 and the plans referenced in series '215023-D-E-161'. All lighting shall be designed in accordance with relevant rules provided in Part 13 of the Auckland City Bylaw (April 2008).

70. A Temporary Construction Lighting Management Plan shall be prepared for all construction zones and construction yards prior to commencement of any night time works within the construction zones and construction yards. The Temporary Construction Lighting Management Plan shall be independently verified by a lighting specialist and that verification shall be provided to the Major Infrastructure Projects Team Manager, Auckland Council for certification of compliance 10 working days prior to any night time work commencing.

The certification process shall ensure that the Temporary Construction Lighting Management Plan includes (but is not limited to):

- a. The layout and arrangement of all temporary lighting required for night time works, and that shows that the temporary lighting complies with relevant rules provided in the Unitary Plan;
- b. Provision for a 10m buffer between the night time work and any residential boundary at all times to minimise potential for light spill; and
- c. General operating procedures requiring lighting as outlined in the CEMP.

71. Asymmetrical floodlights with horizontal glass visors that are not raised more than 3 degrees above the horizontal plane shall be used for any temporary construction night time lighting requirements. Alternative temporary lighting arrangements may be used, subject to the prior approval of the Major Infrastructure Projects Team Manager, Auckland Council, where it can be demonstrated to the satisfaction of the Team Manager that the proposed lighting is similar or better to asymmetrical floodlights with glass visors. Glare shall be kept below the recommendation given in AS 4282 – 1997 "Control of the Obtrusive Effects of Outdoor Lighting" Tables 2.1 and 2.2.

### **Noise and Vibration**

72. The NZTA shall finalise and implement, through the CEMP, a Construction Noise and Vibration Management Plan ("CNVMP") throughout the entire construction period of the project.

The CNVMP shall describe the measures adopted to meet:

- a. the noise criteria set out in conditions 73 and 74 (CNV.2 and CNV.3) below;
- b. the vibration criteria set out in condition 75 (CNV.4) below; or
- c. where (a) or (b) cannot be met, the process that will be followed to appropriately mitigate noise and vibration effects including methods that may be applied outside the designation.

The CNVMP shall be provided to the Major Infrastructure Projects Team Manager, Auckland Council at least 20 working days prior to construction activities being undertaken for review and certification that the

CNVMP, as a minimum, addresses the following:

- i. Construction noise and vibration criteria conditions 73, 74 and 75 (CNV.2, CNV.3, and CNV.4 – of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- ii. Hours of operation, including times and days when noisy and/or vibration inducing construction activities would occur;
- iii. Machinery and equipment to be used as part of construction works;
- iv. Vibration testing of equipment to confirm safe distances to buildings prior to construction;
- v. Preparation of building condition surveys of critical dwellings prior to, during and after completion of construction works;
- vi. Roles and responsibilities of personnel on site;
- vii. Construction operator training procedures;
- viii. Methods for monitoring and reporting on construction noise and vibration;
- ix. A hierarchy of mitigation options that will be assessed for the project noise mitigation, including alternative strategies where full compliance with the relevant noise and/or vibration criteria cannot be achieved;
- x. Management schedules containing site specific information;
- xi. Measures for liaising with and notifying potentially affected receivers of proposed construction activities and the potential for noise and vibration effects, specifically:
  - Methods for ensuring residents affected by night works (within 100m of the construction site night works), are notified of such works (i.e. any works during the hours of 20:00 to 06:30) at least 5 days prior to the commencement of any such work.
- xii. Methods for receiving and handling complaints about construction noise and vibration;
- xiii. Measures for preventing the occurrence of rogue fly rock, including management of charge weights and face loading procedures, stemming of charge holes and profiling of the face to maintain minimum burden (face cover);
- xiv. Investigations on the practicability of implementing permanent noise mitigation works for construction mitigation in accordance with condition 78 (CNV.7 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- xv. Investigations of the practicability of implementing building modification mitigation, as required in accordance with conditions ON.6 and ON.11 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, prior to commencement of construction within 100m of the relevant Protected Premises and Facilities (“PPFs”) (including those on the Unitec site); and
- xvi. The process for developing Site Specific Noise Management Plans (“SSNMP”), and a certification process for the Major Infrastructure Projects Team Manager, Auckland Council in accordance with condition 80 (CNV.13 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent) to confirm the process of SSNMP review of noise mitigation options where the modelled/predicted levels or subsequent actual levels exceed the criteria in conditions 73 and/or 75 (CNV.2 and/or CNV.4 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent).

73. Except where certified by the Council through the SSNMP in accordance with condition 80 (CNV.13), construction noise (excluding noise from blasting Monday to Saturday inclusive) shall be measured and assessed in accordance with NZS 6803:1999 “Acoustics - Construction Noise” and shall comply with the following criteria:

*Note: In this condition, (T) means a duration between 15 minutes and 60 minutes, in accordance with NZS6803:1999.*

**a. Project Construction Noise Criteria: Residential Receivers**

<b>Time of the week</b>	<b>Time Period</b>	<b>Project Construction Noise Criteria -</b>	
		<b>Sector 6 Works, dBA</b>	<b>St Lukes Bridge Works (dBA)</b>

		L <sub>eq</sub>	L <sub>Max</sub>	L <sub>eq</sub>	L <sub>Max</sub>
Monday to Saturday	0630-0730	60	75	55	75
	0730-1800	70	85	70	85
	1800-2000	65	80	65	80
	2000-0630	60	75	50	75
Sunday and Public Holidays	0630-0730	45	75	45	75
	0730-1800	60	85	55	85
	1800-2000	45	75	45	75
	2000-0630	45	75	45	75

b. Project Construction Noise Criteria: Commercial and Industrial Receivers

Time Period	Project Construction Noise Criteria (Long Term Construction) dB
	L <sub>Aeq</sub> (T)
0730-1800	70
1800-0730	75

c. Project Construction Noise Criteria: Internal noise for Licensed Educational Facilities

Time Period (School Days)	Project Construction Noise Criteria Inside	
Teaching Hours	45 dB L <sub>Aeq</sub> (T) or existing, whichever is the higher	Classrooms, library, offices, teaching, laboratories, manual, arts, workshops
Teaching Hours	40 dB L <sub>Aeq</sub> (T) or existing, whichever is the higher	School hall, lecture theatre

Note: In part c. of this condition "Teaching hours" means: Primary schools and Kindergartens: 9am to 3pm  
Unitec: 8am to 9pm

74. Project Construction Noise Criteria: Airblast (excluding Sundays)

Category	Type of Blasting Operations	Peak Sounds Level (L <sub>Zpeak</sub> dB)
Human Comfort Limits		
Sensitive Site	Operations lasting longer than 12 months or more than 20 blasts	115 dB for 95% blasts per year. 120 dB maximum unless agreement is reached with occupier that a higher limit may apply
Sensitive Site	Operations lasting less than 12 months or less than 20 blasts	120 dB for 95% blasts per year. 125 dB maximum unless agreement is reached with occupier that a higher limit may apply

Occupied non-sensitive sites such as factories and commercial properties	All blasting	125 dB maximum unless agreement is reached with the occupier that a higher limit may apply. For sites containing equipment sensitive to vibration, the vibration should be kept below manufacturer's specifications of levels that can be shown to adversely affect the equipment operation
<b>Damage Control Limits</b>		
Structures that include masonry, plaster and plasterboard in their construction and also unoccupied structures of reinforced concrete or steel construction	All Blasting	133 dB unless agreement is reached with owner that a higher limit may apply.
Service structures such as pipelines, powerlines and cables located above ground	All Blasting	Limit to be determined by structural design methodology

75. Except where certified by the Council through the SSNMP in accordance with condition 80 (CNV.13 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent), construction vibration received by any building shall be measured and assessed in accordance with the German Standard DIN 4150-3:1999 “Structural vibration – Part 3: Effects of vibration on structures”, and shall comply with the following criteria:

Type of Structure	Short- term vibration			Long-term vibration	
	PPV at the foundation at the frequency of			PPV at horizontal plane of highest floor (mm / s)	PPV at horizontal plane of highest floor (mm / s)
	1 – 10Hz (mm/s)	1-50 10Hz (mm/s)	50-100 10Hz (mm/s)		
Commercial/Industrial	20	20-40	40-50	40	10
Residential/School	5	5-15	15-20	15	5
Historic or Sensitive Structures	3	3-8	8-10	8	2.5

76. Notwithstanding condition 74 (CNV.3):

- a. Blasting activities shall be conducted so that at least 95% of the blasts undertaken (measured over any twenty blasts on the foundation of any building outside the designation boundary) shall produce peak particle velocities not exceeding 5mm/s and 100% of the blasts undertaken shall produce peak particle velocities not exceeding 10mm/s irrespective of the frequency of the blast measured.
- b. Construction activities, which occur within Sectors 1, 6, 8 and 9 of the Waterview Connection Project which are identified in the Technical Report no. G.19 Assessment of Vibration Effects, submitted with the AEE for the Waterview Connection Project, as being at a ‘High Risk’ of exceeding the DIN 4150-3:1999 criteria (being excavation, piling, compaction and drilling) shall be conducted so that 95% of the activities undertaken (measured over at least 20 representative samples of the relevant activity on any residential building) shall produce peak particle velocities not exceeding the relevant criterion in DIN 4150-3:1999 and 100% of the activities undertaken shall not exceed 10mm/s irrespective of the frequency of the activity measured.

77. Blasting shall be undertaken between 09:00h and 17:00h, Monday to Saturday, except that blasting may be undertaken between 09:00h and 17:00h on Sundays where:

- a. The blasting produces peak particle velocities at any residential building not exceeding 0.5mm/s; and



b. The project construction noise criteria set out in condition 72 (CNV.2 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent) for Sundays are complied with.

78. Where practicable, the permanent (traffic) noise barriers detailed in the Noise Walls and Fences plans (referenced in plan series '215023-D-C-918-001') shall be erected prior to noise generating construction works commencing. Where this is not practicable, temporary noise mitigation measures shall be implemented by the consent holder in accordance with the CNVMP prior to noise generating construction works commencing.

79. Pile driving or pile removal shall not be undertaken at night (i.e. during the hours of 20:00 – 06:30).

80. Construction SSNMPs required by condition 72 (CNV.1(xvi) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent) shall be submitted to Major Infrastructure Projects Team Manager, Auckland Council for review and certification at least 7 working days prior to the proposed works commencing.

*Advice Note: A decision will be provided by the Council within 5 working days of receipt of the SSNMP.*

Works are not to commence until certification is received from the Major Infrastructure Projects Team Manager, Auckland Council. The Council may, in its sole discretion, waive the requirement for individual SSNMPs to be submitted to the Council where an SSNMP is required.

If monitoring shows that construction noise levels specified in an approved SSNMP are being exceeded, the work generating the exceedance is to stop and not recommence until further mitigation is implemented in accordance with an amended SSNMP approved by the Major Infrastructure Projects Team Manager, Auckland Council.

*Advice note: It is accepted that the criteria of conditions 73 and 75 (CNV.2 and CNV.4 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent) may not be met at all times, but that the NZTA will take all practical steps to achieve compliance, taking into account the hierarchy of mitigation options outlined in condition 72 (CNV.1 (ix) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent).*

81. Existing ambient vibration levels shall be measured at critical locations nominated by the NZTA, and submitted to the Major Infrastructure Projects Team Manager, Auckland Council for approval prior to the commencement of works. These baseline measurements will establish pre-project vibration levels for comparison with future vibration levels.

82. The NZTA shall implement the traffic noise mitigation measures identified in the Acoustic Report prepared by Aurecon and dated 14 October 2013 (Ref: 'SH16 – Sector 6: Changes in Noise and Vibration Effects', 'Widening of St Lukes Bridge: Assessment of Construction Noise and Vibration Effects', and 'St Lukes Bridge Widening: Assessment of Operational Noise Effects') and dated 5 March 2013 (Ref: 'SH16 – Sector 6: Road Traffic Noise Assessment').

### **Public Information Conditions**

83. **PI.1.** A community liaison person shall be appointed by the NZTA for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the Project. The liaison person's name and contact details shall be made available in the CEMP and on site signage by the NZTA. This person must be reasonably available for on-going consultation on all matters of concern to affected parties arising from the Project.

**PI.2.** The NZTA shall prepare and implement a Communications Plan that sets out procedures detailing how the public, Ministry of Social Development, Housing New Zealand Corporation and other organisations representing the particular demographic characteristics of the community (including but not limited to Primary Health Organisations, general practitioners, youth, education organisations, aged care groups and groups representing ethnic and migrant communities) will be communicated with throughout the construction and monitoring periods (as prescribed in the designation and consent conditions).

In preparing the Communications Plan, the NZTA will liaise with Auckland Council to access its community liaison databases. The Communications Plan will include details of:

- a. The site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- b. In accordance with these Conditions, the database of the key construction activities and monitoring

- requirements that are the subject of the Communications Plan;
- c. The database of stakeholders and residents who will be communicated with;
- d. Communication methods, an assessment of how these methods reach the different audience/ stakeholder groups (including those methods set out in Condition CEMP.6), and detail on when each of these methods will be used (e.g. regular communication or event specific methods);
- e. The appointed specialist in Environmental and Occupational Medicine, including contact details (as per Condition SO.13 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- f. Any stakeholder specific communication plans required; and
- g. Monitoring and review procedures for the Communications Plan.

The Communications Plan shall be written in accordance with the external communication procedures set out in the CEMP and provided at least 20 working days prior to construction commencing, to the Major Infrastructure Team Manager, Auckland Council, Working Liaison Group and the Community Liaison Group(s) established by Condition PI.5. The structure of the communication groups set out in these conditions is attached as Figure PI.A.

**PI.3.** At least 15 working days prior to the commencement of construction, and at 15 working day intervals thereafter, or as required depending on the scale of works and effects on the community, advertisements will be placed in the relevant local newspapers and community notice boards (as identified in Condition CEMP.6(b)) detailing the nature of the forthcoming works, the location of the forthcoming works and hours of operation. All advertisements will include reference to a 24 hour toll free complaints telephone number. Where relevant, advertisements will also include but not be limited to details of:

- a. Any traffic disruptions or controls or changes to property access, pedestrian/ cycle routes and bus stops; and
- b. Any other construction activities, including night time works, blasting, and structure-borne noise, as identified in the conditions.

**PI.4.** The NZTA shall manage, investigate and resolve (as appropriate) all complaints for the duration of the construction works in accordance with the environmental complaints section of the CEMP. The implementation strategy for complaints includes:

- a. A 24 hour toll free telephone number and email address, which shall be provided to all potentially affected residents and businesses. The number shall be available and answered at all times during the entire duration of the works for the receipt and management of any complaints. A sign containing the contact details shall be located at each site specific work activity;
- b. The NZTA shall maintain a record of all complaints made to this number, email or any site office, including the full details of the complainant and the nature of the complaint;
- c. Upon receiving a complaint, within 10 days of complaint receipt, a formal written response will be provided to the complainant and Auckland Council;
- d. The NZTA shall undertake corrective action where necessary to resolve any problem identified. All action taken and relevant information shall be documented. For the avoidance of doubt, 'where necessary' refers to where the works are not being carried out in accordance with conditions of this designation;
- e. Where issues and complaints about effects cannot be resolved through the CEMP complaints management process, a meeting shall be held between the NZTA, the complainant and the Auckland Council representative(s) to discuss the complaint and ways in which the issue may be resolved. If parties cannot agree on a resolution, an independent qualified mediator will be appointed, agreeable to all parties and at the shared cost of all parties, to undertake mediation of the dispute or concerns; and
- f. All information collected in Conditions PI.4 (b), (c) and (d) shall be detailed in a Construction Compliance Report (including the means by which the complaint was addressed, whether resolution was reached and how the response was carried out) prepared by the NZTA. This Report shall be submitted to the Major Infrastructure Team Manager, Auckland Council on a quarterly basis commencing at the beginning of the works and for the entire duration of construction.

**PI.5.** The NZTA shall establish Community Liaison Group(s) at least two months prior to construction commencing in each of the following key construction areas:

- a. Te Atatu (including the SH16 Causeway)
- b. Waterview (including works to St Lukes on SH16 and on the Waterview Estuary and Causeway Bridges)
- c. Owairaka

and hold regular meetings (at least three monthly) throughout the construction period and up to 24 months following construction completion relevant to these areas (or less if the members of the Group agree), so that on-going monitoring information can continue to be disseminated.

The Community Liaison Group(s) shall be open to all interested parties within the Project area including,

but not limited to the following groups:

- a. Auckland Council and Auckland Transport;
- b. Educational facilities within the Project area (including schools, kindergartens, childcare facilities and Unitec Institute of Technology);
- c. Relevant community/ environmental groups (including but not limited to Friends of Oakley Creek, Star Mills Preservation Group, Cycle Action Auckland and representatives from those organisations identified in the Communications Plan (as required by Condition PI.2) and local residents;
- d. Department of Conservation;
- e. Local Boards;
- f. Iwi groups with Mana Whenua;
- g. Public transport providers; and
- h. Housing New Zealand Corporation.

*Advice note: The purpose of the Community Liaison Group(s) is to provide a regular forum through which information about the Project can be provided to the community, and an opportunity for concerns or issues to be raised.*

**PI.6.** The Community Liaison Group(s) shall be provided opportunities to review and comment on the following (amongst other things):

- a. The Outline Plan of Works detailing designs for the northern and southern ventilation buildings and stacks (the outcomes of this consultation will be reported in accordance with the processes required Conditions in DC.8(n) and DC.9(k) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- b. The Open Space Restoration Plans (as required by Condition OS.3 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- c. Finalisation and amendment to Urban Design and Landscape Plans (UDL Plans) (as required by Condition LV.1 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- d. The Oakley Inlet Heritage Plan (as required by Conditions OS.5(b)(i) and ARCH.6 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- e. The detail of the Oakley Creek restoration (as required by Condition STW.20 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- f. Publicly available results of environmental monitoring as required by the designation and/or these Consents (e.g. air quality monitoring); and
- g. The finalisation of the STEM assessment required by CEMP.6(o) and a schedule of trees that are required to be removed for consideration of timber use in heritage projects as required by Condition SO.7.

*Advice Note: Attention is drawn to the Vegetation conditions concerning identification and protection of Significant Vegetation and Valued Vegetation.*

- h. Detailed design features of the Te Atatu underpass (e.g. lighting and architectural treatment).

### **Open Space Conditions**

84. **OS.13** During construction, the NZTA shall maintain pedestrian accessways to all open space available for public use during construction and education facilities where access is affected by the works, including any public access that crosses private land. Such access shall be safe, clearly identifiable, provide appropriate surfacing and seek to minimise significant detours. The access shall be of a same or similar standard as that disrupted and will be provided and maintained by the NZTA.

*Advice note: This specifically includes the existing pedestrian access that provides a connection to the crossing over Oakley Creek between 1510 Great North Road and Unitec Mt Albert Campus.*

85. **OS.15** The works shall not result in any permanent loss of carparking from Western Springs Garden carpark.

### **Social Conditions**

86. **SO.1** In addition to the Community Liaison Groups established pursuant to Condition PI.5, the NZTA shall establish an Education Liaison Group (including representatives from local schools, kindergartens, childcare facilities, Unitec Institute of Technology, the Ministry of Education and Housing New Zealand Corporation), to provide a forum through which:

- a. Relevant monitoring data can be provided (e.g. air quality monitoring);

- b. Notice can be provided of when particularly noisy activities will occur in close proximity to schools and education facilities, to enable the opportunity to identify any potential conflict with particular sensitive periods, and the requirement for specific mitigation strategies (e.g. rescheduling of construction activities where practicable);
- c. Particular concerns can be raised by educational facilities or parents, discussed and potentially addressed;
- d. Notice can be provided of potential construction impacts on school transport routes (including pedestrian/cycle access) to enable the opportunity to identify specific mitigation preferences of the education facilities (e.g. any detour routes) and to enable these facilities to appropriately inform students and/or parents; and
- e. Learning and teaching opportunities for educational facilities to participate in Project works (e.g. planting or artworks).

The Education Liaison Group shall be established at least 2 months prior to construction commencing and shall have regular meetings (at least three monthly) throughout the construction period. The Education Liaison Group shall continue to meet for at least 12 months following the completion of the Project (or less if the members of the Education Liaison Group agree), so that ongoing monitoring information can continue to be disseminated.

**SO.2** In addition to Condition SO.1(b) above, where noisy construction activities (that are projected to exceed the Noise Criteria in the CNVMP) are proposed in close proximity or adjacent to schools/ childcare centres, the NZTA shall, when preparing their SSNMP (in accordance with Condition (CNV.1) above) give specific consideration to options to carry out these works outside school hours or during school holidays as a mitigation option.

**SO.6** In addition to the Community Liaison Group established pursuant to Condition PI.5, the NZTA shall establish a Working Liaison Group (WLG) inviting the following:

- a. Auckland Council;
- b. Housing New Zealand Corporation;
- c. Te Kawerau Iwi Tribal Authority;
- d. Ngati Whatua o Orakei;
- e. KiwiRail;
- f. Department of Conservation;
- g. Ministry of Education; and
- h. Local Boards.

The purpose of this WLG will be to provide a forum through which:

- a. Opportunities for public work development (including social housing, passenger transport or recreation / open space) are identified in areas where the NZTA confirms that the designation is no longer required (e.g. following construction activities);
- b. Comment can be provided on updated Urban Design and Landscape Plans, including the finalised designs of structural elements for the Project (prior to their submission to the Auckland Council);
- c. Opportunities for integration of other environmental projects (e.g. restoration plantings) are identified;
- d. Consideration is given to appropriate protocols for commencement and completion of construction activities (including blessings for commencement of construction phases); and
- e. Comment can be provided by Te Kawerau a Maki on the detailed lighting design of SH16, to consider how lighting effects on cultural sites and practices might be mitigated without compromising traffic safety or those performance standards identified in Condition L.1 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

The Working Liaison Group shall be established at least 2 months prior to construction commencing and shall have regular meetings (at least three monthly) throughout the construction period.

**SO.7** A schedule of trees that require removal for construction of the Project will be identified and reported to the Community Liaison Group for their consideration of potential provision of timber for heritage projects (including in particular the provision of Robinia wood for heritage boat building). If the demand for this timber is identified to the Construction Team, appropriate measures for felling and removal from the site will be confirmed.

### **Vegetation Conditions**

**87. V.1** The NZTA shall finalise the ECOMP submitted with this application, prior to works commencing on site. The ECOMP shall be implemented through the CEMP. The ECOMP shall clearly identify the location and identity of:

- a. All Significant Vegetation within the designation that is to be fully protected or relocated; and

b. All Valued Vegetation within the designation that is affected by the works (protected or removed).

*Note: Significant and Valued Vegetation shall be as defined in the ECOMP.*

**V.2** The NZTA shall employ a suitably experienced botanist ('nominated botanist') for the duration of the works to monitor, supervise and direct all works affecting or otherwise in close proximity to the Significant Vegetation and Valued Vegetation identified in the ECOMP.

**V.3** Prior to any site works commencing, a pre-commencement site meeting shall be held so that the conditions that pertain to the Significant Vegetation and Valued Vegetation and all vegetation in general (both native and exotic) are explained by the nominated botanist to all contractors or sub-contractors who will be working on site within the close vicinity of that vegetation.

**V.4** The NZTA shall minimise the amount of vegetation (both native and exotic) which is to be cleared, with the exception of weeds (both woody and otherwise, unless agreed with the Major Infrastructure Team Manager, Auckland Council and the Community Liaison Group that the retention of these 'weeds' has other environmental or ecological benefits that warrant their retention). All vegetation clearance shall be undertaken in accordance with the measures set out in the ECOMP.

**V.5** The NZTA shall install protective fencing around, or otherwise clearly demarcate, all of the Significant Vegetation identified in the ECOMP as requiring full protection, under the supervision of the nominated botanist.

**V.6** The NZTA shall replace any terrestrial Valued Vegetation that is required to be removed as a result of construction activities, in accordance with the ECOMP and the Urban Design and Landscape Plans.

**V.7** The nominated botanist shall supervise all trimming, pruning and relocation work associated with the Significant Vegetation and Valued Vegetation required as part of the works.

**V.8** Immediately prior to planting, and for a period of 2 years following completion of construction, the NZTA shall undertake weed control and management of all invasive plant pests within the vegetated areas of the surface designation for the Project. Following this 2 year period, on-going control and management of all invasive plant pests within these areas will be the responsibility of the NZTA.

**V.9** The nominated botanist shall undertake a monitoring programme throughout the construction period, including monitoring of:

- a. The condition, repair and location of the temporary protective fencing or other forms of demarcation used to identify the Significant Vegetation;
- b. Any works within the vicinity of the Significant Vegetation and Valued Vegetation;
- c. The general health of the Significant Vegetation and Valued Vegetation (including any Significant or Valued Vegetation that has been relocated away from the works area); and
- d. Compliance with the vegetation conditions of designation by way of fortnightly inspections during the construction period.

**V.10** Any planting utilising native plants shall use plants genetically sourced from the Tamaki Ecological District where possible or otherwise shall use plants that have been genetically sourced from within the Auckland Ecological Region.

#### **Avian Conditions**

88. **A.1** The NZTA shall finalise, and implement through the CEMP, ECOMP submitted with this application to include the matters set out in Conditions A.2 to A.6 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

#### **Herpetofauna Conditions**

89. **H.1** The NZTA shall finalise and implement through the CEMP, the ECOMP submitted with this application to include details of lizard management to be undertaken, including the following:

- a. Lizard capture methodology, including timing;
- b. Lizard release locations(s);
- c. Lizard habitat enhancement at population release sites, including a detailed pest control programme for a minimum of one month prior to release and for a minimum of three consecutive years' duration after release;
- d. Location(s), monitoring and maintenance of lizard protective fencing;
- e. Post-release monitoring methodology; and

f. Lizard captive management methodology.

### **Archaeology Conditions**

90. **ARCH.1** The NZTA shall complete, and implement through the CEMP, the Archaeological Site Management Plan (ASMP) submitted with the notice of requirement, to include, but not be limited to:

- a. Identification of the Project archaeologist, their role and responsibility on the Project;
- b. Who reports to the Project archaeologist;
- c. Specific sites requiring supervision, and measures to be undertaken to protect and manage these sites;
- d. Whether Heritage New Zealand and/or Auckland Council heritage and/or iwi supervision is required for the specific site (the latter to be determined through consultation with the relevant iwi groups); and
- e. Accidental discovery protocols in the event that unknown archaeological sites are uncovered.

**ARCH.2** The NZTA shall employ at its expense a qualified archaeologist (the Project archaeologist) who shall be on site to monitor all initial earthworks, including surface stripping of the site, for all specific areas identified in the ASMP to establish whether any sub-surface archaeological features are present. This includes, but is not limited to, the following areas:

- a. All unmodified areas in the vicinity of Rosebank Road;
- b. All works in the vicinity of the "Oakley Inlet Heritage Area", located adjacent to the Great North Road Interchange;
- c. Works in the vicinity of two midden sites (recorded R11/2214 and R11/2215) within Great North Road Interchange, and all previously unmodified areas near the banks of the Oakley Inlet;
- d. Any ground disturbance works in Construction Yard 7 within Oakley Creek Reserve.

**ARCH.3** If any archaeological sites, including human remains are exposed during site works, then the following procedures shall apply:

- a. Immediately it becomes apparent that a possible archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease;
- b. The site supervisor shall immediately secure the area in a way that ensures that any artefacts or remains are untouched and notify the Project archaeologist;
- c. The Project archaeologist shall inspect the site to assess the relevance of the find, and then the Auckland Council shall be advised of the significance;
- d. If the site is confirmed to be an archaeological site by the Project archaeologist, the site supervisor shall then notify tangata whenua, Heritage New Zealand, and the Auckland Council that an archaeological site has been exposed so that appropriate action can be taken;
- e. In the case of human remains, the NZ Police shall be notified.

**ARCH.8** All contractors and subcontractors working on the Project shall be trained on the archaeological requirements set out in the ASMP.

*Advice note: Any archaeological sites within the area affected by the Project shall not be modified or disturbed in any way unless written authorisation has been obtained from Heritage New Zealand.*

### **Contaminated Land and Contaminated Discharges Conditions**

91. **CL.1** The NZTA shall finalise and implement through the CEMP, the Contaminated Soil Management Plan (CSMP) submitted with this application prior to commencement of any site works. The CSMP shall include, but not be limited to:

- a. Measures to be undertaken in the handling, storage and disposal of all material excavated during the construction works;
- b. Soil validation testing and groundwater testing;
- c. Soil verification testing to be undertaken to determine the nature of the excavated spoil and potential reuse or disposal options;
- d. Measures to be undertaken in the event of unexpected contamination being identified during construction activities; and
- e. Measures to be undertaken for the handling of asbestos containing material.

92. **CL.2** Prior to the main construction works commencing, the baseline quality of soils and groundwater within Sector 5 (the southern bank of Oakley Creek coincident with the location of the former tannery) and Sector 7 (particularly in relation to works in the vicinity of Great North Road) shall be investigated and established. The investigations shall be carried out in accordance with appropriate Ministry for the Environment and Auckland Council guidelines. The findings of the soil and groundwater investigations shall be used to determine the specific constructions methods during work in this area to manage any likely environmental effects in relation to the Project.

93. **CL.3** Prior to the main construction works commencing, soils and fill materials within Alan Wood Reserve (Sector 9) shall be further classified so as to determine the distribution and extent of cleanfill, managed fill and contaminated/hazardous fill materials.

94. **CL.4** All excavated soil shall be tested by the NZTA in general accordance with the CSMP, prior to either reuse on site or disposal off site. The testing regime shall be submitted for approval by the Major Infrastructure Team Manager, Auckland Council.

**CL.5** The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council within 5 working days of identification of any contamination at the site which was not identified in the reports submitted in support of this application, including contaminated soil, surface water or groundwater.

**CL.6** The removal of any excavated contaminated soil shall be in accordance with the CSMP. The removal and disposal of any contaminated groundwater/ surface water from the site shall be in accordance with the GWMP and the ESCP.

**CL.7** The NZTA shall engage a suitably qualified contaminated land specialist to supervise the works, excavation and removal of any contaminated soils from the site and undertake sampling (if required) of imported material.

**CL.8** All testing / sampling techniques shall be carried out in accordance with the Ministry for the Environment's Contaminated Land Management Guidelines or other equivalent standards approved in writing by the Major Infrastructure Team Manager, Auckland Council.

95. **CL.9** During and following the tunnel construction works beneath Sector 8, groundwater quality monitoring shall be carried out at locations within and down hydraulic gradient of Phyllis Street Landfill. Monitoring shall be undertaken on at least a monthly basis, and for a period up to 12 months following completion of the tunnel construction works. The monitoring programme shall be submitted for approval by the Auckland Council as landowner.

96. **CL.10** Prior to, during and following tunnel construction works beneath Phyllis Street Landfill, monitoring for landfill gas shall be carried out from existing monitoring boreholes within the landfill. Monitoring shall be undertaken on at least a monthly basis, for a period of no less than 6 months prior to, and up to 12 months following completion of the tunnelling works. The monitoring programme shall be submitted for approval by the Auckland Council as landowner.

97. **CL.11** The NZTA shall submit to the Major Infrastructure Team Manager, Auckland Council, a Site Closure Report no later than three (3) months after the completion of the earthworks. The Report shall be prepared in accordance with the Ministry for the Environment's Contaminated Land Management Guidelines and include:

- a. Results of any soil reuse and imported material testing carried out to ensure compliance with the CSMP;
- b. Volumes of soil removed from site;
- c. Copies of the waste disposal receipts; and
- d. Reports of any non-compliance with the CSMP procedures or complaints received while undertaking the site works

### **Freshwater Conditions**

98. **F.1** The NZTA shall finalise, and implement through the CEMP, the ECOMP submitted with this application. The ECOMP shall be updated to ensure compliance with the conditions of this consent and include changes to the details of construction processes prior to construction commencing. The ECOMP shall include, but not be limited to details of:

- a. Monitoring of freshwater ecology;
- b. Monitoring of freshwater and stream sediment quality;
- c. Trigger event criteria for undertaking additional monitoring;
- d. Procedures for responding to accidental discharges of contaminants to the freshwater environment; and
- e. Contingency plans and/or remedial measures in the event monitoring results identify adverse effects.

99. **F.2** The NZTA shall engage a suitably qualified ecologist and water quality scientist to undertake freshwater monitoring programme prior to, during and following construction to monitor the effect of the Project on the freshwater ecology. The freshwater monitoring shall be undertaken in Oakley Creek, Pixie Stream and Meola Creek. The freshwater monitoring programme shall be undertaken in accordance with the details set out in the ECOMP and include:

- a. Cross sectional profiles;
- b. Macro invertebrate sampling; and
- c. Freshwater fish monitoring.

100. **F.3** The freshwater monitoring programme shall, as a minimum, be undertaken in accordance with the following frequency:

- a. Prior to construction – two baseline ecological surveys.
- b. During construction – twice per year for fish and macro invertebrates and cross sectional profiles, within one month prior to the beginning of the earthworks season and within one month either side of the end of the earthworks season.
- c. Post construction – on an annual basis for a maximum period of three years, or less if the Major Infrastructure Team Manager, Auckland Council is satisfied that no adverse effects have occurred or are likely to occur from the Project.
- d. Monthly water quality samples at the five existing Oakley Creek sample locations to be analysed for pH, turbidity, suspended solids, metals (Zn, Cu and Pb) and nutrients.
- e. Four “event based” samples per annum from each of the current two Oakley Creek sites. The samples are to be analysed for pH, turbidity, suspended solids, metals (Zn, Cu and Pb), hydrocarbons (TPH) and nutrients.
- f. Two sediment quality samples per annum (January and July) at the five existing water quality Oakley Creek sites (if there is sufficient sediment to sample). The samples are to be analysed for metals (Zn, Cu and Pb), polycyclic aromatic hydrocarbons (PAH), hydrocarbons (TPH) and semi-volatile organic compounds.

*Advice note: The sample collection and analysis required under sub-clauses (d) to (f) shall be undertaken following an IANZ accredited methodology by a suitably accredited laboratory (International Accreditation New Zealand).*

101. **F.4** The NZTA shall undertake additional freshwater monitoring in the event of a ‘trigger event’ for freshwater habitats. For the purposes of this consent, a ‘trigger event’ for freshwater habitats is defined in the ECOMP.

102. **F.5** The NZTA’s ecologist/hydrologist (required by condition F.2 shall review, every six months, the freshwater monitoring results, provided from Conditions F.2 to F.4, and results in monitoring detailed in earthworks Conditions E.9 and E.19 and Groundwater Condition G.10 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent. In the event that potential adverse effects are identified, including through review of the Condition G.10 monitoring results by the hydrologist and freshwater ecologist required by Condition G.12, the NZTA shall develop and submit for the approval of the Major Infrastructure Team Manager, Auckland Council appropriate contingency plans and/or remedial measures in accordance with the measures set out in the ECOMP.

103. **F.6** Freshwater monitoring reports shall be compiled from the monitoring undertaken pursuant to Conditions F.2 to F.4 and the review of Condition F.5, and a report provided to the Major Infrastructure Team Manager, Auckland Council every 6 months.

**104. ADVICE NOTES – RELEVANT TO ALL RESOURCE CONSENTS AND ALTERATIONS TO DESIGNATIONS FOR BOTH NZTA AND AT (UNLESS SPECIFIED)**

- a. These consents and alterations to designation are to be read in conjunction with the previously approved resource consents and alterations to designation for the Waterview Connection Project and does not negate NZTA or AT’s requirement to continue to comply with the conditions of the resource consents and designations approved by the Board of Inquiry, subject to all the amendments approved above.
- b. The scope of these resource consents and alterations to designations is defined by the information lodged to the Auckland Council Resource Consents and Regional and Local Planning Departments.
- c. In respect of the resource consents, if you disagree with any of the above conditions, or disagree with the additional charges relating to processing the application you have a right of objection pursuant to ss357A or 357B of the Act. Any objection must be made in writing to the Council within 15 working days of notification of these decisions.
- d. The Auckland Council Resource Consents Department shall be paid any compliance and monitoring costs on an ‘actual and reasonable’ basis in accordance with section 36 of the Resource Management Act.
- e. Pursuant to section 126 of the Act, if these resource consents have been exercised, but are not subsequently exercised for a continuous period of five years, the consents may be cancelled by the Auckland Council Resource Consents Department unless other criteria set out in section 126 are met.
- f. These resource consents do not constitute a building consent approval. Please check whether building



consents are required under the Building Act 2004.

g. A copy of these resource consents should be held on the site at all times during the establishment and construction phase of the activity. The consent holders are requested to notify the Council, in writing, of their intention to begin works, a minimum of seven days prior to commencement. Such notification should be sent to the Major Infrastructure Projects Team Manager and include the following details:

- i. site address to which the consent(s) relates;
- ii. name and telephone number of the project manager and the site owner;
- iii. activity to which the consent relates; and
- iv. expected duration of works.

h. These consents do not relieve the consent holders of their individual responsibilities to apply for any other consents which may be required under the Building Act 2004 or other legislation, and/or by Heritage New Zealand.

i. In the event of archaeological site evidence (e.g. shells, middens, hangi or ovens, pit depressions, defensive ditches, artefactual material or human bones) being uncovered during construction, operations shall cease in the vicinity of the discovery and the archaeologist, Auckland Council, is to be contacted so the appropriate action can be taken before any work may recommence there. All archaeological sites are protected under the provisions of the Historic Places Act 1993 ("HPA"). It is an offence under that Act to destroy, damage or modify any archaeological site, whether or not the site is entered on Heritage New Zealand register of historic places, historic areas, wahi tapu and wahi tapu areas. Under ss11 and 12 of the HP Act, applications must be made to Heritage New Zealand for an authority to destroy, damage or modify an archaeological site(s) where avoidance of effect is not practicable. It is the responsibility of the consent holder to consult with Heritage New Zealand about the requirements of the HPA and to obtain the necessary authorities under the HPA should these become necessary as a result of any activity associated with the proposed development.

j. These resource consents do not in any way allow either of the consent holders to enter and construct drainage or other works on or in neighbouring properties, without first obtaining the agreement of all owners and occupiers of said land to undertake the proposed works. Any negotiation or agreement is the full responsibility of the consent holders, and is a private agreement that does not involve the Council in any capacity whatsoever. To obtain sign-off for the resource consents, the services described by the conditions are required to be in place to the satisfaction of the Council.

k. All proposed changes to the stormwater proposal must be discussed through the Major Infrastructure Projects Team Manager with the Team Leader – Stormwater, Natural Resources and Specialist Input, prior to implementation. Any changes to the proposal which will affect the capacity of performance of the stormwater system and/or will result in a change to the conditions of this consent will require an application to be made in accordance with section 127 of the Act.

l. It is anticipated that meetings will be arranged by the consent holder/requiring authority for each of the stormwater catchments following completion of the different stages of the development.

m. The planting plan may be submitted as part of a wider landscaping plan or strategy for the site however it is expected to include information to meet the specific requirements of the stormwater permit.

n. Stormwater360 Stormfilter proprietary devices are those that have been considered and assessed in association with this consent and the alterations to designations. Any changes to the proposed proprietary device media, type or configuration may result in the need to vary this consent and / or designation under section 127 of the Act.

o. If construction takes place over the winter period, extra account should be taken of the potential for larger inflows of surface and groundwater into excavations;

p. Any building over or adjacent to public drains needs to be constructed to Council standards and may include piling in accordance with the Council's requirements;

q. If any building spans over common boundaries, consideration must be given to piling foundations to ensure that any differential settlement is minimised;

r. Where applicable, a wheel wash or similar (or if appropriate, a stabilised construction entrance with a water pressure wash system) should be constructed for all sites and all vehicles exiting the sites are required to use this facility;

s. There may be further requirements for design or geotechnical information as part of a building consent application. Extensions, alterations and diversions to the public infrastructure will require an "Engineering Approval" consent from the Auckland Council.

t. Auckland Transport is advised to enter into discussions with the Auckland Council with regard to the drawback of designation D05-08 (956 Great North Road) to reflect the new footprint of the St Lukes interchange, established through the confirmation of NoR PA362. This process can be undertaken by completing Form 23 of the Resource Management (Forms, Fees and Procedure) Regulations 2003 and Section 182 of the RMA.

## Attachments

Figure CEMP.A – Construction Environmental Management Framework

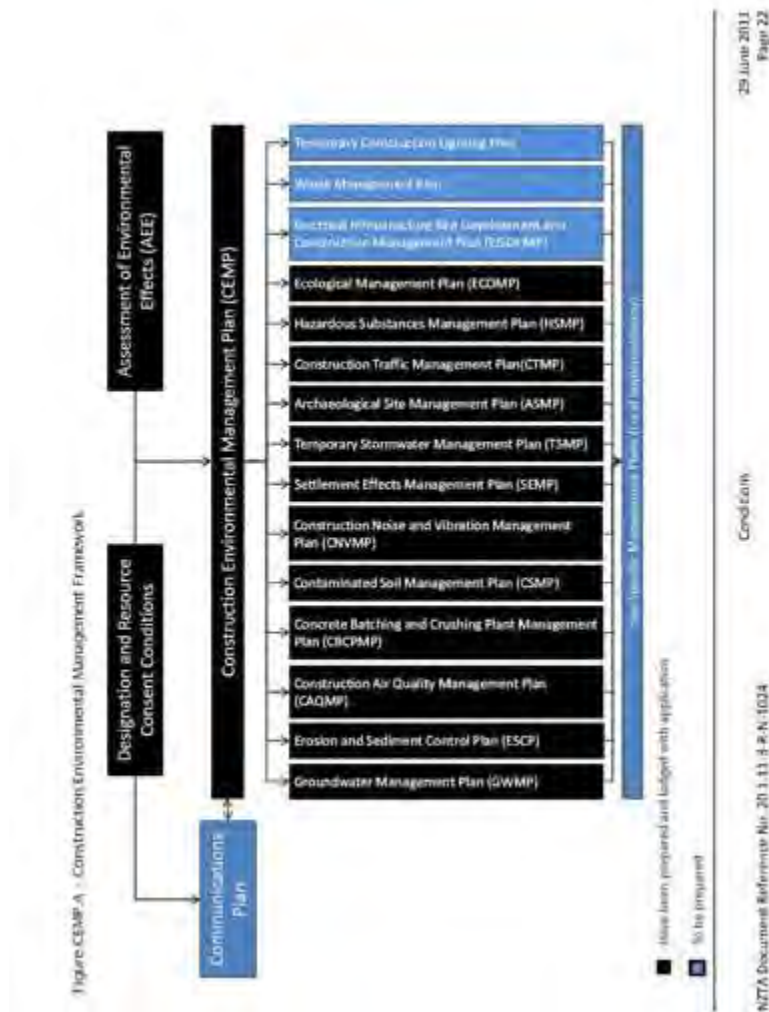
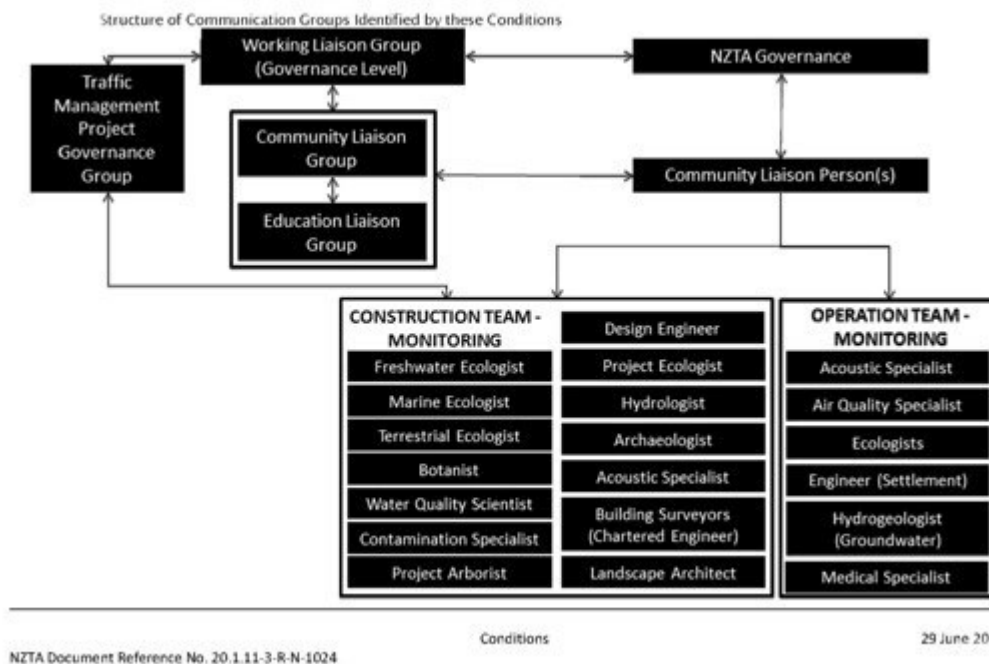


Figure PI.A – Structure of Communication Groups



## 6726 State Highway 20 - Waterview Connection Great North Road

Designation Number	6726
Requiring Authority	New Zealand Transport Agency
Location	State Highway 20 from Great North Road (in the vicinity of Alverston Street) to the northern portal (vicinity of Great North Road interchange), Waterview
Rollover Designation	Yes
Legacy Reference	Designation D04-22, Auckland Council District Plan (Isthmus Section) 1999
Lapse Date	June 2021

### Purpose

For a new designation, SH16, SH20 and Great North underpass – NOR4. A new surface designation for construction, operation and maintenance of new interchange and structures associated with tunnel operation, including ventilation building and stack, mitigation and local road access, taking in new pieces of land, and allowing for construction and operation of ramps, stormwater, wetland ponds, ancillary safety and operational services and maintenance, temporary works, vegetation removal and restoration, relocation of services, works on north-western cycleway, landscaping and planting, open space restoration and restoration of the Oakley Inlet heritage area.

### Conditions

For a complete set of conditions, refer to the Waterview Connection Proposal Board of Inquiry decision titled “Final Report and Decision of the Board of Inquiry into the New Zealand Transport Agency Waterview Connection Proposal - Volume 2” dated June 2011.

#### General Designation Conditions

##### DC.1

Except as modified by the conditions below, the works shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency (NZTA being the Requiring Authority), the Notice(s) of Requirement and the supporting documents, and supplementary information provided in evidence. This information is summarised as follows:

(a) Waterview Connection Project. Assessment of Environmental Effects Report (dated August 2010). Parts A- E;

(b) Waterview Connection Project. Assessment of Environmental Effects Report (dated August 2010). Part F: Plans and Drawings, except as updated through the hearing (Refer Schedule A for current plan and drawing references); and

(c) Waterview Connection Project. Assessment of Environmental Effects Report (dated August 2010). Part G: Technical Reports:

(i) Technical Report G.1 Assessment of Air Quality Effects

(ii) Technical Report G.2 Assessment of Archaeological Effects

(iii) Technical Report G.3 Assessment of Avian Ecological Effects

(iv) Technical Report G.4 Assessment of Coastal Processes

(v) Technical Report G.5 Assessment of Construction Noise Effects

(vi) Technical Report G.6 Assessment of Freshwater Ecological Effects

- (vii) Technical Report G.7 Assessment of Groundwater Effects
- (viii) Technical Report G.8 Assessment of Herpetofauna Ecological Effects
- (ix) Technical Report G.9 Assessment of Land and Groundwater Contamination
- (x) Technical Report G.10 Assessment of Lighting Effects
- (xi) Technical Report G.11 Assessment of Marine Ecological Effects
- (xii) Technical Report G.12 Assessment of Operational Noise Effects
- (xiii) Technical Report G.13 Assessment of Ground Settlement Effects
- (xiv) Technical Report G.14 Assessment of Social Effects
- (xv) Technical Report G.15 Assessment of Stormwater and Streamworks Effects
- (xvi) Technical Report G.16 Assessment of Temporary Traffic Effects
- (xvii) Technical Report G.17 Assessment of Terrestrial Vegetation Effects
- (xviii) Technical Report G.18 Assessment of Transport Effects
- (xix) Technical Report G.19 Assessment of Vibration Effects
- (xx) Technical Report G.20 Assessment of Visual and Landscape Effects
- (xxi) Technical Report G.21 Construction Environmental Management Plan (CEMP)
- (xxii) Technical Report G.22 Erosion and Sediment Control Plan (ESCP)
- (xxiii) Technical Report G.23 Coastal Works
- (xxiv) Technical Report G.24 Geotechnical Interpretive Report
- (xxv) Technical Report G.25 Traffic Modelling Report
- (xxvi) Technical Report G.26 Operational Model Validation Report
- (xxvii) Technical Report G.27 Stormwater Design Philosophy Statement
- (xxviii) Technical Report G.28 Geotechnical Factual Report – 500 Series
- (xxix) Technical Report G.29 Geotechnical Factual Report – 700 Series
- (xxx) Technical Report G.30 Assessment of Associated Sediment and Contaminant Loads
- (xxxi) Technical Report G.31: Technical Addendum Report (September 2010)
- (d) PT & Active Mode Transport Routes Existing and Proposed (Refer Schedule A, Row 22).
- (e) Waterview Connection Project, Evidence and Supplementary Information provided to the Board of Inquiry:
  - (i) Evidence in Chief (Numbers 1-37)
  - (ii) Rebuttal Evidence (Numbers 1-33)
  - (iii) Supplementary Information (Numbers 1-8)

#### DC.1A

Within 3 months of the designations being confirmed for the Project (or at least 1 month prior to any Auckland Council approvals or certifications required by these Conditions, whichever is the earlier), the NZTA shall update and finalise to the satisfaction of the Major Infrastructure Team Manager, Auckland Council all drawings and Plans cited in Schedule A, and provide a full set of the information and documentation referred to in Condition DC.1 to the Major Infrastructure Team Manager Auckland Council. At the same time the NZTA shall prepare to the satisfaction of the Major Infrastructure Team Leader, Auckland Council, a document for each designation which sets out the designation and have attached to it in text format a comprehensive set of the conditions imposed by the Board of Inquiry in its Final Decision as summarised in Schedule B, inclusive of any standard conditions and advice notes.

In particular (but not limited to), the following Plans will need to be amended in light of these Final Conditions:

- (a) F.2 Operational Scheme Plans (refer Schedule A, Row 3) require amendment detailing the amended location of the ventilation stacks and southern ventilation buildings;
- (b) F.5 Construction Scheme Plans (refer Schedule A, Row 4) require amendment to detail changes to the construction footprint for the amended location of the ventilation stacks and southern ventilation buildings and reconfiguration of Construction Yard 1);

- (c) F.6 Construction Yard Plans 101 and 107 (refer Schedule A, Row 7), detailing amendments to the Construction Yard 1 in light of the reconfiguration of this Yard and for Construction Yard 7 in light of the relocation of the northern ventilation stack (refer Schedule A, Row 34);
- (d) F.8 Plans of Structures and Architectural Features (refer Schedule A, Row 9), detailing the amended location of the northern ventilation stack and the design and location of the southern ventilation building and stack;
- (e) The CNVMP (including flow diagram and the supplementary evidence produced by Ms Wilkening) (refer Schedule A, Rows 36, 37 and 39);
- (f) The areas of the Open Space Restoration Plans (Schedule A, Row 30) to:
  - (i) Extend these areas in geographic extent to provide for the works identified in the Management Plan notations identified in the OS Conditions (in particular Condition OS.5 and Condition OS.6 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent) (e.g. these areas will (as relevant) include Eric Armishaw Park, Howlett Reserve and Waterview Esplanade Reserve); and
  - (ii) Exclude the operational area of designation required for the northern ventilation stack (as identified through the OPW process (refer Condition DC.8); and
- (g) Schedule A, Row 28 the Plan detailing proposed open space impacts and replacements needs to be updated to recolour the two land parcels on Hendon Avenue (which are excluded from the replacement calculations) to 'brown' to confirm they are part of the operational impact and will not be returned as open space.

#### DC.2

The period within which this designation shall lapse if not given effect to shall be June 2021, being ten years from the date on which it was confirmed in accordance with Section 184(1) of the Resource Management Act 1991.

#### DC.3

The NZTA shall update and finalise the relevant Construction and Operational Management Plans required under these conditions to ensure compliance with the designation conditions imposed by the Board of Inquiry. The relevant Management Plans shall be submitted to the Major Infrastructure Team Manager, Auckland Council within the timeframes specified in the following conditions. No works shall be undertaken until the relevant management plans have been finalised and certified or approved in accordance with the relevant conditions.

#### DC.4

Any Management Plans submitted to the Major Infrastructure Team Manager, Auckland Council for approval or certification may be submitted in stages to reflect any proposed staging of the physical works. Plans submitted shall clearly show the integration with adjacent stages and interrelated activities.

#### DC.5

In the event of any dispute, disagreement or inaction arising as to any Auckland Council Manager certification/ approvals required by the designation conditions, or as to the implementation of or monitoring required by the conditions, matters shall be referred in the first instance to the NZTA Regional State Highway Manager and to the Resource Consents Manager, Auckland Council to determine a process of resolution. If a resolution cannot be agreed, then the matter may be referred to an independent appropriately qualified expert, agreeable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree. The independent appropriately qualified expert shall be appointed within 10 working days of the NZTA or Auckland Council giving notice of their intention to seek expert determination. The expert shall,

as soon as possible, issue his or her decision on the matter. In making the decision, the expert shall be entitled to seek further information and hear from the parties as he or she sees fit.

Advice note: The dispute resolution process provided for in this condition does not prejudice any party's right to take enforcement action in relation to the implementation of the designation conditions. However, the dispute resolution process will be applied before any formal enforcement action is taken by the Council, except in urgent situations.

#### DC.6

Except for Condition DC.7, Condition DC.8 and Condition DC.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, the NZTA shall be exempt from providing an Outline Plan of Works for the Project, as provided for in Section 176A (2)(a) and (b) of the RMA.

Advice note: The Construction and Operational Management Plans, together with the provision of detailed drawings required by Condition DC.1(b) are considered sufficient detail in all aspects of the Project, with the exception of proposed works for the northern and southern ventilation buildings and stacks where further details are required.

#### DC.7

An Outline Plan of Works shall be prepared for the Northern and Southern Ventilation Buildings and Stacks (OPW1 and OPW2) (in the general location as shown in the Operational Scheme Plans F.2 (Schedule A, Row 3) as shown on Figures DC.A and DC.B) in accordance with Section 176A of the RMA and Condition DC.8 and Condition DC.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent and submitted to the Major Infrastructure Team Manager, Auckland Council.

For the purposes of Condition DC.8 and Condition DC.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, the following definitions shall apply:

- (a) Control Building – A building or buildings associated with the staffed control of the tunnel operating systems (including CCTV systems or surveillance). This precludes the inclusion or attached of any equipment unrelated to the structure of operation of the control building.
- (b) Ventilation Building – A building or buildings associated with the operation and maintenance of the tunnels and associated ventilation system (including power and emergency water supply). This precludes the inclusion or attachment of any equipment unrelated to the structure or operation of the ventilation building.
- (c) Ventilation Stack (stack) - A structure which channels air emissions to a height in the atmosphere which is suitable to disperse the emissions and result in an acceptable ambient air quality. This precludes the inclusion or attachment of any equipment unrelated to the structure or operation of the ventilation stack.

#### DC.8

Outline Plan of Works for the Northern Ventilation Buildings and Stack (OPW1) (refer Figure DC.A)

OPW1 shall be prepared in accordance with Section 176A of the RMA. The final form of the Northern Ventilation Buildings and Stack shall be in accordance with the design principles of Section B of the Urban Landscape and Design Framework (ULDF June 2010) (refer Schedule A, Row 38) and the following requirements:

- (a) Retention of the same building / structural components underground as per the revised Drawing

Set F.8, specifically Drawing 9 'North Portal - Basement Floor Plan' and above ground, specifically Drawing 8 'North Portal Location Plan' (refer Schedule A, Row 9) (subject to the amendments to location required by subclause

(c) below);

(b) Creation of a fragmented form for the ventilation buildings, such that the aboveground building is broken down into small, discrete elements – broadly similar in scale to that of nearby residential and school buildings;

(c) Location of the ventilation stack on the eastern side of Great North Road, within the OPW area identified on Plan DC.A. The precise location within the OPW area shall be a matter of consultation with the Community Liaison Group(s) as established by Condition PI.5;

(d) Ensure that any required roof linkages do not dominate the form of the building nor make it register visually as a single entity;

(e) Development of an architectural profile, detailing and material palette that references the local landscape/ geology/ coastline/ residential area in the design of the aboveground ventilation buildings and for the ventilation stack to avoid an industrial character;

(f) Maximisation of areas of planted open space between buildings, structures and vehicle movement/ parking areas;

(g) Maximisation of the quantum of limbed-up (to promote visibility and surveillance (in accordance with CPTED principles)), large scale, specimen tree planting between buildings, structures and vehicle movement / parking areas surrounding the ventilation buildings;

(h) Treatment of the ventilation building and ventilation stack as objects of urban sculpture;

#### DC.10

The NZTA shall give notice to the Manager Regional and Local Planning, Auckland Council in accordance with Section 182 and 181 respectively of the RMA for:

(a) Within six months of the State highway opening (being operational), removal of those parts of the designation that are not required for the long term operation, maintenance and mitigation of effects of the State highway.

Note: this condition is specific to land no longer required for construction purposes once the Project is completed and includes the land of 6 Barrymore Road, refer Condition OS.17 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

(b) The designation to be altered to remove those conditions no longer required for long term operation and maintenance of the Project.

#### DC.12

Unless otherwise provided for by Condition RC.2 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, if any monitoring required to be undertaken by any party by the designation conditions indicates non-compliance with any designation condition, the NZTA must provide written notice to the Major Infrastructure Team Manager Auckland Council as soon as it becomes aware of same, stating the following:

(a) A description of the non-compliance; and

(b) The measures NZTA proposes for addressing the non-compliance, including any additional mitigation measures.

Subject to the Council's approval, the NZTA must implement the additional mitigation measures to address the non-compliance.

#### DC.13

Pursuant to Section 36(1)(d) of the RMA, the requiring authority is required to pay to Auckland Council any administrative charge for the carrying out by the local authority of its functions in

relation to the administration, monitoring, and supervision of designation conditions.

DC.14

The servants of agents of Auckland Council shall be permitted to have access to relevant parts of the Project at all reasonable times for the purpose of carrying out inspections, investigations, tests, measurements and/or to take samples.

### **Construction Environment Management Plan Conditions**

CEMP.1

Except where provided for in Condition CEMP.1A of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, the NZTA shall update and finalise the draft Construction Environmental Management Plan (CEMP) including all the Management Plans which form part of the CEMP and are included as appendices, submitted with this application to ensure compliance with the consent and designation conditions imposed by the Board of Inquiry. The CEMP shall be provided to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to the commencement of works to certify compliance and consistency with the conditions. Construction shall not commence until certification is obtained.

Advice note: For clarity the CEMP will be updated and finalised in accordance with the conditions. Any amendments will be limited to reflecting the requirements of the conditions, specifying personnel, and completing the Environmental Risk Register.

Advice note: Particular care must be taken with development and operation of Construction Yard 7. When the CEMP is being updated and finalised, consideration must be given to the contents of the draft SSCEMP prepared for Construction Yard 7 (Row 41, Schedule A) recognising changes required by inclusion of the ventilation stack in this yard.

CEMP.2

The certification process of the CEMP (and its appendices) shall confirm that the CEMP gives effect to the relevant conditions, as well as those matters in CEMP.6, and that it includes details of:

- (a) Staff and contractors' responsibilities;
- (b) Training requirements for employees, sub-contractors and visitors;
- (c) Environmental incident and emergency management;
- (d) Communication and interface procedures (in accordance with the Communication Plan required under Condition PI.2);
- (e) Environmental complaints management (including the procedures required under Condition PI.4);
- (f) Compliance monitoring;
- (g) Reporting (including detail on the frequency of reporting to the Auckland Council);
- (h) Environmental auditing; and
- (i) Corrective action.

CEMP.3

The management of key environmental effects associated with the construction phase of the Project is detailed within environmental management plans that are included in the CEMP as appendices.

This suite of management plans as shown on Figure CEMP.A comprises:

- (a) Construction Noise and Vibration Management Plan (CNVMP);
- (b) Construction Air Quality Management Plan (CAQMP);
- (c) Erosion and Sediment Control Plan (ESCP);
- (d) Temporary Stormwater Management Plan (TSMP);



- (e) Ecological Management Plan (ECOMP);
- (f) Groundwater Management Plan (GWMP);
- (g) Settlement Effects Management Plan (SEMP);
- (h) Contaminated Soils Management Plan (CSMP);
- (i) Hazardous Substances Management Plan (HSMP);
- (j) Archaeological Site Management Plan (ASMP);
- (k) Construction Traffic Management Plan (CTMP);
- (l) Concrete Batching and Crushing Plant Management Plan (CBCPMP);
- (m) Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP) (to be prepared in accordance with Condition CEMP.15);
- (n) Waste Management Plan (to be prepared in accordance with Condition CEMP.10); and
- (o) Temporary Construction Lighting Management Plan (to be prepared in accordance with Condition L.2).

#### CEMP.4

The CEMP shall be implemented and maintained throughout the entire construction period.

#### CEMP.5

A copy of the CEMP shall be held on each construction site at all times and be available for inspection on request by the Auckland Council.

#### CEMP.6

The finalised CEMP shall include specific details on demolition, construction and management of all works associated with the Project. The certification process of the CEMP shall confirm that the CEMP includes details of the following:

- (a) Details of the site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- (b) The location of large notice boards that clearly identify the NZTA and the Project name, together with the name, telephone, email address and address for service of the site or Project manager and the community liaison person;
- (c) An outline construction programme of the work indicating in particular likely time periods for road closures and anticipated traffic diversion effects;
- (d) The hours of work, which should reflect the need to ensure that residents enjoy reasonable freedom from noisy or intrusive construction activity in their neighbourhood at night, on Sundays and during public holidays;
- (e) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/ storage of rubbish, storage and unloading of building materials and similar construction activities;
- (f) Location of worker's offices and conveniences (e.g. portaloos);
- (g) Procedures of controlling sediment run-off, dust and the removal of soil, debris and demolition and construction materials from public roads or places. Dust mitigation measures should include use of water sprays to control dust nuisance on dry or windy days;
- (h) Methods to stabilise ingress and egress points to construction sites, to the standard required by ARC Technical Publication 90 (Nov 2007);
- (i) Procedures for ensuring that residents within 100m of construction areas or other people whose use of an area may be disrupted by construction works (for example the Te Atatu Boating Club for works on the Whau River) are given notice of the commencement of construction activities and are informed about the expected duration of the works, including potentially through the community liaison person;
- (j) Procedures to be followed to ensure that those working in the vicinity of identified heritage and ecological features are aware of the heritage or ecological values of these features and the steps

which need to be taken to meet the conditions applying to work on the site;

(k) Means of ensuring the safety of the general public;

(l) Procedures for the community liaison person to receive and respond to complaints about construction activities, including dust and odour from the works;

(m) Methods of mitigating the local and network wide effects of construction of individual elements of the Project, including measures to ensure that parking of staff vehicles on surrounding streets is restricted;

(n) All temporary boundary/ security fences shall be maintained in good order, with any graffiti removed as soon as possible;

(o) Confirmation of a Project Arborist and completion of a STEM assessment of the preliminary list of Amenity

Trees in Schedule E.7 of the AEE to confirm the final Amenity Trees; and

(p) The process to minimise removal of Amenity Trees, maximise the protection of those retained, undertake relocation of Amenity Trees and replacement planting of specimen trees (in accordance with Conditions LV.10 and ARCH.9)).

(q) Advice note: For the purposes of CEMP.6(o) and (p), Amenity Tree is defined as a tree or trees that contribute significantly to amenity, taking into account its form, size, health, ecological or historical significance (a preliminary list of these trees is provided in Appendix E.7 of the AEE).

#### CEMP.7

The layout of the 12 Construction Yards, including associated buildings, fencing and site access shall be developed in accordance with Waterview Connection Project Construction Yards Plans (Refer Schedule A, Row 7). The layout drawings shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to the occupation of the yard, for review and certification that the final layout of the construction yards is in accordance with the conditions. The layout drawings shall incorporate the following:

(a) The main access to the construction yards to be located as far as practicable from residential dwellings, taking into account site and public safety and environmental constraints, in the locations shown on Waterview Connection Project Construction Yards Drawings (Refer Schedule A, Row 7);

(b) Noisy construction activities to be located as far as practicable, and preferably no less than 100m, from residential dwellings; Construction of temporary boundary/ security fences to be undertaken in a manner which minimises impacts on existing trees;

(c) Temporary acoustic fences and visual barriers;

(d) Temporary buildings greater than 8 metres in height to be located in a position which minimises visual impact on adjacent residential dwellings; and

Location of workers' and Project vehicle parking.

#### CEMP.8

All storage of material and equipment associated with the construction works shall take place within the boundaries of the designation.

#### CEMP.9

Temporary protection shall be installed to prevent vehicles damaging drains, footpaths, berms, kerbs, vehicle crossings and the roads during the site preparation and construction phase of the Project. Any damage to the drains, footpaths, berms, kerbs, vehicle crossings and the road attributable to any vehicle associated with construction activities shall be repaired to the same or similar standards as existed prior to such damage at no cost to the Auckland Council.

#### CEMP.10

The NZTA shall finalise and implement the Hazardous Substances Management Plan (HSMP),

through the CEMP (as per Condition CEMP.1), submitted with this application, prior to works commencing on site. The certification process of the CEMP shall confirm that the HSMP clearly identifies the requirements for proper storage, handling, transport and disposal of hazardous substances during the construction phase of the Project and confirm that there shall be no storage of explosives on the Project site.

#### CEMP.11

The NZTA shall develop and implement a Waste Management Plan in accordance with the waste management principles, controls and methods set out in the CEMP. The Plan shall be provided to the Major Infrastructure Team Manager, Auckland Council and be implemented throughout the entire construction period.

#### CEMP.12

The CEMP shall be reviewed by the NZTA at least annually or as a result of a material change to the Project. The review shall take into consideration:

- (a) Compliance with designation and consent conditions;
- (b) Any changes to construction methods;
- (c) Key changes to roles and responsibilities within the Project;
- (d) Changes in industry best practice standards;
- (e) Changes in legal or other requirements;
- (f) Results of inspections, monitoring, incidents, corrective actions, internal or external assessments; and
- (g) Public complaints.

A summary of the review process undertaken shall be kept by the NZTA, provided annually to the Major Infrastructure Team Manager, Auckland Council and made available (with any related data) to the Auckland Council upon request.

#### CEMP.13

Following the review process (as described in Condition CEMP.12), the CEMP may require updating. Any material change proposed to the CEMP (including appended Management Plans) shall be submitted for approval to the Major Infrastructure Team Manager, Auckland Council at least 10 working days prior to the proposed changes taking effect.

#### Advice Note:

Material change will include amendment to any base information informing the CEMP or any process, procedure or method of the CEMP (such as the environmental constraints map, compliance monitoring process, complaints procedure or mitigation / remedial methods identified) which has the potential to increase adverse effects on a particular value. For clarity changes to personnel and contact schedules do not constitute a material change.

#### CEMP.14

The CEMP shall include, as an appendix, an Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP). The EISDCMP shall be provided to the Major Infrastructure Team Manager, Auckland Council, and include:

- (a) Methods and measures:
  - (i) To ensure that the existing high voltage infrastructure can be accessed for maintenance at all reasonable times, or emergency works at all times, during and after construction activities.
  - (ii) To appropriately 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 the overhead transmission lines

- (iii) To ensure that no activity is undertaken during construction that would result in ground vibrations and/or ground instability likely to cause material damage to the transmission lines, including support structures.
- (iv) To ensure that changes to the drainage patterns and runoff characteristics do not result in adverse effects from stormwater on the foundations for any high voltage transmission line support structure.
- (b) Sufficient detail to confirm that new planting and maintenance of vegetation will comply with the New Zealand Electricity (Hazard from Trees) Regulations 2003, including, but not limited to, the provisions of Schedule (Growth Limit Zones) to those Regulations.
- (c) Sufficient detail to confirm that the works will comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001), including, but not limited to, the provisions of:
  - (i) Clause 2.2 with respect to excavations near overhead support structures;
  - (ii) Clause 2.4 with respect to buildings near overhead support structures;
  - (iii) Section 3 with respect to minimum separation between buildings and conductors;
  - (iv) Section 5 with respect to minimum safe distances for the operation of mobile plant; and,
  - (v) Table 4 with respect to minimum safe separation distances between the ground and the overhead conductors.
- (d) Confirmation that Transpower has been provided a copy of the EISCDMP for their review at least 20 working days prior to construction.

Advice note: With respect to clause (c), specific consideration must be given to the height and location of temporary structures (such as Project offices and other construction site facilities) and permanent structures (such as lighting poles, signage, gantries and acoustic barriers).

#### CEMP.15

The NZTA will be responsible for all service relocations required for construction of the Project. The NZTA shall liaise with the providers of infrastructure service networks (including, but not limited to water, gas, stormwater, wastewater, power and telecommunications), and private property owners with on-site services to develop methodologies and timing for necessary services relocation required for the Project, with the objective of minimising disruption to the operation of these service networks and onsite services.

Advice note:

- (a) It is noted that if separate consents are required for relocations for any services of network utility operators or landowners, such consents will be obtained before construction commences in the relevant area, and any effects of those relocations would be considered at that time. The same applies to any alteration of consents if required.
- (b) Network infrastructure owned and operated by Watercare Services is located within the designations. An operating agreement will be developed by the NZTA and Watercare Services which will include appropriate notification and access protocols where works are to be undertaken by either network operator on or adjacent to Watercare Services infrastructure within the designations.

#### **Public Information Conditions**

##### PI.1.

A community liaison person shall be appointed by the NZTA for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the Project. The liaison person's name and contact details shall be made available in the CEMP and on site signage by the NZTA. This person must be reasonably available for on-going consultation on all matters of concern to affected parties arising from the Project.

#### PI.2.

The NZTA shall prepare and implement a Communications Plan that sets out procedures detailing how the public, Ministry of Social Development, Housing New Zealand Corporation and other organisations representing the particular demographic characteristics of the community (including but not limited to Primary Health Organisations, general practitioners, youth, education organisations, aged care groups and groups representing ethnic and migrant communities) will be communicated with throughout the construction and monitoring periods (as prescribed in the designation and consent conditions).

In preparing the Communications Plan, the NZTA will liaise with Auckland Council to access its community liaison databases. The Communications Plan will include details of:

- (a) The site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- (b) In accordance with these Conditions, the database of the key construction activities and monitoring requirements that are the subject of the Communications Plan;
- (c) The database of stakeholders and residents who will be communicated with;
- (d) Communication methods, an assessment of how these methods reach the different audience/ stakeholder groups (including those methods set out in Condition CEMP.6), and detail on when each of these methods will be used (e.g. regular communication or event specific methods);
- (e) The appointed specialist in Environmental and Occupational Medicine, including contact details (as per Condition SO.13);
- (f) Any stakeholder specific communication plans required; and
- (g) Monitoring and review procedures for the Communications Plan.

The Communications Plan shall be written in accordance with the external communication procedures set out in the CEMP and provided at least 20 working days prior to construction commencing, to the Major Infrastructure Team Manager, Auckland Council, Working Liaison Group and the Community Liaison Group(s) established by Condition PI.5. The structure of the communication groups set out in these conditions is attached as Figure PI.A.

#### PI.3.

At least 15 working days prior to the commencement of construction, and at 15 working day intervals thereafter, or as required depending on the scale of works and effects on the community, advertisements will be placed in the relevant local newspapers and community notice boards (as identified in Condition CEMP.6(b)) detailing the nature of the forthcoming works, the location of the forthcoming works and hours of operation. All advertisements will include reference to a 24 hour toll free complaints telephone number. Where relevant, advertisements will also include but not be limited to details of:

- (a) Any traffic disruptions or controls or changes to property access, pedestrian/ cycle routes and bus stops; and
- (b) Any other construction activities, including night time works, blasting, and structure-borne noise, as identified in the conditions.

#### PI.4.

The NZTA shall manage, investigate and resolve (as appropriate) all complaints for the duration of the construction works in accordance with the environmental complaints section of the CEMP. The implementation strategy for complaints includes:

- (a) A 24 hour toll free telephone number and email address, which shall be provided to all potentially affected residents and businesses. The number shall be available and answered at all times during the entire duration of the works for the receipt and management of any complaints. A sign containing the contact details shall be located at each site specific work activity;
- (b) The NZTA shall maintain a record of all complaints made to this number, email or any site

- office, including the full details of the complainant and the nature of the complaint;
- (c) Upon receiving a complaint, within 10 days of complaint receipt, a formal written response will be provided to the complainant and Auckland Council;
  - (d) The NZTA shall undertake corrective action where necessary to resolve any problem identified. All action taken and relevant information shall be documented. For the avoidance of doubt, 'where necessary' refers to where the works are not being carried out in accordance with conditions of this designation;
  - (e) Where issues and complaints about effects cannot be resolved through the CEMP complaints management process, a meeting shall be held between the NZTA, the complainant and the Auckland Council representative(s) to discuss the complaint and ways in which the issue may be resolved. If parties cannot agree on a resolution, an independent qualified mediator will be appointed, agreeable to all parties and at the shared cost of all parties, to undertake mediation of the dispute or concerns; and
  - (f) All information collected in Conditions PI.4 (b), (c) and (d) shall be detailed in a Construction Compliance Report (including the means by which the complaint was addressed, whether resolution was reached and how the response was carried out) prepared by the NZTA. This Report shall be submitted to the Major Infrastructure Team Manager, Auckland Council on a quarterly basis commencing at the beginning of the works and for the entire duration of construction.

#### PI.5.

The NZTA shall establish Community Liaison Group(s) at least two months prior to construction commencing in each of the following key construction areas:

- (a) Te Atatu (including the SH16 Causeway)
- (b) Waterview (including works to St Lukes on SH16 and on the Waterview Estuary and Causeway Bridges)
- (c) Owairaka

and hold regular meetings (at least three monthly) throughout the construction period and up to 24 months following construction completion relevant to these areas (or less if the members of the Group agree), so that on-going monitoring information can continue to be disseminated.

The Community Liaison Group(s) shall be open to all interested parties within the Project area including, but not limited to the following groups:

- (a) Auckland Council and Auckland Transport;
- (b) Educational facilities within the Project area (including schools, kindergartens, childcare facilities and Unitec Institute of Technology);
- (c) Relevant community/ environmental groups (including but not limited to Friends of Oakley Creek, Star Mills Preservation Group, Cycle Action Auckland and representatives from those organisations identified in the Communications Plan (as required by Condition PI.2) and local residents;
- (d) Department of Conservation;
- (e) Local Boards;
- (f) Iwi groups with Mana Whenua;
- (g) Public transport providers; and
- (h) Housing New Zealand Corporation.

Advice note: The purpose of the Community Liaison Group(s) is to provide a regular forum through which information about the Project can be provided to the community, and an opportunity for concerns or issues to be raised.

#### PI.6.

The Community Liaison Group(s) shall be provided opportunities to review and comment on

the following (amongst other things):

- (a) The Outline Plan of Works detailing designs for the northern and southern ventilation buildings and stacks (the outcomes of this consultation will be reported in accordance with the processes required in DC.8(n) and DC.9(k);
- (b) The Open Space Restoration Plans (as required by Condition OS.3);
- (c) Finalisation and amendment to Urban Design and Landscape Plans (UDL Plans) (as required by Condition LV.1);
- (d) The Oakley Inlet Heritage Plan (as required by Conditions OS.5(b)(i) and ARCH.6);
- (e) The detail of the Oakley Creek restoration (as required by Condition STW.20 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- (f) Publicly available results of environmental monitoring as required by the designation and/or these Consents (e.g. air quality monitoring); and
- (g) The finalisation of the STEM assessment required by CEMP.6(o) and a schedule of trees that are required to be removed for consideration of timber use in heritage projects as required by Condition SO.7.

Advice Note: Attention is drawn to the Vegetation conditions concerning identification and protection of Significant Vegetation and Valued Vegetation.

- (h) Detailed design features of the Te Atatu underpass (e.g. lighting and architectural treatment).

### **Temporary Traffic Conditions**

#### **TT.1**

The NZTA shall update and finalise the Construction Traffic Management Plan (CTMP) submitted with this application, in accordance with these conditions, and implement it through the CEMP.

In finalising the CTMP, the NZTA shall:

- (a) Provide simulation modelling demonstrations to better understand the effects of construction of the Project on the affected road network;
- (b) Include measures to avoid road closures and restrictions of vehicle, bus, cycle and pedestrian movements;
- (c) Where road closures or restrictions cannot reasonably be avoided the particular vulnerabilities and sensitivities of pedestrian diversions and restricted conditions shall be taken into account in the planning of any closures or restrictions.

#### **TT.2**

The CTMP shall require the development of Site Specific Traffic Management Plans (SSTMPs) and their approval by the Traffic Management Project Governance Group (as defined by the CTMP), for each construction activity that may affect traffic or transportation infrastructure and services. The SSTMPs shall be provided to the Traffic Management Coordinator(s) for the relevant Road Controlling Authority at least 10 working days prior to each construction activity.

#### **TT.3**

Each SSTMP shall describe the measures that will be undertaken to avoid, remedy or mitigate the local and network wide effects of construction of the Project. In particular, the SSTMP shall include the following matters:

- (a) Traffic management measures to address and maintain, traffic capacity, including bus services, at peak traffic periods during weekdays (6:00 to 9:00 and 16:00 to 19:00) and peak traffic periods at weekends (including Te Atatu Road, Great North Road and Richardson Road);
- (b) Methods to manage the effects of traffic during construction including the requirement to detour or divert traffic. These methods shall seek to avoid, remedy or mitigate effects on access

to and from businesses and other organisations in the area;

(c) Any road closures that will be required and the nature and duration of any traffic management measures that will result, including any temporary restrictions, detours or diversions for general traffic and buses;

(d) Methods to avoid, remedy or mitigate the local and network wide effects of the construction of individual elements of the project (e.g. intersections/ overbridges) and the use of staging to allow sections of the Project to be opened to the traffic while other sections are still under construction;

(e) Methods to manage the effects of the delivery of construction material, plant and machinery (including cranes and oversized trucks) during construction;

(f) Any routes where construction traffic movements will be restricted (either for particular times for construction periods);

(g) Measures to maintain existing vehicle access, as far as practicable, or where the existing property access is to be removed or becomes unsafe as a result of the construction works, measures to provide alternative access arrangements in consultation with the Auckland Council and the affected landowner; and

(h) Measures to maintain pedestrian and cycle access with thoroughfare to be maintained on all roads and footpaths adjacent to the construction works, where practicable (e.g. unless provision of such access is severed by the works or such access will become unsafe as a result of the construction works). Such access shall be safe, clearly identifiable, provide permanent surfacing and seek to minimise significant detours. (This Condition does not act as a qualification to the commitment to maintain access to open space and education facilities, as required in Condition OS.13).

#### TT.4

The SSTMPs shall include traffic management measures developed in consultation with the Auckland Transport, Bus and Coach Association and the Auckland Council, to address and maintain, where practicable, existing levels of service for buses particularly at peak periods (6:00 to 9:00 and 16:00 to 19:00) on weekdays.

#### TT.5

The NZTA shall consult with the Traffic Operations Manager, Auckland Transport with regard to the most appropriate means for providing access on Council roads within and adjacent to the designation. The NZTA shall also coordinate and consult directly with the proponents of any major construction or major traffic generating event occurring concurrently with, and in the vicinity of the Project.

#### TT.6

The SSTMPs shall include measures developed in consultation with Auckland Transport to, as far as practicable, enable continued public walking and cycling passage along the existing Northwestern Cycleway (between Te Atatu Interchange and St Lukes Interchange) and along Great North Road and the public walkway along Oakley Creek, with any interruptions being as short as feasible.

#### TT.7

The NZTA shall undertake construction works so as to avoid significant long duration impacts or the full closure of Te Atatu Road for all road users heading to or from the Te Atatu Peninsula and to ensure that access for emergency service vehicles is maintained.

#### TT.8

The NZTA shall restrict construction truck movements during peak hours (6:00 to 9:00 and 16:00 to



19:00) on weekdays and during the peak periods at the weekends to avoid the following:

- (a) Te Atatu Road Interchange, during both morning and afternoon peak hours
- (b) Great North Road Interchange, city bound during the morning peak hours
- (c) Great North Road Interchange, west bound onto SH16 and southbound onto Great North road during the afternoon peak.

Construction truck movements during these hours shall only be allowed under exceptional circumstances agreed in advance with the Traffic Management Project Governance Group.

#### TT.9

The NZTA shall maintain at least the existing active traffic lane configuration capacity on SH16, at the Te Atatu Interchange area, Te Atatu Road, Richardson Road and on Great North Road during peak periods being 6:00 to 9:00 and 16:00 to 19:00 on weekdays and during the peak periods on weekends, for the duration of the temporary construction programme.

#### TT.10

The NZTA shall monitor the impact of construction traffic in terms of traffic speeds and volumes on SH16, Great North Road, Te Atatu Road and Richardson Road throughout the construction period to confirm the expected traffic effects as set out in the Temporary Traffic Assessment (Technical Report G.16) submitted with this application.

- (a) This monitoring will be undertaken on a daily, weekly and monthly basis; and
- (b) Monitoring results will be made available to the Traffic Operations Manager, Auckland Transport on request.

#### TT.11

If monitoring undertaken pursuant to Condition TT.10 indicates that traffic volumes or traffic conditions are significantly different from those expected, the SSTMPs will be reviewed and as appropriate amended to the satisfaction of the Traffic Management Project Governance Group.

### **Operational Traffic**

#### **Conditions Integration with**

##### **Local Road Network**

#### OT.1

The NZTA shall prepare in collaboration with Auckland Transport a Network Integration Plan (NIP) for the Project, or relevant Project phases, to demonstrate how the Project integrates with the existing local road network and with future improvements (identified in the Western Ring Route (Northwest) Network Plan) planned by the Auckland Council. The NIP shall include details of proposed physical works at the interface between the State highway and the local road network, and shall address such matters as pedestrian/ cycle ways, lane configuration, traffic signal co-ordination, signage and provision for buses

In addition, the NIP will address:

- (a) The commitment of the NZTA to progress bus priority measures northbound on Great North Road as part of the reinstatement of Great North Road, as proposed by Auckland Transport and indicated on the Plans Great North Road Option 1 Proposed Road Marking (Schedule A, Row 33), subject to the agreement with Auckland Transport;
- (b) How the works committed to by the NZTA for pedestrian and cycle ways, as detailed in the PT and Active Mode Transport Routes Plan Set (Condition DC.1(d) (refer Schedule A, Row 22)), integrate with pedestrian and cycle ways on the wider transport network;
- (c) The Richardson Road Bridge, which shall be designed in general accordance with the structural plans (Schedule A, Row 9) and the commitment of the NZTA to provide a 2m footpath on Richardson Road Bridge, subject to confirming appropriate bus stop locations with Auckland

Transport;

(d) Integration of the works proposed on Te Atatu Road to appropriately transition between the Waterview Connection Project and any projects being progressed by Auckland

Transport;

(e) Opportunities to review traffic signal timings at the Te Atatu Interchange with a view to minimising delays to all users, including cyclists on the SH16 cycle way; and

(f) The commitment of the NZTA to provide for cycle “aspects” (cycle signal lights) at the Great North Road Interchange.

(g) As part of detailed design at the Te Atatu Interchange, the installation of underpasses and/or overbridges, provided however that should some not prove feasible in civil or traffic engineering design terms, the installation of coordinated traffic signal operation for cyclists on the north-western cycleway by means of synchronised cycle lights which seek to reduce delays for cyclists.

Works identified in the NIP which are the responsibility of the NZTA, will be undertaken as at the time of construction works for the Project.

The NZTA shall prepare a Tunnel Traffic Operation Plan in consultation with the Auckland Transport and Auckland Council. The Plan shall include, but not be limited to:

(a) Procedures for tunnel operational safety, including fire-life safety;

(b) Procedures for maintenance requirements.

(c) Procedures for managing traffic to avoid or minimise potential congestion within the tunnel, particularly during peak periods.

(d) Procedures for the management of traffic during incidents.

(e) Procedures for the operation of tunnel fans and the management of portal emissions.

(f) Confirmation that all equipment has been tested and operates in accordance with requirements and specifications.

The Tunnel Traffic Operation Plan shall be completed and provided to Auckland Transport and to the Major Infrastructure Team Manager, Auckland Council (in respect of Condition OT.2(e)), prior to operational use of the tunnelled section of SH20.

Advice note: The operation and maintenance of the air quality monitoring equipment inside the tunnel shall follow manufacturer’s recommendations.

### **Noise and Vibration Conditions – Construction**

#### **CNV.1**

The NZTA shall finalise and implement through the CEMP, a Construction Noise and Vibration Management Plan (CNVMP) throughout the entire construction period of the Project.

The CNVMP shall describe the measures adopted to meet:

(a) the noise criteria set out in Conditions CNV.2 and 3 below;

(b) the vibration criteria set out in Condition CNV.4 below; or

(c) where (a) or (b) cannot be met, the process that will be followed to appropriately mitigate noise and vibration effects including methods that may be applied outside the designation.

The CNVMP shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to construction activities being undertaken for review and certification that the CNVMP, as a minimum, addresses the following:

(i) Construction noise and vibration criteria (Conditions CNV.2, CNV.3, and CNV.4);

(ii) Hours of operation, including times and days when noisy and/or vibration inducing construction activities would occur;

- (iii) Machinery and equipment to be used;
- (iv) Vibration testing of equipment to confirm safe distances to buildings prior to construction;
- (v) Preparation of building condition surveys of critical dwellings prior to, during and after completion of construction works;
- (vi) Roles and responsibilities of personnel on site;
- (vii) Construction operator training procedures;
- (viii) Methods for monitoring and reporting on construction noise and vibration;
- (ix) A hierarchy of mitigation options that will be assessed for the Project noise mitigation, including alternative strategies where full compliance with the relevant noise and/or vibration criteria cannot be achieved;
- (x) Management schedules containing site specific information;
- (xi) Measures for liaising with and notifying potentially affected receivers of proposed construction activities and the potential for noise and vibration effects, specifically:
  - PPFs located within a horizontal distance of 35 metres of underground excavation works, along the tunnel alignment shall receive prior notification not greater than 7 days (and not less than 24 hours) prior to the commencement of works.
  - Methods for ensuring residents affected by night works (within 100m of the construction site night works, as defined on the maps (refer Schedule A, Row 35)) are notified of such works (i.e. any works during the hours of 20:00 to 06:30) at least 5 days prior to the commencement of any such work.
  - The maps showing PPFs to be notified of night works (refer Schedule A, Row 35), shall be reviewed and included within the CNVMP.
- (xii) Methods for receiving and handling complaints about construction noise and vibration;
- (xiii) Measures for preventing the occurrence of rogue fly rock, including management of charge weights and face loading procedures, stemming of charge holes and profiling of the face to maintain minimum burden (face cover);
- (xiv) Investigations on the practicability of implementing permanent noise mitigation works for construction mitigation (as per Condition CNV.7);
- (xv) Investigations of the practicability of implementing Building Modification mitigation, as required in accordance with Conditions ON.6 and ON.11, prior to commencement of construction within 100m of the relevant PPFs (including those on the Unitec site); and
- (xvi) The process for developing Site Specific Noise Management Plans (SSNMP), in accordance with the SSNMP Flow Chart (refer Schedule A, Row 36), including templates and a certification process for the Major Infrastructure Team Manager, Auckland Council (in accordance with Condition CNV.13) to confirm the process of SSNMP review of noise mitigation options where, the modelled/predicted levels or subsequent actual levels exceed the criteria in Conditions CNV.2 and/or CNV.4.

**CNV.2**

Except where certified by the Council through the SSNMP (in accordance with Condition CNV.13), construction noise (excluding noise from blasting Monday to Saturday inclusive) shall be measured and assessed in accordance with NZS 6803:1999 "Acoustics - Construction Noise" and shall comply with the following criteria: Note: In Condition CNV.2 (T) means a duration between 15 minutes and 60 minutes, in accordance with NZS6803:1999.

**(a) Project Construction Noise Criteria: Residential Receivers**

Time of Week	Time period	Project Construction Noise Criteria (Long Term Construction)		
		dB		
		Sectors 1-7	Sectors 8-9	All Sectors
		LAeq(T)	LAeq(T)	LAeq(T)

Monday- Saturday	0630-0730	60	45	75
	0730-1800	70	70	85
	1800-2000	65	65	80
	2000-0630	60	45	75
Sundays and Public Holidays	0630-0730	45	45	75
	0730-1800	60	45	85
	1800-2000	45	45	75
	2000-0630	45	45	75

(b) Project Construction Noise Criteria: Commercial and Industrial Receivers

Time Period	Project Construction Noise Criteria (Long Term Construction) dB
	LAeq(T)
0730-1800	70
1800-0730	75

(c) Project Construction Noise Criteria: Internal Structure-borne Noise from tunnelling for Residential Receivers

Time Period	Project Construction Noise Criteria Inside	
0600-2200	35 dB LAeq(T)	All habitable rooms
2200-0600	30 dB LAeq(T)	Bedrooms

(d) Project Construction Noise Criteria: Internal noise for Licensed Educational Facilities

Time Period (School Days)	Project Construction Noise Criteria Inside	
Teaching Hours	45 dB LAeq(T)	Classrooms, library, offices, teaching, laboratories, manual arts, workshops
Teaching Hours	40 dB LAeq(T)	School hall, lecture theatres

Note: In Condition CNV2(d) "Teaching hours" means: Primary schools and Kindergartens: 9am to 3pm Unitec: 8am to 9pm

CNV.3

Project Construction Noise Criteria: Airblast (excluding Sundays)

Category	Type of Blasting Operations	Peak Sound Pressure Level (LZpeak dB)
<b>Human Comfort Limits</b>		
Sensitive Site	Operations lasting longer than 12 months or more than 20 Blasts	115 dB for 95% blasts per year. 120 dB maximum unless agreement is reached with occupier that a higher limit may apply
Sensitive Site	Operations lasting less than 12 months or less than 20 Blasts	120 dB for 95% blasts per year. 125 dB maximum unless agreement is reached with occupier that a higher limit may apply

Occupied non-sensitive sites such as factories and commercial premises	All blasting	125 dB maximum unless agreement is reached with the occupier that a higher limit may apply. For sites containing equipment sensitive to vibration, the vibration should be kept below manufacturer's specifications of levels that can be shown to adversely affect the equipment operation
<b>Damage Control Limits</b>		
Structures that include masonry, plaster and plasterboard in their construction and also unoccupied structures of reinforced concrete or steel construction	All blasting	133 dB unless agreement is reached with owner that a higher limit may apply.
Service structures such as pipelines, powerlines and cables located above ground	All blasting	Limit to be determined by structural design methodology

#### CNV.4

Except where certified by the Council through the SSNMP (in accordance with Condition CNV.13), construction vibration received by any building shall be measured and assessed in accordance with the German Standard DIN 4150-3:1999 "Structural vibration – Part 3: Effects of vibration on structures", and shall comply with the criteria set out as follows:

Type of Structure	Short-term vibration			Long-term vibration	
	PPV at the foundation at a frequency of			PPV at horizontal plane of highest floor (mm/s)	PPV at horizontal plane of highest floor (mm/s)
	1-10 Hz (mm/s)	1-50 Hz (mm/s)	50-100 Hz (mm/s)		
Commercial/Industrial	20	20-40	40-50	40	10
Residential/School	5	5-15	15-20	15	5
Historic or Sensitive structures	3	3-8	8-10	8	2.5

#### CNV.5

Notwithstanding Condition CNV.3 above,

(a) Blasting activities shall be conducted so that 95% of the blasts undertaken (measured over any twenty blasts on the foundation of any building outside the designation boundary) shall produce peak particle velocities not exceeding 5mm/s and 100% of the blasts undertaken shall produce peak particle velocities not exceeding 10mm/s irrespective of the frequency of the blast measured.

(b) Construction activities, which occur within Sectors 1, 6, 8 and 9 which are identified in Technical Report no.

G.19 Assessment of Vibration Effects, as being at a 'High Risk' of exceeding the DIN 4150-3:1999 criteria (being excavation, piling, compaction and drilling) shall be conducted so that 95% of the activities undertaken (measured over at least 20 representative samples of the relevant activity on any residential building) shall produce peak particle velocities not exceeding the relevant criterion in DIN 4150-3:1999 and 100% of the activities undertaken shall not exceed 10mm/s irrespective of the frequency of the activity measured.

#### CNV.6

Blasting shall be undertaken between 09:00h and 17:00h, Monday to Saturday, except that blasting may be undertaken between 09:00h and 17:00h on Sundays where:

(a) The blasting is at least 50m inside the Sector 8 tunnel;

(b) The blasting produces peak particle velocities at any residential building not exceeding 0.5mm/s; and

(c) The Project construction noise criteria set out in Condition CNV.2 for Sundays are complied with.

#### CNV.7

Where practicable, permanent (traffic) noise barriers, required in any Sector as Detailed Mitigation Options for operational noise following completion of the Project (in accordance with Conditions ON.3 to ON.5) shall be erected prior to noise generating construction works commencing. Where this is not practicable, temporary noise mitigation measures shall be implemented in accordance with the CNVMP, prior to noise generating construction works commencing.

#### CNV.8

Pile driving or pile removal shall not be undertaken at night (i.e. during the hours of 20:00 – 06:30).

#### CNV.9

The concrete batch plants, rock crushing plants and the loading bays and conveyors for such plants shall be fully enclosed.

#### CNV.10

If noise and vibration monitoring of the tunnelling works for the Project (in accordance with Condition CNV.1), indicates that the noise or vibration criteria of Conditions CNV.2(c) or CNV.4 will potentially be exceeded and that temporary relocation will be offered for residents at 1510 Great North Road, then relocation (and temporary transportation) shall be arranged with the leaseholder at 1510 Great North Road for tenants (with at least 1 months' notice to the leaseholder prior to relocation). Any accepted offer of relocation is to be in place prior to tunnelling works within 50m of the building at 1510 Great North Road.

#### CNV.11

For all other properties, if noise and vibration monitoring of the tunnelling works for the Project (in accordance with Condition CNV.1), indicates that the noise or vibration criteria of Conditions CNV.2 or CNV.4 will potentially be exceeded, then the process set out in the CNVMP will be undertaken including Site Specific Noise Management Plans. Where relocation for residents is proposed, notification of such relocation with residents and property owners will be undertaken in accordance with the processes contained in the CNVMP.

#### CNV.12

Any relocation required by CNV.10 will not be undertaken in the period between 10 working days prior to any Unitec examinations and the completion of those examinations.

#### CNV.13

SSNMPs (required by Condition CNV.1(xvi)) above, shall be submitted to Major Infrastructure Team Manager, Auckland Council for review and certification at least 7 working days prior to the proposed works commencing. A decision will be provided by the Council within 5 working days of receipt of the SSNMP.

Works will not commence until certification is received from the Major Infrastructure Team Manager, Auckland Council. The Council may, at its discretion, waive the requirement for SSNMPs to be submitted to the Council where an SSNMP is required.

If monitoring shows that levels specified in a SSNMP are being exceeded, work generating the exceedence will stop and not recommence until further mitigation is implemented in accordance with an amended SSNMP certified by Council.

Advice note: It is accepted that the criteria of CNV.2 and CNV.4 may not be met at all times, but that the NZTA will take all practical steps to achieve compliance, taking into account the hierarchy

of mitigation options outlined in Condition CNV.1 (ix).

## **Noise Conditions – Operation**

### **ON.1**

For the purposes of Conditions ON.2-ON.14 the following terms will have the following meanings:

- Appendix E – means Appendix E to the Technical Report G.12 ‘Assessment of Operational Noise Effects’ submitted with this application.
- BPO – means Best Practicable Option.
- Building Modification Mitigation – has the same meaning as in NZS 6806:2010.
- Design Year – means a point in time that is 10 years after the opening of the Project to the public
- Emergency Mechanical Services – means mechanical services used for emergency situations only.
- Habitable room – has the same meaning as in NZS 6806:2010.
- Noise Criteria Categories – means groups of preference for time-averaged sound levels established in accordance with NZS 6806:2010 when determining the BPO mitigation option; i.e. Category A - primary noise criterion, Category B - secondary noise criterion and Category C - internal noise criterion.
- NZS 6806:2010 – means NZS 6806:2010 Acoustics – Road-Traffic Noise – New and Altered Roads.
- PPFs – means only the premises and facilities identified in green, yellow or red in Appendix E.
- Structural mitigation – has the same meaning as in NZS 6806:2010.

### **ON.2**

The NZTA shall implement the traffic noise mitigation measures identified as the “Preferred Mitigation Options” in Appendix E as part of the Project, in order to achieve the Noise Criteria Categories indicated in Appendix E (“Identified Categories”), where practicable and subject to Conditions ON.3-ON.11 below.

### **ON.3**

The detailed design of the structural mitigation measures of the “Preferred Mitigation Options” (the Detailed Mitigation Options) shall be undertaken by a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council prior to construction of the Project, and, subject to Condition ON.4, shall include, as a minimum, the following:

- (a) Noise barriers with the location, length and height in general accordance with Appendix E and designed in accordance with the ULDF (Section B) (refer Schedule A, Row 38); and
- (b) A requirement that Open Graded Porous Asphalt (“OGPA”) or equivalent low-noise generating road surface be used on all surface roads throughout the Project, except at the Great North Road Interchange; and
- (c) For the Great North Road Interchange, a requirement that Twin Layer Open Graded Porous Asphalt (“Twin Layer OGPA”) or equivalent low-noise generating road surface be used as shown in Appendix E.

### **ON.4**

Where the design of the Detailed Mitigation Options identifies that it is not practicable to implement a particular structural mitigation measure in the location or of the length or height included in the “Preferred Mitigation Options”, either:

- (a) If the design of the structural mitigation measures could be changed and would still achieve the same Identified Category at all relevant PPFs, and a suitably qualified expert approved by the Major Infrastructure Team Manager, Auckland Council, certifies to the Auckland Council that the changed structural mitigation measure would be consistent with adopting BPO in accordance with NZS 6806:2010, the Detailed Mitigation Options may include the changed mitigation measures; or

(b) If the changed design of the structural mitigation measure would change the Noise Criteria Category at any relevant PPF from Category A or B to Category C but Major Infrastructure Team Manager, Auckland Council confirms that the changed structural mitigation measure would be consistent with adopting BPO in accordance with NZS 6806:2010, the Detailed Mitigation Options may include the changed structural mitigation measures.

#### ON.5

The Detailed Mitigation Options shall be implemented prior to completion of construction of the Project.

#### ON.6

(a) Sectors 1 to 8 - Prior to construction of the Project, a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council shall identify those PPFs within 100m of the edge of the closest traffic lane of the motorway carriageway where, following implementation of all the structural mitigation measures included in the Detailed Mitigation Options:

i. A noise level increase of 3 decibels or more will occur due to road-traffic noise from the Project; and  
ii. Habitable spaces are likely to receive in excess of 45 dB LAeq(24h) from motorway operational noise with windows closed, in the Design Year.

For those PPFs, following the process set out in Conditions ON.7 to ON.11, it shall be determined which Building Modification Mitigation is required to achieve 40 dB LAeq inside habitable spaces.

(b) Sector 9 - Prior to construction of the Project, a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council shall identify those PPFs within 100m of the edge of the closest traffic lane of the motorway carriageway where, following implementation of all the structural mitigation measures included in the Detailed Mitigation Options, habitable spaces are likely to receive in excess of 40 dB LAeq(24h) from motorway operational noise with windows closed, in the Design Year. For those PPFs, following the process set out in ON.7 and ON.8, it shall be determined if Building Modification Mitigation may be required to achieve 40 dB LAeq inside habitable spaces. For those PPFs where Building Modification Mitigation is required to achieve 40 dB LAeq inside habitable spaces, this shall be implemented following the process set out in ON.9 to ON.11.

#### ON.7

(a) Prior to commencement of construction of any sector of the Project in the vicinity of a PPF identified under Condition ON.6, the NZTA shall write to the owner of each such building seeking access for the purpose of measuring internal noise levels and assessing the existing building envelope in relation to noise reduction performance.

(b) If the owner(s) of the building approve the NZTA's access to the property within 12 months of the date of the NZTA's letter (sent pursuant to Condition ON.7(a)), then no more than six months prior to commencement of construction in any sector of the Project, the NZTA shall instruct a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council, to visit the building to measure internal noise levels and assess the existing building envelope in relation to noise reduction performance.

#### ON.8

Where a PPF identified under Condition ON.6 is identified, the NZTA shall be deemed to have complied with Condition ON.7 above where:

(a) The NZTA (through its acoustics specialist) has visited the building; or

(b) The owner(s) of the building approved the NZTA's access, but the NZTA could not gain entry for some reason after repeated attempts; or



(c) The owner(s) of the building did not approve the NZTA's access to the property within the time period set out in Condition ON.7(b) (including where the owner(s) did not respond to the NZTA's letter (sent pursuant to Condition ON.7(a) within that period); or

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

If any of (b) to (d) above apply to a particular Building, the NZTA shall not be required to implement any Building Modification Mitigation at that Building

#### ON.9

Subject to Condition ON.8, within 6 months of the assessment required under Condition ON.7(b), the NZTA shall give written notice to the owner of each PPF identified under Condition ON.6:

- (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 whether to accept Building Modification Mitigation for the building, and if the NZTA has advised the owner that more than one options for building modification mitigation is available, to advise which of those options the owner prefers.

#### ON.10

Once an agreement on Building Modification Mitigation is reached between the NZTA and the owner of an affected building, the mitigation shall be implemented (including the NZTA undertaking any required third party authorisation) in a reasonable and practical timeframe agreed between the NZTA and the owner. Building Modification Mitigation shall be to the standard specified in section 8.3.2 of NZS 6806:2010.

Advice Note: The NZTA will be responsible for obtaining any necessary building consents or other approvals to undertake the above Building Modification Mitigation.

#### ON.11

Subject to Condition ON.8, where Building Modification Mitigation is required, the NZTA shall be deemed to have complied with Condition ON.10 above where:

- (a) The NZTA has completed Building Modification Mitigation to the Building; or
- (b) The owner(s) of the Building did not accept the NZTA's offer to implement Building Modification Mitigation prior to the expiry of the timeframe stated in Condition ON.9(b) above (including where the owner(s) did not respond to the Requiring Authority within that period); or
- (c) The owner of the Building cannot, after reasonable enquiry, be found prior to completion of construction of

the Project.

#### ON.12

The NZTA shall manage and maintain the Detailed Mitigation Options to ensure that, those mitigation works are maintained to retain their noise attenuation performance indefinitely.

#### ON.13

All mechanical services associated with the general operation of the tunnels shall be designed such that noise emissions do not exceed the following noise limits, when measured at or within the boundary of any residential- zoned site:

Monday to Saturday 7 am to 10 pm	50 dB LAeq(15 min)
Sunday & Public Holidays 9 am to 6 pm	50 dB LAeq(15 min)
At all other times	40 dB LAeq(15 min) 75 dB LAmx

#### ON.14

(a) Prior to construction, the NZTA shall arrange for a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council 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 Major Infrastructure Team Manager, Auckland Council to undertake traffic noise monitoring at the same sites surveyed in Condition ON.14 (a) 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 in accordance with ON.14(b) above shall be used to verify the computer noise model of the Detailed Mitigation Option. A report describing the findings of the verification shall be provided to the Major Infrastructure Team Manager, Auckland Council within one month of it being completed.

#### **Vibration Conditions - Operation**

##### OV.1

Existing ambient vibration levels shall be measured at critical locations nominated by the NZTA, and submitted to the Major Infrastructure Team Manager, Auckland Council for approval prior to the commencement of works. These baseline measurements will establish pre-Project vibration levels for comparison with future vibration levels.

#### **Air Quality Conditions –**

#### **Construction GENERAL**

#### **CONDITIONS**

##### AQ.1.

The NZTA shall finalise and implement, through the CEMP, the Construction Air Quality Management Plan (CAQMP) and Concrete Batching and Crushing Management Plan (CBCMP) submitted with the application. The CAQMP and CBCMP shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to construction activities being undertaken for review and certification that the CAQMP and CBCMP includes the following details:

- (a) Daily visual monitoring of dust emissions;
- (b) Procedures for responding to process malfunctions and accidental dust discharges;
- (c) Criteria, including consideration of weather conditions and procedures for use of water sprays on stockpiles and operational areas of the site;
- (d) Continuous monitoring of Total Suspended Particulate (TSP) concentrations and meteorology;
- (e) Monitoring of the times of detectable odour emissions from the ground;
- (f) Procedures for responding to discharges of odour (including in the event of excavation of contaminated sites);
- (g) Monitoring of construction vehicle maintenance;
- (h) Process equipment inspection, maintenance, monitoring and recording, including baghouses, pressure relief valves and high level alarms;
- (i) Complaints investigation, monitoring and reporting; and
- (j) The identification of staff and contractors' responsibilities.

##### AQ.2.

The NZTA shall review the CAQMP and CBCMP at least annually and as a result of any material change to the Project. Any consequential changes will be undertaken in accordance with Condition CEMP.13.

AQ.3.

All construction activities shall be operated, maintained, supervised, monitored and controlled at all times so that all emissions authorised by this consent are maintained at the minimum practicable level.

AQ.4.

The NZTA shall undertake construction activities in accordance with the CEMP, CAQMP and CBCMP, such that:

- (a) Hard surfaced areas of the construction yards and active construction areas are vacuum swept or scraped down at least twice each week and additionally as reasonably required;
- (b) All unsealed areas of the site used for vehicle movement are maintained visibly damp by the use of water sprays or a water cart during weather conditions where the potential for dust emissions exist;
- (c) Wheel wash systems are installed at all truck exits from unpaved areas of the site onto public roads are used for all trucks that depart from the site;
- (d) All stockpiles are constructed and positioned to minimise the potential for dust emissions. The surfaces of all stockpiles are maintained adequately damp at all times to minimise the release of particulate matter;
- (e) Belt conveyors for moving dry materials are fitted with water sprays or enclosed to minimise wind entrainment of dust. Where installed, water suppression is used whenever the conveyors are used for moving dry materials.

AQ.5.

Unless expressly provided for by conditions of this consent, there shall be no odour, dust or fumes beyond the site boundary caused by discharges from the site which, in the opinion of an enforcement officer, is noxious, offensive or objectionable.

AQ.6.

All offensive or objectionable dust beyond the boundary of the site caused as a result of processes on the site shall be mitigated forthwith in accordance with the requirements of the Construction Air Quality Management Plan.

AQ.7.

Beyond the site boundary there shall be no hazardous air pollutant caused by discharges from the site that causes, or is likely to cause, adverse effects on human health, environment or property.

AQ.8

No discharges from any activity on site shall give rise to visible emissions, other than water vapour, to an extent which, in the opinion of an enforcement officer, is noxious, dangerous, offensive or objectionable.

**PROCESS CONDITIONS – CONCRETE BATCHING:**

AQ.9

Air displaced from concrete batching plant during silo filling or concrete batching shall be vented to atmosphere

via filter units as follows:

- (a) Cement silos – a pulse jet baghouse mounted on top of the silo designed to meet a particulate discharge concentration limit of 30 mg/m<sup>3</sup>, a collection efficiency of 99.9% and a maximum air to cloth ratio of 3.0 m<sup>3</sup>/m<sup>2</sup>/min.
- (b) Cement weigh hopper - a static baghouse mounted on top of the weigh hopper designed to meet a particulate discharge concentration limit of 30 mg/m<sup>3</sup>, a collection efficiency of 90% and a maximum air to cloth ratio of 1.0 m<sup>3</sup>/m<sup>2</sup>/min.
- (c) Mixer drum – either via the cement silo or via a separate baghouse designed to meet a particulate discharge concentration limit of 30 mg/m<sup>3</sup>, a collection efficiency of 99.9% and a maximum air to cloth ratio of 3.0 m<sup>3</sup>/m<sup>2</sup>/min. If a separate baghouse is used, the pressure drop across this baghouse shall be continuously monitored.

AQ.10

Each cement silo on site shall be fitted with a high fill alarm that shall be adequately maintained and be operating whenever bulk cement is being transferred into that silo. In the event of the alarm operating, filling into that silo shall cease immediately and shall not be resumed until the cause has been located and remedied.

AQ.11

No part of the concrete batching process shall be operated without the associated emission control equipment being fully operational and functioning correctly.

## **MONITORING**

AQ.14

The NZTA shall undertake visual inspections of dust emissions as follows:

- (a) Visual inspections of all active construction areas at least three times daily during October to April inclusive, whenever there are construction activities. The results of visual monitoring shall be logged.
- (b) Visual inspections of dust emissions from the concrete batching plants and rock crushing plant shall be undertaken daily while the plant is operating

AQ.15

The operation of water sprays shall be checked at least once each day.

## **Air Quality Conditions – Construction**

AQ.16

Continuous monitoring of TSP concentrations shall be undertaken in at least one location in Sector 1, in at least two locations in Sectors 5 and/or 7, and in at least two locations in Sector 9 while construction activities are being undertaken in those Sectors. The locations of continuous TSP monitors shall, as far as practicable, comply with the requirements of AS/NZ 3580.1.1:2007 Method for Sampling and Analysis of Ambient Air – Guide to Siting Air Monitoring Equipment.

AQ.17

Continuous monitoring of wind speed and direction shall be undertaken in at least one location in each of Sector 1, Sectors 5 or 7 and Sector 9 while construction activities are being undertaken in those Sectors. The locations of wind speed and direction monitors shall, as far as practicable, comply with the requirements of AS 2923:1987 Ambient Air – Guide for the Measurement of Horizontal Wind for Air Quality Applications and be at the same locations as the TSP monitors required by Condition AQ.16.

AQ.18

The locations and types of continuous TSP and meteorological monitoring sites required by Conditions AQ.16 and AQ.17 shall be selected by the NZTA in consultation with the Auckland Council. In the event of a failure of the monitoring equipment, this shall be repaired or replaced within 2 working days.

**REPORTING**

AQ.19.

All records, logs, monitoring and test results that are required by the conditions of this consent shall be made available on request, during operating hours, to an Auckland Council enforcement officer and shall be kept for the duration of the consent.

AQ.20

If the monitoring required by Condition AQ.16 shows that concentrations of TSP in ambient air at or beyond the boundary of the site exceeds 80 micrograms/m<sup>3</sup> as a 24-hour average, the NZTA shall undertake an investigation into the cause of the exceedance in accordance with the CAQMP.

AQ.21.

A report into the outcome of any investigation required by Condition AQ.20 shall be forwarded to the Major Infrastructure Team Manager, Auckland Council within 10 working days of the exceedance. If the cause of the exceedance is identified as being an activity undertaken on the site, the report shall also identify additional measures to be taken to reduce discharges of particulate matter into air from that activity.

AQ.22.

Log books shall be maintained that record all relevant information that is required to demonstrate compliance with the conditions of this consent. This information shall include, but is not limited to:

- (a) Visual assessments of any dust emissions from the site and the source;
- (b) Any dust control equipment malfunction and any remedial action taken;
- (c) When a water cart was used and, if so, the frequency of use and the volume of water used (including identification of location);
- (d) All relevant details of the TSP and meteorological monitoring required by Conditions AQ.16 and AQ.17;
- (e) Any additional dust control measures undertaken; and
- (f) The date and time of the entry and the signature of the person entering the information.

AQ.23.

The NZTA shall maintain a log of any complaints received relating to air quality. Details of each complaint received shall be forwarded to the Major Infrastructure Team Manager, Auckland Council within 24 hours of receipt of the complaint. The log shall include any complaints lodged with the Auckland Council where the Council has informed the NZTA of the complaint. The log shall include, but not be limited to the following:

- (a) The date, time, location and nature of the complaint;
- (b) Weather conditions at the time of the complaint (including approximate wind speed, wind direction, cloud cover);
- (c) Any possible other contributing factors (such as a fire, smoky vehicle, a local chimney emission, etc.);
- (d) The name, phone number and address of the complainant (unless the complainant elects not to supply these details);
- (e) Any remedial actions undertaken; and

(f) The date and time of the entry and the signature of the person entering the information.

### **Landscape and Visual Conditions**

#### **LV.1.**

The Urban Design and Landscape Plans (UDL Plans) (Plan Set F.16, refer Schedule A, Row 17) shall be reviewed and revised in accordance with the conditions and submitted to the Major Infrastructure Team Manager, Auckland Council for certification that they comply with the conditions of the consents/ designation prior to construction of the relevant Project stage, at least 20 working days prior to the commencement of construction.

The UDL Plans shall be updated to:

- (a) Reflect relevant details from the PT and Active Mode Transport Routes Plan Set (Schedule A, Row 23);
- (b) Remove the playing field at Waterview Reserve;
- (c) Confirm the reconfigured bund design at Alwyn Avenue (Schedule A, Row 42);
- (d) Reflect landscaping required in relation to the northern vent stack in Waterview Glades pursuant to Conditions DC.8.

#### **LV.2.**

In certifying the UDL Plans, prepared in accordance with Condition LV.1, the Major Infrastructure Team Manager, Auckland Council shall be satisfied the UDL plans includes:

- (a) The visual mitigation of infrastructure as detailed in Section B of the UDLF (refer Schedule A, Row 38).
- (b) Incorporation of art or art through design of structures, particularly as it relates to noise barriers and the Great North Road Interchange piers and ramps (Refer to clauses (g) and (i) below).
- (c) Planting to screen houses and noise walls (including cross section details);
- (d) Planting along the corridor on Traherne Island, in accordance with these conditions and the Ecological Management Plan;
- (e) Specimen planting on the Great North Road Interchange and the Te Atatu Road Interchange;
- (f) Specimen planting at the tunnel portals (except where this is within the OPW area);
- (g) Finalisation of the noise barriers (as required by Condition ON.3(a)) in accordance with the design principles for noise walls (refer Schedule A, Row 32);
- (h) Delineation of the final areas of the Open Space Restoration Plans in accordance with the Open Space Restoration Plans (Schedule A, Row 30), and reference that all works within the Open Space Restoration Plan Areas are subject to Conditions OS.1 – OS.5 and OS.7, Conditions OS.6 and OS.8 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent;
- (i) Oakley Inlet Heritage Plan, prepared in accordance with Conditions OS.5, and in particular, consideration shall be given to the design treatment of the Great North Road Interchange piers and ramps to take into consideration the impact of the structures on the visual quality of the open space beneath;
- (j) Ecological Management Plan, prepared in accordance with Conditions V.1, A.1, H.1, F.1 and M.1 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent ;
- (k) Western Ring Route: Maioro Street Interchange and Waterview Connection - Oakley Creek Rehabilitation and Restoration Guidelines (Boffa Miskell, 2010); and
- (l) Details of artworks or art through design of structures within the Project (e.g. design detailing of median barriers, bridge railings, safety barriers, piers, retaining walls and tunnel portals), in accordance with Section B of the Urban Landscape and Design Framework (UDLF June 2010) (refer Schedule A, Row 38) and F.8:Plans of Structures and Architectural Features, but excluding the north and south ventilation buildings, plans sections and elevations.

LV.3.

The NZTA shall have implemented the UDL Plans within 6 months of practical completion of construction of the Project.

LV.4.

The landscaping shall be implemented in accordance with the UDL Plans within the first planting season following the completion of the construction works, provided that climatic conditions are suitable, otherwise at the first practicable opportunity thereafter, and shall be maintained for a period of 10 years thereafter. Should the landscaping be implemented in stages (depending on construction phases), landscaping shall be implemented in accordance with this Condition for each stage unless subsequent construction staging requires use of the proposed landscaping area.

Advice note: On-going control and management of the landscaping within the designation is the responsibility of the NZTA.

LV.5.

The NZTA shall implement the UDL Plans taking into account the pest plant management guidelines detailed in the Ecological Management Plan (as required by Condition CEMP.3).

LV.8.

The NZTA shall ensure that any areas within the designation affected by construction activities have sub-soil rehabilitated and top-soil replaced so that the hydrological response including the volume of stormwater runoff generated is as close as practicable to the predevelopment situation. The methodologies to achieve this shall be documented and provided to the Major Infrastructure Team Manager, Auckland Council with the revised UDL Plans submitted pursuant to Condition LV.1.

LV.10.

The UDL Plans shall identify all Amenity Trees required to be removed over the construction of the Project (in accordance with Condition CEMP.6(o) and (p)). Replacement trees shall be sized at 160Lt and will either draw from the Coastal Forest or Basalt Rock Forest ecotypes listed in the Landscape Planting Schedules (provided in F.16, refer Schedule A, 17) or an agreed alternative species (confirmed by Major Infrastructure Team Manager, Auckland Council), except in the case of those trees subject to Condition ARCH.9.

Advice note: This does not necessarily apply to any replacement planting in the Open Space Restoration Plan areas, which will be confirmed in approval from Auckland Council and will be in accordance with relevant Auckland Council Park guidelines (see Condition OS.4).

### **Open Space Conditions**

OS.1

For the purposes of Conditions OS.2 – OS.15 the following terms will have the following meanings:

- Full size – means a football (soccer) field with the dimensions 100m x 60m.
- Half size – means a football (soccer) field with the dimensions less than 100m x 60m but no smaller than 50m x 30m.
- Toddler – means a playground specifically designed for children between the ages of 1 and 3.
- Junior – means a playground specifically designed for children between the ages of 4 and 8.
- Youth – means a playground specifically designed for children between the ages of 9 – 14 years.
- Open Space Restoration Plans – means those plans listed in Schedule A, row 30.
- Open for Play - means the sports field has a level surface and a dense weed-free sward of mature

grass, goal posts and lighting if indicated in the Open Space Restoration Plans approved by the Auckland Council.

- Sand - carpeted - means the field has been levelled and irrigated, and conventional sub-soil drains, slit drains and a 50mm deep sand carpet have been installed. The field has been stolonised with a warm season grass such as kikuyu or couch.
- Auckland Council Park Guidelines – means the document by Auckland City Council titled “Furnishing our parks: design guidelines for park furniture”, dated September 2009
- Park furniture – means those items described in the Auckland Council Park Guidelines
- AS2560 – means the Australia New Zealand Standard for lighting of sports fields.
- AS4282 – means the Australia New Zealand Standard for the control of the obtrusive effects of outdoor lighting.
- Way finding exercise – means a process for determining the number, size, location and content of signage to provide clear direction for all park users.
- Skate-park for the purpose of condition OS.5(b)(iii) means a skate park with a size of approximately 1,400 sq. m. (generally 25 wide x 55m long), incorporating a range of design variations. Suitable for beginners (providing training facilities to develop their skills) but primarily catering for intermediate to advanced level skaters.
- BMX bike track for the purpose of condition OS.5(b)(iii) means a low maintenance, non-competition BMX bike track, incorporating a range of design variations. Primarily catering for beginner and intermediate riders.

#### OS.2

The NZTA shall prepare Open Space Restoration Plans to outline how the open space replacement land, as defined in the Open Space Restoration Plan Areas (Schedule A, Row 30) (including land occupied during construction) will be reinstated or replaced on completion of construction, for handover to Auckland Council and those areas identified in Condition DC.1A(f) and RC.3(f). Following the consultation detailed in Condition OS.3 below, the Open Space Restoration Plans listed in Condition OS.3(a) to (f) shall be submitted within 12 months of construction commencing in the specific areas affecting the reserves or within 12 months of occupation of open space, whichever is the sooner, to the Major Infrastructure Team Manager, Auckland Council.

Advice note: Condition OS.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent and Condition OS.10 require certain works to be provided prior to occupation of Construction Yards 6 and 7 (Waterview Reserve) and Construction Yards 9- 12 (Alan Wood Reserve) and this may impact on the timing of Open Space Restoration Plans for these areas.

#### OS.3

The Open Space Restoration Plans shall be prepared in consultation with the Auckland Council, Iwi, the Community Liaison Groups (Condition PI.5), [Heritage New Zealand](#), and other recreation users and other user representatives identified by Auckland Council. The Open Space Restoration Plans shall comprise the following specific plans:

- (a) Waterview Reserve Restoration Plan;
- (b) Alan Wood Restoration Plan (including Hendon Park and 25 Valonia Street);
- (c) Oakley Creek Esplanade (Waterview Glades) Restoration Plan;
- (d) Jack Colvin Park Restoration Plan;
- (e) Rosebank Domain Restoration Plan;
- (f) Harbourview-Orangihina Reserve Restoration Plan; and
- (g) The areas of the Open Space Restoration Plans are shown in the Open Space Restoration Plan Areas (Refer Schedule A, Row 30).



#### OS.4

All Open Space Restoration Plans shall be prepared in general accordance with the UDL Plans (Schedule A, Row 30), and shall include, but not be limited to, the following:

- (a) Details of, including the location, of any artworks and educational signage, and directional signage. In the case of Alan Wood Reserve, Waterview Reserve and Oakley Creek Esplanade (Waterview Glade) this shall include a “way-finding exercise” in accordance with Auckland Council practice, to determine all signage to be provided; and
- (b) Evidence of integration with the Oakley Creek restoration works required under Condition V.16, Condition LV.2(1) and Conditions STW.5 and STW.20 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent; and a summary of the consultation undertaken (as required by Condition OS.3) and the response received; and
- (c) Details of any vehicle access through the reserves and parking areas; and
- (d) Park furniture (including quantity and quality) to be provided in accordance with relevant Auckland Council Park guidelines, except for:
  - (i) The riparian area within Alan Wood Reserve where the only furniture required is a maximum of 10 seats; and
  - (ii) Oakley Creek Esplanade (Waterview Glades) where the only furniture required is replacement of 3 existing seats; and
- (e) The inclusion and integration of the design for all pedestrian and cycleway linkages and facilities detailed on the PT and Active Mode Transport Routes (Schedule A, Row 22). The design integration shall be in accordance with CPTED principles; and
- (f) Implementation programme, including sequencing of works and completion dates. This shall include works that could be implemented prior to practical completion of construction works or are outside the Project area (e.g. upgrading of the Waterview Esplanade Reserve set out in Condition OS.5(b)(vii)); and
- (g) Implementation programmes for planting and field reinstatement. This shall include:
  - (i) A 12 month maintenance period for built structures and soft landscaping; and
  - (ii) For any landscaping accessible to horses an assessment to demonstrate that the planting schedule is not toxic to horses and that consultation on this has been undertaken with the Te Atatu Pony Club; and
- (h) The specific requirements for each Restoration Plan area as set out in Conditions OS.5 and OS.7 and Condition OS.6 and OS.7 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent; and
- (i) Documentation of consultation undertaken required by Condition OS.3 and the views and concerns expressed by this consultation and the written approval of the Manager Community and Cultural Policy.

Advice note: For the avoidance of doubt provision of (a) to (h) above will require elevations, cross sections, engineering drawings and written documentation to supplement the UDL Plans. It is also noted that the UDL Plans identify landscaping, planting and other works beyond the Open Space Restoration Plans (refer Conditions LV.1 – LV.5 and LV.10 and Conditions LV.6 and LV.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent). Educational signs and artworks are particularly encouraged.

#### **Waterview Reserve (Specific)**

##### OS.5

The Waterview Reserve Open Space Restoration Plan shall be prepared in general accordance with the UDL Plans (Refer Schedule A, Row 17). The following shall be provided:

- (a) Equivalent reinstatement of the following recreational facilities:
  - (i) A children’s playground with the design and equipment targeted at “junior” and “youth” ages; and
  - (ii) One ablution block; and

- (iii) One basketball court (28m by 15m); and
- (iv) One volleyball court.
- (b) Other restoration and enhancement:
  - (i) Measures to enhance the Oakley Inlet Heritage Area, including interpretative signage and pedestrian access;
  - (ii) Creation of esplanade reserve along Oakley Inlet;
  - (iii) Subject to obtaining necessary resource consents and Auckland Council landowner approval, provision of a skate-park, BMX bike track (non-motorised bikes);
  - (iv) Provision of pedestrian paths within the reserve area (as indicated on the UDL Plan 212);
  - (v) Eco-sourced and mass planting to screen the interchange ramps from Herdman Street and the Waterview Primary School (as indicated on the UDL Plan 212 (Refer Schedule A, Row 17));
  - (vi) A sloping and landscaped bund as indicated on the UDL Plan 212 (Refer Schedule A, Row 17) to screen the interchange ramps from the open space areas;
  - (vii) Subject to obtaining necessary resource consents and Auckland Council landowner approvals, upgrading of the Waterview Esplanade Reserve walkway and associated landscaping, identified on the UDL Plan 210 (Refer Schedule A, Row 17);
- (c) The works required in accordance with Condition OS.16(a) in respect of the allweather cycle/pedestrian path into Eric Armishaw Park.
- (d) A financial payment shall be made to the Auckland Council (in lieu and as equivalent of a playing field at Waterview Reserve), in full at least 20 working days prior to occupation of Construction Yards 6 and 7, valued on the basis of provision of one “open for play” full size sand-carpeted football (soccer) field with a clear 10m space for spectators on all sides and associated changing facilities and parking requirements as at Waterview Reserve or as proposed by UDL Plans (Schedule A, Row 17).

Advice note: the purpose of the financial payment in lieu is for the provision of a playing field at Phyllis Reserve, rather than its reinstatement at Waterview Reserve.

Advice note: The replacement land area for Open Space will provide approximately 2.35 – 2.4ha of new replacement open space land in general accordance with the Proposed Open Space Impacts and Replacement Plans (See Schedule A, Row 28), including 0.30ha of additional open space at Saxon Reserve if it is all able to be acquired and consented.

#### OS.7

The Oakley Creek Esplanade Reserve (Waterview Glades) Open Space Restoration Plan shall be prepared in general accordance with the UDL Plans (Refer Schedule A, Row 17), and shall include, but not be limited to, the following:

- (a) Creation of esplanade reserve at 36 Cradock Street;
- (b) Riparian planting along Oakley Creek to a width of 15m and as identified on the notated UDL Plan 229 (Refer Schedule A, Row 17) as notation M1;
- (c) Re-contouring of the reserve in a manner that is consistent with those shown on UDL Plan 229 (Refer Schedule A, Row 17) and as described in the annotation Plan Note 7 of that Plan; and
- (d) Stability work required for the ventilation stack (refer Condition DC.8(n)), and the integration of any necessary structures within Oakley Creek Esplanade Reserve.

#### **Construction Works**

##### OS.10

At least 20 working days prior to the occupation of the construction areas within Waterview Reserve, the NZTA shall, in consultation and agreement with the Auckland Council, provide:

- (a) The financial payment in lieu of the playing field facilities at Waterview Reserve, as per Condition

OS.5(c);

(b) A half basketball court and volleyball court within the relocated Waterview Reserve;  
(c) Development of Saxon Reserve with an additional site area of 2,000m<sup>2</sup> and as a minimum, the expanded reserve shall include an upgraded children's playground (toddler, junior and youth), landscaping, pedestrian paths, park furniture and an ablution block; and  
(d) Improvements to the existing pathway connections at Howlett Reserve, providing wider and safer access out to either Howlett Street or Oakley Avenue. In the event land purchase requirements deems this unable to be completed prior to occupation of the construction areas within Waterview Reserve, an equivalent financial payment in lieu of the land purchase and improvement works will be made. The financial payment will be based on the Capital Value of the Oakley Avenue site that is nominated by the NZTA in the Proposed Open Space Impacts and Replacement Plan (refer Schedule A, Row 28) and approved by the Auckland Council, with provision for site clearance (meaning works to provide vacant possession clear of any existing improvements), path formation and landscaping). This contribution shall be paid in full to the Auckland Council for improvement to or expansion of existing reserves in the Waterview area.

OS.11

At least 20 working days prior to the occupation of the construction areas within Oakley Creek Esplanade Reserve (Waterview Glades), the NZTA shall, in consultation and subject to agreement with the Auckland Council, provide:

- (a) Formalisation of the existing informal pathway at the northern end of Oakley Creek Esplanade Reserve (Waterview Glades), to connect to the existing Oakley Creek walkway (as indicatively identified on the notated UDL Plan 229 (Refer Schedule A, Row 17), as Plan Note 3), as modified for the finalised location of the ventilation stack (DC.8), and in a way that maintains public health and safety throughout the construction period;
- (b) Planting of the riparian margins of Oakley Creek.

OS.13

During construction, the NZTA shall maintain pedestrian accessways to all open space available for public use during construction and education facilities where access is affected by the works, including any public access that crosses private land. Such access shall be safe, clearly identifiable, provide appropriate surfacing and seek to minimise significant detours. The access shall be of a same or similar standard as that disrupted and will be provided and maintained by the NZTA.

Advice note: This specifically includes the existing pedestrian access that provides a connection to the crossing over Oakley Creek between 1510 Great North Road and Unitec Mt Albert Campus.

### **Open Space Conditions**

OS.14

Where access to Oakley Creek will be disrupted for more than 3 consecutive days, or over a weekend, or there is no provision for a walkway detour, the Community Liaison Person shall notify the Friends of Oakley Creek at least 20 working days in advance of any planned disruption (except where the disruption is of shorter duration, or an emergency situation).

OS.16

The NZTA shall provide:

- (a) Subject to obtaining necessary resource consents and Auckland Council landowner approval, a 3m all-weather shared cycle/pedestrian path with boardwalks as required, from the Great North Road Interchange through into Eric Armishaw Park. The works shall be sufficient to connect this path to the existing walkways and paths within that park (eg to the playground); and
- (b) The pedestrian connections to Berridge Avenue, Alberta Street and Montrose Street as shown on

the PT and Active Mode Transport Routes (Sheet 109) (Refer Schedule A, Row 22), once these areas are no longer required for construction.

### **Social Conditions**

#### **SO.1**

In addition to the Community Liaison Groups established pursuant to Condition PI.5, the NZTA shall establish an Education Liaison Group (including representatives from local schools, kindergartens, childcare facilities, Unitec Institute of Technology, the Ministry of Education and Housing New Zealand Corporation), to provide a forum through which:

- (a) Relevant monitoring data can be provided (e.g. air quality monitoring);
- (b) Notice can be provided of when particularly noisy activities will occur in close proximity to schools and education facilities, to enable the opportunity to identify any potential conflict with particular sensitive periods, and the requirement for specific mitigation strategies (e.g. rescheduling of construction activities where practicable);
- (c) Particular concerns can be raised by educational facilities or parents, discussed and potentially addressed;
- (d) Notice can be provided of potential construction impacts on school transport routes (including pedestrian/cycle access) to enable the opportunity to identify specific mitigation preferences of the education facilities (e.g. any detour routes) and to enable these facilities to appropriately inform students and/or parents; and
- (e) Learning and teaching opportunities for educational facilities to participate in Project works (e.g. planting or artworks).

The Education Liaison Group shall be established at least 2 months prior to construction commencing and shall have regular meetings (at least three monthly) throughout the construction period. The Education Liaison Group shall continue to meet for at least 12 months following the completion of the Project (or less if the members of the Education Liaison Group agree), so that ongoing monitoring information can continue to be disseminated.

#### **SO.2**

In addition to Condition SO.1(b) above, where noisy construction activities (that are projected to exceed the Noise Criteria in the CNVMP) are proposed in close proximity or adjacent to schools/ childcare centres, the NZTA shall, when preparing their SSNMP (in accordance with Condition CNV.1) give specific consideration to options to carry out these works outside school hours or during school holidays as a mitigation option.

#### **SO.3**

The NZTA shall comply with the obligations imposed on it by clauses 4 and 5 of the Project Agreement (dated May 2011 (yet to be signed)) between it, the Ministry of Education and the Auckland Kindergarten Association, including in particular the requirement to relocate the Waterview Kindergarten to an alternative site prior to construction works commencing on sites adjoining the Kindergarten site. The NZTA's obligations under this condition are subject to the Ministry and the Auckland Kindergarten Association providing written approvals, agreements or other inputs as specified in that Project Agreement.

#### **SO.4**

The NZTA shall, in agreement with the Ministry of Education, monitor the Waterview Primary School and the Waterview Kindergarten rolls:

- (a) At commencement of construction in the Waterview area (including demolition of houses within the confirmed designation footprint); and
- (b) For a period up to 3 years after construction is completed in the Waterview area and confirmed the

operational designation footprint in these areas, or until monitoring shows the roll has stabilised to the 2006 roll level (155 and 30 students respectively) over two consecutive years (whichever is shorter).

#### SO.5

Should monitoring as required by Condition SO.4 indicate that the rolls of Waterview Kindergarten and Waterview Primary School have dropped below 30 and 155 respectively (the 2006 roll levels), the NZTA shall in consultation with the Ministry of Education provide financial resources to ensure that resources are maintained to these 2006 roll levels during the required length of monitoring.

#### SO.5A

The NZTA shall comply with the obligations imposed on it by clauses 4 and 5 (dated April 2011) Project Agreement between it, the Ministry of Education and the Waterview Primary School Board of Trustees. The NZTA's obligations under this condition are subject to the Ministry and Board of Trustees providing such approvals, agreements or other input as specified in that Project Agreement.

#### SO.6

In addition to the Community Liaison Group established pursuant to Condition PI.5, the NZTA shall establish a Working Liaison Group (WLG) inviting the following:

- (a) Auckland Council;
- (b) Housing New Zealand Corporation;
- (c) Te Kawerau Iwi Tribal Authority;
- (d) Ngati Whatua o Orakei;
- (e) KiwiRail;
- (f) Department of Conservation;
- (g) Ministry of Education; and
- (h) Local Boards.

The purpose of this WLG will be to provide a forum through which:

- (a) Opportunities for public work development (including social housing, passenger transport or recreation / open space) are identified in areas where the NZTA confirms that the designation is no longer required (e.g. following construction activities);
- (b) Comment can be provided on updated Urban Design and Landscape Plans, including the finalised designs of structural elements for the Project (prior to their submission to the Auckland Council);
- (c) Opportunities for integration of other environmental projects (e.g. restoration plantings) are identified;
- (d) Consideration is given to appropriate protocols for commencement and completion of construction activities (including blessings for commencement of construction phases); and
- (e) Comment can be provided by Te Kawerau a Maki on the detailed lighting design of SH16, to consider how lighting effects on cultural sites and practices might be mitigated without compromising traffic safety or those performance standards identified in Condition L.1.

The Working Liaison Group shall be established at least 2 months prior to construction commencing and shall have regular meetings (at least three monthly) throughout the construction period.

#### SO.7

A schedule of trees that require removal for construction of the Project will be identified and

reported to the Community Liaison Group for their consideration of potential provision of timber for heritage projects (including in particular the provision of Robinia wood for heritage boat building). If the demand for this timber is identified to the Construction Team, appropriate measures for felling and removal from the site will be confirmed.

#### SO.13

The NZTA shall appoint a medical specialist qualified and experienced in Environmental and Occupational Medicine for the duration of the operational air quality monitoring of the Project (as defined by Condition OA.4 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent) to be a point of contact for persons concerned about the discharge from the ventilation stacks. This person must be reasonably available by appointment for advice on matters of concern for residents within the Waterview / Point Chevalier and Owairaka / New Windsor communities, and parents of pupils and prospective pupils at schools, kindergartens, playschools, and child care centres within those areas.

#### SO.14

For the purpose of mitigating significant adverse effects on passive open space and reserves in Sectors 5, 7 and 9, both during the construction years and longer term, particularly in the Waterview, Owairaka and New Windsor communities (other mitigation having been held by the Board of Inquiry not to be adequate) the following applies:

(a) The NZTA shall, subject to conditions (b), (c) and (d) below, construct the following:

(i) A pedestrian and cycleway to AUSTROADS standards between Waterview and Owairaka/New Windsor (as generally indicated on drawing labelled as "Indicative SH20 Cycleway Route" (refer to Schedule A, Row 40)), subject to any modifications necessary to address design, property or engineering constraints.

(ii) The "Alford St Bridge".

(iii) The "Soljak PI Bridge".

(b) The NZTA's obligations under condition (a)(i) arise when the NZTA receives certification from the Auckland Council and Auckland Transport that the Auckland Council and Auckland Transport have:

(i) acquired all necessary land, or obtained all necessary interests and/or landowner approvals on a permanent basis in respect of the facilities described in condition (a)(i); and

(ii) acquired sufficient land to form a cycle and pedestrian way to AUSTROADS standards between Alan Wood Reserve and Unitec; and

(iii) obtained all necessary resource consents required for construction and operation of the facilities.

(c) The NZTA's obligations under condition (a)(ii) arise when the NZTA receives certification from the Auckland Council and Auckland Transport that the Auckland Council and Auckland Transport have:

(i) acquired all necessary land, or obtained all necessary interests and/or landowner approvals on a permanent basis for the Alford St Bridge; and

(ii) obtained all necessary resource consents required for construction and operation of the Alford St Bridge.

(d) The NZTA's obligations under conditions (a)(iii) arise when the NZTA receives certification from the Auckland Council and Auckland Transport that the Auckland Council and Auckland Transport have:

(i) acquired all necessary land, or obtained all necessary interests and/or landowner approvals for the Soljak PI Bridge either on a permanent basis or on the basis that the Soljak PI Bridge may be constructed and operated unless and until its continued existence and / or operation conflicts with or compromises future works pursuant to the designation for rail purposes; and

(ii) obtained all necessary resource consents required for construction and operation of the Soljak PI Bridge.

- (e) The certification from Auckland Council required under conditions (b), (c) and (d) above must be received by the NZTA within 8 years of the designations for the Project being confirmed.
- (f) Each of the facilities for which certification has been given must be constructed within 1 year of the opening of the motorway, or two years from when certification is given for the relevant facility, whichever is the earlier, subject however to some elements of the facilities towards the northern end needing to await the decommissioning of Construction Yard 7.
- (g) The value of the construction works to be undertaken by the NZTA pursuant to condition (a) to (d) above shall not exceed a sum equal to \$8 million in June 2011 New Zealand dollars (with any construction costs above that figure being met by the Council.)”
- (h) The pedestrian and cycleway facilities described in condition (a)(i) above are in addition to the cycling and pedestrian facilities required by the other conditions.

**Advice notes:**

The intention of this condition is to construct a continuous pedestrian and cycleway with bridges at Soljak PI and Alford St. To achieve this, the Council and Auckland Transport will use their best endeavours to obtain the necessary consents and landowner approvals, for all three components of the network.

The approvals required for the Soljak PI Bridge reflect the designation for rail purposes of land under the bridge and the possibility that any bridge structure will be approved for a limited length of time only.

In the event that, despite their best endeavours, the Council and Auckland Transport cannot obtain all of the necessary landowner approvals, the condition allows each part of the network to be constructed in isolation from the others. That will provide some mitigation of the significant adverse effects on passive open space and reserves in Sectors 5, 7 and 9 that the condition is intended to address. It will also enable the Council and Auckland Transport to complete the network in the future at their expense when and if they are able to obtain the outstanding approvals.

Condition (f) above requires the earlier of the 2 named events to be the trigger for NZTA to undertake the works, in order that the required mitigation or at least some of it occur during the construction years. It also recognises that towards the northern end of the pedestrian and cycleway, some of the works may need to await the de-commissioning of Construction Yard 7.

Subject to landowner approvals, the Council and/or Auckland Transport will be the owner of the pedestrian and cycleway and the bridges described in (a) above and shall have full responsibility for the operation and maintenance of those facilities once they have been constructed by NZTA. Accordingly, NZTA will be under no further obligation in respect of any of the facilities once they have been constructed and, in particular, will have no obligation in terms of the removal, alteration or replacement of the Soljak PI Bridge in the event that it conflicts with or compromises proposed works pursuant to the designation for rail purposes.

**Vegetation Conditions**

**V.1**

The NZTA shall finalise the ECOMP submitted with this application, prior to works commencing on site. The ECOMP shall be implemented through the CEMP. The ECOMP shall clearly identify the location and identity of:

- (a) All Significant Vegetation within the designation that is to be fully protected or relocated; and
- (b) All Valued Vegetation within the designation that is affected by the works (protected or removed). Note: Significant and Valued Vegetation shall be as defined in the ECOMP.

#### V.2

The NZTA shall employ a suitably experienced botanist ('nominated botanist') for the duration of the works to monitor, supervise and direct all works affecting or otherwise in close proximity to the Significant Vegetation and Valued Vegetation identified in the ECOMP.

#### V.3

Prior to any site works commencing, a pre-commencement site meeting shall be held so that the conditions that pertain to the Significant Vegetation and Valued Vegetation and all vegetation in general (both native and exotic) are explained by the nominated botanist to all contractors or sub-contractors who will be working on site within the close vicinity of that vegetation.

#### V.4

The NZTA shall minimise the amount of vegetation (both native and exotic) which is to be cleared, with the exception of weeds (both woody and otherwise, unless agreed with the Major Infrastructure Team Manager, Auckland Council and the Community Liaison Group that the retention of these 'weeds' has other environmental or ecological benefits that warrant their retention). All vegetation clearance shall be undertaken in accordance with the measures set out in the ECOMP.

#### V.5

The NZTA shall install protective fencing around, or otherwise clearly demarcate, all of the Significant Vegetation identified in the ECOMP as requiring full protection, under the supervision of the nominated botanist.

#### V.6

The NZTA shall replace any terrestrial Valued Vegetation that is required to be removed as a result of construction activities, in accordance with the ECOMP and the Urban Design and Landscape Plans.

#### V.7

The nominated botanist shall supervise all trimming, pruning and relocation work associated with the Significant Vegetation and Valued Vegetation required as part of the works.

#### V.8

Immediately prior to planting, and for a period of 2 years following completion of construction, the NZTA shall undertake weed control and management of all invasive plant pests within the vegetated areas of the surface designation for the Project. Following this 2 year period, on-going control and management of all invasive plant pests within these areas will be the responsibility of the NZTA.

#### V.9

The nominated botanist shall undertake a monitoring programme throughout the construction period, including monitoring of:

- (a) The condition, repair and location of the temporary protective fencing or other forms of demarcation used to identify the Significant Vegetation;
- (b) Any works within the vicinity of the Significant Vegetation and Valued Vegetation;
- (c) The general health of the Significant Vegetation and Valued Vegetation (including any Significant or Valued Vegetation that has been relocated away from the works area); and
- (d) Compliance with the vegetation conditions of designation by way of fortnightly inspections during the construction period.



#### V.10

Any planting utilising native plants shall use plants genetically sourced from the Tamaki Ecological District where possible or otherwise shall use plants that have been genetically sourced from within the Auckland Ecological Region.

#### V.14

A rock forest restoration programme shall be undertaken by the NZTA on the northern banks of the Oakley Creek Inlet in accordance with the concepts of the ECOMP, Appendix H 'Rock Forest Provisional Concept Plan'. A detailed planting plan shall be submitted to Auckland Council for approval, prior to implementation of the planting, with the plan to include planting specifications and management techniques. The detailed planting plan shall be integrated with cultural heritage values including, but not limited to, those shown on the plan entitled 'Oakley Inlet Heritage Area' (UDL Plan 224 refer Schedule A, Row 17).

#### V.16

All realignments and riparian enhancements of Oakley Creek shall be carried out in accordance with the Oakley Creek Realignment and Rehabilitation Guidelines and in general accordance with the Urban Design and Landscape plans (Refer Schedule A, Row 17).

### **Avian Conditions**

#### A.1

The NZTA shall finalise, and implement through the CEMP, ECOMP submitted with this application to include the matters set out in Conditions A.2 to A.6 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

### **Herpetofauna Conditions**

#### H.1

The NZTA shall finalise and implement through the CEMP, the ECOMP submitted with this application to include details of lizard management to be undertaken, including the following:

- (a) Lizard capture methodology, including timing;
- (b) Lizard release locations(s);
- (c) Lizard habitat enhancement at population release sites, including a detailed pest control programme for a minimum of one month prior to release and for a minimum of three consecutive years' duration after release;
- (d) Location(s), monitoring and maintenance of lizard protective fencing;
- (e) Post-release monitoring methodology; and
- (f) Lizard captive management methodology.

### **Lighting**

#### **Conditions**

#### **Operation**

##### L.1

Lighting shall be designed and screened to minimise the amount of lighting overspill and illumination of residential areas, in general accordance with the Waterview Connection Lighting Plan (Drawing Set F.11 (Refer Schedule A, Row 12):

- a) All motorway lighting shall be designed in accordance with "Roadlighting Standard AS/NZS1158";
- b) All other lighting shall be designed in accordance with relevant rules provided in Rule 14 of the

Waitakere City District Plan or Part 13 of the Auckland City Bylaw (April 2008);

c) Fully cut off luminaries shall be used on SH20 from the Southern Tunnel Portal to the Maoro Street Interchange to minimised lighting overspill, as shown on Drawing Set F.11(Refer Schedule A, Row 12). Construction Zones and Construction Yards

#### L.2

A Temporary Construction Lighting Management Plan shall be prepared for all construction zones and construction yards prior to commencement of any night time works within the construction zones and construction yards. The Temporary Construction Lighting Management Plan shall be independently verified by a lighting specialist and provided to the Major Infrastructure Team Manager, Auckland Council for certification of compliance 10 working days prior to any night time work commencing.

The certification process shall ensure that the Plan includes (but is not be limited to):

- a) The layout and arrangement of all temporary lighting required for night time works, and shall show how this avoids the “Light Spill Restriction Zone” identified on the Construction Yard Plans (Refer Schedule A, Row 7) submitted with the application, and that the temporary lighting complies with relevant rules provided in the Unitary Plan;
- b) Provision for a 10m buffer between the night time work and any residential boundary at all times to minimise potential for light spill; and
- c) General operating procedures outlined in the CEMP.

#### L.3

Asymmetrical floodlights with horizontal glass visors that are not raised more than 3 degrees above the horizontal plane shall be used for any temporary construction night time lighting requirements. Alternative temporary lighting arrangements may be used, subject to the prior approval of the Major Infrastructure Team Manager, Auckland Council, where it can be demonstrated that the proposed lighting is similar or better to asymmetrical floodlights with glass visors. Glare shall be kept below the recommendation given in AS 4282 – 1997 “Control of the Obtrusive Effects of Outdoor Lighting” Tables 2.1 and 2.2.

### **Archaeology Conditions**

#### ARCH.1

The NZTA shall complete, and implement through the CEMP, the Archaeological Site Management Plan (ASMP) submitted with the notice of requirement, to include, but not be limited to:

- a) Identification of the Project archaeologist, their role and responsibility on the Project;
- b) Who reports to the Project archaeologist;
- c) Specific sites requiring supervision, and measures to be undertaken to protect and manage these sites;
- d) Whether [Heritage New Zealand](#), and/or Auckland Council heritage and/or iwi supervision is required for the specific site (the latter to be determined through consultation with the relevant iwi groups); and
- e) Accidental discovery protocols in the event that unknown archaeological sites are uncovered.

#### ARCH.2

The NZTA shall employ at its expense a qualified archaeologist (the Project archaeologist) who shall be on site to monitor all initial earthworks, including surface stripping of the site, for all specific areas identified in the ASMP to establish whether any sub-surface archaeological features are present. This includes, but is not limited to, the following areas:

- (a) All unmodified areas in the vicinity of Rosebank Road;
- (b) All works in the vicinity of the "Oakley Inlet Heritage Area", located adjacent to the Great North Road Interchange;
- (c) Works in the vicinity of two midden sites (recorded R11/2214 and R11/2215) within Great North Road Interchange, and all previously unmodified areas near the banks of the Oakley Inlet;
- (d) Any ground disturbance works in Construction Yard 7 within Oakley Creek Reserve.

#### ARCH.3

If any archaeological sites, including human remains are exposed during site works, then the following procedures shall apply:

- (a) Immediately it becomes apparent that a possible archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease;
- (b) The site supervisor shall immediately secure the area in a way that ensures that any artefacts or remains are untouched and notify the Project archaeologist;
- (c) The Project archaeologist shall inspect the site to assess the relevance of the find, and then the Auckland Council shall be advised of the significance;
- (d) If the site is confirmed to be an archaeological site by the Project archaeologist, the site supervisor shall then notify tangata whenua, Heritage New Zealand, and the Auckland Council that an archaeological site has been exposed so that appropriate action can be taken;
- (e) In the case of human remains, the NZ Police shall be notified.

#### ARCH.4

In accordance with the ASMP, the following archaeological sites shall be fenced off and protected to the satisfaction of the Project archaeologist, prior to construction activities being undertaken:

- (a) Recorded sites R11/2504, R11/2505, R11/2506 and R11/2507, located on the northern boundary of the designation adjacent to the Rosebank Road peninsula.
- (b) Recorded site R11/2383 in the Oakley Creek Esplanade Reserve construction yard.

#### ARCH.5

In accordance with the ASMP, the following specific measures shall be implemented in the area identified as the "Oakley Inlet Heritage Area" (including recorded sites R11/2191, R11/2202, R11/2203 and R11/2459), located adjacent to the Great North Road Interchange:

- (a) In determining the details of construction methodology and site access, the NZTA shall ensure that there is no impact on sites R11/2202, R11/2203 and the main features of site R11/2191 (the basalt walls, boiler, building foundations and platforms). When the details have been determined, a plan will be prepared in consultation with the Project archaeologist that outlines the areas of archaeological value to be fenced off and protected from any adverse effects during the construction process. The Heritage Manager, Environmental Services, Auckland Council shall be consulted in the drafting of the plan and shall certify that the extent and method of fencing will protect the areas of archaeological value prior to commencement of construction works within the area. This plan will be added to the Archaeological Constraints layer in the GIS layers included as an Appendix of the ASMP in the CEMP.
- (b) All works in the Oakley Inlet Heritage Area shall be monitored by the Project archaeologist;
- (c) Machine access to construction works in this area shall be planned so as to minimise adverse effects on archaeological features;
- (d) During and following removal of houses north of Cowley Street and west of Great North Road in the area where the mill workers' cottages and mill race were once located, investigations shall be undertaken to establish and record any archaeological remains that may have survived;
- (e) Remedial or limited restoration works shall be carried out to the basalt walls, wheel pit, boiler

and bridge abutment of the mill/tannery/ quarry site (R11/2191), to a specification prepared by a heritage professional, to ensure their long term preservation. The specification shall be prepared in consultation with the Heritage Manager, Environmental Services, Auckland Council;

(f) A vegetation management plan shall be prepared and implemented to remove vegetation that is damaging archaeological features in this area and to protect and enhance features with appropriate vegetation cover. This plan shall form part of the Waterview Reserve Restoration Plan (refer to Conditions ARCH.6 and OS.5) and shall be prepared in consultation with the Heritage Manager, Environmental Services, Auckland Council;

(g) The design and location of any walkways and paths and structures within the Oakley Inlet Heritage Area shall include consideration of historic paths and accessways (excluding the piers associated with the SH16 Interchange).

#### ARCH.6

The Project archaeologist shall be made part of the Waterview Reserve Restoration Plan (refer Condition OS.3) development team to provide advice on long term management of the "Oakley Inlet Heritage Area". The Waterview Reserve Restoration Plan shall include provision for, as a minimum:

(a) A pedestrian bridge linking the northern and southern banks of the Oakley inlet shall be provided in the original location of the historical bridge to restore the historical connection between the two parts of the Oakley Inlet Heritage Area and make both parts easily accessible. The bridge is to be of a design appropriate to the historic form of this bridge but at a height above water to accommodate the passage of kayaks at high tide;

(b) Interpretative signage of the Oakley Inlet Heritage Area for public information and educational purposes;

(c) The management of planting to avoid encroachment of deep rooted trees on identified archaeological sites (including planting undertaken in accordance with Condition V.14).

#### ARCH.7

In accordance with the ASMP, any works to the dry stone wall (recorded site R11/2213) located on the north western boundary of the Great North Road Interchange, shall be minimised and managed in accordance with the following:

(a) If it is necessary to demolish part of the wall, the stone shall be used to repair the remainder of the wall. Appropriate reuse of any surplus stone will be determined following consultation with Heritage New Zealand and Auckland Council.

(b) The remainder of the stone wall shall be protected from construction machinery by the use of waratahs and an adequate buffer area prior to earthworks commencing.

(c) The remainder of the stone wall shall be carefully cleared of vegetation growth and repaired where necessary to a specification prepared by a heritage professional employed at the expense of the NZTA.

#### ARCH.8

All contractors and subcontractors working on the Project shall be trained on the archaeological requirements set out in the ASMP.

#### Advice note:

Any archaeological sites within the area affected by the Project shall not be modified or disturbed in any way unless written authorisation has been obtained from Heritage New Zealand.

#### ARCH.9

All Monterey Pines or oak trees (*Quercus* spp) over 10m in height within Sector 5 shall be identified and managed through the CEMP Amenity Tree process (Conditions CEMP.6(o) and (p)). Irrespective

of their health (unless the Project Arborist and Auckland Council confirm that these trees pose an immediate hazard), these trees will be confirmed as Amenity Trees. These trees shall be retained where practicable. If removal of any of these trees is required for construction, they shall be replaced by trees of the same species (or as otherwise agreed through the Waterfront Reserve Restoration Plan) sized at 160Lt. The location of replacement specimens will be defined through planning of the Oakley Inlet Heritage Area (as part of the Waterview Reserve Restoration Plan, refer Condition OS.5), with the replanting of Monterey Pines to reflect their historic use as a boundary planting species. Two trees shall be provided for every oak tree (*Quercus* spp) removed.

#### Advice note

Any archaeological sites within the area affected by the Project shall not be modified or disturbed in any way unless written authorisation has been obtained from Heritage New Zealand.

### **Ground Settlement Conditions**

#### S.1

The NZTA shall finalise, and implement through the CEMP, the Settlement Effects Management Plan (SEMP) lodged with the application prior to construction activities being undertaken. Prior to construction (following detailed investigation and design), the total estimated settlements and building damage categories shall be confirmed using the methodology in Technical Report G.13 Assessment of Ground Settlement Effects and the SEMF shall be updated accordingly.

In the event that settlement predictions are greater (than those allowed for in Figure E.14 (refer Schedule A, Row 26)) or building damage categories increase in ranking or buildings affected from those identified in Figures G1-G4 (refer Schedule A, Row 27), mitigation measures shall be introduced as part of the detailed design and construction process to avoid any adverse effects greater than predicted by the application lodged in August 2010.

### **Settlement Monitoring**

#### S.2

The NZTA shall establish a series of ground settlement monitoring markers to monitor potential settlement in relation to the construction of the tunnels. The survey markers will be located generally as follows:

- (a) Along the tunnel alignment and extending out to a maximum of 400m either side of the tunnels to correlate with cross sections that have been used for the settlement estimates and to infill between them.
- (b) To cover the more extensive eastern zone area of settlement at Chainage 3400 (Figure E.14 refer Schedule A, Row 26).
- (c) On or around buildings or features considered to be particularly sensitive as defined in the SEMF (including those buildings identified in Condition S.7) and as may be updated to reflect detailed analysis and interpretation of monitoring results as the Project proceeds.

Two types of markers shall be established: Framework Markers which shall form the main basis of monitoring, and Intermediate Markers which shall provide additional monitoring information for interpretation of Alerts and Alarms. The locations of each type of settlement monitoring marker shall be confirmed in the SEMF. Each Framework Marker shall have an alert and alarm level set in relation to Figure E.14, where alert = 75% of the theoretical value and alarm = 100% of the theoretical value with due consideration of the seasonal range of ground movement identified by pre-construction monitoring.

#### S.3

The NZTA shall survey the settlement monitoring markers at the following frequency:

(a) Pre-construction

- i) All Framework Markers – Vertical and selected horizontal at 3 monthly intervals, starting at least 12 months prior to construction commencing; and
- ii) All Intermediate Markers - Vertical and selected horizontal once.

(b) During Construction

- i) All Framework Markers - Vertical on a monthly basis; and
- ii) Selected Framework Markers only - Horizontal on a monthly basis.

(c) During Active Construction

- i) All Framework and Intermediate Markers – Vertical on a weekly basis; and
- ii) Selected Framework Markers only - Horizontal on a monthly basis. Active construction” shall be defined as:

(a) Starting when the advancing tunnel face comes within 150m and ending when the final tunnel lining has been installed 150m beyond the section; and

(b) When excavation in front of a retaining wall comes within 100m of a section and ending when the permanent wall supports are in place beyond a distance of 100m.

#### S.4

Within three days of each monitoring round, the NZTA shall use the settlement monitoring results (together with the results of groundwater monitoring where they may provide an earlier indication of future settlements) to reassess the ground settlements and building damage categories and compare them to those estimated in Figures E.14 and G1-G4 (refer Schedule A, Row 26 and 27). If alert and alarm levels are exceeded, the trigger marker shall be resurveyed within 24 hours. If the reassessment indicates that a building has increased its damage category from that in Figures G1 – G4 (refer Schedule A, Row 27) then this shall be considered to be an Alert Level and additional specific assessment of the building shall be carried out by the NZTA to confirm this reassessment within 72 hours. If the additional assessment confirms the increase in damage category, this shall be considered to be an Alarm Level and the property owner and occupier will be notified within 48 hours. Following consultation with the property owner and occupier(s); subsequent actions may include increased frequency and/or extent of monitoring, modification to the construction approach or mitigation works to the affected building.

S.5 Settlement monitoring shall be undertaken for a period of 2 years following completion of the tunnels. The NZTA may reduce the frequency of settlement monitoring, required by Condition S.3, to 6-monthly:

- (a) Once the active construction stage has passed; and
- (b) Monthly monitoring has been undertaken for a minimum of 6 months; and
- (c) The monitoring indicates that any potential settlement effects are within a satisfactory range as specified in the SEMP; and
- (d) The criteria in (a) to (c) above has been certified by the Auckland Council.

#### S.6

The NZTA shall collate the results of the settlement monitoring (undertaken pursuant to Conditions S.2 – S.5) and prepare a report that shall be made available to the Auckland Council]. A settlement monitoring report shall be prepared prior to the commencement of construction, and then at monthly intervals throughout the construction period. Following the completion of construction, a settlement monitoring report shall be prepared following each round of settlement monitoring undertaken (i.e. monthly and then 6-monthly when monitoring is reduced pursuant to Condition S.5). The settlement reports shall highlight any alert or alarm level exceedances and provide a full interpretation and/or explanation as to why these levels are exceeded, the likely effects and detail any remedial or mitigation measures initiated as a result of these trigger exceedances.

### **Building Condition Surveys**

S.7 The NZTA shall review and update the schedule of buildings and structures considered to be at risk in accordance with the criteria of the SEMP and maintain this for review by the Auckland Council. This shall include, but not be limited to, the following properties identified in the Technical Report G.13 Assessment of Ground Settlement Effects provided in support of this application:

- (a) Buildings on properties within the substrata designation;
- (b) Buildings where total estimated settlement is greater than 50mm (defined in Figure E.14 – Refer Schedule A, Row 26);
- (c) Buildings in areas estimated to have a risk of damage more than negligible (defined in Figures G1-G4 as categories 1-5 (Refer Schedule A, Row 27));
- (d) Unitec Buildings 76, and 310-313 (as per Unitec Site Plan in Schedule A, Row 31);
- (e) 1510 Great North Road, Unitec Residential Flats (two buildings);
- (f) Pak'n Save Supermarket;
- (g) Metro Football Clubhouse, Phyllis Street;
- (h) Building at 1550 Great North Road;
- (i) BP Service station at 1380 Great North Road;
- (j) Modern Chairs Building (Richardson Road);
- (k) Waterview Primary School;
- (l) Operational septic tanks where total estimated settlement is greater than 50mm; and
- (m) Buildings on the western side of the alignment between Chainage 3000 and 3400 where total estimated settlement is greater than 20mm.

### **S.8**

The NZTA shall consult with owners of buildings and structures identified in Condition S.7 and, subject to the owner's approval of terms acceptable to the NZTA, shall undertake a preconstruction condition assessment of these structures in accordance with the SEMP.

### **S.9**

The NZTA shall employ a suitably qualified person (e.g. a Chartered Professional Engineer) to undertake the building assessments required pursuant to Conditions S.8 and S.12 and identify this person in the SEMP.

### **S.10**

The NZTA shall undertake monthly visual inspections of the following buildings during the "active construction" phase of the Project as defined in Condition S.3:

- (a) All Type 1 Dwellings within a zone where "more than negligible" effects have been predicted;
- (b) All Type 2 Dwellings within a zone where "slight" effects or greater have been predicted
- (c) Unitec Building 76;
- (d) 1510 Great North Road, Unitec Residential Flats (two buildings);
- (e) Pak'n Save supermarket; and
- (f) Waterview Primary School (pool and hall).

Note: Type 1 and 2 Dwellings are those as defined in Technical Report G.13 Assessment of Ground Settlement Effects.

### **S.11**

The NZTA shall undertake level and/or wall inclination surveys on a monthly basis during the "active construction" phase of the Project on the following buildings:

- (a) All Type 1 Dwellings within a zone where “slight” effects or greater have been predicted;
- (b) Unitec Building 76;
- (c) 1510 Great North Road, Unitec Residential Flats (two buildings);
- (d) Waterview Primary School (pool); and
- (e) Pak ‘n’ Save Supermarket

#### S.12

The NZTA shall, subject to the owner(s) approval, ensure that within 6 months of completion of construction activities, a post-construction condition assessment covering the matters identified in the SEMP is undertaken and shall be provided to the owner(s). The assessment report shall include a determination of the cause of damage identified (if any) since the preconstruction condition assessments. The NZTA shall agree with the owner(s) appropriate remedial works (if any) in conjunction with arrangements for implementation and/or compensation. The requirements of this condition need not be fulfilled for any particular building with the written approval of the current owner of a building or where the NZTA can provide reasonable evidence to the Auckland Council that the current owner of that building has agreed they do not require such a survey.

#### S.13

The NZTA shall ensure that a copy of the pre, post-construction and any additional building condition assessment reports for each building be forwarded to the respective property owner(s) within 15 working days of completing the reports. The NZTA shall notify the Auckland Council that the assessments have been completed. The community liaison person appointed pursuant to Condition PI.1 shall be the contact person for owner(s) subject to assessment and reporting under Conditions S.1 to S.11 and S.16 and remedial works or compensation payments under Condition S.12 and S.16.

### **Retaining Wall Monitoring**

#### S.14

The NZTA shall establish inclinometer and surface monitoring of the retaining walls for the tunnel portals and cut and cover tunnel to determine any potential effect from the tunnels. The nature and timing of the monitoring shall be determined during detailed design of the retaining walls and specified in the SEMP.

### **Services Monitoring**

#### S.15

Prior to construction commencing, the NZTA shall undertake CCTV surveys of services identified in the SEMP as being susceptible to damage or particularly critical. This shall include, but not be limited to:

- (a) Waterview Orakei No. 9 trunk sewer. The NZTA shall monitor these services by undertaking additional CCTV surveys throughout the construction period. If any damage is determined in relation to the Project, the NZTA shall undertake any remedial action as required in consultation with the service provider.

### **Slope Stability Assessments**

#### S.16

Prior to construction commencing, the NZTA shall undertake geotechnical investigations of slopes or sites that have been identified as potentially being susceptible to movement. This shall include, but not be limited to:

- (a) 14H and 14J Cradock Street
- (b) 34 Cradock Street
- (c) 40 Cradock Street



- (d) 56 Powell Street;
- (e) 1590A Great North Road; and
- (f) Other sites on the western slopes of Oakley Creek identified under Condition S.7(b) and S.7(m) which are assessed in the course of a pre-construction condition assessment undertaken in accordance with Condition S.8 as potentially being susceptible to slope movement.

The NZTA shall undertake monitoring throughout the active construction period in accordance with Condition S.10 above and shall assess and agree remedial action as required, in consultation with the owner, in accordance with Condition S.12 above.

### **Differential Settlement**

#### **S.17**

Pairs of settlement markers shall be established on each side of the cross sections identified on Figure E.14 to monitor differential movements. The markers in each pair shall be no more than 20m apart, and each pair shall be within 100m of the centreline of the closest tunnel. Monitoring installed in accordance with Condition S.11 can be utilised for this purpose. Each pair of markers shall have Alert and Alarm values set based on the calculated differential settlements at that location and consistent with the relevant calculated Building Damage Category (Figures G1-G4, (Refer Schedule A Row 27)), Alert and Alarm levels shall be as defined in Condition S.2. Monitoring frequency shall be as defined for Framework Markers in Condition S.3.

### **Contaminated Land and Contaminated Discharges Conditions**

#### **CL.1**

The NZTA shall finalise and implement through the CEMP, the Contaminated Soil Management Plan (CSMP)

submitted with this application prior to commencement of any site works. The CSMP shall include, but not be limited to:

- (a) Measures to be undertaken in the handling, storage and disposal of all material excavated during the construction works;
- (b) Soil validation testing and groundwater testing;
- (c) Soil verification testing to be undertaken to determine the nature of the excavated spoil and potential reuse or disposal options;
- (d) Measures to be undertaken in the event of unexpected contamination being identified during construction activities; and
- (e) Measures to be undertaken for the handling of asbestos containing material.

#### **CL.2**

Prior to the main construction works commencing, the baseline quality of soils and groundwater within Sector 5 (the southern bank of Oakley Creek coincident with the location of the former tannery) and Sector 7 (particularly in relation to works in the vicinity of Great North Road) shall be investigated and established. The investigations shall be carried out in accordance with appropriate Ministry for the Environment and Auckland Council guidelines.

The findings of the soil and groundwater investigations shall be used to determine the specific constructions methods during work in this area to manage any likely environmental effects in relation to the Project.

#### **CL.3**

Prior to the main construction works commencing, soils and fill materials within Alan Wood Reserve (Sector 9) shall be further classified so as to determine the distribution and extent of

cleanfill, managed fill and contaminated/hazardous fill materials.

CL.4

All excavated soil shall be tested by the NZTA in general accordance with the CSMP, prior to either reuse on site or disposal off site. The testing regime shall be submitted for approval by the Major Infrastructure Team Manager, Auckland Council.

CL.5

The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council within 5 working days of identification of any contamination at the site which was not identified in the reports submitted in support of this application, including contaminated soil, surface water or groundwater. The removal of any excavated contaminated soil shall be in accordance with the CSMP. The removal and disposal of any contaminated groundwater/ surface water from the site shall be in accordance with the GWMP and the ESCP.

CL.6

The removal of any excavated contaminated soil shall be in accordance with the CSMP. The removal and disposal of any contaminated groundwater/ surface water from the site shall be in accordance with the GWMP and the ESCP.

CL.7

The NZTA shall engage a suitably qualified contaminated land specialist to supervise the works, excavation and removal of any contaminated soils from the site and undertake sampling (if required) of imported material.

CL.8

All testing / sampling techniques shall be carried out in accordance with the Ministry for the Environment's Contaminated Land Management Guidelines or other equivalent standards approved in writing by the Major Infrastructure Team Manager, Auckland Council.

CL.9

During and following the tunnel construction works beneath Sector 8, groundwater quality monitoring shall be carried out at locations within and down hydraulic gradient of Phyllis Street Landfill. Monitoring shall be undertaken on at least a monthly basis, and for a period up to 12 months following completion of the tunnel construction works. The monitoring programme shall be submitted for approval by the Auckland Council as landowner.

CL.10

Prior to, during and following tunnel construction works beneath Phyllis Street Landfill, monitoring for landfill gas shall be carried out from existing monitoring boreholes within the landfill. Monitoring shall be undertaken on at least a monthly basis, for a period of no less than 6 months prior to, and up to 12 months following completion of the tunnelling works. The monitoring programme shall be submitted for approval by the Auckland Council as landowner.

CL.11

The NZTA shall submit to the Major Infrastructure Team Manager, Auckland Council, a Site Closure Report no later than three (3) months after the completion of the earthworks. The Report shall be prepared in accordance with the Ministry for the Environment's Contaminated Land Management Guidelines and include:

(a) Results of any soil reuse and imported material testing carried out to ensure compliance with the

CSMP;

- (b) Volumes of soil removed from site;
- (c) Copies of the waste disposal receipts; and
- (d) Reports of any non-compliance with the CSMP procedures or complaints received while undertaking the site works.

### **Freshwater Conditions**

#### **F.1**

The NZTA shall finalise, and implement through the CEMP, the ECOMP submitted with this application. The ECOMP shall be updated to ensure compliance with the conditions of this consent and include changes to the details of construction processes prior to construction commencing.

The ECOMP shall include, but not be limited to details of:

- (a) Monitoring of freshwater ecology;
- (b) Monitoring of freshwater and stream sediment quality;
- (c) Trigger event criteria for undertaking additional monitoring;
- (d) Procedures for responding to accidental discharges of contaminants to the freshwater environment; and
- (e) Contingency plans and/or remedial measures in the event monitoring results identify adverse effects.

#### **F.2**

The NZTA shall engage a suitably qualified ecologist and water quality scientist to undertake freshwater monitoring programme prior to, during and following construction to monitor the effect of the Project on the freshwater ecology. The freshwater monitoring shall be undertaken in Oakley Creek, Pixie Stream and Meola Creek. The freshwater monitoring programme shall be undertaken in accordance with the details set out in the ECOMP and include:

- (a) Cross sectional profiles;
- (b) Macro invertebrate sampling; and
- (c) Freshwater fish monitoring.

#### **F.3**

The freshwater monitoring programme shall, as a minimum, be undertaken in accordance with the following frequency:

- (a) Prior to construction – two baseline ecological surveys.
- (b) During construction – twice per year for fish and macro invertebrates and cross sectional profiles, within one month prior to the beginning of the earthworks season and within one month either side of the end of the earthworks season.
- (c) Post construction – on an annual basis for a maximum period of three years, or less if the Major Infrastructure Team Manager, Auckland Council is satisfied that no adverse effects have occurred or are likely to occur from the Project.
- (d) Monthly water quality samples at the five existing Oakley Creek sample locations to be analysed for pH, turbidity, suspended solids, metals (Zn, Cu and Pb) and nutrients.
- (e) Four “event based” samples per annum from each of the current two Oakley Creek sites. The samples are to be analysed for pH, turbidity, suspended solids, metals (Zn, Cu and Pb), hydrocarbons (TPH) and nutrients.
- (f) Two sediment quality samples per annum (January and July) at the five existing water quality Oakley Creek sites (if there is sufficient sediment to sample). The samples are to be analysed for metals (Zn, Cu and Pb), polycyclic aromatic hydrocarbons (PAH), hydrocarbons (TPH) and semi-volatile organic compounds.

Advice note: The sample collection and analysis required under sub-clauses (d) to (f) shall be

undertaken following an IANZ accredited methodology by a suitably accredited laboratory (International Accreditation New Zealand).

#### F.4

The NZTA shall undertake additional freshwater monitoring in the event of a 'trigger event' for freshwater habitats. For the purposes of this consent, a 'trigger event' for freshwater habitats is defined in the ECOMP.

#### F.5

The NZTAs ecologist/hydrologist (required by condition F.2) shall review, every six months, the freshwater monitoring results, provided from Conditions F.2 to F.4, and results in monitoring detailed in earthworks Conditions E.9 and E.19 and Groundwater Condition G.10 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent. In the event that potential adverse effects are identified, including through review of the Condition G.10 monitoring results by the hydrologist and freshwater ecologist required by Condition G.12, the NZTA shall develop and submit for the approval of the Major Infrastructure Team Manager, Auckland Council appropriate contingency plans and/or remedial measures in accordance with the measures set out in the ECOMP.

#### F.6

Freshwater monitoring reports shall be compiled from the monitoring undertaken pursuant to Conditions F.2 to F.4 and the review of Condition F.5, and a report provided to the Major Infrastructure Team Manager, Auckland Council every 6 months.

## Attachments

### Figure CEMP.A - Construction Environmental Management Framework

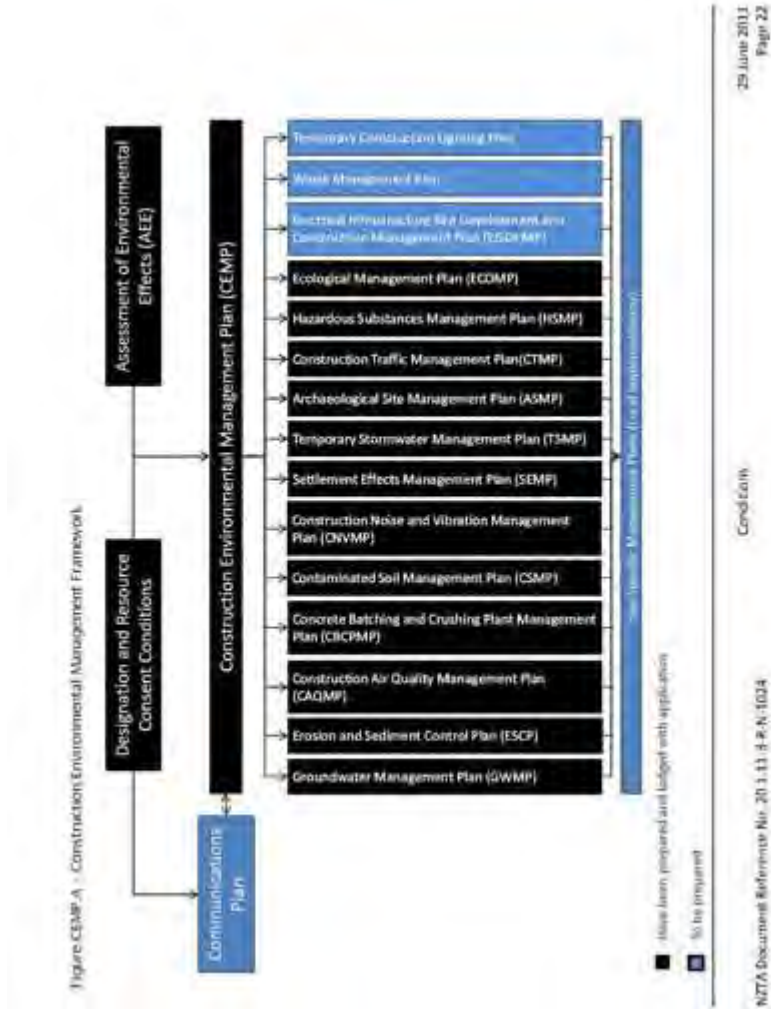
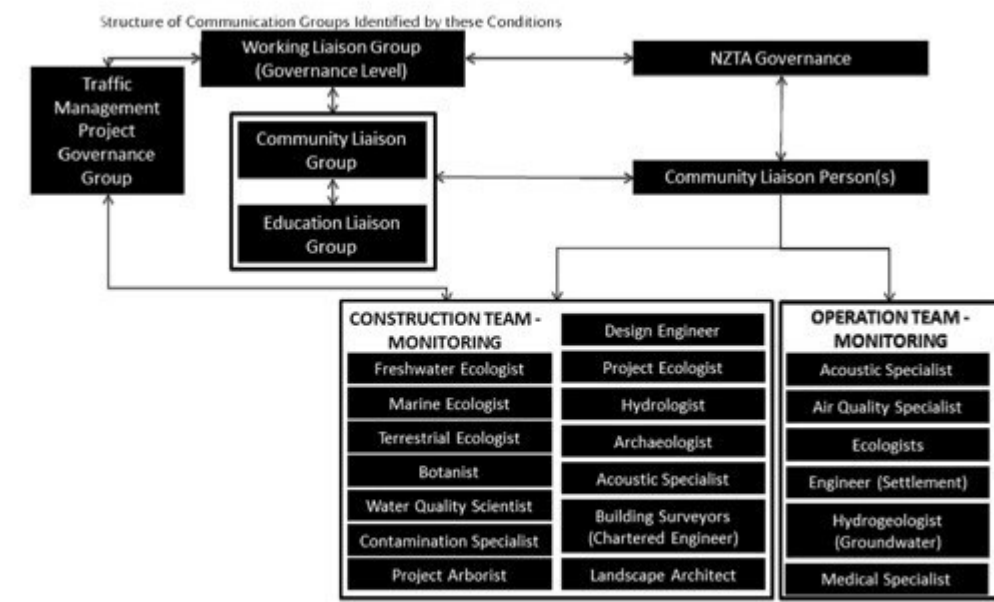


Figure PI.A - Structure of Communication Groups



## 6728 State Highway 20 - Waterview Connection Mt Roskill to Waterview

Designation Number	6728
Requiring Authority	New Zealand Transport Agency
Location	State Highway 20 from Alan Wood Reserve, Mt Roskill to Great North Road, Waterview
Rollover Designation	Yes
Legacy Reference	Designation E04-13, Auckland Council District Plan (Isthmus Section) 1999
Lapse Date	The period within which this designation shall lapse if not given effect to shall be June 2021, being ten years from the date on which it was confirmed in accordance with Section 184(1) of the Resource Management Act 1991

### Purpose

For a new designation, SH20 tunnels, Great North Road underpass to Alan Wood Reserve – NOR5. New strata (subsoil) designation for construction, operation and maintenance of cut and cover and deep excavation tunnels, restricting subsurface activities beneath certain properties, through proposed Sectors 7 and 8; construction, operation and maintenance and protection of SH20 subsurface works (tunnels).

### Conditions

For a complete set of conditions, refer to the Waterview Connection Proposal Board of Inquiry decision titled “Final Report and Decision of the Board of Inquiry into the New Zealand Transport Agency Waterview Connection Proposal - Volume 2” dated June 2011.

#### General Designation Conditions

DC.1

Except as modified by the conditions below, the works shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency (NZTA being the Requiring Authority), the Notice(s) of Requirement and the supporting documents, and supplementary information provided in evidence. This information is summarised as follows:

- (a) Waterview Connection Project. Assessment of Environmental Effects Report (dated August 2010). Parts A- E;
- (b) Waterview Connection Project. Assessment of Environmental Effects Report (dated August 2010). Part F: Plans and Drawings, except as updated through the hearing (Refer Schedule A for current plan and drawing references); and
- (c) Waterview Connection Project. Assessment of Environmental Effects Report (dated August 2010). Part G: Technical Reports:
  - (i) Technical Report G.1 Assessment of Air Quality Effects
  - (ii) Technical Report G.2 Assessment of Archaeological Effects
  - (iii) Technical Report G.3 Assessment of Avian Ecological Effects
  - (iv) Technical Report G.4 Assessment of Coastal Processes
  - (v) Technical Report G.5 Assessment of Construction Noise Effects
  - (vi) Technical Report G.6 Assessment of Freshwater Ecological Effects

- (vii) Technical Report G.7 Assessment of Groundwater Effects
- (viii) Technical Report G.8 Assessment of Herpetofauna Ecological Effects
- (ix) Technical Report G.9 Assessment of Land and Groundwater Contamination
- (x) Technical Report G.10 Assessment of Lighting Effects
- (xi) Technical Report G.11 Assessment of Marine Ecological Effects
- (xii) Technical Report G.12 Assessment of Operational Noise Effects
- (xiii) Technical Report G.13 Assessment of Ground Settlement Effects
- (xiv) Technical Report G.14 Assessment of Social Effects
- (xv) Technical Report G.15 Assessment of Stormwater and Streamworks Effects
- (xvi) Technical Report G.16 Assessment of Temporary Traffic Effects
- (xvii) Technical Report G.17 Assessment of Terrestrial Vegetation Effects
- (xviii) Technical Report G.18 Assessment of Transport Effects
- (xix) Technical Report G.19 Assessment of Vibration Effects
- (xx) Technical Report G.20 Assessment of Visual and Landscape Effects
- (xxi) Technical Report G.21 Construction Environmental Management Plan (CEMP)
- (xxii) Technical Report G.22 Erosion and Sediment Control Plan (ESCP)
- (xxiii) Technical Report G.23 Coastal Works
- (xxiv) Technical Report G.24 Geotechnical Interpretive Report
- (xxv) Technical Report G.25 Traffic Modelling Report
- (xxvi) Technical Report G.26 Operational Model Validation Report
- (xxvii) Technical Report G.27 Stormwater Design Philosophy Statement
- (xxviii) Technical Report G.28 Geotechnical Factual Report – 500 Series
- (xxix) Technical Report G.29 Geotechnical Factual Report – 700 Series
- (xxx) Technical Report G.30 Assessment of Associated Sediment and Contaminant Loads
- (xxxi) Technical Report G.31: Technical Addendum Report (September 2010)
- (d) PT & Active Mode Transport Routes Existing and Proposed (Refer Schedule A, Row 22).
- (e) Waterview Connection Project, Evidence and Supplementary Information provided to the Board of Inquiry:
  - (i) Evidence in Chief (Numbers 1-37)
  - (ii) Rebuttal Evidence (Numbers 1-33)
  - (iii) Supplementary Information (Numbers 1-8)

#### DC.1A

Within 3 months of the designations being confirmed for the Project (or at least 1 month prior to any Auckland Council approvals or certifications required by these Conditions, whichever is the earlier), the NZTA shall update and finalise to the satisfaction of the Major Infrastructure Team Manager, Auckland Council all drawings and Plans cited in Schedule A, and provide a full set of the information and documentation referred to in Condition DC.1 to the Major Infrastructure Team Manager Auckland Council. At the same time the NZTA shall prepare to the satisfaction of the Major Infrastructure Team Leader, Auckland Council, a document for each designation which sets out the designation and have attached to it in text format a comprehensive set of the conditions imposed by the Board of Inquiry in its Final Decision as summarised in Schedule B, inclusive of any standard conditions and advice notes.

In particular (but not limited to), the following Plans will need to be amended in light of these Final Conditions:

- (a) F.2 Operational Scheme Plans (refer Schedule A, Row 3) require amendment detailing the amended location of the ventilation stacks and southern ventilation buildings;
- (b) F.5 Construction Scheme Plans (refer Schedule A, Row 4) require amendment to detail changes to the construction footprint for the amended location of the ventilation stacks and southern ventilation buildings and reconfiguration of Construction Yard 1);

- (c) F.6 Construction Yard Plans 101 and 107 (refer Schedule A, Row 7), detailing amendments to the Construction Yard 1 in light of the reconfiguration of this Yard and for Construction Yard 7 in light of the relocation of the northern ventilation stack (refer Schedule A, Row 34);
- (d) F.8 Plans of Structures and Architectural Features (refer Schedule A, Row 9), detailing the amended location of the northern ventilation stack and the design and location of the southern ventilation building and stack;
- (e) The CNVMP (including flow diagram and the supplementary evidence produced by Ms Wilkening) (refer Schedule A, Rows 36, 37 and 39);
- (f) The areas of the Open Space Restoration Plans (Schedule A, Row 30) to:
  - (i) Extend these areas in geographic extent to provide for the works identified in the Management Plan notations identified in the OS Conditions (in particular Conditions OS.5 and OS.6 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent) (e.g. these areas will (as relevant) include Eric Armishaw Park, Howlett Reserve and Waterview Esplanade Reserve); and
  - (ii) Exclude the operational area of designation required for the northern ventilation stack (as identified through the OPW process (refer Condition DC.8 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent); and
- (g) Schedule A, Row 28 the Plan detailing proposed open space impacts and replacements needs to be updated to recolour the two land parcels on Hendon Avenue (which are excluded from the replacement calculations) to 'brown' to confirm they are part of the operational impact and will not be returned as open space.

#### DC.2

The period within which this designation shall lapse if not given effect to shall be June 2021, being ten years from the date on which it was confirmed in accordance with Section 184(1) of the Resource Management Act 1991.

#### DC.3

The NZTA shall update and finalise the relevant Construction and Operational Management Plans required under these conditions to ensure compliance with the designation conditions imposed by the Board of Inquiry. The relevant Management Plans shall be submitted to the Major Infrastructure Team Manager, Auckland Council within the timeframes specified in the following conditions. No works shall be undertaken until the relevant management plans have been finalised and certified or approved in accordance with the relevant conditions.

#### DC.4

Any Management Plans submitted to the Major Infrastructure Team Manager, Auckland Council for approval or certification may be submitted in stages to reflect any proposed staging of the physical works. Plans submitted shall clearly show the integration with adjacent stages and interrelated activities.

#### DC.5

In the event of any dispute, disagreement or inaction arising as to any Auckland Council Manager certification/ approvals required by the designation conditions, or as to the implementation of or monitoring required by the conditions, matters shall be referred in the first instance to the NZTA Regional State Highway Manager and to the Resource Consents Manager, Auckland Council to determine a process of resolution. If a resolution cannot be agreed, then the matter may be referred to an independent appropriately qualified expert, agreeable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree. The



independent appropriately qualified expert shall be appointed within 10 working days of the NZTA or Auckland Council giving notice of their intention to seek expert determination. The expert shall, as soon as possible, issue his or her decision on the matter. In making the decision, the expert shall be entitled to seek further information and hear from the parties as he or she sees fit.

Advice note: The dispute resolution process provided for in this condition does not prejudice any party's right to take enforcement action in relation to the implementation of the designation conditions. However, the dispute resolution process will be applied before any formal enforcement action is taken by the Council, except in urgent situations.

#### DC.6

Except for Conditions DC.7, DC.8 and DC.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, the NZTA shall be exempt from providing an Outline Plan of Works for the Project, as provided for in Section 176A (2)(a) and (b) of the RMA.

Advice note: The Construction and Operational Management Plans, together with the provision of detailed drawings required by Condition DC.1(b) are considered sufficient detail in all aspects of the Project, with the exception of proposed works for the northern and southern ventilation buildings and stacks where further details are required.

#### DC.10

The NZTA shall give notice to the Manager Regional and Local Planning, Auckland Council in accordance with Section 182 and 181 respectively of the RMA for:

(a) Within six months of the State highway opening (being operational), removal of those parts of the designation that are not required for the long term operation, maintenance and mitigation of effects of the State highway.

Note: this condition is specific to land no longer required for construction purposes once the Project is completed and includes the land of 6 Barrymore Road, refer Condition OS.17 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

(b) The designation to be altered to remove those conditions no longer required for long term operation and maintenance of the Project.

#### DC.12

Unless otherwise provided for by Condition RC.2 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, if any monitoring required to be undertaken by any party by the designation conditions indicates non-compliance with any designation condition, the NZTA must provide written notice to the Major Infrastructure Team Manager Auckland Council as soon as it becomes aware of same, stating the following:

(a) A description of the non-compliance; and

(b) The measures NZTA proposes for addressing the non-compliance, including any additional mitigation measures.

Subject to the Council's approval, the NZTA must implement the additional mitigation measures to address the non-compliance.

#### DC.13

Pursuant to Section 36(1)(d) of the RMA, the requiring authority is required to pay to Auckland

Council any administrative charge for the carrying out by the local authority of its functions in relation to the administration, monitoring, and supervision of designation conditions.

DC.14

The servants of agents of Auckland Council shall be permitted to have access to relevant parts of the Project at all reasonable times for the purpose of carrying out inspections, investigations, tests, measurements and/or to take samples.

### **Construction Environment Management Plan Conditions**

#### **CEMP.1**

Except where provided for in Condition CEMP.1A of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, the NZTA shall update and finalise the draft Construction Environmental Management Plan (CEMP) including all the Management Plans which form part of the CEMP and are included as appendices, submitted with this application to ensure compliance with the consent and designation conditions imposed by the Board of Inquiry. The CEMP shall be provided to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to the commencement of works to certify compliance and consistency with the conditions. Construction shall not commence until certification is obtained.

Advice note: For clarity the CEMP will be updated and finalised in accordance with the conditions. Any amendments will be limited to reflecting the requirements of the conditions, specifying personnel, and completing the Environmental Risk Register.

Advice note: Particular care must be taken with development and operation of Construction Yard 7. When the CEMP is being updated and finalised, consideration must be given to the contents of the draft SSCEMP prepared for Construction Yard 7 (Row 41, Schedule A) recognising changes required by inclusion of the ventilation stack in this yard.

#### **CEMP.2**

The certification process of the CEMP (and its appendices) shall confirm that the CEMP gives effect to the relevant conditions, as well as those matters in CEMP.6, and that it includes details of:

- (a) Staff and contractors' responsibilities;
- (b) Training requirements for employees, sub-contractors and visitors;
- (c) Environmental incident and emergency management;
- (d) Communication and interface procedures (in accordance with the Communication Plan required under Condition PI.2);
- (e) Environmental complaints management (including the procedures required under Condition PI.4);
- (f) Compliance monitoring;
- (g) Reporting (including detail on the frequency of reporting to the Auckland Council);
- (h) Environmental auditing; and
- (i) Corrective action.

#### **CEMP.3**

The management of key environmental effects associated with the construction phase of the Project is detailed within environmental management plans that are included in the CEMP as appendices. This suite of management plans as shown on Figure CEMP.A comprises:

- (a) Construction Noise and Vibration Management Plan (CNVMP);
- (b) Construction Air Quality Management Plan (CAQMP);
- (c) Erosion and Sediment Control Plan (ESCP);

- (d) Temporary Stormwater Management Plan (TSMP);
- (e) Ecological Management Plan (ECOMP);
- (f) Groundwater Management Plan (GWMP);
- (g) Settlement Effects Management Plan (SEMP);
- (h) Contaminated Soils Management Plan (CSMP);
- (i) Hazardous Substances Management Plan (HSMP);
- (j) Archaeological Site Management Plan (ASMP);
- (k) Construction Traffic Management Plan (CTMP);
- (l) Concrete Batching and Crushing Plant Management Plan (CBCPMP);
- (m) Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP) (to be prepared in accordance with Condition CEMP.15);
- (n) Waste Management Plan (to be prepared in accordance with Condition CEMP.10); and
- (o) Temporary Construction Lighting Management Plan (to be prepared in accordance with Condition L.2).

#### CEMP.4

The CEMP shall be implemented and maintained throughout the entire construction period.

#### CEMP.5

A copy of the CEMP shall be held on each construction site at all times and be available for inspection on request by the Auckland Council.

#### CEMP.6

The finalised CEMP shall include specific details on demolition, construction and management of all works associated with the Project. The certification process of the CEMP shall confirm that the CEMP includes details of the following:

- (a) Details of the site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- (b) The location of large notice boards that clearly identify the NZTA and the Project name, together with the name, telephone, email address and address for service of the site or Project manager and the community liaison person;
- (c) An outline construction programme of the work indicating in particular likely time periods for road closures and anticipated traffic diversion effects;
- (d) The hours of work, which should reflect the need to ensure that residents enjoy reasonable freedom from noisy or intrusive construction activity in their neighbourhood at night, on Sundays and during public holidays;
- (e) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/ storage of rubbish, storage and unloading of building materials and similar construction activities;
- (f) Location of worker's offices and conveniences (e.g. portaloos);
- (g) Procedures of controlling sediment run-off, dust and the removal of soil, debris and demolition and construction materials from public roads or places. Dust mitigation measures should include use of water sprays to control dust nuisance on dry or windy days;
- (h) Methods to stabilise ingress and egress points to construction sites, to the standard required by ARC Technical Publication 90 (Nov 2007);
- (i) Procedures for ensuring that residents within 100m of construction areas or other people whose use of an area may be disrupted by construction works (for example the Te Atatu Boating Club for works on the Whau River) are given notice of the commencement of construction activities and are informed about the expected duration of the works, including potentially through the community liaison person;
- (j) Procedures to be followed to ensure that those working in the vicinity of identified heritage and

ecological features are aware of the heritage or ecological values of these features and the steps which need to be taken to meet the conditions applying to work on the site;

(k) Means of ensuring the safety of the general public;

(l) Procedures for the community liaison person to receive and respond to complaints about construction activities, including dust and odour from the works;

(m) Methods of mitigating the local and network wide effects of construction of individual elements of the Project, including measures to ensure that parking of staff vehicles on surrounding streets is restricted;

(n) All temporary boundary/ security fences shall be maintained in good order, with any graffiti removed as soon as possible;

(o) Confirmation of a Project Arborist and completion of a STEM assessment of the preliminary list of Amenity Trees in Schedule E.7 of the AEE to confirm the final Amenity Trees; and

(p) The process to minimise removal of Amenity Trees, maximise the protection of those retained, undertake relocation of Amenity Trees and replacement planting of specimen trees (in accordance with Conditions LV.10 and ARCH.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent).

(q) Advice note: For the purposes of CEMP.6(o) and (p), Amenity Tree is defined as a tree or trees that contribute significantly to amenity, taking into account its form, size, health, ecological or historical significance (a preliminary list of these trees is provided in Appendix E.7 of the AEE).

#### CEMP.7

The layout of the 12 Construction Yards, including associated buildings, fencing and site access shall be developed in accordance with Waterview Connection Project Construction Yards Plans (Refer Schedule A, Row 7). The layout drawings shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to the occupation of the yard, for review and certification that the final layout of the construction yards is in accordance with the conditions. The layout drawings shall incorporate the following:

(a) The main access to the construction yards to be located as far as practicable from residential dwellings, taking into account site and public safety and environmental constraints, in the locations shown on Waterview Connection Project Construction Yards Drawings (Refer Schedule A, Row 7);

(b) Noisy construction activities to be located as far as practicable, and preferably no less than 100m, from residential dwellings; Construction of temporary boundary/ security fences to be undertaken in a manner which minimises impacts on existing trees;

(c) Temporary acoustic fences and visual barriers;

(d) Temporary buildings greater than 8 metres in height to be located in a position which minimises visual impact on adjacent residential dwellings; and

Location of workers' and Project vehicle parking.

#### CEMP.8

All storage of material and equipment associated with the construction works shall take place within the boundaries of the designation.

#### CEMP.9

Temporary protection shall be installed to prevent vehicles damaging drains, footpaths, berms, kerbs, vehicle crossings and the roads during the site preparation and construction phase of the Project. Any damage to the drains, footpaths, berms, kerbs, vehicle crossings and the road attributable to any vehicle associated with construction activities shall be repaired to the same or similar standards as existed prior to such damage at no cost to the Auckland Council.

#### CEMP.10

The NZTA shall finalise and implement the Hazardous Substances Management Plan (HSMP), through the CEMP (as per Condition CEMP.1), submitted with this application, prior to works commencing on site. The certification process of the CEMP shall confirm that the HSMP clearly identifies the requirements for proper storage, handling, transport and disposal of hazardous substances during the construction phase of the Project and confirm that there shall be no storage of explosives on the Project site.

#### CEMP.11

The NZTA shall develop and implement a Waste Management Plan in accordance with the waste management principles, controls and methods set out in the CEMP. The Plan shall be provided to the Major Infrastructure Team Manager, Auckland Council and be implemented throughout the entire construction period.

#### CEMP.12

The CEMP shall be reviewed by the NZTA at least annually or as a result of a material change to the Project. The review shall take into consideration:

- (a) Compliance with designation and consent conditions;
- (b) Any changes to construction methods;
- (c) Key changes to roles and responsibilities within the Project;
- (d) Changes in industry best practice standards;
- (e) Changes in legal or other requirements;
- (f) Results of inspections, monitoring, incidents, corrective actions, internal or external assessments; and
- (g) Public complaints.

A summary of the review process undertaken shall be kept by the NZTA, provided annually to the Major Infrastructure Team Manager, Auckland Council and made available (with any related data) to the Auckland Council upon request.

#### CEMP.13

Following the review process (as described in Condition CEMP.12), the CEMP may require updating. Any material change proposed to the CEMP (including appended Management Plans) shall be submitted for approval to the Major Infrastructure Team Manager, Auckland Council at least 10 working days prior to the proposed changes taking effect.

#### Advice Note:

Material change will include amendment to any base information informing the CEMP or any process, procedure or method of the CEMP (such as the environmental constraints map, compliance monitoring process, complaints procedure or mitigation / remedial methods identified) which has the potential to increase adverse effects on a particular value. For clarity changes to personnel and contact schedules do not constitute a material change.

#### CEMP.14

The CEMP shall include, as an appendix, an Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP). The EISDCMP shall be provided to the Major Infrastructure Team Manager, Auckland Council, and include:

- (a) Methods and measures:
  - (i) To ensure that the existing high voltage infrastructure can be accessed for maintenance at all reasonable times, or emergency works at all times, during and after construction activities.
  - (ii) To appropriately 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 the overhead transmission lines

(iii) To ensure that no activity is undertaken during construction that would result in ground vibrations and/or

ground instability likely to cause material damage to the transmission lines, including support structures.

(iv) To ensure that changes to the drainage patterns and runoff characteristics do not result in adverse effects from stormwater on the foundations for any high voltage transmission line support structure.

(b) Sufficient detail to confirm that new planting and maintenance of vegetation will comply with the New Zealand Electricity (Hazard from Trees) Regulations 2003, including, but not limited to, the provisions of Schedule (Growth Limit Zones) to those Regulations.

(c) Sufficient detail to confirm that the works will comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001), including, but not limited to, the provisions of:

(i) Clause 2.2 with respect to excavations near overhead support structures;

(ii) Clause 2.4 with respect to buildings near overhead support structures;

(iii) Section 3 with respect to minimum separation between buildings and conductors;

(iv) Section 5 with respect to minimum safe distances for the operation of mobile plant; and,

(v) Table 4 with respect to minimum safe separation distances between the ground and the overhead conductors.

(d) Confirmation that Transpower has been provided a copy of the EISCDMP for their review at least 20 working days prior to construction.

Advice note: With respect to clause (c), specific consideration must be given to the height and location of temporary structures (such as Project offices and other construction site facilities) and permanent structures (such as lighting poles, signage, gantries and acoustic barriers).

#### CEMP.15

The NZTA will be responsible for all service relocations required for construction of the Project. The NZTA shall liaise with the providers of infrastructure service networks (including, but not limited to water, gas, stormwater, wastewater, power and telecommunications), and private property owners with on-site services to develop methodologies and timing for necessary services relocation required for the Project, with the objective of minimising disruption to the operation of these service networks and onsite services.

Advice note:

(a) It is noted that if separate consents are required for relocations for any services of network utility operators or landowners, such consents will be obtained before construction commences in the relevant area, and any effects of those relocations would be considered at that time. The same applies to any alteration of consents if required.

(b) Network infrastructure owned and operated by Watercare Services is located within the designations. An operating agreement will be developed by the NZTA and Watercare Services which will include appropriate notification and access protocols where works are to be undertaken by either network operator on or adjacent to Watercare Services infrastructure within the designations.

#### **Public Information Conditions**

##### PI.1.

A community liaison person shall be appointed by the NZTA for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the Project. The liaison person's name and contact details shall be made available in the CEMP and on site signage by the NZTA. This person must be reasonably available for on-going consultation on all matters of concern to affected parties arising from the Project.

#### PI.2.

The NZTA shall prepare and implement a Communications Plan that sets out procedures detailing how the public, Ministry of Social Development, Housing New Zealand Corporation and other organisations representing the particular demographic characteristics of the community (including but not limited to Primary Health Organisations, general practitioners, youth, education organisations, aged care groups and groups representing ethnic and migrant communities) will be communicated with throughout the construction and monitoring periods (as prescribed in the designation and consent conditions).

In preparing the Communications Plan, the NZTA will liaise with Auckland Council to access its community liaison databases. The Communications Plan will include details of:

- (a) The site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- (b) In accordance with these Conditions, the database of the key construction activities and monitoring requirements that are the subject of the Communications Plan;
- (c) The database of stakeholders and residents who will be communicated with;
- (d) Communication methods, an assessment of how these methods reach the different audience/ stakeholder groups (including those methods set out in Condition CEMP.6), and detail on when each of these methods will be used (e.g. regular communication or event specific methods);
- (e) The appointed specialist in Environmental and Occupational Medicine, including contact details (as per Condition SO.13 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- (f) Any stakeholder specific communication plans required; and
- (g) Monitoring and review procedures for the Communications Plan.

The Communications Plan shall be written in accordance with the external communication procedures set out in the CEMP and provided at least 20 working days prior to construction commencing, to the Major Infrastructure Team Manager, Auckland Council, Working Liaison Group and the Community Liaison Group(s) established by Condition PI.5. The structure of the communication groups set out in these conditions is attached as Figure PI.A.

#### PI.3.

At least 15 working days prior to the commencement of construction, and at 15 working day intervals thereafter, or as required depending on the scale of works and effects on the community, advertisements will be placed in the relevant local newspapers and community notice boards (as identified in Condition CEMP.6(b)) detailing the nature of the forthcoming works, the location of the forthcoming works and hours of operation. All advertisements will include reference to a 24 hour toll free complaints telephone number. Where relevant, advertisements will also include but not be limited to details of:

- (a) Any traffic disruptions or controls or changes to property access, pedestrian/ cycle routes and bus stops; and
- (b) Any other construction activities, including night time works, blasting, and structure-borne noise, as identified in the conditions.

#### PI.4.

The NZTA shall manage, investigate and resolve (as appropriate) all complaints for the duration of the construction works in accordance with the environmental complaints section of the CEMP.

The implementation strategy for complaints includes:

- (a) A 24 hour toll free telephone number and email address, which shall be provided to all potentially affected residents and businesses. The number shall be available and answered at all times during the entire duration of the works for the receipt and management of any complaints. A sign containing the contact details shall be located at each site specific work activity;

- (b) The NZTA shall maintain a record of all complaints made to this number, email or any site office, including the full details of the complainant and the nature of the complaint;
- (c) Upon receiving a complaint, within 10 days of complaint receipt, a formal written response will be provided to the complainant and Auckland Council;
- (d) The NZTA shall undertake corrective action where necessary to resolve any problem identified. All action taken and relevant information shall be documented. For the avoidance of doubt, 'where necessary' refers to where the works are not being carried out in accordance with conditions of this designation;
- (e) Where issues and complaints about effects cannot be resolved through the CEMP complaints management process, a meeting shall be held between the NZTA, the complainant and the Auckland Council representative(s) to discuss the complaint and ways in which the issue may be resolved. If parties cannot agree on a resolution, an independent qualified mediator will be appointed, agreeable to all parties and at the shared cost of all parties, to undertake mediation of the dispute or concerns; and
- (f) All information collected in Conditions PI.4 (b), (c) and (d) shall be detailed in a Construction Compliance Report (including the means by which the complaint was addressed, whether resolution was reached and how the response was carried out) prepared by the NZTA. This Report shall be submitted to the Major Infrastructure Team Manager, Auckland Council on a quarterly basis commencing at the beginning of the works and for the entire duration of construction.

PI.5.

The NZTA shall establish Community Liaison Group(s) at least two months prior to construction commencing in each of the following key construction areas:

- (a) Te Atatu (including the SH16 Causeway)
- (b) Waterview (including works to St Lukes on SH16 and on the Waterview Estuary and Causeway Bridges)
- (c) Owairaka

and hold regular meetings (at least three monthly) throughout the construction period and up to 24 months following construction completion relevant to these areas (or less if the members of the Group agree), so that on-going monitoring information can continue to be disseminated.

The Community Liaison Group(s) shall be open to all interested parties within the Project area including, but not limited to the following groups:

- (a) Auckland Council and Auckland Transport;
- (b) Educational facilities within the Project area (including schools, kindergartens, childcare facilities and Unitec Institute of Technology);
- (c) Relevant community/ environmental groups (including but not limited to Friends of Oakley Creek, Star Mills Preservation Group, Cycle Action Auckland and representatives from those organisations identified in the Communications Plan (as required by Condition PI.2) and local residents;
- (d) Department of Conservation;
- (e) Local Boards;
- (f) Iwi groups with Mana Whenua;
- (g) Public transport providers; and
- (h) Housing New Zealand Corporation.

Advice note: The purpose of the Community Liaison Group(s) is to provide a regular forum through which information about the Project can be provided to the community, and an opportunity for concerns or issues to be raised.



PI.6.

The Community Liaison Group(s) shall be provided opportunities to review and comment on the following (amongst other things):

- (a) The Outline Plan of Works detailing designs for the northern and southern ventilation buildings and stacks (the outcomes of this consultation will be reported in accordance with the processes required in Conditions DC.8(n) and DC.9(k) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
  - (b) The Open Space Restoration Plans (as required by Condition OS.3 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
  - (c) Finalisation and amendment to Urban Design and Landscape Plans (UDL Plans) (as required by Condition LV.1 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
  - (d) The Oakley Inlet Heritage Plan (as required by Conditions OS.5(b)(i) and ARCH.6 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
  - (e) The detail of the Oakley Creek restoration (as required by Condition STW.20 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
  - (f) Publicly available results of environmental monitoring as required by the designation and/or these Consents  
(e.g. air quality monitoring); and
  - (g) The finalisation of the STEM assessment required by CEMP.6(o) and a schedule of trees that are required to be removed for consideration of timber use in heritage projects (as required by Condition SO.7 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent).
- Advice Note: Attention is drawn to the Vegetation conditions concerning identification and protection of Significant Vegetation and Valued Vegetation.
- (h) Detailed design features of the Te Atatu underpass (e.g. lighting and architectural treatment).

### **Operational Traffic**

### **Conditions Tunnel Traffic**

#### **Operation Plan**

OT.2

The NZTA shall prepare a Tunnel Traffic Operation Plan in consultation with the Auckland Transport and Auckland Council. The Plan shall include, but not be limited to:

- (a) Procedures for tunnel operational safety, including fire-life safety;
- (b) Procedures for maintenance requirements.
- (c) Procedures for managing traffic to avoid or minimise potential congestion within the tunnel, particularly during peak periods.
- (d) Procedures for the management of traffic during incidents.
- (e) Procedures for the operation of tunnel fans and the management of portal emissions.
- (f) Confirmation that all equipment has been tested and operates in accordance with requirements and specifications.

The Tunnel Traffic Operation Plan shall be completed and provided to Auckland Transport and to the Major Infrastructure Team Manager, Auckland Council (in respect of Condition OT.2(e)), prior to operational use of the tunnelled section of SH20.

Advice note: The operation and maintenance of the air quality monitoring equipment inside the tunnel shall follow manufacturer's recommendations.

## **Noise and Vibration Conditions – Construction**

### **CNV.1**

The NZTA shall finalise and implement through the CEMP, a Construction Noise and Vibration Management Plan (CNVMP) throughout the entire construction period of the Project.

The CNVMP shall describe the measures adopted to meet:

- (a) the noise criteria set out in Conditions CNV.2 and 3 below;
- (b) the vibration criteria set out in Condition CNV.4 below; or
- (c) where (a) or (b) cannot be met, the process that will be followed to appropriately mitigate noise and vibration effects including methods that may be applied outside the designation.

The CNVMP shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to construction activities being undertaken for review and certification that the CNVMP, as a minimum, addresses the following:

- (i) Construction noise and vibration criteria (Conditions CNV.2, CNV.3, and CNV.4);
- (ii) Hours of operation, including times and days when noisy and/or vibration inducing construction activities would occur;
- (iii) Machinery and equipment to be used;
- (iv) Vibration testing of equipment to confirm safe distances to buildings prior to construction;
- (v) Preparation of building condition surveys of critical dwellings prior to, during and after completion of construction works;
- (vi) Roles and responsibilities of personnel on site;
- (vii) Construction operator training procedures;
- (viii) Methods for monitoring and reporting on construction noise and vibration;
- (ix) A hierarchy of mitigation options that will be assessed for the Project noise mitigation, including alternative strategies where full compliance with the relevant noise and/or vibration criteria cannot be achieved;
- (x) Management schedules containing site specific information;
- (xi) Measures for liaising with and notifying potentially affected receivers of proposed construction activities and the potential for noise and vibration effects, specifically:
  - PPFs located within a horizontal distance of 35 metres of underground excavation works, along the tunnel alignment shall receive prior notification not greater than 7 days (and not less than 24 hours) prior to the commencement of works.
  - Methods for ensuring residents affected by night works (within 100m of the construction site night works, as defined on the maps (refer Schedule A, Row 35)) are notified of such works (i.e. any works during the hours of 20:00 to 06:30) at least 5 days prior to the commencement of any such work.
  - The maps showing PPFs to be notified of night works (refer Schedule A, Row 35), shall be reviewed and included within the CNVMP.
- (xii) Methods for receiving and handling complaints about construction noise and vibration;
- (xiii) Measures for preventing the occurrence of rogue fly rock, including management of charge weights and face loading procedures, stemming of charge holes and profiling of the face to maintain minimum burden (face cover);
- (xiv) Investigations on the practicability of implementing permanent noise mitigation works for construction mitigation (as per Condition CNV.7);
- (xv) Investigations of the practicability of implementing Building Modification mitigation, as required in accordance with Conditions ON.6 and ON.11 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, prior to commencement of construction within 100m of the relevant PPFs (including those on the Unitec site); and

(xvi) The process for developing Site Specific Noise Management Plans (SSNMP), in accordance with the SSNMP Flow Chart (refer Schedule A, Row 36), including templates and a certification process for the Major Infrastructure Team Manager, Auckland Council (in accordance with Condition CNV.13) to confirm the process of SSNMP review of noise mitigation options where, the modelled/predicted levels or subsequent actual levels exceed the criteria in Conditions CNV.2 and/or CNV.4.

**CNV.2**

Except where certified by the Council through the SSNMP (in accordance with Condition CNV.13), construction noise (excluding noise from blasting Monday to Saturday inclusive) shall be measured and assessed in accordance with NZS 6803:1999 "Acoustics - Construction Noise" and shall comply with the following criteria: Note: In Condition CNV.2 (T) means a duration between 15 minutes and 60 minutes, in accordance with NZS6803:1999.

**(a) Project Construction Noise Criteria: Residential Receivers**

Time of Week	Time period	Project Construction Noise Criteria (Long Term Construction) dB		
		Sectors 1-7	Sectors 8-9	All Sectors
		LAeq(T)	LAeq(T)	LAeq(T)
Monday- Saturday	0630-0730	60	45	75
	0730-1800	70	70	85
	1800-2000	65	65	80
	2000-0630	60	45	75
Sundays and Public Holidays	0630-0730	45	45	75
	0730-1800	60	45	85
	1800-2000	45	45	75
	2000-0630	45	45	75

**(b) Project Construction Noise Criteria: Commercial and Industrial Receivers**

Time Period	Project Construction Noise Criteria (Long Term Construction) dB
	LAeq(T)
0730-1800	70
1800-0730	75

**(c) Project Construction Noise Criteria: Internal Structure-borne Noise from tunnelling for Residential Receivers**

Time Period	Project Construction Noise Criteria Inside	
0600-2200	35 dB LAeq(T)	All habitable rooms
2200-0600	30 dB LAeq(T)	Bedrooms

**(d) Project Construction Noise Criteria: Internal noise for Licensed Educational Facilities**

Time Period (School Days)	Project Construction Noise Criteria Inside	
Teaching Hours	45 dB LAeq(T)	Classrooms, library, offices, teaching, laboratories, manual arts, workshops
Teaching Hours	40 dB LAeq(T)	School hall, lecture theatres

Note: In Condition CNV2(d) "Teaching hours" means: Primary schools and Kindergartens: 9am to 3pm Unitec: 8am to 9pm

**CNV.3**

Project Construction Noise Criteria: Airblast (excluding Sundays)

Category	Type of Blasting Operations	Peak Sound Pressure Level (LZpeak dB)
<b>Human Comfort Limits</b>		
Sensitive Site	Operations lasting longer than 12 months or more than 20 Blasts	115 dB for 95% blasts per year. 120 dB maximum unless agreement is reached with occupier that a higher limit may apply
Sensitive Site	Operations lasting less than 12 months or less than 20 Blasts	120 dB for 95% blasts per year. 125 dB maximum unless agreement is reached with occupier that a higher limit may apply
Occupied non-sensitive sites such as factories and commercial premises	All blasting	125 dB maximum unless agreement is reached with the occupier that a higher limit may apply. For sites containing equipment sensitive to vibration, the vibration should be kept below manufacturer's specifications of levels that can be shown to adversely affect the equipment operation
<b>Damage Control Limits</b>		
Structures that include masonry, plaster and plasterboard in their construction and also unoccupied structures of reinforced concrete or steel construction	All blasting	133 dB unless agreement is reached with owner that a higher limit may apply.
Service structures such as pipelines, powerlines and cables located above ground	All blasting	Limit to be determined by structural design methodology

CNV.4

Except where certified by the Council through the SSNMP (in accordance with Condition CNV.13), construction vibration received by any building shall be measured and assessed in accordance with the German Standard DIN 4150-3:1999 "Structural vibration – Part 3: Effects of vibration on structures", and shall comply with the criteria set out as follows:

Type of Structure	Short-term vibration			Long-term vibration	
	PPV at the foundation at a frequency of			PPV at horizontal plane of highest floor (mm/s)	PPV at horizontal plane of highest floor (mm/s)
	1-10 Hz (mm/s)	1-50 Hz (mm/s)	50-100 Hz (mm/s)		
Commercial/Industrial	20	20-40	40-50	40	10
Residential/School	5	5-15	15-20	15	5
Historic or Sensitive structures	3	3-8	8-10	8	2.5

CNV.5

Notwithstanding Condition CNV.3 above,

(a) Blasting activities shall be conducted so that 95% of the blasts undertaken (measured over any

twenty blasts on the foundation of any building outside the designation boundary) shall produce peak particle velocities not exceeding 5mm/s and 100% of the blasts undertaken shall produce peak particle velocities not exceeding 10mm/s irrespective of the frequency of the blast measured.

(b) Construction activities, which occur within Sectors 1, 6, 8 and 9 which are identified in Technical Report no.G.19 Assessment of Vibration Effects, as being at a 'High Risk' of exceeding the DIN 4150-3:1999 criteria (being excavation, piling, compaction and drilling) shall be conducted so that 95% of the activities undertaken (measured over at least 20 representative samples of the relevant activity on any residential building) shall produce peak particle velocities not exceeding the relevant criterion in DIN 4150-3:1999 and 100% of the activities undertaken shall not exceed 10mm/s irrespective of the frequency of the activity measured.

#### CNV.6

Blasting shall be undertaken between 09:00h and 17:00h, Monday to Saturday, except that blasting may be undertaken between 09:00h and 17:00h on Sundays where:

- (a) The blasting is at least 50m inside the Sector 8 tunnel;
- (b) The blasting produces peak particle velocities at any residential building not exceeding 0.5mm/s; and
- (c) The Project construction noise criteria set out in Condition CNV.2 for Sundays are complied with.

#### CNV.7

Where practicable, permanent (traffic) noise barriers, required in any Sector as Detailed Mitigation Options for operational noise following completion of the Project (in accordance with Conditions ON.3 to ON.5 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent) shall be erected prior to noise generating construction works commencing. Where this is not practicable, temporary noise mitigation measures shall be implemented in accordance with the CNVMP, prior to noise generating construction works commencing.

#### CNV.8

Pile driving or pile removal shall not be undertaken at night (i.e. during the hours of 20:00 – 06:30).

#### CNV.9

The concrete batch plants, rock crushing plants and the loading bays and conveyors for such plants shall be fully enclosed.

#### CNV.10

If noise and vibration monitoring of the tunnelling works for the Project (in accordance with Condition CNV.1), indicates that the noise or vibration criteria of Conditions CNV.2(c) or CNV.4 will potentially be exceeded and that temporary relocation will be offered for residents at 1510 Great North Road, then relocation (and temporary transportation) shall be arranged with the leaseholder at 1510 Great North Road for tenants (with at least 1 months' notice to the leaseholder prior to relocation). Any accepted offer of relocation is to be in place prior to tunnelling works within 50m of the building at 1510 Great North Road.

#### CNV.11

For all other properties, if noise and vibration monitoring of the tunnelling works for the Project (in accordance with Condition CNV.1), indicates that the noise or vibration criteria of Conditions CNV.2 or CNV.4 will potentially be exceeded, then the process set out in the CNVMP will be undertaken including Site Specific Noise Management Plans. Where relocation for residents is proposed, notification of such relocation with residents and property owners will be undertaken in accordance with the processes contained in the CNVMP.

#### CNV.12

Any relocation required by CNV.10 will not be undertaken in the period between 10 working days prior to any Unitec examinations and the completion of those examinations.

#### CNV.13

SSNMPs (required by Condition CNV.1(xvi)) above, shall be submitted to Major Infrastructure Team Manager, Auckland Council for review and certification at least 7 working days prior to the proposed works commencing. A decision will be provided by the Council within 5 working days of receipt of the SSNMP.

Works will not commence until certification is received from the Major Infrastructure Team Manager, Auckland Council. The Council may, at its discretion, waive the requirement for SSNMPs to be submitted to the Council where an SSNMP is required.

If monitoring shows that levels specified in a SSNMP are being exceeded, work generating the exceedence will stop and not recommence until further mitigation is implemented in accordance with an amended SSNMP certified by Council.

Advice note: It is accepted that the criteria of CNV.2 and CNV.4 may not be met at all times, but that the NZTA will take all practical steps to achieve compliance, taking into account the hierarchy of mitigation options outlined in Condition CNV.1 (ix).

### **Vibration Conditions - Operation**

#### OV.1

Existing ambient vibration levels shall be measured at critical locations nominated by the NZTA, and submitted to the Major Infrastructure Team Manager, Auckland Council for approval prior to the commencement of works. These baseline measurements will establish pre-Project vibration levels for comparison with future vibration levels.

### **Operational Air Quality Conditions**

#### OA.2

Prior to the tunnels becoming operational, the NZTA shall establish two ambient air quality monitoring stations and one portal air quality monitoring station. The location and types of these monitoring stations shall be selected by the NZTA in consultation with the Auckland Council and Peer Review Panel (Condition OA.7 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent), providing that one ambient monitoring station will be located within the Waterview Primary School (subject to agreement by the School).

Ambient air quality shall be monitored continuously in real time, to monitor potential effects associated with the operation of the ventilation system from the tunnels. Ambient monitoring shall include fine particulates (PM10 and PM2.5) and nitrogen dioxide. Portal monitoring shall include nitrogen dioxide. Results shall be compared with the relevant National Environmental Standards for air quality and Auckland Regional air quality targets (as identified in Chapter 4 of the Auckland Regional Plan: Air, Land and Water, 2010). Monitoring shall be undertaken at each site until the Peer Review Panel recommends that monitoring is no longer necessary. The locations, operation and maintenance schedules of the continuous monitors shall, as far as practicable, comply with the requirements of AS/NZ 3580.1.1: 2007 Method for Sampling and Analysis of Ambient Air – Guide to Siting Air Monitoring Equipment, and with methods specified in the National Environment Standards.

### **Ground Settlement Conditions**

#### S.1

The NZTA shall finalise, and implement through the CEMP, the Settlement Effects Management Plan (SEMP) lodged with the application prior to construction activities being undertaken. Prior to

construction (following detailed investigation and design), the total estimated settlements and building damage categories shall be confirmed using the methodology in Technical Report G.13 Assessment of Ground Settlement Effects and the SEMP shall be updated accordingly.

In the event that settlement predictions are greater (than those allowed for in Figure E.14 (refer Schedule A, Row 26)) or building damage categories increase in ranking or buildings affected from those identified in Figures G1-G4 (refer Schedule A, Row 27), mitigation measures shall be introduced as part of the detailed design and construction process to avoid any adverse effects greater than predicted by the application lodged in August 2010.

### **Settlement Monitoring**

#### **S.6**

The NZTA shall collate the results of the settlement monitoring (undertaken pursuant to Conditions S.2 – S.5 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent) and prepare a report that shall be made available to the Auckland Council. A settlement monitoring report shall be prepared prior to the commencement of construction, and then at monthly intervals throughout the construction period. Following the completion of construction, a settlement monitoring report shall be prepared following each round of settlement monitoring undertaken (i.e. monthly and then 6-monthly when monitoring is reduced pursuant to Condition S.5 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent). The settlement reports shall highlight any alert or alarm level exceedances and provide a full interpretation and/or explanation as to why these levels are exceeded, the likely effects and detail any remedial or mitigation measures initiated as a result of these trigger exceedances.

### **Differential Settlement**

#### **S.17**

Pairs of settlement markers shall be established on each side of the cross sections identified on Figure E.14 to monitor differential movements. The markers in each pair shall be no more than 20m apart, and each pair shall be within 100m of the centreline of the closest tunnel. Monitoring installed in accordance with Condition S.11 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent can be utilised for this purpose. Each pair of markers shall have Alert and Alarm values set based on the calculated differential settlements at that location and consistent with the relevant calculated Building Damage Category (Figures G1-G4, (Refer Schedule A Row 27)), Alert and Alarm levels shall be as defined in Condition S.2. of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent. Monitoring frequency shall be as defined for Framework Markers in Condition S.3 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

### **Contaminated Land and Contaminated Discharges Conditions**

#### **CL.1**

The NZTA shall finalise and implement through the CEMP, the Contaminated Soil Management Plan (CSMP) submitted with this application prior to commencement of any site works. The CSMP shall include, but not be limited to:

- (a) Measures to be undertaken in the handling, storage and disposal of all material excavated during the construction works;
- (b) Soil validation testing and groundwater testing;
- (c) Soil verification testing to be undertaken to determine the nature of the excavated spoil and potential reuse or disposal options;
- (d) Measures to be undertaken in the event of unexpected contamination being identified during

construction activities; and

(e) Measures to be undertaken for the handling of asbestos containing material.

#### CL.2

Prior to the main construction works commencing, the baseline quality of soils and groundwater within Sector 5 (the southern bank of Oakley Creek coincident with the location of the former tannery) and Sector 7 (particularly in relation to works in the vicinity of Great North Road) shall be investigated and established. The investigations shall be carried out in accordance with appropriate Ministry for the Environment and Auckland Council guidelines.

The findings of the soil and groundwater investigations shall be used to determine the specific constructions methods during work in this area to manage any likely environmental effects in relation to the Project.

#### CL.3

Prior to the main construction works commencing, soils and fill materials within Alan Wood Reserve (Sector 9) shall be further classified so as to determine the distribution and extent of cleanfill, managed fill and contaminated/hazardous fill materials.

#### CL.4

All excavated soil shall be tested by the NZTA in general accordance with the CSMP, prior to either reuse on site or disposal off site. The testing regime shall be submitted for approval by the Major Infrastructure Team Manager, Auckland Council.

#### CL.5

The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council within 5 working days of identification of any contamination at the site which was not identified in the reports submitted in support of this application, including contaminated soil, surface water or groundwater. The removal of any excavated contaminated soil shall be in accordance with the CSMP. The removal and disposal of any contaminated groundwater/ surface water from the site shall be in accordance with the GWMP and the ESCP.

#### CL.6

The removal of any excavated contaminated soil shall be in accordance with the CSMP. The removal and disposal of any contaminated groundwater/ surface water from the site shall be in accordance with the GWMP and the ESCP.

#### CL.7

The NZTA shall engage a suitably qualified contaminated land specialist to supervise the works, excavation and removal of any contaminated soils from the site and undertake sampling (if required) of imported material.

#### CL.8

All testing / sampling techniques shall be carried out in accordance with the Ministry for the Environment Contaminated Land Management Guidelines or other equivalent standards approved in writing by the Major Infrastructure Team Manager, Auckland Council.

#### CL.9

During and following the tunnel construction works beneath Sector 8, groundwater quality monitoring shall be carried out at locations within and down hydraulic gradient of Phyllis Street Landfill. Monitoring shall be undertaken on at least a monthly basis, and for a period up to 12



months following completion of the tunnel construction works. The monitoring programme shall be submitted for approval by the Auckland Council as landowner.

CL.10

Prior to, during and following tunnel construction works beneath Phyllis Street Landfill, monitoring for landfill gas shall be carried out from existing monitoring boreholes within the landfill. Monitoring shall be undertaken on at least a monthly basis, for a period of no less than 6 months prior to, and up to 12 months following completion of the tunnelling works. The monitoring programme shall be submitted for approval by the Auckland Council as landowner.

CL.11

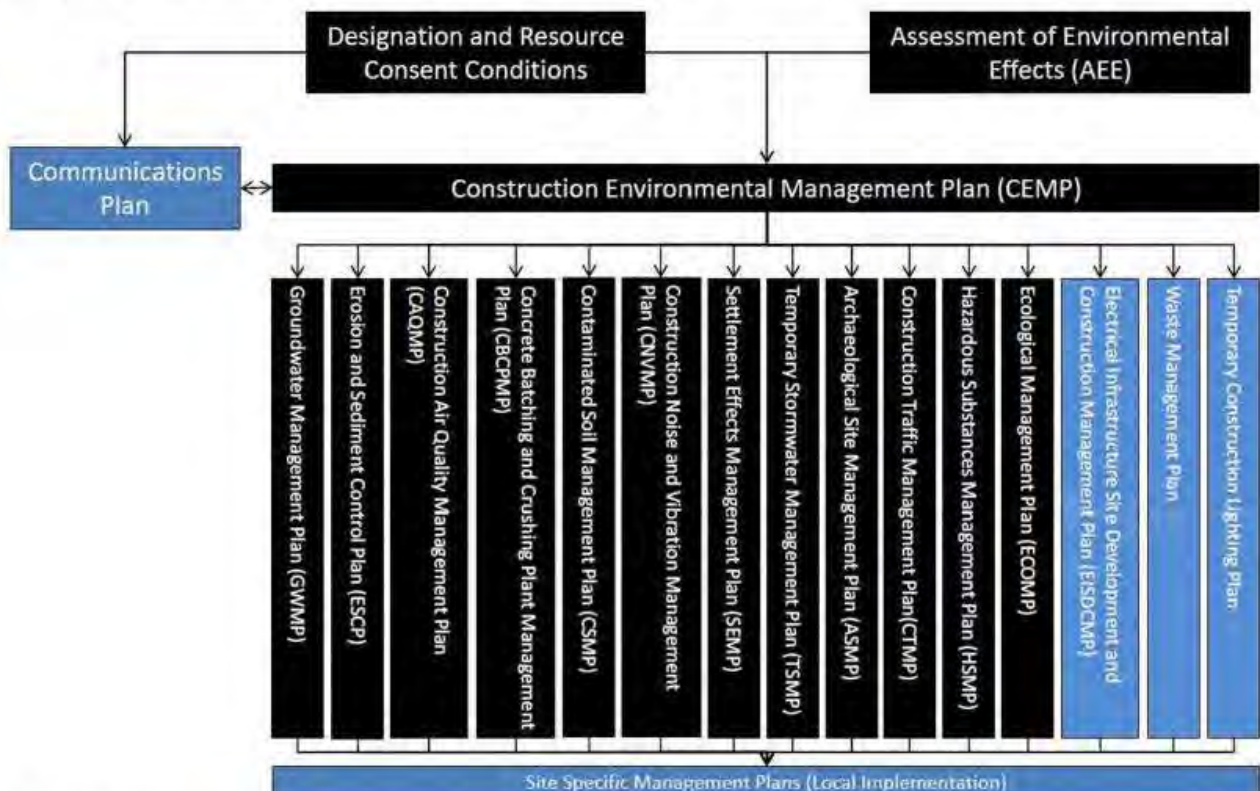
The NZTA shall submit to the Major Infrastructure Team Manager, Auckland Council, a Site Closure Report no later than three (3) months after the completion of the earthworks. The Report shall be prepared in accordance with the Ministry for the Environment’s Contaminated Land Management Guidelines and include:

- (a) Results of any soil reuse and imported material testing carried out to ensure compliance with the CSMP;
- (b) Volumes of soil removed from site;
- (c) Copies of the waste disposal receipts; and
- (d) Reports of any non-compliance with the CSMP procedures or complaints received while undertaking the site works.

**Attachments**

**Figure CEMP.A - Construction Environmental Management Framework**

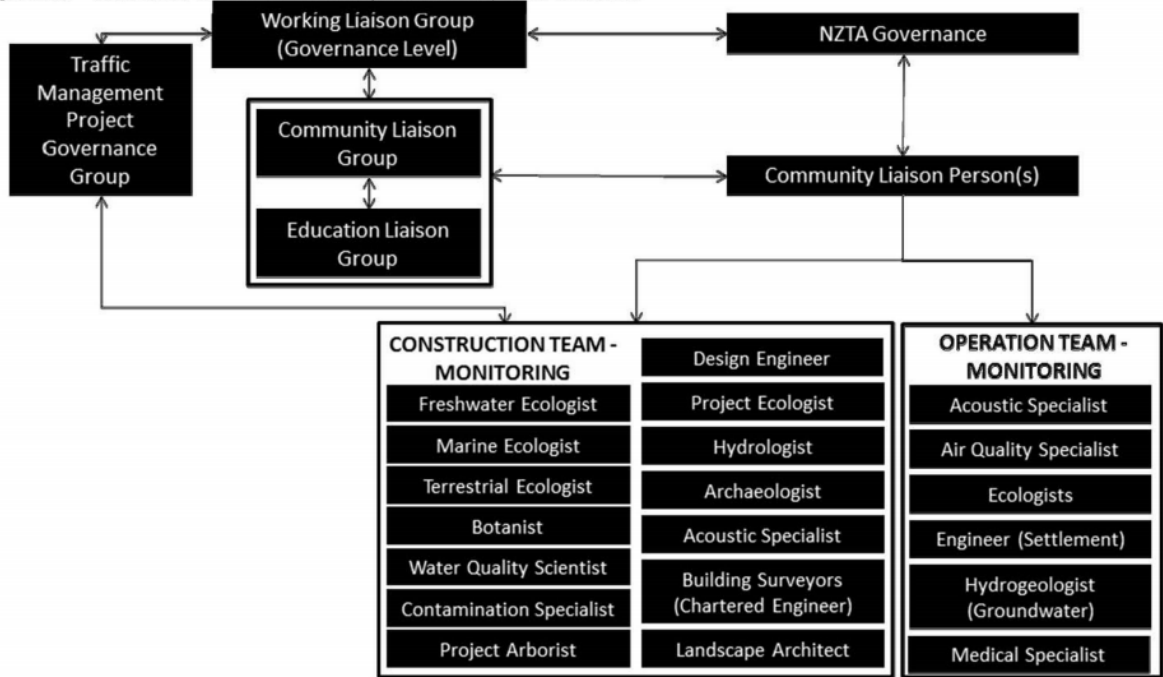
Figure CEMP.A - Construction Environmental Management Framework



- Have been prepared and lodged with application
- To be prepared

**Figure PI.A - Structure of Communication Groups**

Figure PI.A - Structure of Communication Groups Identified by these Conditions



## 6730 State Highway 20 - Waterview Connection Mt Roskill

Designation Number	6730
Requiring Authority	New Zealand Transport Agency
Location	State Highway 20 from Maioro Street to Alan Wood Reserve, Mt Roskill
Rollover Designation	Yes
Legacy Reference	Designation F05-11, Auckland Council District Plan (Isthmus Section) 1999
Lapse Date	June 2021

### Purpose

For new designation, SH20, southern tunnel portal to Maioro Street interchange – NOR7. New surface designation for construction, operation and maintenance of the SH20 surface component from Maioro Street Interchange to the proposed tunnels; includes land for structures associated with tunnel operation and works for mitigation and local road access and ramps; land taken from reserves and from land owned by the Crown for rail and residential purposes, generally in Sector 9. Works for construction, operation and maintenance of SH20 described above and including stormwater treatment, wetland ponds, ancillary safety and operational services, ventilation building and stack, temporary works, vegetation removal and restoration works, cycleway extension, landscaping and planting, installation and maintenance of grout curtain for groundwater management.

### Conditions

For a complete set of conditions, refer to the Waterview Connection Proposal Board of Inquiry decision titled “Final Report and Decision of the Board of Inquiry into the New Zealand Transport Agency Waterview Connection Proposal - Volume 2” dated June 2011.

#### General Designation Conditions

DC.1

Except as modified by the conditions below, the works shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency (NZTA being the Requiring Authority), the Notice(s) of Requirement and the supporting documents, and supplementary information provided in evidence. This information is summarised as follows: (a) Waterview Connection Project. Assessment of Environmental Effects Report (dated August 2010). Parts A-E; (b) Waterview Connection Project. Assessment of Environmental Effects Report (dated August 2010). Part F: Plans and Drawings, except as updated through the hearing (Refer Schedule A for current plan and drawing references); and (c) Waterview Connection Project. Assessment of Environmental Effects Report (dated August 2010). Part G: Technical Reports:

- (i) Technical Report G.1 Assessment of Air Quality Effects
- (ii) Technical Report G.2 Assessment of Archaeological Effects
- (iii) Technical Report G.3 Assessment of Avian Ecological Effects
- (iv) Technical Report G.4 Assessment of Coastal Processes
- (v) Technical Report G.5 Assessment of Construction Noise Effects
- (vi) Technical Report G.6 Assessment of Freshwater Ecological Effects
- (vii) Technical Report G.7 Assessment of Groundwater Effects
- (viii) Technical Report G.8 Assessment of Herpetofauna Ecological Effects
- (ix) Technical Report G.9 Assessment of Land and Groundwater Contamination
- (x) Technical Report G.10 Assessment of Lighting Effects
- (xi) Technical Report G.11 Assessment of Marine Ecological Effects
- (xii) Technical Report G.12 Assessment of Operational Noise Effects
- (xiii) Technical Report G.13 Assessment of Ground Settlement Effects
- (xiv) Technical Report G.14 Assessment of Social Effects

- (xv) Technical Report G.15 Assessment of Stormwater and Streamworks Effects
- (xvi) Technical Report G.16 Assessment of Temporary Traffic Effects
- (xvii) Technical Report G.17 Assessment of Terrestrial Vegetation Effects
- (xviii) Technical Report G.18 Assessment of Transport Effects (xix) Technical Report G.19 Assessment of Vibration Effects
- (xx) Technical Report G.20 Assessment of Visual and Landscape Effects (xxi) Technical Report G.21 Construction Environmental Management Plan (CEMP)
- (xxii) Technical Report G.22 Erosion and Sediment Control Plan (ESCP)
- (xxiii) Technical Report G.23 Coastal Works
- (xxiv) Technical Report G.24 Geotechnical Interpretive Report (xxv) Technical Report G.25 Traffic Modelling Report (xxvi) Technical Report G.26 Operational Model Validation Report
- (xxvii) Technical Report G.27 Stormwater Design Philosophy Statement
- (xxviii) Technical Report G.28 Geotechnical Factual Report – 500 Series
- (xxix) Technical Report G.29 Geotechnical Factual Report – 700 Series
- (xxx) Technical Report G.30 Assessment of Associated Sediment and Contaminant Loads
- (xxxi) Technical Report G.31: Technical Addendum Report (September 2010)
- (d) PT & Active Mode Transport Routes Existing and Proposed (Refer Schedule A, Row 22).
- (e) Waterview Connection Project, Evidence and Supplementary Information provided to the Board of Inquiry:
  - (i) Evidence in Chief (Numbers 1-37)
  - (ii) Rebuttal Evidence (Numbers 1-33)
  - (iii) Supplementary Information (Numbers 1-8)

#### DC.1A

Within 3 months of the designations being confirmed for the Project (or at least 1 month prior to any Auckland Council approvals or certifications required by these Conditions, whichever is the earlier), the NZTA shall update and finalise to the satisfaction of the Major Infrastructure Team Manager, Auckland Council all drawings and Plans cited in Schedule A, and provide a full set of the information and documentation referred to in Condition DC.1 to the Major Infrastructure Team Manager Auckland Council. At the same time the NZTA shall prepare to the satisfaction of the Major Infrastructure Team Leader, Auckland Council, a document for each designation which sets out the designation and have attached to it in text format a comprehensive set of the conditions imposed by the Board of Inquiry in its Final Decision as summarised in Schedule B, inclusive of any standard conditions and advice notes. In particular (but not limited to), the following Plans will need to be amended in light of these Final Conditions:

- (a) F.2 Operational Scheme Plans (refer Schedule A, Row 3) require amendment detailing the amended location of the ventilation stacks and southern ventilation buildings;
- (b) F.5 Construction Scheme Plans (refer Schedule A, Row 4) require amendment to detail changes to the construction footprint for the amended location of the ventilation stacks and southern ventilation buildings and reconfiguration of Construction Yard 1);
- (c) F.6 Construction Yard Plans 101 and 107 (refer Schedule A, Row 7), detailing amendments to the Construction Yard 1 in light of the reconfiguration of this Yard and for Construction Yard 7 in light of the relocation of the northern ventilation stack (refer Schedule A, Row 34);
- (d) F.8 Plans of Structures and Architectural Features (refer Schedule A, Row 9), detailing the amended location of the northern ventilation stack and the design and location of the southern ventilation building and stack;
- (e) The CNVMP (including flow diagram and the supplementary evidence produced by Ms Wilkening) (refer Schedule A, Rows 36, 37 and 39);
- (f) The areas of the Open Space Restoration Plans (Schedule A, Row 30) to:
  - (i) Extend these areas in geographic extent to provide for the works identified in the Management Plan notations identified in the OS Conditions (in particular Condition OS.5 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent and Condition OS.6) (e.g. these areas will (as relevant) include Eric Armishaw Park, Howlett Reserve and Waterview Esplanade Reserve); and
  - (ii) Exclude the operational area of designation required for the northern ventilation stack (as identified through

the OPW process (refer Condition DC.8 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent); and

(g) Schedule A, Row 28 the Plan detailing proposed open space impacts and replacements needs to be updated to recolour the two land parcels on Hendon Avenue (which are excluded from the replacement calculations) to 'brown' to confirm they are part of the operational impact and will not be returned as open space.

#### DC.2

The period within which this designation shall lapse if not given effect to shall be June 2021, being ten years from the date on which it was confirmed in accordance with Section 184(1) of the Resource Management Act 1991.

#### DC.3

The NZTA shall update and finalise the relevant Construction and Operational Management Plans required under these conditions to ensure compliance with the designation conditions imposed by the Board of Inquiry. The relevant Management Plans shall be submitted to the Major Infrastructure Team Manager, Auckland Council within the timeframes specified in the following conditions. No works shall be undertaken until the relevant management plans have been finalised and certified or approved in accordance with the relevant conditions.

#### DC.4

Any Management Plans submitted to the Major Infrastructure Team Manager, Auckland Council for approval or certification may be submitted in stages to reflect any proposed staging of the physical works. Plans submitted shall clearly show the integration with adjacent stages and interrelated activities.

#### DC.5

In the event of any dispute, disagreement or inaction arising as to any Auckland Council Manager certification/ approvals required by the designation conditions, or as to the implementation of or monitoring required by the conditions, matters shall be referred in the first instance to the NZTA Regional State Highway Manager and to the Resource Consents Manager, Auckland Council to determine a process of resolution. If a resolution cannot be agreed, then the matter may be referred to an independent appropriately qualified expert, agreeable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree. The independent appropriately qualified expert shall be appointed within 10 working days of the NZTA or Auckland Council giving notice of their intention to seek expert determination. The expert shall, as soon as possible, issue his or her decision on the matter. In making the decision, the expert shall be entitled to seek further information and hear from the parties as he or she sees fit.

Advice note: The dispute resolution process provided for in this condition does not prejudice any party's right to take enforcement action in relation to the implementation of the designation conditions. However, the dispute resolution process will be applied before any formal enforcement action is taken by the Council, except in urgent situations.

#### DC.6

Except for Conditions DC.7, DC.8 and DC.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, the NZTA shall be exempt from providing an Outline Plan of Works for the Project, as provided for in Section 176A (2)(a) and (b) of the RMA.

Advice note: The Construction and Operational Management Plans, together with the provision of detailed drawings required by Condition DC.1(b) are considered sufficient detail in all aspects of the Project, with the exception of proposed works for the northern and southern ventilation buildings and stacks where further details are required .

#### **Outline Plan of works**

#### DC.7

An Outline Plan of Works shall be prepared for the Northern and Southern Ventilation Buildings and Stacks (OPW1 and OPW2) (in the general location as shown in the Operational Scheme Plans F.2 (Schedule A, Row

3) as shown on Figures DC.A and DC.B) in accordance with Section 176A of the RMA and Conditions DC.8 and DC.9 below and submitted to the Major Infrastructure Team Manager, Auckland Council.

For the purposes of Condition DC.8 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent and Condition DC.9, the following definitions shall apply:

- (a) Control Building – A building or buildings associated with the staffed control of the tunnel operating systems (including CCTV systems or surveillance). This precludes the inclusion or attached of any equipment unrelated to the structure of operation of the control building.
- (b) Ventilation Building – A building or buildings associated with the operation and maintenance of the tunnels and associated ventilation system (including power and emergency water supply). This precludes the inclusion or attachment of any equipment unrelated to the structure or operation of the ventilation building.
- (c) Ventilation Stack (stack) - A structure which channels air emissions to a height in the atmosphere which is suitable to disperse the emissions and result in an acceptable ambient air quality. This precludes the inclusion or attachment of any equipment unrelated to the structure or operation of the ventilation stack.

#### DC.9

Outline Plan of Works for the Southern Ventilation Building, Control Building and Stack (OPW2) (Refer Figure DC.B). OPW2 shall be prepared in accordance with Section 176A of the RMA. The final form of the Southern Ventilation Building, Control Building and Ventilation Stack shall be in accordance with the design principles of Section B of the Urban Landscape and Design Framework (ULDF June 2010) (refer Schedule A, Row 38) and the following requirements:

- (a) Retention of the same building / structural components underground as per the revised Drawing Set F.8, specifically Drawings of Vent South Option 003 / 003A (refer Schedule A, Row 9);
- (b) Creation of an above ground building arrangement that maximises the separation of the buildings from the houses on Hendon Avenue to the east and the pedestrian / cycle way to the west;
- (c) The location of facilities, accessways, parking and manoeuvring areas to be in general accordance with the revised Plans of Drawing Set F.8, specifically Drawings of Vent South Option 003 / 003A (refer Schedule A, Row 9), providing for a shift of between 70 – 80m to the south east from the position shown in the application documents, the final decision within that 10m range to be taken by the NZTA, to the approval of Major Infrastructure Team Manager, Auckland Council, after consultation with the Community Liaison Group for Owairaka established under Condition PI.5;
- (d) Minimisation of the height of the ventilation building, control building and ventilation stack to limit their visual intrusion/ incursion relative to neighbouring residential properties – other than to enhance the visual aesthetic and cohesion of these key elements;
- (e) Development of an architectural profile, detailing and material palette that is sufficiently varied to avoid the building and vent imparting a monolithic character;
- (f) Employment of an architectural profile, detailing and material palette that references the local landscape/ geology/ tectonic character of the locality, and which is visually/ aesthetically 'grounded' in the remaining open space of Alan Wood Reserve and avoids an industrial character;
- (g) Treatment of the ventilation buildings and ventilation stack as objects of urban sculpture that are integrated with one another;
- (h) Use of the building materials on the ventilation buildings and stack which are sufficiently robust, varied/ modulated, and treated that they remain adverse to graffiti and vandalism;
- (i) Maximisation of the quantum of limbed-up large scale specimen trees (to promote visibility and surveillance (in accordance with CPTED principles)) in the vicinity of the ventilation buildings, related structures and vehicle movement/ parking areas, so as to reduce the apparent scale of the buildings when viewed from residential properties near Hendon Avenue and Methuen Road;
- (j) Documentation of consultation with the Owairaka Community Liaison Group (as established by Condition PI.5) and the Manager, Urban Design Auckland Council and the views and concerns expressed by this consultation;
- (k) Confirmation that the building height (maximum of 7.5m) and above ground area is no greater than the Concept Plan drawings in the updated plan set F.8, specifically Drawings of Vent South Option 003 / 003A

(refer Schedule A, Row 9);

(l) The site configuration should maximise the use of CPTED principles for territorial reinforcements to achieve site security, minimising the necessity for additional fencing;

(m) If parking areas are secured, they should where possible directly abut the buildings. Any fencing should be kept to a minimum;

(n) Provision of lighting integrated with the façade design to illuminate the ventilation building, and as appropriate any shared pedestrian / cycle path within Alan Wood Reserve; and

(o) The ventilation stack will be at a height of 15m calculated from the post-construction ground level of the Alan Wood Reserve averaged at a distance of 10m from the exterior walls of the ventilation stack location.

#### DC.10

The NZTA shall give notice to the Manager Regional and Local Planning, Auckland Council in accordance with Section 182 and 181 respectively of the RMA for:

(a) Within six months of the State highway opening (being operational), removal of those parts of the designation that are not required for the long term operation, maintenance and mitigation of effects of the State highway. Note: this condition is specific to land no longer required for construction purposes once the Project is completed and includes the land of 6 Barrymore Road, refer Condition OS.17.

(b) The designation to be altered to remove those conditions no longer required for long term operation and maintenance of the Project.

#### DC.11

A number of conditions of the designation require works on land that is to be acquired by the NZTA to provide land for a rail corridor to replace existing rail land required for the Project ("replacement rail land"). Any conditions applying to the replacement rail land must be met by the NZTA up until (and if) construction of rail commences on that land. Once construction of rail commences on the replacement rail land, under a new or altered rail designation imposed through a publicly notified process, any conditions relating to the replacement rail land shall cease to have effect. *Advice note: The expectation is that the planning process authorising the construction of such rail will have imposed appropriate conditions to apply in respect of the rail corridor and any mitigation and interface with the Waterview Project.*

#### DC.12

Unless otherwise provided for by Condition RC.2 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, if any monitoring required to be undertaken by any party by the designation conditions indicates non-compliance with any designation condition, the NZTA must provide written notice to the Major Infrastructure Team Manager Auckland Council as soon as it becomes aware of same, stating the following:

(a) A description of the non-compliance; and

(b) The measures NZTA proposes for addressing the non-compliance, including any additional mitigation measures.

Subject to the Council's approval, the NZTA must implement the additional mitigation measures to address the non-compliance.

#### DC.13

Pursuant to Section 36(1)(d) of the RMA, the requiring authority is required to pay to Auckland Council any administrative charge for the carrying out by the local authority of its functions in relation to the administration, monitoring, and supervision of designation conditions.

#### DC.14

The servants of agents of Auckland Council shall be permitted to have access to relevant parts of the Project at all reasonable times for the purpose of carrying out inspections, investigations, tests, measurements and/or to take samples.

## **Construction Environment Management Plan Conditions**

### **CEMP.1**

Except where provided for in Condition CEMP.1A below of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, the NZTA shall update and finalise the draft Construction Environmental Management Plan (CEMP) including all the Management Plans which form part of the CEMP and are included as appendices, submitted with this application to ensure compliance with the consent and designation conditions imposed by the Board of Inquiry. The CEMP shall be provided to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to the commencement of works to certify compliance and consistency with the conditions. Construction shall not commence until certification is obtained.

Advice note: For clarity the CEMP will be updated and finalised in accordance with the conditions. Any amendments will be limited to reflecting the requirements of the conditions, specifying personnel, and completing the Environmental Risk Register. Advice note: Particular care must be taken with development and operation of Construction Yard 7. When the CEMP is being updated and finalised, consideration must be given to the contents of the draft SSCEMP prepared for Construction Yard 7 (Row 41, Schedule A) recognising changes required by inclusion of the ventilation stack in this yard.

### **CEMP.2**

The certification process of the CEMP (and its appendices) shall confirm that the CEMP gives effect to the relevant conditions, as well as those matters in CEMP.6, and that it includes details of:

- (a) Staff and contractors' responsibilities;
- (b) Training requirements for employees, sub-contractors and visitors;
- (c) Environmental incident and emergency management;
- (d) Communication and interface procedures (in accordance with the Communication Plan required under Condition PI.2);
- (e) Environmental complaints management (including the procedures required under Condition PI.4);
- (f) Compliance monitoring; (g) Reporting (including detail on the frequency of reporting to the Auckland Council);
- (h) Environmental auditing; and (i) Corrective action.

### **CEMP.3**

The management of key environmental effects associated with the construction phase of the Project is detailed within environmental management plans that are included in the CEMP as appendices. This suite of management plans as shown on Figure CEMP.A comprises:

- (a) Construction Noise and Vibration Management Plan (CNVMP);
- (b) Construction Air Quality Management Plan (CAQMP);
- (c) Erosion and Sediment Control Plan (ESCP);
- (d) Temporary Stormwater Management Plan (TSMP);
- (e) Ecological Management Plan (ECOMP);
- (f) Groundwater Management Plan (GWMP);
- (g) Settlement Effects Management Plan (SEMP);
- (h) Contaminated Soils Management Plan (CSMP);
- (i) Hazardous Substances Management Plan (HSMP);
- (j) Archaeological Site Management Plan (ASMP);
- (k) Construction Traffic Management Plan (CTMP);
- (l) Concrete Batching and Crushing Plant Management Plan (CBCPMP);
- (m) Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP) (to be prepared in accordance with Condition CEMP.15);
- (n) Waste Management Plan (to be prepared in accordance with Condition CEMP.10); and Temporary Construction Lighting Management Plan (to be prepared in accordance with Condition L.2).

### **CEMP.4**



The CEMP shall be implemented and maintained throughout the entire construction period.

#### CEMP.5

A copy of the CEMP shall be held on each construction site at all times and be available for inspection on request by the Auckland Council.

#### CEMP.6

The finalised CEMP shall include specific details on demolition, construction and management of all works associated with the Project. The certification process of the CEMP shall confirm that the CEMP includes details of the following:

- (a) Details of the site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- (b) The location of large notice boards that clearly identify the NZTA and the Project name, together with the name, telephone, email address and address for service of the site or Project manager and the community liaison person;
- (c) An outline construction programme of the work indicating in particular likely time periods for road closures and anticipated traffic diversion effects;
- (d) The hours of work, which should reflect the need to ensure that residents enjoy reasonable freedom from noisy or intrusive construction activity in their neighbourhood at night, on Sundays and during public holidays;
- (e) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/storage of rubbish, storage and unloading of building materials and similar construction activities;
- (f) Location of worker's offices and conveniences (e.g. portaloos);
- (g) Procedures of controlling sediment run-off, dust and the removal of soil, debris and demolition and construction materials from public roads or places. Dust mitigation measures should include use of water sprays to control dust nuisance on dry or windy days;
- (h) Methods to stabilise ingress and egress points to construction sites, to the standard required by ARC Technical Publication 90 (Nov 2007);
- (i) Procedures for ensuring that residents within 100m of construction areas or other people whose use of an area may be disrupted by construction works (for example the Te Atatu Boating Club for works on the Whau River) are given notice of the commencement of construction activities and are informed about the expected duration of the works, including potentially through the community liaison person;
- (j) Procedures to be followed to ensure that those working in the vicinity of identified heritage and ecological features are aware of the heritage or ecological values of these features and the steps which need to be taken to meet the conditions applying to work on the site;
- (k) Means of ensuring the safety of the general public;
- (l) Procedures for the community liaison person to receive and respond to complaints about construction activities, including dust and odour from the works;
- (m) Methods of mitigating the local and network wide effects of construction of individual elements of the Project, including measures to ensure that parking of staff vehicles on surrounding streets is restricted;
- (n) All temporary boundary/ security fences shall be maintained in good order, with any graffiti removed as soon as possible;
- (o) Confirmation of a Project Arborist and completion of a STEM assessment of the preliminary list of Amenity Trees in Schedule E.7 of the AEE to confirm the final Amenity Trees; and
- (p) The process to minimise removal of Amenity Trees, maximise the protection of those retained, undertake relocation of Amenity Trees and replacement planting of specimen trees (in accordance with Condition LV.10 and Condition ARCH.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent).
- (q) Advice note: For the purposes of CEMP.6(o) and (p), Amenity Tree is defined as a tree or trees that contribute significantly to amenity, taking into account its form, size, health, ecological or historical significance (a preliminary list of these trees is provided in Appendix E.7 of the AEE).

#### CEMP.7

The layout of the 12 Construction Yards, including associated buildings, fencing and site access shall be

developed in accordance with Waterview Connection Project Construction Yards Plans (Refer Schedule A, Row 7). The layout drawings shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to the occupation of the yard, for review and certification that the final layout of the construction yards is in accordance with the conditions. The layout drawings shall incorporate the following:

- (a) The main access to the construction yards to be located as far as practicable from residential dwellings, taking into account site and public safety and environmental constraints, in the locations shown on Waterview Connection Project Construction Yards Drawings (Refer Schedule A, Row 7);
  - (b) Noisy construction activities to be located as far as practicable, and preferably no less than 100m, from residential dwellings; Construction of temporary boundary/ security fences to be undertaken in a manner which minimises impacts on existing trees;
  - (c) Temporary acoustic fences and visual barriers;
  - (d) Temporary buildings greater than 8 metres in height to be located in a position which minimises visual impact on adjacent residential dwellings; and
- Location of workers' and Project vehicle parking.

#### CEMP.8

All storage of material and equipment associated with the construction works shall take place within the boundaries of the designation.

#### CEMP.9

Temporary protection shall be installed to prevent vehicles damaging drains, footpaths, berms, kerbs, vehicle crossings and the roads during the site preparation and construction phase of the Project. Any damage to the drains, footpaths, berms, kerbs, vehicle crossings and the road attributable to any vehicle associated with construction activities shall be repaired to the same or similar standards as existed prior to such damage at no cost to the Auckland Council.

#### CEMP.10

The NZTA shall finalise and implement the Hazardous Substances Management Plan (HSMP), through the CEMP (as per Condition CEMP.1), submitted with this application, prior to works commencing on site. The certification process of the CEMP shall confirm that the HSMP clearly identifies the requirements for proper storage, handling, transport and disposal of hazardous substances during the construction phase of the Project and confirm that there shall be no storage of explosives on the Project site.

#### CEMP.11

The NZTA shall develop and implement a Waste Management Plan in accordance with the waste management principles, controls and methods set out in the CEMP. The Plan shall be provided to the Major Infrastructure Team Manager, Auckland Council and be implemented throughout the entire construction period.

#### CEMP.12

The CEMP shall be reviewed by the NZTA at least annually or as a result of a material change to the Project. The review shall take into consideration:

- (a) Compliance with designation and consent conditions;
- (b) Any changes to construction methods;
- (c) Key changes to roles and responsibilities within the Project;
- (d) Changes in industry best practice standards;
- (e) Changes in legal or other requirements;
- (f) Results of inspections, monitoring, incidents, corrective actions, internal or external assessments; and
- (g) Public complaints. A summary of the review process undertaken shall be kept by the NZTA, provided annually to the Major Infrastructure Team Manager, Auckland Council and made available (with any related data) to the Auckland Council upon request.

#### CEMP.13

Following the review process (as described in Condition CEMP.12), the CEMP may require updating. Any material change proposed to the CEMP (including appended Management Plans) shall be submitted for approval to the Major Infrastructure Team Manager, Auckland Council at least 10 working days prior to the proposed changes taking effect.

*Advice Note: Material change will include amendment to any base information informing the CEMP or any process, procedure or method of the CEMP (such as the environmental constraints map, compliance monitoring process, complaints procedure or mitigation / remedial methods identified) which has the potential to increase adverse effects on a particular value. For clarity changes to personnel and contact schedules do not constitute a material change.*

#### CEMP.14

The CEMP shall include, as an appendix, an Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP). The EISDCMP shall be provided to the Major Infrastructure Team Manager, Auckland Council, and include:

(a) Methods and measures:

(i) To ensure that the existing high voltage infrastructure can be accessed for maintenance at all reasonable times, or emergency works at all times, during and after construction activities.

(ii) To appropriately 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 the overhead transmission lines

(iii) To ensure that no activity is undertaken during construction that would result in ground vibrations and/or ground instability likely to cause material damage to the transmission lines, including support structures.

(iv) To ensure that changes to the drainage patterns and runoff characteristics do not result in adverse effects from stormwater on the foundations for any high voltage transmission line support structure.

(b) Sufficient detail to confirm that new planting and maintenance of vegetation will comply with the New Zealand Electricity (Hazard from Trees) Regulations 2003, including, but not limited to, the provisions of Schedule (Growth Limit Zones) to those Regulations.

(c) Sufficient detail to confirm that the works will comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001), including, but not limited to, the provisions of:

(i) Clause 2.2 with respect to excavations near overhead support structures;

(ii) Clause 2.4 with respect to buildings near overhead support structures;

(iii) Section 3 with respect to minimum separation between buildings and conductors;

(iv) Section 5 with respect to minimum safe distances for the operation of mobile plant; and,

(v) Table 4 with respect to minimum safe separation distances between the ground and the overhead conductors.

(d) Confirmation that Transpower has been provided a copy of the EISDCMP for their review at least 20 working days prior to construction.

*Advice note: With respect to clause (c), specific consideration must be given to the height and location of temporary structures (such as Project offices and other construction site facilities) and permanent structures (such as lighting poles, signage, gantries and acoustic barriers).*

#### CEMP.15

The NZTA will be responsible for all service relocations required for construction of the Project. The NZTA shall liaise with the providers of infrastructure service networks (including, but not limited to water, gas, stormwater, wastewater, power and telecommunications), and private property owners with on-site services to develop methodologies and timing for necessary services relocation required for the Project, with the objective of minimising disruption to the operation of these service networks and onsite services.

*Advice note:*

*(a) It is noted that if separate consents are required for relocations for any services of network utility operators or landowners, such consents will be obtained before construction commences in the relevant area, and any effects of those relocations would be considered at that time. The same applies to any alteration of consents if*

required.

*(b) Network infrastructure owned and operated by Watercare Services is located within the designations. An operating agreement will be developed by the NZTA and Watercare Services which will include appropriate notification and access protocols where works are to be undertaken by either network operator on or adjacent to Watercare Services infrastructure within the designations.*

## **Public Information Conditions**

### **PI.1.**

A community liaison person shall be appointed by the NZTA for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the Project. The liaison person's name and contact details shall be made available in the CEMP and on site signage by the NZTA. This person must be reasonably available for on-going consultation on all matters of concern to affected parties arising from the Project.

### **PI.2.**

The NZTA shall prepare and implement a Communications Plan that sets out procedures detailing how the public, Ministry of Social Development, Housing New Zealand Corporation and other organisations representing the particular demographic characteristics of the community (including but not limited to Primary Health Organisations, general practitioners, youth, education organisations, aged care groups and groups representing ethnic and migrant communities) will be communicated with throughout the construction and monitoring periods (as prescribed in the designation and consent conditions). In preparing the Communications Plan, the NZTA will liaise with Auckland Council to access its community liaison databases. The Communications Plan will include details of:

- (a) The site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- (b) In accordance with these Conditions, the database of the key construction activities and monitoring requirements that are the subject of the Communications Plan;
- (c) The database of stakeholders and residents who will be communicated with;
- (d) Communication methods, an assessment of how these methods reach the different audience/ stakeholder groups (including those methods set out in Condition CEMP.6), and detail on when each of these methods will be used (e.g. regular communication or event specific methods);
- (e) The appointed specialist in Environmental and Occupational Medicine, including contact details (as per Condition SO.13);
- (f) Any stakeholder specific communication plans required; and
- (g) Monitoring and review procedures for the Communications Plan. The Communications Plan shall be written in accordance with the external communication procedures set out in the CEMP and provided at least 20 working days prior to construction commencing, to the Major Infrastructure Team Manager, Auckland Council, Working Liaison Group and the Community Liaison Group(s) established by Condition PI.5. The structure of the communication groups set out in these conditions is attached as Figure PI.A.

### **PI.3.**

At least 15 working days prior to the commencement of construction, and at 15 working day intervals thereafter, or as required depending on the scale of works and effects on the community, advertisements will be placed in the relevant local newspapers and community notice boards (as identified in Condition CEMP.6(b)) detailing the nature of the forthcoming works, the location of the forthcoming works and hours of operation. All advertisements will include reference to a 24 hour toll free complaints telephone number. Where relevant, advertisements will also include but not be limited to details of:

- (a) Any traffic disruptions or controls or changes to property access, pedestrian/ cycle routes and bus stops; and
- (b) Any other construction activities, including night time works, blasting, and structure-borne noise, as identified in the conditions.

### **PI.4.**

The NZTA shall manage, investigate and resolve (as appropriate) all complaints for the duration of the construction works in accordance with the environmental complaints section of the CEMP. The implementation strategy for complaints includes:

- (a) A 24 hour toll free telephone number and email address, which shall be provided to all potentially affected residents and businesses. The number shall be available and answered at all times during the entire duration of the works for the receipt and management of any complaints. A sign containing the contact details shall be located at each site specific work activity;
- (b) The NZTA shall maintain a record of all complaints made to this number, email or any site office, including the full details of the complainant and the nature of the complaint;
- (c) Upon receiving a complaint, within 10 days of complaint receipt, a formal written response will be provided to the complainant and Auckland Council;
- (d) The NZTA shall undertake corrective action where necessary to resolve any problem identified. All action taken and relevant information shall be documented. For the avoidance of doubt, 'where necessary' refers to where the works are not being carried out in accordance with conditions of this designation;
- (e) Where issues and complaints about effects cannot be resolved through the CEMP complaints management process, a meeting shall be held between the NZTA, the complainant and the Auckland Council representative(s) to discuss the complaint and ways in which the issue may be resolved. If parties cannot agree on a resolution, an independent qualified mediator will be appointed, agreeable to all parties and at the shared cost of all parties, to undertake mediation of the dispute or concerns; and
- (f) All information collected in Conditions PI.4 (b), (c) and (d) shall be detailed in a Construction Compliance Report (including the means by which the complaint was addressed, whether resolution was reached and how the response was carried out) prepared by the NZTA. This Report shall be submitted to the Major Infrastructure Team Manager, Auckland Council on a quarterly basis commencing at the beginning of the works and for the entire duration of construction.

#### PI.5.

The NZTA shall establish Community Liaison Group(s) at least two months prior to construction commencing in each of the following key construction areas:

- (a) Te Atatu (including the SH16 Causeway)
- (b) Waterview (including works to St Lukes on SH16 and on the Waterview Estuary and Causeway Bridges)
- (c) Owairaka and hold regular meetings (at least three monthly) throughout the construction period and up to 24 months following construction completion relevant to these areas (or less if the members of the Group agree), so that on-going monitoring information can continue to be disseminated.

The Community Liaison Group(s) shall be open to all interested parties within the Project area including, but not limited to the following groups:

- (a) Auckland Council and Auckland Transport;
- (b) Educational facilities within the Project area (including schools, kindergartens, childcare facilities and Unitec Institute of Technology);
- (c) Relevant community/ environmental groups (including but not limited to Friends of Oakley Creek, Star Mills Preservation Group, Cycle Action Auckland and representatives from those organisations identified in the Communications Plan (as required by Condition PI.2) and local residents;
- (d) Department of Conservation;
- (e) Local Boards;
- (f) Iwi groups with Mana Whenua;
- (g) Public transport providers; and
- (h) Housing New Zealand Corporation.

Advice note: The purpose of the Community Liaison Group(s) is to provide a regular forum through which information about the Project can be provided to the community, and an opportunity for concerns or issues to be raised.

#### PI.6.

The Community Liaison Group(s) shall be provided opportunities to review and comment on the following (amongst other things):

- (a) The Outline Plan of Works detailing designs for the northern and southern ventilation buildings and stacks (the outcomes of this consultation will be reported in accordance with the processes required in Condition DC.8(n) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, and Condition DC.9(k);
  - (b) The Open Space Restoration Plans (as required by Condition OS.3);
  - (c) Finalisation and amendment to Urban Design and Landscape Plans (UDL Plans) (as required by Condition LV.1);
  - (d) The Oakley Inlet Heritage Plan (as required by Conditions OS.5(b)(i) and ARCH.6 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent), the NZTA shall be exempt from providing an Outline Plan of Works for the Project;
  - (e) The detail of the Oakley Creek restoration (as required by Condition STW.20);
  - (f) Publicly available results of environmental monitoring as required by the designation and/or these Consents (e.g. air quality monitoring); and
  - (g) The finalisation of the STEM assessment required by CEMP.6(o) and a schedule of trees that are required to be removed for consideration of timber use in heritage projects (as required by Condition SO.7).
- Advice Note: Attention is drawn to the Vegetation conditions concerning identification and protection of Significant Vegetation and Valued Vegetation.
- (h) Detailed design features of the Te Atatu underpass (e.g. lighting and architectural treatment).

### **Temporary Traffic Conditions**

#### **TT.1**

The NZTA shall update and finalise the Construction Traffic Management Plan (CTMP) submitted with this application, in accordance with these conditions, and implement it through the CEMP. In finalising the CTMP, the NZTA shall:

- (a) Provide simulation modelling demonstrations to better understand the effects of construction of the Project on the affected road network;
- (b) Include measures to avoid road closures and restrictions of vehicle, bus, cycle and pedestrian movements;
- (c) Where road closures or restrictions cannot reasonably be avoided the particular vulnerabilities and sensitivities of pedestrian diversions and restricted conditions shall be taken into account in the planning of any closures or restrictions.

#### **TT.2**

The CTMP shall require the development of Site Specific Traffic Management Plans (SSTMPs) and their approval by the Traffic Management Project Governance Group (as defined by the CTMP), for each construction activity that may affect traffic or transportation infrastructure and services. The SSTMPs shall be provided to the Traffic Management Coordinator(s) for the relevant Road Controlling Authority at least 10 working days prior to each construction activity.

#### **TT.3**

Each SSTMP shall describe the measures that will be undertaken to avoid, remedy or mitigate the local and network wide effects of construction of the Project. In particular, the SSTMP shall include the following matters:

- (a) Traffic management measures to address and maintain, traffic capacity, including bus services, at peak traffic periods during weekdays (6:00 to 9:00 and 16:00 to 19:00) and peak traffic periods at weekends (including Te Atatu Road, Great North Road and Richardson Road);

- (b) Methods to manage the effects of traffic during construction including the requirement to detour or divert traffic. These methods shall seek to avoid, remedy or mitigate effects on access to and from businesses and other organisations in the area;
- (c) Any road closures that will be required and the nature and duration of any traffic management measures that will result, including any temporary restrictions, detours or diversions for general traffic and buses;
- (d) Methods to avoid, remedy or mitigate the local and network wide effects of the construction of individual elements of the project (e.g. intersections/ overbridges) and the use of staging to allow sections of the Project

to be opened to the traffic while other sections are still under construction;

(e) Methods to manage the effects of the delivery of construction material, plant and machinery (including cranes and oversized trucks) during construction;

(f) Any routes where construction traffic movements will be restricted (either for particular times for construction periods);

(g) Measures to maintain existing vehicle access, as far as practicable, or where the existing property access is to be removed or becomes unsafe as a result of the construction works, measures to provide alternative access arrangements in consultation with the Auckland Council and the affected landowner; and

(h) Measures to maintain pedestrian and cycle access with thoroughfare to be maintained on all roads and footpaths adjacent to the construction works, where practicable (e.g. unless provision of such access is severed by the works or such access will become unsafe as a result of the construction works). Such access shall be safe, clearly identifiable, provide permanent surfacing and seek to minimise significant detours. (This Condition does not act as a qualification to the commitment to maintain access to open space and education facilities, as required in Condition OS.13).

#### TT.4

The SSTMPs shall include traffic management measures developed in consultation with the Auckland Transport, Bus and Coach Association and the Auckland Council, to address and maintain, where practicable, existing levels of service for buses particularly at peak periods (6:00 to 9:00 and 16:00 to 19:00) on weekdays.

#### TT.5

The NZTA shall consult with the Traffic Operations Manager, Auckland Transport with regard to the most appropriate means for providing access on Council roads within and adjacent to the designation. The NZTA shall also coordinate and consult directly with the proponents of any major construction or major traffic generating event occurring concurrently with, and in the vicinity of the Project.

#### TT.6

The SSTMPs shall include measures developed in consultation with Auckland Transport to, as far as practicable, enable continued public walking and cycling passage along the existing Northwestern Cycleway (between Te Atatu Interchange and St Lukes Interchange) and along Great North Road and the public walkway along Oakley Creek, with any interruptions being as short as feasible.

#### TT.7

The NZTA shall undertake construction works so as to avoid significant long duration impacts or the full closure of Te Atatu Road for all road users heading to or from the Te Atatu Peninsula and to ensure that access for emergency service vehicles is maintained.

#### TT.8

The NZTA shall restrict construction truck movements during peak hours (6:00 to 9:00 and 16:00 to 19:00) on weekdays and during the peak periods at the weekends to avoid the following:

- (a) Te Atatu Road Interchange, during both morning and afternoon peak hours
- (b) Great North Road Interchange, city bound during the morning peak hours
- (c) Great North Road Interchange, west bound onto SH16 and southbound onto Great North road during the afternoon peak. Construction truck movements during these hours shall only be allowed under exceptional circumstances agreed in advance with the Traffic Management Project Governance Group.

#### TT.9

The NZTA shall maintain at least the existing active traffic lane configuration capacity on SH16, at the Te Atatu Interchange area, Te Atatu Road, Richardson Road and on Great North Road during peak periods being 6:00 to 9:00 and 16:00 to 19:00 on weekdays and during the peak periods on weekends, for the duration of the temporary construction programme.

#### TT.10

The NZTA shall monitor the impact of construction traffic in terms of traffic speeds and volumes on SH16, Great North Road, Te Atatu Road and Richardson Road throughout the construction period to confirm the expected traffic effects as set out in the *Temporary Traffic Assessment* (Technical Report G.16) submitted with this application.

- (a) This monitoring will be undertaken on a daily, weekly and monthly basis; and
- (b) Monitoring results will be made available to the Traffic Operations Manager, Auckland Transport on request.

#### TT.11

If monitoring undertaken pursuant to Condition TT.10 indicates that traffic volumes or traffic conditions are significantly different from those expected, the SSTMPs will be reviewed and as appropriate amended to the satisfaction of the Traffic Management Project Governance Group.

### **Operational Traffic Conditions Integration with Local Road Network**

#### OT.1

The NZTA shall prepare in collaboration with Auckland Transport a Network Integration Plan (NIP) for the Project, or relevant Project phases, to demonstrate how the Project integrates with the existing local road network and with future improvements (identified in the Western Ring Route (Northwest) Network Plan) planned by the Auckland Council. The NIP shall include details of proposed physical works at the interface between the State highway and the local road network, and shall address such matters as pedestrian/ cycle ways, lane configuration, traffic signal co-ordination, signage and provision for buses. In addition, the NIP will address:

- (a) The commitment of the NZTA to progress bus priority measures northbound on Great North Road as part of the reinstatement of Great North Road, as proposed by Auckland Transport and indicated on the Plans *Great North Road Option 1 Proposed Road Marking* (Schedule A, Row 33), subject to the agreement with Auckland Transport;
- (b) How the works committed to by the NZTA for pedestrian and cycle ways, as detailed in the PT and Active Mode Transport Routes Plan Set (Condition DC.1(d) (refer Schedule A, Row 22)), integrate with pedestrian and cycle ways on the wider transport network;
- (c) The Richardson Road Bridge, which shall be designed in general accordance with the structural plans (Schedule A, Row 9) and the commitment of the NZTA to provide a 2m footpath on Richardson Road Bridge, subject to confirming appropriate bus stop locations with Auckland Transport;
- (d) Integration of the works proposed on Te Atatu Road to appropriately transition between the Waterview Connection Project and any projects being progressed by Auckland Transport;
- (e) Opportunities to review traffic signal timings at the Te Atatu Interchange with a view to minimising delays to all users, including cyclists on the SH16 cycle way; and (f) The commitment of the NZTA to provide for cycle "aspects" (cycle signal lights) at the Great North Road Interchange.
- (g) As part of detailed design at the Te Atatu Interchange, the installation of underpasses and/or overbridges, provided however that should some not prove feasible in civil or traffic engineering design terms, the installation of coordinated traffic signal operation for cyclists on the north-western cycleway by means of synchronised cycle lights which seek to reduce delays for cyclists. Works identified in the NIP which are the responsibility of the NZTA, will be undertaken as at the time of construction works for the Project.

### **Tunnel Traffic Operation Plan**

#### OT.2

The NZTA shall prepare a Tunnel Traffic Operation Plan in consultation with the Auckland Transport and Auckland Council. The Plan shall include, but not be limited to:

- (a) Procedures for tunnel operational safety, including fire-life safety;
- (b) Procedures for maintenance requirements.
- (c) Procedures for managing traffic to avoid or minimise potential congestion within the tunnel, particularly during peak periods.
- (d) Procedures for the management of traffic during incidents.
- (e) Procedures for the operation of tunnel fans and the management of portal emissions.
- (f) Confirmation that all equipment has been tested and operates in accordance with requirements and



specifications. The Tunnel Traffic Operation Plan shall be completed and provided to Auckland Transport and to the Major Infrastructure Team Manager, Auckland Council (in respect of Condition OT.2(e)), prior to operational use of the tunnelled section of SH20.

Advice note: The operation and maintenance of the air quality monitoring equipment inside the tunnel shall follow manufacturer's recommendations.

### **Noise and Vibration Conditions – Construction**

#### **CNV.1**

The NZTA shall finalise and implement through the CEMP, a Construction Noise and Vibration Management Plan (CNVMP) throughout the entire construction period of the Project. The CNVMP shall describe the measures adopted to meet:

- (a) the noise criteria set out in Conditions CNV.2 and 3 below;
- (b) the vibration criteria set out in Condition CNV.4 below; or
- (c) where (a) or (b) cannot be met, the process that will be followed to appropriately mitigate noise and vibration effects including methods that may be applied outside the designation.

The CNVMP shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to construction activities being undertaken for review and certification that the CNVMP, as a minimum, addresses the following:

- (i) Construction noise and vibration criteria (Conditions CNV.2, CNV.3, and CNV.4);
- (ii) Hours of operation, including times and days when noisy and/or vibration inducing construction activities would occur;
- (iii) Machinery and equipment to be used;
- (iv) Vibration testing of equipment to confirm safe distances to buildings prior to construction;
- (v) Preparation of building condition surveys of critical dwellings prior to, during and after completion of construction works;
- (vi) Roles and responsibilities of personnel on site;
- (vii) Construction operator training procedures;
- (viii) Methods for monitoring and reporting on construction noise and vibration;
- (ix) A hierarchy of mitigation options that will be assessed for the Project noise mitigation, including alternative strategies where full compliance with the relevant noise and/or vibration criteria cannot be achieved;
- (x) Management schedules containing site specific information;
- (xi) Measures for liaising with and notifying potentially affected receivers of proposed construction activities and the potential for noise and vibration effects, specifically:
  - PPFs located within a horizontal distance of 35 metres of underground excavation works, along the tunnel alignment shall receive prior notification not greater than 7 days (and not less than 24 hours) prior to the commencement of works.
  - Methods for ensuring residents affected by night works (within 100m of the construction site night works, as defined on the maps (refer Schedule A, Row 35)) are notified of such works (i.e. any works during the hours of 20:00 to 06:30) at least 5 days prior to the commencement of any such work.
  - The maps showing PPFs to be notified of night works (refer Schedule A, Row 35), shall be reviewed and included within the CNVMP.
- (xii) Methods for receiving and handling complaints about construction noise and vibration;
- (xiii) Measures for preventing the occurrence of rogue fly rock, including management of charge weights and face loading procedures, stemming of charge holes and profiling of the face to maintain minimum burden (face cover);
- (xiv) Investigations on the practicability of implementing permanent noise mitigation works for construction mitigation (as per Condition CNV.7);
- (xv) Investigations of the practicability of implementing Building Modification mitigation, as required in accordance with Conditions ON.6 and ON.11, prior to commencement of construction within 100m of the relevant PPFs (including those on the Unitec site); and
- (xvi) The process for developing Site Specific Noise Management Plans (SSNMP), in accordance with the

SSNMP Flow Chart (refer Schedule A, Row 36), including templates and a certification process for the Major Infrastructure Team Manager, Auckland Council (in accordance with Condition CNV.13) to confirm the process of SSNMP review of noise mitigation options where, the modelled/predicted levels or subsequent actual levels exceed the criteria in Conditions CNV.2 and/or CNV.4.

#### CNV.2

Except where certified by the Council through the SSNMP (in accordance with Condition CNV.13), construction noise (excluding noise from blasting Monday to Saturday inclusive) shall be measured and assessed in accordance with NZS 6803:1999 "Acoustics - Construction Noise" and shall comply with the following criteria:

Note: In Condition CNV.2 (T) means a duration between 15 minutes and 60 minutes, in accordance with NZS6803:1999.

##### (a) Project Construction Noise Criteria: Residential Receivers

Time of Week	Time period	Project Construction Noise Criteria (Long Term Construction) dB		
		Sectors 1-7	Sectors 8-9	All Sectors
		L <sub>Aeq</sub> (T)	L <sub>Aeq</sub> (T)	L <sub>Aeq</sub> (T)
Monday- Saturday	0630-0730	60	45	75
	0730-1800	70	70	85
	1800-2000	65	65	80
	2000-0630	60	45	75
Sundays and Public Holidays	0630-0730	45	45	75
	0730-1800	60	45	85
	1800-2000	45	45	75
	2000-0630	45	45	75

##### (b) Project Construction Noise Criteria: Commercial and Industrial Receivers

Time Period	Project Construction Noise Criteria (Long Term Construction) dB
	L <sub>Aeq</sub> (T)
0730-1800	70
1800-0730	75

##### (c) Project Construction Noise Criteria: Internal Structure-borne Noise from tunnelling for Residential Receivers

Time Period	Project Construction Noise Criteria Inside	
0600-2200	35 dB L <sub>Aeq</sub> (T)	All habitable rooms
2200-0600	30 dB L <sub>Aeq</sub> (T)	Bedrooms

##### (d) Project Construction Noise Criteria: Internal noise for Licensed Educational Facilities

Time Period (School Days)	Project Construction Noise Criteria Inside	
Teaching Hours	45 dB L <sub>Aeq</sub> (T)	Classrooms, library, offices, teaching, laboratories, manual arts, workshops
Teaching Hours	40 dB L <sub>Aeq</sub> (T)	School hall, lecture theatres

Note: In Condition CNV2(d) "Teaching hours" means: Primary schools and Kindergartens: 9am to 3pm Unitec: 8am to 9pm

#### CNV.3

Project Construction Noise Criteria: Airblast (excluding Sundays)

Category	Type of Blasting Operations	Peak Sound Pressure Level (LZpeak dB)
<b>Human Comfort Limits</b>		
Sensitive Site	Operations lasting longer than 12 months or more than 20 Blasts	115 dB for 95% blasts per year. 120 dB maximum unless agreement is reached with occupier that a higher limit may apply
Sensitive Site	Operations lasting less than 12 months or less than 20 Blasts	120 dB for 95% blasts per year. 125 dB maximum unless agreement is reached with occupier that a higher limit may apply
Occupied non-sensitive sites such as factories and commercial premises	All blasting	125 dB maximum unless agreement is reached with the occupier that a higher limit may apply. For sites containing equipment sensitive to vibration, the vibration should be kept below manufacturer's specifications of levels that can be shown to adversely affect the equipment operation
<b>Damage Control Limits</b>		
Structures that include masonry, plaster and plasterboard in their construction and also unoccupied structures of reinforced concrete or steel construction	All blasting	133 dB unless agreement is reached with owner that a higher limit may apply.
Service structures such as pipelines, powerlines and cables located above ground	All blasting	Limit to be determined by structural design methodology

#### CNV.4

Except where certified by the Council through the SSNMP (in accordance with Condition CNV.13), construction vibration received by any building shall be measured and assessed in accordance with the German Standard DIN 4150-3:1999 "Structural vibration – Part 3: Effects of vibration on structures", and shall comply with the criteria set out as follows:

Type of Structure	Short-term vibration			Long-term vibration	
	1-10 Hz (mm/s)	1-50 Hz (mm/s)	50-100 Hz (mm/s)	PPV at horizontal plane of highest floor (mm/s)	PPV at horizontal plane of highest floor (mm/s)
Commercial/Industrial	20	20-40	40-50	40	10
Residential/School	5	5-15	15-20	15	5
Historic or Sensitive structures	3	3-8	8-10	8	2.5

#### CNV.5

Notwithstanding Condition CNV.3 above,

(a) Blasting activities shall be conducted so that 95% of the blasts undertaken (measured over any twenty blasts on the foundation of any building outside the designation boundary) shall produce peak particle velocities not exceeding 5mm/s and 100% of the blasts undertaken shall produce peak particle velocities not exceeding 10mm/s irrespective of the frequency of the blast measured.

(b) Construction activities, which occur within Sectors 1, 6, 8 and 9 which are identified in Technical Report no. G.19 Assessment of Vibration Effects, as being at a 'High Risk' of exceeding the DIN 4150-3:1999 criteria (being excavation, piling, compaction and drilling) shall be conducted so that 95% of the activities undertaken (measured over at least 20 representative samples of the relevant activity on any residential building) shall produce peak particle velocities not exceeding the relevant criterion in DIN 4150-3:1999 and 100% of the activities undertaken shall not exceed 10mm/s irrespective of the frequency of the activity measured.

#### CNV.6

Blasting shall be undertaken between 09:00h and 17:00h, Monday to Saturday, except that blasting may be undertaken between 09:00h and 17:00h on Sundays where:

- (a) The blasting is at least 50m inside the Sector 8 tunnel;
- (b) The blasting produces peak particle velocities at any residential building not exceeding 0.5mm/s; and
- (c) The Project construction noise criteria set out in Condition CNV.2 for Sundays are complied with.

#### CNV.7

Where practicable, permanent (traffic) noise barriers, required in any Sector as Detailed Mitigation Options for operational noise following completion of the Project (in accordance with Conditions ON.3 to ON.5) shall be erected prior to noise generating construction works commencing. Where this is not practicable, temporary noise mitigation measures shall be implemented in accordance with the CNVMP, prior to noise generating construction works commencing.

#### CNV.8

Pile driving or pile removal shall not be undertaken at night (i.e. during the hours of 20:00 – 06:30).

#### CNV.9

The concrete batch plants, rock crushing plants and the loading bays and conveyors for such plants shall be fully enclosed.

#### CNV.11

For all other properties, if noise and vibration monitoring of the tunnelling works for the Project (in accordance with Condition CNV.1), indicates that the noise or vibration criteria of Conditions CNV.2 or CNV.4 will potentially be exceeded, then the process set out in the CNVMP will be undertaken including Site Specific Noise Management Plans. Where relocation for residents is proposed, notification of such relocation with residents and property owners will be undertaken in accordance with the processes contained in the CNVMP.

#### CNV.13

SSNMPs (required by Condition CNV.1(xvi)) above, shall be submitted to Major Infrastructure Team Manager, Auckland Council for review and certification at least 7 working days prior to the proposed works commencing. A decision will be provided by the Council within 5 working days of receipt of the SSNMP. Works will not commence until certification is received from the Major Infrastructure Team Manager, Auckland Council. The Council may, at its discretion, waive the requirement for SSNMPs to be submitted to the Council where an SSNMP is required. If monitoring shows that levels specified in a SSNMP are being exceeded, work generating the exceedence will stop and not recommence until further mitigation is implemented in accordance with an amended SSNMP certified by Council. *Advice note: It is accepted that the criteria of CNV.2 and CNV.4 may not be met at all times, but that the NZTA will take all practical steps to achieve compliance, taking into account the hierarchy of mitigation options outlined in Condition CNV.1 (ix).*

## **Noise Conditions – Operation**

### **ON.1**

For the purposes of Conditions ON.2-ON.14 the following terms will have the following meanings:

- Appendix E – means Appendix E to the Technical Report G.12 'Assessment of Operational Noise Effects' submitted with this application.
- BPO – means Best Practicable Option.
- Building Modification Mitigation – has the same meaning as in NZS 6806:2010.
- Design Year – means a point in time that is 10 years after the opening of the Project to the public
- Emergency Mechanical Services – means mechanical services used for emergency situations only. Habitable room – has the same meaning as in NZS 6806:2010.
- Noise Criteria Categories – means groups of preference for time-averaged sound levels established in accordance with NZS 6806:2010 when determining the BPO mitigation option; i.e. Category A - primary noise criterion, Category B - secondary noise criterion and Category C - internal noise criterion.
- NZS 6806:2010 – means NZS 6806:2010 Acoustics – Road-Traffic Noise – New and Altered Roads. PPFs – means only the premises and facilities identified in green, yellow or red in Appendix E.
- Structural mitigation – has the same meaning as in NZS 6806:2010.

### **ON.2**

The NZTA shall implement the traffic noise mitigation measures identified as the “Preferred Mitigation Options” in Appendix E as part of the Project, in order to achieve the Noise Criteria Categories indicated in Appendix E (“Identified Categories”), where practicable and subject to Conditions ON.3-ON.11 below.

### **ON.3**

The detailed design of the structural mitigation measures of the “Preferred Mitigation Options” (the Detailed Mitigation Options) shall be undertaken by a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council prior to construction of the Project, and, subject to Condition ON.4, shall include, as a minimum, the following:

- (a) Noise barriers with the location, length and height in general accordance with Appendix E and designed in accordance with the ULDF (Section B) (refer Schedule A, Row 38); and
- (b) A requirement that Open Graded Porous Asphalt (“OGPA”) or equivalent low-noise generating road surface be used on all surface roads throughout the Project, except at the Great North Road Interchange; and
- (c) For the Great North Road Interchange, a requirement that Twin Layer Open Graded Porous Asphalt (“Twin Layer OGPA”) or equivalent low-noise generating road surface be used as shown in Appendix E.

### **ON.4**

Where the design of the Detailed Mitigation Options identifies that it is not practicable to implement a particular structural mitigation measure in the location or of the length or height included in the “Preferred Mitigation Options”, either:

- (a) If the design of the structural mitigation measures could be changed and would still achieve the same Identified Category at all relevant PPFs, and a suitably qualified expert approved by the Major Infrastructure Team Manager, Auckland Council, certifies to the Auckland Council that the changed structural mitigation measure would be consistent with adopting BPO in accordance

with NZS 6806:2010, the Detailed Mitigation Options may include the changed mitigation measures; or

(b) If the changed design of the structural mitigation measure would change the Noise Criteria Category at any relevant PPF from Category A or B to Category C but Major Infrastructure Team Manager, Auckland Council confirms that the changed structural mitigation measure would be consistent with adopting BPO in accordance with NZS 6806:2010, the Detailed Mitigation Options may include the changed structural mitigation measures.

#### ON.5

The Detailed Mitigation Options shall be implemented prior to completion of construction of the Project.

#### ON.6

(a) **Sectors 1 to 8** - Prior to construction of the Project, a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council shall identify those PPFs within 100m of the edge of the closest traffic lane of the motorway carriageway where, following implementation of all the structural mitigation measures included in the Detailed Mitigation Options:

i. A noise level increase of 3 decibels or more will occur due to road-traffic noise from the Project; and ii. Habitable spaces are likely to receive in excess of 45 dB LAeq(24h) from motorway operational noise with windows closed, in the Design Year. For those PPFs, following the process set out in Conditions ON.7 to ON.11, it shall be determined which Building Modification Mitigation is required to achieve 40 dB LAeq inside habitable spaces.

(b) **Sector 9** - Prior to construction of the Project, a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council shall identify those PPFs within 100m of the edge of the closest traffic lane of the motorway carriageway where, following implementation of all the structural mitigation measures included in the Detailed Mitigation Options, habitable spaces are likely to receive in excess of 40 dB LAeq(24h) from motorway operational noise with windows closed, in the Design Year. For those PPFs, following the process set out in ON.7 and ON.8, it shall be determined if Building Modification Mitigation may be required to achieve 40 dB LAeq inside habitable spaces. For those PPFs where Building Modification Mitigation is required to achieve 40 dB LAeq inside habitable spaces, this shall be implemented following the process set out in ON.9 to ON.11.

#### ON.7

(a) Prior to commencement of construction of any sector of the Project in the vicinity of a PPF identified under Condition ON.6, the NZTA shall write to the owner of each such building seeking access for the purpose of measuring internal noise levels and assessing the existing building envelope in relation to noise reduction performance.

(b) If the owner(s) of the building approve the NZTA's access to the property within 12 months of the date of the NZTA's letter (sent pursuant to Condition ON.7(a)), then no more than six months prior to commencement of construction in any sector of the Project, the NZTA shall instruct a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council, to visit the building to measure internal noise levels and assess the existing building envelope in relation to noise reduction performance.

#### ON.8

Where a PPF identified under Condition ON.6 is identified, the NZTA shall be deemed to have complied with Condition ON.7 above where:

(a) The NZTA (through its acoustics specialist) has visited the building; or

(b) The owner(s) of the building approved the NZTA's access, but the NZTA could not gain entry for

some reason after repeated attempts; or

(c) The owner(s) of the building did not approve the NZTA's access to the property within the time period set out in Condition ON.7(b) (including where the owner(s) did not respond to the NZTA's letter (sent pursuant to Condition ON.7(a) within that period); or

(d) The owner(s) of the building cannot, after reasonable enquiry, be found prior to completion of construction of the Project. If any of (b) to (d) above apply to a particular Building, the NZTA shall not be required to implement any Building Modification Mitigation at that Building

#### ON.9

Subject to Condition ON.8, within 6 months of the assessment required under Condition ON.7(b), the NZTA shall give written notice to the owner of each PPF identified under Condition ON.6:

- (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 whether to accept Building Modification Mitigation for the building, and if the NZTA has advised the owner that more than one options for building modification mitigation is available, to advise which of those options the owner prefers.

#### ON.10

Once an agreement on Building Modification Mitigation is reached between the NZTA and the owner of an affected building, the mitigation shall be implemented (including the NZTA undertaking any required third party authorisation) in a reasonable and practical timeframe agreed between the NZTA and the owner. Building Modification Mitigation shall be to the standard specified in section 8.3.2 of NZS 6806:2010. *Advice Note: The NZTA will be responsible for obtaining any necessary building consents or other approvals to undertake the above Building Modification Mitigation.*

#### ON.11

Subject to Condition ON.8, where Building Modification Mitigation is required, the NZTA shall be deemed to have complied with Condition ON.10 above where:

- (a) The NZTA has completed Building Modification Mitigation to the Building; or
- (b) The owner(s) of the Building did not accept the NZTA's offer to implement Building Modification Mitigation prior to the expiry of the timeframe stated in Condition ON.9(b) above (including where the owner(s) did not respond to the Requiring Authority within that period); or
- (c) The owner of the Building cannot, after reasonable enquiry, be found prior to completion of construction of the Project.

#### ON.12

The NZTA shall manage and maintain the Detailed Mitigation Options to ensure that, those mitigation works are maintained to retain their noise attenuation performance indefinitely.

#### ON.13

All mechanical services associated with the general operation of the tunnels shall be designed such that noise emissions do not exceed the following noise limits, when measured at or within the boundary of any residential- zoned site:

Monday to Saturday	7am to 10pm	50 dB LAeq(15 min)
Sundays & Public Holidays	9am to 6pm	50 dB LAeq(15 min)
At all other times		40 dB L Aeq(15 min) 75 dB LAmax

#### ON.14

- (a) Prior to construction, the NZTA shall arrange for a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council 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 Major Infrastructure Team Manager, Auckland Council to undertake traffic noise monitoring at the same sites surveyed in Condition ON.14 (a) 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 in accordance with ON.14(b) above shall be used to verify the computer noise model of the Detailed Mitigation Option. A report describing the findings of the verification shall be provided to the Major Infrastructure Team Manager, Auckland Council within one month of it being completed.

#### **Vibration Conditions - Operation**

##### **OV.1**

Existing ambient vibration levels shall be measured at critical locations nominated by the NZTA, and submitted to the Major Infrastructure Team Manager, Auckland Council for approval prior to the commencement of works. These baseline measurements will establish pre-Project vibration levels for comparison with future vibration levels.

#### **Air Quality Conditions – Construction GENERAL CONDITIONS**

##### **AQ.1.**

The NZTA shall finalise and implement, through the CEMP, the Construction Air Quality Management Plan (CAQMP) and Concrete Batching and Crushing Management Plan (CBCMP) submitted with the application. The CAQMP and CBCMP shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to construction activities being undertaken for review and certification that the CAQMP and CBCMP includes the following details:

- (a) Daily visual monitoring of dust emissions;
- (b) Procedures for responding to process malfunctions and accidental dust discharges;
- (c) Criteria, including consideration of weather conditions and procedures for use of water sprays on stockpiles and operational areas of the site;
- (d) Continuous monitoring of Total Suspended Particulate (TSP) concentrations and meteorology;
- (e) Monitoring of the times of detectable odour emissions from the ground;
- (f) Procedures for responding to discharges of odour (including in the event of excavation of contaminated sites);
- (g) Monitoring of construction vehicle maintenance;
- (h) Process equipment inspection, maintenance, monitoring and recording, including baghouses, pressure relief valves and high level alarms;
- (i) Complaints investigation, monitoring and reporting; and
- (j) The identification of staff and contractors' responsibilities.

##### **AQ.2.**

The NZTA shall review the CAQMP and CBCMP at least annually and as a result of any material change to the Project. Any consequential changes will be undertaken in accordance with Condition CEMP.13.

##### **AQ.3.**

All construction activities shall be operated, maintained, supervised, monitored and controlled at all times so that all emissions authorised by this consent are maintained at the minimum practicable level.



AQ.4.

The NZTA shall undertake construction activities in accordance with the CEMP, CAQMP and CBCMP, such that:

- (a) Hard surfaced areas of the construction yards and active construction areas are vacuum swept or scraped down at least twice each week and additionally as reasonably required;
- (b) All unsealed areas of the site used for vehicle movement are maintained visibly damp by the use of water sprays or a water cart during weather conditions where the potential for dust emissions exist;
- (c) Wheel wash systems are installed at all truck exits from unpaved areas of the site onto public roads are used for all trucks that depart from the site;
- (d) All stockpiles are constructed and positioned to minimise the potential for dust emissions. The surfaces of all stockpiles are maintained adequately damp at all times to minimise the release of particulate matter;
- (e) Belt conveyors for moving dry materials are fitted with water sprays or enclosed to minimise wind entrainment of dust. Where installed, water suppression is used whenever the conveyors are used for moving dry materials.

AQ.5.

Unless expressly provided for by conditions of this consent, there shall be no odour, dust or fumes beyond the site boundary caused by discharges from the site which, in the opinion of an enforcement officer, is noxious, offensive or objectionable.

AQ.6.

All offensive or objectionable dust beyond the boundary of the site caused as a result of processes on the site shall be mitigated forthwith in accordance with the requirements of the Construction Air Quality Management Plan.

AQ.7.

Beyond the site boundary there shall be no hazardous air pollutant caused by discharges from the site that causes, or is likely to cause, adverse effects on human health, environment or property.

AQ.8

No discharges from any activity on site shall give rise to visible emissions, other than water vapour, to an extent which, in the opinion of an enforcement officer, is noxious, dangerous, offensive or objectionable.

**MONITORING**

AQ.14

The NZTA shall undertake visual inspections of dust emissions as follows:

- (a) Visual inspections of all active construction areas at least three times daily during October to April inclusive, whenever there are construction activities. The results of visual monitoring shall be logged.
- (b) Visual inspections of dust emissions from the concrete batching plants and rock crushing plant shall be undertaken daily while the plant is operating

AQ.15

The operation of water sprays shall be checked at least once each day.

AQ.16

Continuous monitoring of TSP concentrations shall be undertaken in at least one location in Sector 1, in at least two locations in Sectors 5 and/or 7, and in at least two locations in Sector 9 while construction activities are being undertaken in those Sectors. The locations of continuous TSP monitors shall, as far as practicable, comply with the requirements of AS/NZ 3580.1.1:2007 Method for Sampling and Analysis of Ambient Air – Guide to Siting Air Monitoring Equipment.

AQ.17

Continuous monitoring of wind speed and direction shall be undertaken in at least one location in each of Sector 1, Sectors 5 or 7 and Sector 9 while construction activities are being undertaken in those Sectors. The locations of wind speed and direction monitors shall, as far as practicable, comply with the requirements of AS 2923:1987 Ambient Air – Guide for the Measurement of Horizontal Wind for Air Quality Applications and be at the same locations as the TSP monitors required by Condition AQ.16.

AQ.18

The locations and types of continuous TSP and meteorological monitoring sites required by Conditions AQ.16 and AQ.17 shall be selected by the NZTA in consultation with the Auckland Council. In the event of a failure of the monitoring equipment, this shall be repaired or replaced within 2 working days.

**REPORTING**

AQ.19

All records, logs, monitoring and test results that are required by the conditions of this consent shall be made available on request, during operating hours, to an Auckland Council enforcement officer and shall be kept for the duration of the consent.

AQ.20

If the monitoring required by Condition AQ.16 shows that concentrations of TSP in ambient air at or beyond the boundary of the site exceeds 80 micrograms/m<sup>3</sup> as a 24-hour average, the NZTA shall undertake an investigation into the cause of the exceedence in accordance with the CAQMP.

AQ.21

A report into the outcome of any investigation required by Condition AQ.20 shall be forwarded to the Major Infrastructure Team Manager, Auckland Council within 10 working days of the exceedence. If the cause of the exceedence is identified as being an activity undertaken on the site, the report shall also identify additional measures to be taken to reduce discharges of particulate matter into air from that activity.

AQ.22

Log books shall be maintained that record all relevant information that is required to demonstrate compliance with the conditions of this consent. This information shall include, but is not limited to:

- (a) Visual assessments of any dust emissions from the site and the source;
- (b) Any dust control equipment malfunction and any remedial action taken;
- (c) When a water cart was used and, if so, the frequency of use and the volume of water used (including identification of location);
- (d) All relevant details of the TSP and meteorological monitoring required by Conditions AQ.16 and AQ.17; (e) Any additional dust control measures undertaken; and

(f) The date and time of the entry and the signature of the person entering the information.

#### AQ.23

The NZTA shall maintain a log of any complaints received relating to air quality. Details of each complaint received shall be forwarded to the Major Infrastructure Team Manager, Auckland Council within 24 hours of receipt of the complaint. The log shall include any complaints lodged with the Auckland Council where the Council has informed the NZTA of the complaint. The log shall include, but not be limited to the following:

- (a) The date, time, location and nature of the complaint;
- (b) Weather conditions at the time of the complaint (including approximate wind speed, wind direction, cloud cover);
- (c) Any possible other contributing factors (such as a fire, smoky vehicle, a local chimney emission, etc.);
- (d) The name, phone number and address of the complainant (unless the complainant elects not to supply these details);
- (e) Any remedial actions undertaken; and
- (f) The date and time of the entry and the signature of the person entering the information.

### **Operational Air Quality Conditions**

#### OA.1

The vents used to discharge emissions in the tunnels shall discharge vertically into air at a height of 15m, as follows:

- (a) The northern ventilation stack will be at a height of 15m. This height shall be calculated from the lowest existing ground level along the Great North Road boundary, adjacent to the ventilation stack; and
- (b) The southern ventilation stack will be at a height of 15m calculated from the post-construction ground level of the Alan Wood Reserve averaged at a distance of 10m from the exterior walls the ventilation stack location. and shall not be impeded by any obstruction that may in the opinion of the Peer Review Panel (Condition OA. 7) decrease the vertical efflux velocity (in other words, the average velocity of material emitted into the atmosphere).

#### OA.2

Prior to the tunnels becoming operational, the NZTA shall establish two ambient air quality monitoring stations and one portal air quality monitoring station. The location and types of these monitoring stations shall be selected by the NZTA in consultation with the Auckland Council and Peer Review Panel (Condition OA.7), providing that one ambient monitoring station will be located within the Waterview Primary School (subject to agreement by the School). Ambient air quality shall be monitored continuously in real time, to monitor potential effects associated with the operation of the ventilation system from the tunnels. Ambient monitoring shall include fine particulates (PM10 and PM2.5) and nitrogen dioxide. Portal monitoring shall include nitrogen dioxide. Results shall be compared with the relevant National Environmental Standards for air quality and Auckland Regional air quality targets (as identified in Chapter 4 of the Auckland Regional Plan: Air, Land and Water, 2010). Monitoring shall be undertaken at each site until the Peer Review Panel recommends that monitoring is no longer necessary. The locations, operation and maintenance schedules of the continuous monitors shall, as far as practicable, comply with the requirements of AS/NZ 3580.1.1: 2007 Method for Sampling and Analysis of Ambient Air – Guide to Siting Air Monitoring Equipment, and with methods specified in the National Environment Standards.

#### OA.3

Continuous monitoring of wind speed and direction shall be undertaken at each ambient air quality

monitoring location as required by Condition OA.2. The locations of wind speed and direction monitors shall, as far as practicable, comply with the requirements of AS 2923:1987 Ambient Air – Guide for the Measurement of Horizontal Wind for Air Quality Applications.

#### OA.4

For the first 12 months of tunnel operation, the results of the ambient air quality monitoring shall be reported via validated reports and issued for information via the Project website (monthly). Following this period, and for a period of at least 12 months, reporting shall take place quarterly as follows: Quarter 1 (December to February) by 31 March, Quarter 2 (March to May) by 30 June, Quarter 3 (June to August) by 30 September and Quarter 4 (September to November) by 31 December.

#### OA.5

If the monitoring required by Condition OA.2 shows that concentrations of contaminants in ambient air at the monitoring locations exceeds the relevant National Environmental Standards for air quality, or Regional Air Quality Targets (as identified in Chapter 4 of the Auckland Regional Plan: Air, Land and Water), the NZTA shall undertake an investigation into the cause of the exceedence and report this to the Peer Review Panel (Condition OA.7) and the Major Infrastructure Team Manager, Auckland Council.

#### OA.6

The air quality monitoring shall be undertaken in general accordance with the Operational Air Quality Management Procedure (Appendix O of *Technical Report G.1 Assessment of Air Quality Effects*) submitted with this application.

#### OA.7

A Peer Review Panel shall be appointed by NZTA with the agreement of Major Infrastructure Team Manager, Auckland Council for the purpose of reviewing the ambient air quality monitoring programme and results. The Peer Review Panel shall consist of two independent experts in air quality with experience in ambient air quality monitoring and emissions from motor vehicles. The Peer Review Panel shall review all ambient monitoring, relevant traffic data and tunnel emissions and provide a summary report including any interpretation and recommendations to NZTA, Auckland Council and the Community Liaison Group(s) within 6 months of the tunnels becoming operational and annually thereafter.

### **Portal Emissions**

#### OA.8

The tunnel ventilation system shall be designed and operated to ensure that any air emitted from the tunnel portals does not cause the concentration of nitrogen dioxide (NO<sub>2</sub>) in ambient air to exceed 200 micrograms per cubic metre, expressed as a rolling 1 hour average, at any point beyond the designation boundary that borders an air pollution sensitive land use.

*Advice Note: The above standard reflects the National Environmental Standard for Nitrogen Dioxide (NO<sub>2</sub>) concentration in ambient air.*

### **Landscape and Visual Conditions**

#### LV.1.

The Urban Design and Landscape Plans (UDL Plans) (Plan Set F.16, refer Schedule A, Row 17) shall be reviewed and revised in accordance with the conditions and submitted to the Major Infrastructure Team Manager, Auckland Council for certification that they comply with the conditions of the consents/ designation prior to construction of the relevant Project stage, at least 20 working days prior to the commencement of construction. The UDL Plans shall be updated to:

- (a) Reflect relevant details from the PT and Active Mode Transport Routes Plan Set (Schedule A, Row 23);
- (b) Remove the playing field at Waterview Reserve;
- (c) Confirm the reconfigured bund design at Alwyn Avenue (Schedule A, Row 42);
- (d) Reflect landscaping required in relation to the northern vent stack in Waterview Glades pursuant to Condition DC.8 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, the NZTA shall be exempt from providing an Outline Plan of Works for the Project.

#### LV.2.

In certifying the UDL Plans, prepared in accordance with Condition LV.1, the Major Infrastructure Team Manager, Auckland Council shall be satisfied the UDL plans includes:

- (a) The visual mitigation of infrastructure as detailed in Section B of the UDLF (refer Schedule A, Row 38).
- (b) Incorporation of art or art through design of structures, particularly as it relates to noise barriers and the Great North Road Interchange piers and ramps (Refer to clauses (g) and (i) below).
- (c) Planting to screen houses and noise walls (including cross section details);
- (d) Planting along the corridor on Traherne Island, in accordance with these conditions and the Ecological Management Plan;
- (e) Specimen planting on the Great North Road Interchange and the Te Atatu Road Interchange;
- (f) Specimen planting at the tunnel portals (except where this is within the OPW area);
- (g) Finalisation of the noise barriers (as required by Condition ON.3(a)) in accordance with the design principles for noise walls (refer Schedule A, Row 32);
- (h) Delineation of the final areas of the Open Space Restoration Plans in accordance with the Open Space Restoration Plans (Schedule A, Row 30), and reference that all works within the Open Space Restoration Plan Areas are subject to Conditions OS.5 and OS.6-OS.7 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, and Conditions OS.1-OS.4 and OS.6;
- (i) Oakley Inlet Heritage Plan, prepared in accordance with Condition OS.5 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, the NZTA shall be exempt from providing an Outline Plan of Works for the Project, and in particular, consideration shall be given to the design treatment of the Great North Road Interchange piers and ramps to take into consideration the impact of the structures on the visual quality of the open space beneath;
- (j) Ecological Management Plan, prepared in accordance with Conditions V.1, A.1, H.1, F.1 and Condition M.1 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent;
- (k) Western Ring Route: Maioro Street Interchange and Waterview Connection - Oakley Creek Rehabilitation and Restoration Guidelines (Boffa Miskell, 2010); and
- (l) Details of artworks or art through design of structures within the Project (e.g. design detailing of median barriers, bridge railings, safety barriers, piers, retaining walls and tunnel portals), in accordance with Section B of the Urban Landscape and Design Framework (UDLF June 2010) (refer Schedule A, Row 38) and F.8:Plans of Structures and Architectural Features, but excluding the north and south ventilation buildings, plans sections and elevations.

#### LV.3.

The NZTA shall have implemented the UDL Plans within 6 months of practical completion of construction of the Project.

LV.4.

The landscaping shall be implemented in accordance with the UDL Plans within the first planting season following the completion of the construction works, provided that climatic conditions are suitable, otherwise at the first practicable opportunity thereafter, and shall be maintained for a period of 10 years thereafter. Should the landscaping be implemented in stages (depending on construction phases), landscaping shall be implemented in accordance with this Condition for each stage unless subsequent construction staging requires use of the proposed landscaping area.

*Advice note: On-going control and management of the landscaping within the designation is the responsibility of the NZTA.*

LV.5.

The NZTA shall implement the UDL Plans taking into account the pest plant management guidelines detailed in the Ecological Management Plan (as required by Condition CEMP.3).

LV.8.

The NZTA shall ensure that any areas within the designation affected by construction activities have sub-soil

rehabilitated and top-soil replaced so that the hydrological response including the volume of stormwater runoff generated is as close as practicable to the predevelopment situation. The methodologies to achieve this shall be documented and provided to the Major Infrastructure Team Manager, Auckland Council with the revised UDL Plans submitted pursuant to Condition LV.1.

LV.10.

The UDL Plans shall identify all Amenity Trees required to be removed over the construction of the Project (in accordance with Condition CEMP.6(o) and (p)). Replacement trees shall be sized at 160Lt and will either draw from the Coastal Forest or Basalt Rock Forest ecotypes listed in the Landscape Planting Schedules (provided in F.16, refer Schedule A, 17) or an agreed alternative species (confirmed by Major Infrastructure Team Manager, Auckland Council), except in the case of those trees subject to Condition ARCH.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

*Advice note: This does not necessarily apply to any replacement planting in the Open Space Restoration Plan areas, which will be confirmed in approval from Auckland Council and will be in accordance with relevant Auckland Council Park guidelines (see Condition OS.4).*

## **Open Space Conditions**

OS.1

For the purposes of Conditions OS.2-OS.4, OS.6, OS.9, OS.12-OS.14 and Conditions OS.5, OS.7-OS.8, OS.10-OS.11 and OS.15 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, the following terms will have the following meanings:

- Full size – means a football (soccer) field with the dimensions 100m x 60m.
- Half size – means a football (soccer) field with the dimensions less than 100m x 60m but no smaller than 50m x 30m.
- Toddler – means a playground specifically designed for children between the ages of 1 and 3  
Junior – means a playground specifically designed for children between the ages of 4 and 8  
Youth – means a playground specifically designed for children between the ages of 9 – 14 years  
Open Space Restoration Plans – means those plans listed in Schedule A, row 30.
- Open for Play - means the sports field has a level surface and a dense weed-free sward of mature

grass, goal posts and lighting if indicated in the Open Space Restoration Plans approved by the Auckland Council.

- Sand - carpeted - means the field has been levelled and irrigated, and conventional sub-soil drains, slit drains and a 50mm deep sand carpet have been installed. The field has been stolonised with a warm season grass such as kikuyu or couch.
- Auckland Council Park Guidelines – means the document by Auckland City Council titled “Furnishing our parks: design guidelines for park furniture”, dated September 2009  
Park furniture – means those items described in the Auckland Council Park Guidelines AS2560 – means the Australia New Zealand Standard for lighting of sports fields.
- AS4282 – means the Australia New Zealand Standard for the control of the obtrusive effects of outdoor lighting.
- Way finding exercise – means a process for determining the number, size, location and content of signage to provide clear direction for all park users.
- Skate-park for the purpose of condition OS.5(b)(iii) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, the NZTA shall be exempt from providing an Outline Plan of Works for the Project means a skate park with a size of approximately 1,400 sq. m. (generally 25 wide x 55m long), incorporating a range of design variations. Suitable for beginners (providing training facilities to develop their skills) but primarily catering for intermediate to advanced level skaters.
- BMX bike track for the purpose of condition OS.5(b)(iii) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, the NZTA shall be exempt from providing an Outline Plan of Works for the Project means a low maintenance, non-competition BMX bike track, incorporating a range of design variations. Primarily catering for beginner and intermediate riders.

## OS.2

The NZTA shall prepare Open Space Restoration Plans to outline how the open space replacement land, as defined in the Open Space Restoration Plan Areas (Schedule A, Row 30) (including land occupied during construction) will be reinstated or replaced on completion of construction, for handover to Auckland Council and those areas identified in Condition DC.1A(f) and RC.3(f) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent. Following the consultation detailed in Condition OS.3 below, the Open Space Restoration Plans listed in Condition OS.3(a) to (f) shall be submitted within 12 months of construction commencing in the specific areas affecting the reserves or within 12 months of occupation of open space, whichever is the sooner, to the Major Infrastructure Team Manager, Auckland Council.

Advice note: Condition OS.9 and Condition OS.10 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, require certain works to be provided prior to occupation of Construction Yards 6 and 7 (Waterview Reserve) and Construction Yards 9- 12 (Alan Wood Reserve) and this may impact on the timing of Open Space Restoration Plans for these areas.

## OS.3

The Open Space Restoration Plans shall be prepared in consultation with the Auckland Council, Iwi, the Community Liaison Groups (Condition PI.5), Heritage New Zealand, and other recreation users and other user representatives identified by Auckland Council. The Open Space Restoration Plans

shall comprise the following specific plans:

- (a) Waterview Reserve Restoration Plan;
- (b) Alan Wood Restoration Plan (including Hendon Park and 25 Valonia Street);
- (c) Oakley Creek Esplanade (Waterview Glades) Restoration Plan;
- (d) Jack Colvin Park Restoration Plan;
- (e) Rosebank Domain Restoration Plan;
- (f) Harbourview-Orangihina Reserve Restoration Plan; and
- (g) The areas of the Open Space Restoration Plans are shown in the Open Space Restoration Plan Areas (Refer Schedule A, Row 30).

#### OS.4

All Open Space Restoration Plans shall be prepared in general accordance with the UDL Plans (Schedule A, Row 30), and shall include, but not be limited to, the following:

- (a) Details of, including the location, of any artworks and educational signage, and directional signage. In the case of Alan Wood Reserve, Waterview Reserve and Oakley Creek Esplanade (Waterview Glade) this shall include a “way-finding exercise” in accordance with Auckland Council practice, to determine all signage to be provided; and
- (b) Evidence of integration with the Oakley Creek restoration works required under Conditions STW.5, STW.20, V.16 and LV.2(i); and a summary of the consultation undertaken (as required by Condition OS.3) and the response received; and
- (c) Details of any vehicle access through the reserves and parking areas; and
- (d) Park furniture (including quantity and quality) to be provided in accordance with relevant Auckland Council Park guidelines, except for:
  - (i) The riparian area within Alan Wood Reserve where the only furniture required is a maximum of 10 seats; and
  - (ii) Oakley Creek Esplanade (Waterview Glades) where the only furniture required is replacement of 3 existing seats; and
- (e) The inclusion and integration of the design for all pedestrian and cycleway linkages and facilities detailed on the PT and Active Mode Transport Routes (Schedule A, Row 22). The design integration shall be in accordance with CPTED principles; and
- (f) Implementation programme, including sequencing of works and completion dates. This shall include works that could be implemented prior to practical completion of construction works or are outside the Project area (e.g. upgrading of the Waterview Esplanade Reserve set out in Condition OS.5(b)(vii) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent) ; and
- (g) Implementation programmes for planting and field reinstatement. This shall include:
  - (i) A 12 month maintenance period for built structures and soft landscaping; and
  - (ii) For any landscaping accessible to horses an assessment to demonstrate that the planting schedule is not toxic to horses and that consultation on this has been undertaken with the Te Atatu Pony Club;
- (h) The specific requirements for each Restoration Plan area as set out in Conditions OS.5, OS.7-OS.8 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent and Condition OS.6 below;
- (i) Documentation of consultation undertaken required by Condition OS.3 and the views and concerns expressed by this consultation and the written approval of the Manager Community and Cultural Policy.

Advice note: For the avoidance of doubt provision of (a) to (h) above will require elevations, cross sections, engineering drawings and written documentation to supplement the UDL Plans. It is also noted that the UDL Plans identify landscaping, planting and other works beyond the Open Space Restoration Plans (refer Conditions LV.1 – LV.6, LV.9 and LV.10 with Conditions LV.6 and LV.9



contained in the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent). Educational signs and artworks are particularly encouraged.

### **Alan Wood Reserve (Specific)**

#### **OS.6**

The Alan Wood Reserve Open Space Restoration Plan, shall be prepared in general accordance with the detail shown for the Open Space Restoration Areas on the UDL Plans (Refer Schedule A, Row 17), the following shall be provided:

(a) Equivalent reinstatement of the following recreational facilities:

(i) Two “open for play” full sized sand-carpeted football (soccer) fields at Valonia Street with artificial lighting (for training purposes to AS2560 and AS4282), associated changing facilities/ ablution block, and associated parking requirements;

(ii) If a financial payment in lieu has not been made under Condition OS.9(b) then one half size football field for training purposes at Alan Wood Reserve;

(iii) One half basketball court; and

(iv) One volleyball court; Except that:

(v) There shall be a general 10m clear space for spectators around the fields and field layout shall be maximised to provide a continuous playing surface (e.g. for summer sports such as softball and cricket) (e.g. by altering drainage and the detailed design for the stream realignment of Oakley Creek).

(b) Other Restoration and Enhancement:

(i) An extension to the pedestrian / cycle access from the Pedestrian/Cycleway to Methuen Road through the existing park access at 174 Methuen Road, following a full CPTED review and response;

(ii) Details of proposed pedestrian/ cycle access within and to/from the reserve areas (including Hendon Park Bridge) (Refer Schedule A, Row 9) including a full CPTED review and response;

(iii) Separation of pedestrian access within the reserve (e.g. linking the carpark to the fields) from the SH20 Cycleway (Refer Schedule A, Row 17);

(iv) Subject to obtaining necessary resource consents and Auckland Council landowner approval, provision of a skate-park;

(v) Design and provision of the Management Plan elements identified on UDL Plan 218 (Refer Schedule A, Row

17) (with the exception of M3 and M7) and notation M2 on Plan 219, subject to approval from Auckland Council;

(vi) Design and provision of the Management Plan elements identified on UDL Plan 220 (noted M1 through to M5), on UDL Plan 221 (Refer Schedule A, Row 17) (noted as M1 – M3, M7 - M10, M12 and M13) and on UDL Plan 222 (noted M1 and M2 and M4 and M6), subject to any necessary resource consents and landowner approval from Auckland Council; and (vii) Landscape planting as provided on UDL Plan 223 (Refer Schedule A, Row 17) (noted as M1 and M3), subject to landowner approval from Auckland Council. *Advice Note: Condition OS.6(a) needs to be read in conjunction with Condition OS.9(a) as decisions made prior to construction may be relevant to the post construction Open Space Restoration Plan.*

### **Construction Works**

#### **OS.9**

At least 20 working days prior to the occupation of the construction areas within Alan Wood Reserve, the NZTA shall, in consultation and agreement with the Auckland Council, provide:

(a) Three soccer playing fields, maintaining as a minimum the existing dimensions of the playing fields in Alan Wood Reserve that are open for play, including associated access, ablution block and carparking. If the two fields at Valonia Reserve can be provided as an early work these will be done to the standard set in OS.6(a); or

(b) An equivalent financial payment in lieu (or part thereof) to the Auckland Council, which has been paid in full at least 20 working days prior to occupation of Construction Yards 9 - 12; and  
(c) A half basketball court and volleyball court.

#### OS.9a

Prior to occupation of Construction Yards 8, 9 and 10, access to the following areas will be maintained or provided (as shown as Area A on the Accessible Open Space in Sector 9 during Construction Plan (Refer Schedule A, Row 29)):

- (a) Approximately 4.6ha of existing passive open space from Methuen Road to New North Road.
- (b) Approximately 2.2ha of newly established active recreation open space and existing passive open space, in the vicinity of the Valonia Street Reserve.

#### OS.9b

Following the stream realignment, a passive recreation linkage (including a gravel walkway) between the above open spaces will be provided, establishing a continuous open space linkage from Valonia Street to New North Road (identified as Area B on the Accessible Open Space in Sector 9 During Construction Plan (see Schedule A, Row 29)).

#### OS.12

The "Hendon Park Bridge" to the Valonia Reserve area shall be provided within three months of completion of construction works on the SH20 carriageway (up to chainage 1300) and the final stormwater pond proposed at Valonia Street.

#### OS.13

During construction, the NZTA shall maintain pedestrian accessways to all open space available for public use during construction and education facilities where access is affected by the works, including any public access that crosses private land. Such access shall be safe, clearly identifiable, provide appropriate surfacing and seek to minimise significant detours. The access shall be of a same or similar standard as that disrupted and will be provided and maintained by the NZTA.

Advice note: This specifically includes the existing pedestrian access that provides a connection to the crossing over Oakley Creek between 1510 Great North Road and Unitec Mt Albert Campus.

#### OS.14

Where access to Oakley Creek will be disrupted for more than 3 consecutive days, or over a weekend, or there is no provision for a walkway detour, the Community Liaison Person shall notify the Friends of Oakley Creek at least 20 working days in advance of any planned disruption (except where the disruption is of shorter duration, or an emergency situation).

#### OS.17

(a) The NZTA will facilitate the Crown making the property at 6 Barrymore Road (with the exception of land required for the ongoing operation and maintenance of the State Highway or the future rail corridor land) available to Auckland Council for reserve. Any transfer to Auckland Council would be subject to the agreement of both Land Information New Zealand and Council, and only occur after the designation footprint is withdrawn to the operational requirements of the Project (as per Condition DC.10).

(b) If the transfer to Auckland Council does not occur within 12 months of commencement of operations of the motorway in Sector 9, the NZTA shall make a financial payment in lieu of that transfer to Auckland Council in the amount of \$1.13 million, for the same purposes as the payment described in condition SO.14, but not further conditional in the manner provided by

SO.14(d).

(c) The purpose of the transfer under (a) or the financial payment under (b) is to mitigate significant adverse effects on passive open space and reserves in Sector 9 (other mitigation having been held by the Board of Inquiry not to be adequate).

Advice Note: The disposal of surplus Crown land is subject to statutory processes (including the Public Works Act) which are managed by Land Information New Zealand and not the NZTA directly.

### **Social Conditions**

SO.1

In addition to the Community Liaison Groups established pursuant to Condition PI.5, the NZTA shall establish an Education Liaison Group (including representatives from local schools, kindergartens, childcare facilities, Unitec Institute of Technology, the Ministry of Education and Housing New Zealand Corporation), to provide a forum through which:

- (a) Relevant monitoring data can be provided (e.g. air quality monitoring);
- (b) Notice can be provided of when particularly noisy activities will occur in close proximity to schools and education facilities, to enable the opportunity to identify any potential conflict with particular sensitive periods, and the requirement for specific mitigation strategies (e.g. rescheduling of construction activities where practicable);
- (c) Particular concerns can be raised by educational facilities or parents, discussed and potentially addressed;
- (d) Notice can be provided of potential construction impacts on school transport routes (including pedestrian/cycle access) to enable the opportunity to identify specific mitigation preferences of the education facilities (e.g. any detour routes) and to enable these facilities to appropriately inform students and/or parents; and
- (e) Learning and teaching opportunities for educational facilities to participate in Project works (e.g. planting or artworks). The Education Liaison Group shall be established at least 2 months prior to construction commencing and shall have regular meetings (at least three monthly) throughout the construction period. The Education Liaison Group shall continue to meet for at least 12 months following the completion of the Project (or less if the members of the Education Liaison Group agree), so that ongoing monitoring information can continue to be disseminated.

SO.2

In addition to Condition SO.1(b) above, where noisy construction activities (that are projected to exceed the Noise Criteria in the CNVMP) are proposed in close proximity or adjacent to schools/ childcare centres, the NZTA shall, when preparing their SSNMP (in accordance with Condition CNV.1) give specific consideration to options to carry out these works outside school hours or during school holidays as a mitigation option.

SO.6

In addition to the Community Liaison Group established pursuant to Condition PI.5, the NZTA shall establish a Working Liaison Group (WLG) inviting the following:

- (a) Auckland Council;
- (b) Housing New Zealand Corporation;
- (c) Te Kawerau Iwi Tribal Authority;
- (d) Ngati Whatua o Orakei;
- (e) KiwiRail;
- (f) Department of Conservation;
- (g) Ministry of Education; and
- (h) Local Boards.

The purpose of this WLG will be to provide a forum through which:

(a) Opportunities for public work development (including social housing, passenger transport or recreation / open space) are identified in areas where the NZTA confirms that the designation is no longer required (e.g. following construction activities);

(b) Comment can be provided on updated Urban Design and Landscape Plans, including the finalised designs of structural elements for the Project (prior to their submission to the Auckland Council);

(c) Opportunities for integration of other environmental projects (e.g. restoration plantings) are identified;

(d) Consideration is given to appropriate protocols for commencement and completion of construction activities (including blessings for commencement of construction phases); and

(e) Comment can be provided by Te Kawerau a Maki on the detailed lighting design of SH16, to consider how lighting effects on cultural sites and practices might be mitigated without compromising traffic safety or those performance standards identified in Condition L.1. The Working Liaison Group shall be established at least 2 months prior to construction commencing and shall have regular meetings (at least three monthly) throughout the construction period.

#### SO.7

A schedule of trees that require removal for construction of the Project will be identified and reported to the Community Liaison Group for their consideration of potential provision of timber for heritage projects (including in particular the provision of *Robinia* wood for heritage boat building). If the demand for this timber is identified to the Construction Team, appropriate measures for felling and removal from the site will be confirmed.

#### SO.13

The NZTA shall appoint a medical specialist qualified and experienced in Environmental and Occupational Medicine for the duration of the operational air quality monitoring of the Project (as defined by Condition OA.4) to be a point of contact for persons concerned about the discharge from the ventilation stacks. This person must be reasonably available by appointment for advice on matters of concern for residents within the Waterview / Point Chevalier and Owairaka / New Windsor communities, and parents of pupils and prospective pupils at schools, kindergartens, play schools, and child care centres within those areas.

#### SO.14

For the purpose of mitigating significant adverse effects on passive open space and reserves in Sectors 5, 7 and 9, both during the construction years and longer term, particularly in the Waterview, Owairaka and New Windsor communities (other mitigation having been held by the Board of Inquiry not to be adequate) the following applies:

(a) The NZTA shall, subject to conditions (b), (c) and (d) below, construct the following:

(i) A pedestrian and cycleway to AUSTROADS standards between Waterview and Owairaka/New Windsor (as generally indicated on drawing labelled as "Indicative SH20 Cycleway Route" (refer to Schedule A, Row 40)), subject to any modifications necessary to address design, property or engineering constraints.

(ii) The "Alford St Bridge".

(iii) The "Soljak PI Bridge".

(b) The NZTA's obligations under condition (a)(i) arise when the NZTA receives certification from the Auckland Council and Auckland Transport that the Auckland Council and Auckland Transport have:

(i) acquired all necessary land, or obtained all necessary interests and/or landowner approvals on a permanent basis in respect of the facilities described in condition (a)(i); and

(ii) acquired sufficient land to form a cycle and pedestrian way to AUSTROADS standards between

Alan Wood Reserve and Unitec; and

(iii) obtained all necessary resource consents required for construction and operation of the facilities.

(c) The NZTA's obligations under condition (a)(ii) arise when the NZTA receives certification from the Auckland Council and Auckland Transport that the Auckland Council and Auckland Transport have:

(i) acquired all necessary land, or obtained all necessary interests and/or landowner approvals on a permanent basis for the Alford St Bridge; and

(ii) obtained all necessary resource consents required for construction and operation of the Alford St Bridge.

(d) The NZTA's obligations under conditions (a)(iii) arise when the NZTA receives certification from the Auckland Council and Auckland Transport that the Auckland Council and Auckland Transport have:

(i) acquired all necessary land, or obtained all necessary interests and/or landowner approvals for the Soljak PI Bridge either on a permanent basis or on the basis that the Soljak PI Bridge may be constructed and operated unless and until its continued existence and / or operation conflicts with or compromises future works pursuant to the designation for rail purposes; and

(ii) obtained all necessary resource consents required for construction and operation of the Soljak PI Bridge.

(e) The certification from Auckland Council required under conditions (b), (c) and (d) above must be received by the NZTA within 8 years of the designations for the Project being confirmed.

(f) Each of the facilities for which certification has been given must be constructed within 1 year of the opening of the motorway, or two years from when certification is given for the relevant facility, whichever is the earlier, subject however to some elements of the facilities towards the northern end needing to await the decommissioning of Construction Yard 7.

(g) The value of the construction works to be undertaken by the NZTA pursuant to condition (a) to (d) above shall not exceed a sum equal to \$8 million in June 2011 New Zealand dollars (with any construction costs above that figure being met by the Council.)"

(h) The pedestrian and cycleway facilities described in condition (a)(i) above are in addition to the cycling and pedestrian facilities required by the other conditions.

**Advice notes:**

The intention of this condition is to construct a continuous pedestrian and cycleway with bridges at Soljak PI and Alford St. To achieve this, the Council and Auckland Transport will use their best endeavours to obtain the necessary consents and landowner approvals, for all three components of the network.

The approvals required for the Soljak PI Bridge reflect the designation for rail purposes of land under the bridge and the possibility that any bridge structure will be approved for a limited length of time only.

In the event that, despite their best endeavours, the Council and Auckland Transport cannot obtain all of the necessary landowner approvals, the condition allows each part of the network to be constructed in isolation from the others. That will provide some mitigation of the significant adverse effects on passive open space and reserves in Sectors 5, 7 and 9 that the condition is intended to address. It will also enable the Council and Auckland Transport to complete the network in the future at their expense when and if they are able to obtain the outstanding approvals.

Condition (f) above requires the earlier of the 2 named events to be the trigger for NZTA to undertake the works, in order that the required mitigation or at least some of it occur during the construction years. It also recognises that towards the northern end of the pedestrian and

cycleway, some of the works may need to await the de-commissioning of Construction Yard 7.

Subject to landowner approvals, the Council and/or Auckland Transport will be the owner of the pedestrian and cycleway and the bridges described in (a) above and shall have full responsibility for the operation and maintenance of those facilities once they have been constructed by NZTA. Accordingly, NZTA will be under no further obligation in respect of any of the facilities once they have been constructed and, in particular, will have no obligation in terms of the removal, alteration or replacement of the Soljak PI Bridge in the event that it conflicts with or compromises proposed works pursuant to the designation for rail purposes.

### **Vegetation Conditions**

#### V.1

The NZTA shall finalise the ECOMP submitted with this application, prior to works commencing on site. The ECOMP shall be implemented through the CEMP. The ECOMP shall clearly identify the location and identity of:

- (a) All Significant Vegetation within the designation that is to be fully protected or relocated; and
- (b) All Valued Vegetation within the designation that is affected by the works (protected or removed).

Note: Significant and Valued Vegetation shall be as defined in the ECOMP.

#### V.2

The NZTA shall employ a suitably experienced botanist ('nominated botanist') for the duration of the works to monitor, supervise and direct all works affecting or otherwise in close proximity to the Significant Vegetation and Valued Vegetation identified in the ECOMP.

#### V.3

Prior to any site works commencing, a pre-commencement site meeting shall be held so that the conditions that pertain to the Significant Vegetation and Valued Vegetation and all vegetation in general (both native and exotic) are explained by the nominated botanist to all contractors or sub-contractors who will be working on site within the close vicinity of that vegetation.

#### V.4

The NZTA shall minimise the amount of vegetation (both native and exotic) which is to be cleared, with the exception of weeds (both woody and otherwise, unless agreed with the Major Infrastructure Team Manager, Auckland Council and the Community Liaison Group that the retention of these 'weeds' has other environmental or ecological benefits that warrant their retention). All vegetation clearance shall be undertaken in accordance with the measures set out in the ECOMP.

#### V.5

The NZTA shall install protective fencing around, or otherwise clearly demarcate, all of the Significant Vegetation identified in the ECOMP as requiring full protection, under the supervision of the nominated botanist.

#### V.6

The NZTA shall replace any terrestrial Valued Vegetation that is required to be removed as a result of construction activities, in accordance with the ECOMP and the Urban Design and Landscape Plans.

#### V.7

The nominated botanist shall supervise all trimming, pruning and relocation work associated with

the Significant Vegetation and Valued Vegetation required as part of the works.

V.8

Immediately prior to planting, and for a period of 2 years following completion of construction, the NZTA shall undertake weed control and management of all invasive plant pests within the vegetated areas of the surface designation for the Project. Following this 2 year period, on-going control and management of all invasive plant pests within these areas will be the responsibility of the NZTA.

V.9

The nominated botanist shall undertake a monitoring programme throughout the construction period, including monitoring of:

- (a) The condition, repair and location of the temporary protective fencing or other forms of demarcation used to identify the Significant Vegetation;
- (b) Any works within the vicinity of the Significant Vegetation and Valued Vegetation;
- (c) The general health of the Significant Vegetation and Valued Vegetation (including any Significant or Valued Vegetation that has been relocated away from the works area); and
- (d) Compliance with the vegetation conditions of designation by way of fortnightly inspections during the construction period.

V.10

Any planting utilising native plants shall use plants genetically sourced from the Tamaki Ecological District where possible or otherwise shall use plants that have been genetically sourced from within the Auckland Ecological Region.

V.12

Should the taxonomic and rarity status of the Geranium species growing alongside Oakley Creek in Hendon Park and Alan Wood Reserve not be confirmed before the commencement of works in this area, then this species shall be treated as Significant Vegetation and shall either be:

- (a) Protected in full or in part, and/or
- (b) Where protection is not practicable, relocated to a suitable and safe habitat elsewhere; or
- (c) Where protection or translocation are not practicable, this population shall be cleared in locations where required to allow works to proceed, but replaced with an equal extent of replacement plantings of the same species (from propagated material sourced from the existing population) planted at a safe and suitable habitat nearby in Hendon Park/Alan Wood Reserve.

V.13

Any clearance of the Geranium in accordance with Condition V.12 shall be restricted to the minimum necessary to facilitate the works.

V.16

All realignments and riparian enhancements of Oakley Creek shall be carried out in accordance with the Oakley Creek Realignment and Rehabilitation Guidelines and in general accordance with the Urban Design and Landscape plans (Refer Schedule A, Row 17).

**Avian Conditions**

A.1

The NZTA shall finalise, and implement through the CEMP, ECOMP submitted with this application to include the matters set out in Conditions A.2 to A.6 of the Final Report and

### **Herpetofauna Conditions**

#### **H.1**

The NZTA shall finalise and implement through the CEMP, the ECOMP submitted with this application to include details of lizard management to be undertaken, including the following:

- (a) Lizard capture methodology, including timing;
- (b) Lizard release location(s);
- (c) Lizard habitat enhancement at population release sites, including a detailed pest control programme for a minimum of one month prior to release and for a minimum of three consecutive years' duration after release;
- (d) Location(s), monitoring and maintenance of lizard protective fencing;
- (e) Post-release monitoring methodology; and
- (f) Lizard captive management methodology.

### **Lighting Conditions Operation**

#### **L.1**

Lighting shall be designed and screened to minimise the amount of lighting overspill and illumination of residential areas, in general accordance with the Waterview Connection Lighting Plan (Drawing Set F.11 (Refer Schedule A, Row 12):

- a) All motorway lighting shall be designed in accordance with "Roadlighting Standard AS/NZS1158";
- b) All other lighting shall be designed in accordance with relevant rules provided in the Unitary Plan;
- c) Fully cut off luminaires shall be used on SH20 from the Southern Tunnel Portal to the Maoro Street Interchange to minimised lighting overspill, as shown on Drawing Set F.11(Refer Schedule A, Row 12).

### **Construction Zones and Construction Yards**

#### **L.2**

A Temporary Construction Lighting Management Plan shall be prepared for all construction zones and construction yards prior to commencement of any night time works within the construction zones and construction yards. The Temporary Construction Lighting Management Plan shall be independently verified by a lighting specialist and provided to the Major Infrastructure Team Manager, Auckland Council for certification of compliance 10 working days prior to any night time work commencing. The certification process shall ensure that the Plan includes (but is not be limited to):

- a) The layout and arrangement of all temporary lighting required for night time works, and shall show how this avoids the "Light Spill Restriction Zone" identified on the Construction Yard Plans (Refer Schedule A, Row 7) submitted with the application, and that the temporary lighting complies with relevant rules provided in the Unitary Plan;
- b) Provision for a 10m buffer between the night time work and any residential boundary at all times to minimise potential for light spill; and
- c) General operating procedures outlined in the CEMP.

### **Lighting Conditions**

#### **L.3**

Asymmetrical floodlights with horizontal glass visors that are not raised more than 3 degrees above the horizontal plane shall be used for any temporary construction night time lighting requirements. Alternative temporary lighting arrangements may be used, subject to the prior approval of the Major Infrastructure Team Manager, Auckland Council, where it can be demonstrated that the proposed lighting is similar or better to asymmetrical floodlights with glass



visors. Glare shall be kept below the recommendation given in AS 4282 – 1997 “Control of the Obtrusive Effects of Outdoor Lighting” Tables 2.1 and 2.2.

### **Archaeology Conditions**

#### **ARCH.1**

The NZTA shall complete, and implement through the CEMP, the Archaeological Site Management Plan (ASMP) submitted with the notice of requirement, to include, but not be limited to:

- a) Identification of the Project archaeologist, their role and responsibility on the Project;
- b) Who reports to the Project archaeologist;
- c) Specific sites requiring supervision, and measures to be undertaken to protect and manage these sites;
- d) Whether Heritage New Zealand and/or Auckland Council heritage and/or iwi supervision is required for the specific consultation with the relevant iwi groups); and
- e) Accidental discovery protocols in the event that unknown archaeological sites are uncovered.

#### **ARCH.2.**

The NZTA shall employ at its expense a qualified archaeologist (the Project archaeologist) who shall be on site to monitor all initial earthworks, including surface stripping of the site, for all specific areas identified in the ASMP to establish whether any sub-surface archaeological features are present. This includes, but is not limited to, the following areas:

- (a) All unmodified areas in the vicinity of Rosebank Road;
- (b) All works in the vicinity of the “Oakley Inlet Heritage Area”, located adjacent to the Great North Road Interchange;
- (c) Works in the vicinity of two midden sites (recorded R11/2214 and R11/2215) within Great North Road Interchange, and all previously unmodified areas near the banks of the Oakley Inlet;
- (d) Any ground disturbance works in Construction Yard 7 within Oakley Creek Reserve.

#### **ARCH.3**

If any archaeological sites, including human remains are exposed during site works, then the following procedures shall apply:

- (a) Immediately it becomes apparent that a possible archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease;
- (b) The site supervisor shall immediately secure the area in a way that ensures that any artefacts or remains are untouched and notify the Project archaeologist;
- (c) The Project archaeologist shall inspect the site to assess the relevance of the find, and then the Auckland Council shall be advised of the significance;
- (d) If the site is confirmed to be an archaeological site by the Project archaeologist, the site supervisor shall then notify tangata whenua, Heritage New Zealand, and the Auckland Council that an archaeological site has been exposed so that appropriate action can be taken
- (e) In the case of human remains, the NZ Police shall be notified.

#### **ARCH.8**

All contractors and subcontractors working on the Project shall be trained on the archaeological requirements set out in the ASMP.

#### **Advice note:**

Any archaeological sites within the area affected by the Project shall not be modified or disturbed in any way unless written authorisation has been obtained from Heritage New Zealand.

## **Ground Settlement Conditions**

### **S.1**

The NZTA shall finalise, and implement through the CEMP, the Settlement Effects Management Plan (SEMP) lodged with the application prior to construction activities being undertaken. Prior to construction (following detailed investigation and design), the total estimated settlements and building damage categories shall be confirmed using the methodology in Technical Report G.13 *Assessment of Ground Settlement Effects* and the SEMF shall be updated accordingly. In the event that settlement predictions are greater (than those allowed for in Figure E.14 (refer Schedule A, Row 26)) or building damage categories increase in ranking or buildings affected from those identified in Figures G1-G4 (refer Schedule A, Row 27), mitigation measures shall be introduced as part of the detailed design and construction process to avoid any adverse effects greater than predicted by the application lodged in August 2010.

## **Settlement Monitoring**

### **S.2**

The NZTA shall establish a series of ground settlement monitoring markers to monitor potential settlement in relation to the construction of the tunnels. The survey markers will be located generally as follows:

- (a) Along the tunnel alignment and extending out to a maximum of 400m either side of the tunnels to correlate with cross sections that have been used for the settlement estimates and to infill between them.
- (b) To cover the more extensive eastern zone area of settlement at Chainage 3400 (Figure E.14 refer Schedule A, Row 26).
- (c) On or around buildings or features considered to be particularly sensitive as defined in the SEMF (including those buildings identified in Condition S.7) and as may be updated to reflect detailed analysis and interpretation of monitoring results as the Project proceeds. Two types of markers shall be established: Framework Markers which shall form the main basis of monitoring, and Intermediate Markers which shall provide additional monitoring information for interpretation of Alerts and Alarms. The locations of each type of settlement monitoring marker shall be confirmed in the SEMF. Each Framework Marker shall have an alert and alarm level set in relation to Figure E.14, where alert = 75% of the theoretical value and alarm = 100% of the theoretical value with due consideration of the seasonal range of ground movement identified by pre-construction monitoring.

### **S.3**

The NZTA shall survey the settlement monitoring markers at the following frequency:

- (a) Pre-construction
  - (i) All Framework Markers – Vertical and selected horizontal at 3 monthly intervals, starting at least 12 months prior to construction commencing; and
  - (ii) All Intermediate Markers - Vertical and selected horizontal once.
- (b) During Construction
  - (i) All Framework Markers - Vertical on a monthly basis; and
  - (ii) Selected Framework Markers only - Horizontal on a monthly basis.
- (c) During Active Construction
  - (i) All Framework and Intermediate Markers – Vertical on a weekly basis; and
  - (ii) Selected Framework Markers only - Horizontal on a monthly basis.

“Active construction” shall be defined as:

- (a) Starting when the advancing tunnel face comes within 150m and ending when the final tunnel lining has been installed 150m beyond the section; and
- (b) When excavation in front of a retaining wall comes within 100m of a section and ending when

the permanent wall supports are in place beyond a distance of 100m.

#### S.4

Within three days of each monitoring round, the NZTA shall use the settlement monitoring results (together with the results of groundwater monitoring where they may provide an earlier indication of future settlements) to reassess the ground settlements and building damage categories and compare them to those estimated in Figures E.14 and G1-G4 (refer Schedule A, Row 26 and 27).

If alert and alarm levels are exceeded, the trigger marker shall be resurveyed within 24 hours.

If the reassessment indicates that a building has increased its damage category from that in Figures G1 – G4 (refer Schedule A, Row 27) then this shall be considered to be an Alert Level and additional specific assessment of the building shall be carried out by the NZTA to confirm this reassessment within 72 hours.

If the additional assessment confirms the increase in damage category, this shall be considered to be an Alarm Level and the property owner and occupier will be notified within 48 hours. Following consultation with the property owner and occupier(s); subsequent actions may include increased frequency and/or extent of monitoring, modification to the construction approach or mitigation works to the affected building.

#### S.5

Settlement monitoring shall be undertaken for a period of 2 years following completion of the tunnels. The NZTA may reduce the frequency of settlement monitoring, required by Condition S.3, to 6-monthly:

- (a) Once the active construction stage has passed; and
- (b) Monthly monitoring has been undertaken for a minimum of 6 months; and
- (c) The monitoring indicates that any potential settlement effects are within a satisfactory range as specified in the SEMP; and
- (d) The criteria in (a) to (c) above has been certified by the Auckland Council.

#### S.6

The NZTA shall collate the results of the settlement monitoring (undertaken pursuant to Conditions S.2 – S.5) and prepare a report that shall be made available to the Auckland Council. A settlement monitoring report shall be prepared prior to the commencement of construction, and then at monthly intervals throughout the construction period. Following the completion of construction, a settlement monitoring report shall be prepared following each round of settlement monitoring undertaken (i.e. monthly and then 6-monthly when monitoring is reduced pursuant to Condition S.5).

The settlement reports shall highlight any alert or alarm level exceedences and provide a full interpretation and/or explanation as to why these levels are exceeded, the likely effects and detail any remedial or mitigation measures initiated as a result of these trigger exceedences.

### **Building Condition Surveys**

#### S.7

The NZTA shall review and update the schedule of buildings and structures considered to be at risk in accordance with the criteria of the SEMP and maintain this for review by the Auckland Council. This shall include, but not be limited to, the following properties identified in the Technical Report G.13 *Assessment of Ground Settlement Effects* provided in support of this application:

- (a) Buildings on properties within the substrata designation;
- (b) Buildings where total estimated settlement is greater than 50mm (defined in Figure E.14 –

Refer Schedule A, Row 26);

(c) Buildings in areas estimated to have a risk of damage more than negligible (defined in Figures G1-G4 as categories 1-5 (Refer Schedule A, Row 27));

(d) Unitec Buildings 76, and 310-313 (as per Unitec Site Plan in Schedule A, Row 31);

(e) 1510 Great North Road, Unitec Residential Flats (two buildings);

(f) Pak'n Save Supermarket;

(g) Metro Football Clubhouse, Phyllis Street;

(h) Building at 1550 Great North Road;

(i) BP Service station at 1380 Great North Road;

(j) Modern Chairs Building (Richardson Road);

(k) Waterview Primary School;

(l) Operational septic tanks where total estimated settlement is greater than 50mm; and

(m) Buildings on the western side of the alignment between Chainage 3000 and 3400 where total estimated settlement is greater than 20mm.

#### S.8

The NZTA shall consult with owners of buildings and structures identified in Condition S.7 and, subject to the owner's approval of terms acceptable to the NZTA, shall undertake a preconstruction condition assessment of these structures in accordance with the SEMP.

S.9 The NZTA shall employ a suitably qualified person (e.g. a Chartered Professional Engineer) to undertake the building assessments required pursuant to Conditions S.8 and S.12 and identify this person in the SEMP.

S.10 The NZTA shall undertake monthly visual inspections of the following buildings during the "active construction" phase of the Project as defined in Condition S.3:

(a) All Type 1 Dwellings within a zone where "more than negligible" effects have been predicted;

(b) All Type 2 Dwellings within a zone where "slight" effects or greater have been predicted

(c) Unitec Building 76;

(d) 1510 Great North Road, Unitec Residential Flats (two buildings);

(e) Pak'n Save supermarket; and

(f) Waterview Primary School (pool and hall).

Note: Type 1 and 2 Dwellings are those as defined in Technical Report G.13 *Assessment of Ground Settlement Effects*.

#### S.11

The NZTA shall undertake level and/or wall inclination surveys on a monthly basis during the "active construction" phase of the Project on the following buildings:

(a) All Type 1 Dwellings within a zone where "slight" effects or greater have been predicted;

(b) Unitec Building 76;

(c) 1510 Great North Road, Unitec Residential Flats (two buildings);

(d) Waterview Primary School (pool); and

(e) Pak 'n' Save Supermarket

#### S.12

The NZTA shall, subject to the owner(s) approval, ensure that within 6 months of completion of construction activities, a post-construction condition assessment covering the matters identified in the SEMP is undertaken and shall be provided to the owner(s). The assessment report shall include a determination of the cause of damage identified (if any) since the preconstruction condition assessments. The NZTA shall agree with the owner(s) appropriate remedial works (if

any) in conjunction with arrangements for implementation and/or compensation. The requirements of this condition need not be fulfilled for any particular building with the written approval of the current owner of a building or where the NZTA can provide reasonable evidence to the Auckland Council that the current owner of that building has agreed they do not require such a survey.

#### S.13

The NZTA shall ensure that a copy of the pre, post-construction and any additional building condition assessment reports for each building be forwarded to the respective property owner(s) within 15 working days of completing the reports. The NZTA shall notify the Auckland Council that the assessments have been completed. The community liaison person appointed pursuant to Condition PI.1 shall be the contact person for owner(s) subject to assessment and reporting under Conditions S.1 to S.11 and S.16 and remedial works or compensation payments under Condition S.12 and S.16.

### **Retaining Wall Monitoring**

#### S.14

The NZTA shall establish inclinometer and surface monitoring of the retaining walls for the tunnel portals and cut and cover tunnel to determine any potential effect from the tunnels. The nature and timing of the monitoring shall be determined during detailed design of the retaining walls and specified in the SEMP.

### **Services Monitoring**

#### S.15

Prior to construction commencing, the NZTA shall undertake CCTV surveys of services identified in the SEMP as being susceptible to damage or particularly critical. This shall include, but not be limited to:

- (a) Waterview Orakei No. 9 trunk sewer.

The NZTA shall monitor these services by undertaking additional CCTV surveys throughout the construction period. If any damage is determined in relation to the Project, the NZTA shall undertake any remedial action as required in consultation with the service provider.

### **Slope Stability Assessments**

#### S.16

Prior to construction commencing, the NZTA shall undertake geotechnical investigations of slopes or sites that have been identified as potentially being susceptible to movement. This shall include, but not be limited to:

- (a) 14H and 14J Cradock Street
- (b) 34 Cradock Street
- (c) 40 Cradock Street
- (d) 56 Powell Street;
- (e) 1590A Great North Road; and
- (f) Other sites on the western slopes of Oakley Creek identified under Condition S.7(b) and S.7(m) which are assessed in the course of a pre-construction condition assessment undertaken in accordance with Condition S.8 as potentially being susceptible to slope movement.

The NZTA shall undertake monitoring throughout the active construction period in accordance with Condition S.10 above and shall assess and agree remedial action as required, in consultation with the owner, in accordance with Condition S.12 above.

## **Differential Settlement**

### **S.17**

Pairs of settlement markers shall be established on each side of the cross sections identified on Figure E.14 to monitor differential movements. The markers in each pair shall be no more than 20m apart, and each pair shall be within 100m of the centreline of the closest tunnel. Monitoring installed in accordance with Condition S.11 can be utilised for this purpose. Each pair of markers shall have Alert and Alarm values set based on the calculated differential settlements at that location and consistent with the relevant calculated Building Damage Category (Figures G1-G4, (Refer Schedule A Row 27)), Alert and Alarm levels shall be as defined in Condition S.2. Monitoring frequency shall be as defined for Framework Markers in Condition S.3.

## **Streamworks**

### **Conditions General conditions**

STW.1 The streamworks and associated works (such as stormwater outfalls) shall be undertaken in accordance with the plans and information contained within Technical Report G.15 *Assessment of Stormwater and Streamworks Effects* and Technical Report G.22 *Erosion and Sediment Control Plan*, submitted with this application. The design of streamworks and associated works shall follow the approach expressed in the Oakley Creek Re-alignment and Rehabilitation Guidelines, appended to *Technical Report G.6 Assessment of Freshwater Ecological Effects*.

### **STW.2**

Any future amendments that may affect the performance of the streamworks shall be approved by the Major Infrastructure Team Manager, Auckland Council in writing, prior to construction. Any amendments to the design shall be in accordance with the Western Ring Route: Oakley Creek Re-alignment and Rehabilitation Guidelines (Boffa Miskell, 2010), appended to *Technical Report G.6 Assessment of Freshwater Ecological Effects*.

### **STW.3**

The NZTA shall inform the Major Infrastructure Team Manager, Auckland Council in writing at least 10 working days prior to any streamworks commencing, and again 10 working days before any environmental protection measures are removed.

### **STW.4**

Prior to streamworks commencing on site, the NZTA shall arrange and conduct a preconstruction site meeting between Auckland Council, NZTA and the primary contractor.

### **STW.5**

At least 20 working days prior to commencement of streamworks associated with the realignments of Oakley Creek and the Stoddard Road tributary, the construction design details associated with these works shall be submitted to the Major Infrastructure Team Manager, Auckland Council for approval. The details shall include but not be limited to:

- (a) Detailed design of the proposed streamworks including long sections, cross sections and details of the design including freshwater habitat improvement and riparian planting;
- (b) Construction erosion and sediment control plans (ESCP).

### **STW.6**

The NZTA shall forward a detailed construction programme and methodology to the Major Infrastructure Team Manager, Auckland Council at least 10 working days prior to the commencement of works, and shall provide monthly updates during the streamworks. These shall include details of:

- (a) The commencement date and expected duration of the streamworks;
- (b) The location of any works and structures in relation to the streamworks; and
- (c) Dates for the implementation of erosion and sediment controls.

#### STW.7

No streamworks shall be undertaken between 1 May and 30 September unless written approval has been obtained from the Major Infrastructure Team Manager, Auckland Council. Any such approval shall be sought at least 10 working days prior to the proposed commencement of the works.

#### STW.8

All erosion and sediment controls associated with the streamworks shall be constructed and installed in accordance with Technical Report G.22 *Erosion and Sediment Control Plan* submitted with this application.

#### STW.9

The site shall be stabilised against erosion as soon as practicable and in a progressive manner as streamworks are finished.

#### STW.10

All uncompacted material shall be kept clear of the channel during and after streamworks.

#### STW.11

The NZTA shall ensure that any temporary dam structure built within the stream shall be constructed from non-erodible material (such as sandbags or sheet piles).

#### STW.12

The NZTA shall ensure that when dewatering the in-stream works area, no sediment-laden water shall be discharged directly into a watercourse. Any sediment-laden water must be treated in an appropriate sediment treatment device in accordance with TP90.

#### STW.13

All machinery shall be maintained and operated in a way which ensures that spillages of fuel, oil and similar contaminants are prevented, particularly during refuelling and machinery servicing.

#### STW.14

The NZTA shall ensure that:

- (a) Any excavated sediment that requires temporary stockpiling shall not be placed within the 1% AEP flood plain; and
- (b) Erosion and sediment control measures around the stockpile perimeter shall be constructed in accordance with TP90.

#### STW.15

The design engineer and Project ecologist shall monitor the construction of the streamworks. The NZTA shall submit to the Major Infrastructure Team Manager, Auckland Council a certificate signed by an appropriately qualified and experienced engineer and ecologist to certify that the streamworks have been undertaken in accordance with the drawings supplied with this application, or as otherwise amended under Condition STW.2, within three months of completion of the streamworks.

STW.16

The NZTA shall obtain approval of the constructed stream realignment works from the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to diversion of Oakley Creek into the new channel.

### **Bridge Structure**

STW.17

The NZTA shall submit a certificate signed by an appropriately qualified and experienced engineer to certify that the Oakley Creek SH20 motorway bridge has been constructed in accordance with the drawings supplied with this application, within 3 months of completion of the structure.

STW.18

Any erosion occurring as a result of construction of the Oakley Creek bridge (SH20) shall be remedied as soon as possible and to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.

STW.19

The area of Oakley Creek beneath the Oakley Creek bridge (SH20) shall be maintained free of debris to ensure stream flows are not restricted.

### **Streamworks Environmental Management Plan (SWEMP)**

STW.20

The NZTA shall submit for approval to the Major Infrastructure Team Manager, Auckland Council a Streamworks Environmental Management Plan (SWEMP) which shall include details of the final freshwater mitigation and environmental enhancement works associated with the Project to give effect to the design set out in Technical Report G.15 and principles of the “Western Ring Route – Maioro Street Interchange and Waterview Connection - Oakley Creek Realignment and Rehabilitation Guidelines” described in Condition STW.22. This SWEMP shall cover the mitigation for the loss of an area of Pixie Stream, Oakley Creek and the Stoddard Road tributary. It shall be submitted to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to the proposed enhancement works being commenced under this consent and shall include, but not be limited to, the following:

- (a) The nature of works to be undertaken;
- (b) The location of works;
- (c) Detailed design and plans of all enhancements to the stream bed and/or stream channel, including any structures or other engineering works. This includes replication of the existing waterfall located on the Stoddard Road tributary near the confluence with Oakley Creek in a similar position within the new realignment;
- (d) Riparian planting programmes, including detailed planting plans and specifications relating to species mix, location, density, size and maintenance to achieve an overall average of 70% shading of stream at maturity within those reaches where realignments or the SEV off-setting mitigation associated with the Project are proposed;
- (e) Timing of implementation;
- (f) The outcomes of consultation with Iwi (Ngati Whatua o Orakei and Te Kawerau Tribal Authority), the Community Liaison Group (see Condition PI.6), and Friends of Oakley Creek; and
- (g) How the basalt blocks from sections of the existing Oakley Creek channel that are to be realigned will be reused, with preference given to use within the channel realignment works and within other works identified in the Alan Wood Open Space Restoration Plan. Options for reuse shall take into account, but not be limited to:
  - (i) The heritage (cultural) values of the basalt blocks in the channel walls, in-situ basalt e.g. at the Stoddard Confluence and the basalt columnar blocks; and



(ii) The ecological values of the basalt block substrates with terrestrial and aquatic vegetation e.g. endangered moss *Fissidens berteroi*.

Advice Note: The intent is to include the SEV off-setting mitigation associated with the Maioro Interchange Project within Hendon Park and Alan Wood Reserve, and to the same shading standard as specified in Condition STW 20(d).

#### STW.21

The realignments necessary for highway construction will be rehabilitated separately to the Project's SEV off-set mitigation requirement of 343 metres. The Project's SEV off-set mitigation requirements will be undertaken within the areas demarcated as areas A to D on the "Oakley Creek Realignment Layout Plan, drawing 20.1.11- 3-D-D-330-21" (Refer Schedule A, Row 23).

Advice Note: The SEV off-set mitigation associated with the Maioro Interchange Project is intended to be undertaken upstream and downstream of those areas shown for Realignment and Rehabilitation (Refer Schedule A, Row 23), for the purposes of creating a coherent ecological corridor in this area.

#### STW.22

The SWEMP shall be prepared in general accordance with the "Western Ring Route – Maioro Street Interchange and Waterview Connection - Oakley Creek Realignment and Rehabilitation Guidelines" (Boffa Miskell, 2010) appended to *Technical Report G.6 Assessment of Freshwater Ecological Effects*.

#### STW.23

The NZTA shall implement the mitigation and environmental enhancement works contained in the approved SWEMP within 12 months of practical completion of the Project.

#### STW.24

The NZTA shall supply to the Major Infrastructure Team Manager, Auckland Council within three months of the completion of the riparian planting works written confirmation from an appropriately qualified landscape architect or ecologist that the riparian plantings have been implemented in accordance with the SWEMP approved under Condition STW.20.

#### STW.25

Any material amendments to the SWEMP shall be submitted for approval by the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to any amendment being implemented.

### **Fish Passage**

#### STW.26

All proposed stream bed and/or stream channel structures shall not impede the passage of fish both upstream and downstream.

### **Flooding**

#### STW.27

Works in the floodplain (including motorway embankments, ancillary earthworks and streamworks) shall be in accordance with the final design of the streamworks approved by the Major Infrastructure Team Manager, Auckland Council (as per Conditions STW.5 and STW.29) and be undertaken in accordance with the plans and information submitted with this application including, but not limited:

- (a) Waterview Connection Project. Assessment of Environmental Effects Report (Dated August 2010).
- (i) Plan F.2 Operation Scheme Plans (Refer Schedule A, Row 3); and
- (ii) Plan F.14 Streamworks and Stormwater Discharges (Refer Schedule A, Row 15).
- (b) Technical Report G.15 *Assessment of Stormwater and Streamworks Effects*.

#### STW.28

Within three months of completion of the works, the NZTA shall submit to the Major Infrastructure Team Manager, Auckland Council “as built” plans certified by a qualified and experienced engineer to confirm that the works have been carried out in accordance with Condition STW.27.

#### STW.29

Any amendments to works by the NZTA in the floodplain that may increase the flooding effects shall be submitted to the Major Infrastructure Team Manager, Auckland Council for approval in writing at least 20 working days prior to construction. These proposed amendments shall include updated drawings and hydraulic modelling using the Oakley Creek Catchment Model to assess the effects of the change.

#### STW.30

The NZTA shall submit to the Major Infrastructure Team Manager, Auckland Council a certificate signed by an appropriately qualified and experienced engineer to certify that the flood protection works for the tunnels have been constructed in accordance with the drawings, approach and standards supplied with this application, prior to the opening of the Project.

#### STW.31

Design of flood defences for the southern portal shall be in accordance with the catchment management option preferred by Auckland Council with allowances for climate change, sea-level rise and Maximum Probable Development.

### **Contaminated Land and Contaminated Discharges Conditions**

CL.1 The NZTA shall finalise and implement through the CEMP, the Contaminated Soil Management Plan (CSMP) submitted with this application prior to commencement of any site works. The CSMP shall include, but not be limited to:

- (a) Measures to be undertaken in the handling, storage and disposal of all material excavated during the construction works;
- (b) Soil validation testing and groundwater testing;
- (c) Soil verification testing to be undertaken to determine the nature of the excavated spoil and potential reuse or disposal options;
- (d) Measures to be undertaken in the event of unexpected contamination being identified during construction activities; and
- (e) Measures to be undertaken for the handling of asbestos containing material.

#### CL.2

Prior to the main construction works commencing, the baseline quality of soils and groundwater within Sector 5 (the southern bank of Oakley Creek coincident with the location of the former tannery) and Sector 7 (particularly in relation to works in the vicinity of Great North Road) shall be investigated and established. The investigations shall be carried out in accordance with appropriate Ministry for the Environment and Auckland Council guidelines. The findings of the soil and groundwater investigations shall be used to determine the specific constructions methods during work in this area to manage any likely environmental effects in relation to the Project.

#### CL.3

Prior to the main construction works commencing, soils and fill materials within Alan Wood Reserve (Sector 9) shall be further classified so as to determine the distribution and extent of cleanfill, managed fill and contaminated/hazardous fill materials.

CL.4

All excavated soil shall be tested by the NZTA in general accordance with the CSMP, prior to either reuse on site or disposal off site. The testing regime shall be submitted for approval by the Major Infrastructure Team Manager, Auckland Council.

CL.5

The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council within 5 working days of identification of any contamination at the site which was not identified in the reports submitted in support of this application, including contaminated soil, surface water or groundwater.

CL.6

The removal of any excavated contaminated soil shall be in accordance with the CSMP. The removal and disposal of any contaminated groundwater/ surface water from the site shall be in accordance with the GWMP and the ESCP.

CL.7

The NZTA shall engage a suitably qualified contaminated land specialist to supervise the works, excavation and removal of any contaminated soils from the site and undertake sampling (if required) of imported material.

CL.8

All testing / sampling techniques shall be carried out in accordance with the Ministry for the Environment Contaminated Land Management Guidelines or other equivalent standards approved in writing by the Major Infrastructure Team Manager, Auckland Council.

CL.9

During and following the tunnel construction works beneath Sector 8, groundwater quality monitoring shall be carried out at locations within and down hydraulic gradient of Phyllis Street Landfill. Monitoring shall be undertaken on at least a monthly basis, and for a period up to 12 months following completion of the tunnel construction works. The monitoring programme shall be submitted for approval by the Auckland Council as landowner.

CL.10

Prior to, during and following tunnel construction works beneath Phyllis Street Landfill, monitoring for landfill gas shall be carried out from existing monitoring boreholes within the landfill. Monitoring shall be undertaken on at least a monthly basis, for a period of no less than 6 months prior to, and up to 12 months following completion of the tunnelling works. The monitoring programme shall be submitted for approval by the Auckland Council as landowner.

CL.11

The NZTA shall submit to the Major Infrastructure Team Manager, Auckland Council, a Site Closure Report no later than three (3) months after the completion of the earthworks. The Report shall be prepared in accordance with the Ministry for the Environment's Contaminated Land Management Guidelines and include:

- (a) Results of any soil reuse and imported material testing carried out to ensure compliance with the CSMP;
- (b) Volumes of soil removed from site;
- (c) Copies of the waste disposal receipts; and
- (d) Reports of any non-compliance with the CSMP procedures or complaints received while undertaking the site works

### **Freshwater Conditions**

F.1 The NZTA shall finalise, and implement through the CEMP, the ECOMP submitted with this application. The ECOMP shall be updated to ensure compliance with the conditions of this consent and include changes to the details of construction processes prior to construction commencing. The ECOMP shall include, but not be limited to details of:

- (a) Monitoring of freshwater ecology;
- (b) Monitoring of freshwater and stream sediment quality;
- (c) Trigger event criteria for undertaking additional monitoring;
- (d) Procedures for responding to accidental discharges of contaminants to the freshwater environment; and
- (e) Contingency plans and/or remedial measures in the event monitoring results identify adverse effects.

### F.2

The NZTA shall engage a suitably qualified ecologist and water quality scientist to undertake freshwater monitoring programme prior to, during and following construction to monitor the effect of the Project on the freshwater ecology. The freshwater monitoring shall be undertaken in Oakley Creek, Pixie Stream and Meola Creek. The freshwater monitoring programme shall be undertaken in accordance with the details set out in the ECOMP and include:

- (a) Cross sectional profiles;
- (b) Macro invertebrate sampling; and
- (c) Freshwater fish monitoring.

### F.3

The freshwater monitoring programme shall, as a minimum, be undertaken in accordance with the following frequency:

- (a) Prior to construction – two baseline ecological surveys.
- (b) During construction – twice per year for fish and macro invertebrates and cross sectional profiles, within one month prior to the beginning of the earthworks season and within one month either side of the end of the earthworks season.
- (c) Post construction – on an annual basis for a maximum period of three years, or less if the Major Infrastructure Team Manager, Auckland Council is satisfied that no adverse effects have occurred or are likely to occur from the Project.
- (d) Monthly water quality samples at the five existing Oakley Creek sample locations to be analysed for pH, turbidity, suspended solids, metals (Zn, Cu and Pb) and nutrients.
- (e) Four “event based” samples per annum from each of the current two Oakley Creek sites. The samples are to be analysed for pH, turbidity, suspended solids, metals (Zn, Cu and Pb), hydrocarbons (TPH) and nutrients.
- (f) Two sediment quality samples per annum (January and July) at the five existing water quality Oakley Creek sites (if there is sufficient sediment to sample). The samples are to be analysed for metals (Zn, Cu and Pb), polycyclic aromatic hydrocarbons (PAH), hydrocarbons (TPH) and semi-volatile organic compounds.

Advice note: The sample collection and analysis required under sub-clauses (d) to (f) shall be undertaken following an IANZ accredited methodology by a suitably accredited laboratory

(International Accreditation New Zealand).

F.4 The NZTA shall undertake additional freshwater monitoring in the event of a ‘trigger event’ for freshwater habitats. For the purposes of this consent, a ‘trigger event’ for freshwater habitats is defined in the ECOMP.

F.5

The NZTAs ecologist/hydrologist (required by condition F.2) shall review, every six months, the freshwater monitoring results, provided from Conditions F.2 to F.4, and results in monitoring detailed in earthworks Conditions E.9 and E.19 and Groundwater Condition G.10 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent. In the event that potential adverse effects are identified, including through review of the Condition G.10 monitoring results by the hydrologist and freshwater ecologist required by Condition G.12, the NZTA shall develop and submit for the approval of the Major Infrastructure Team Manager, Auckland Council appropriate contingency plans and/or remedial measures in accordance with the measures set out in the ECOMP.

F.6

Freshwater monitoring reports shall be compiled from the monitoring undertaken pursuant to Conditions F.2 to

F.4 and the review of Condition F.5, and a report provided to the Major Infrastructure Team Manager, Auckland Council every 6 months.

## Attachments

**Figure DC.A - OPW1 Northern Ventilation Buildings and Stack**  
OPW1 Northern Ventilation Buildings and Stack

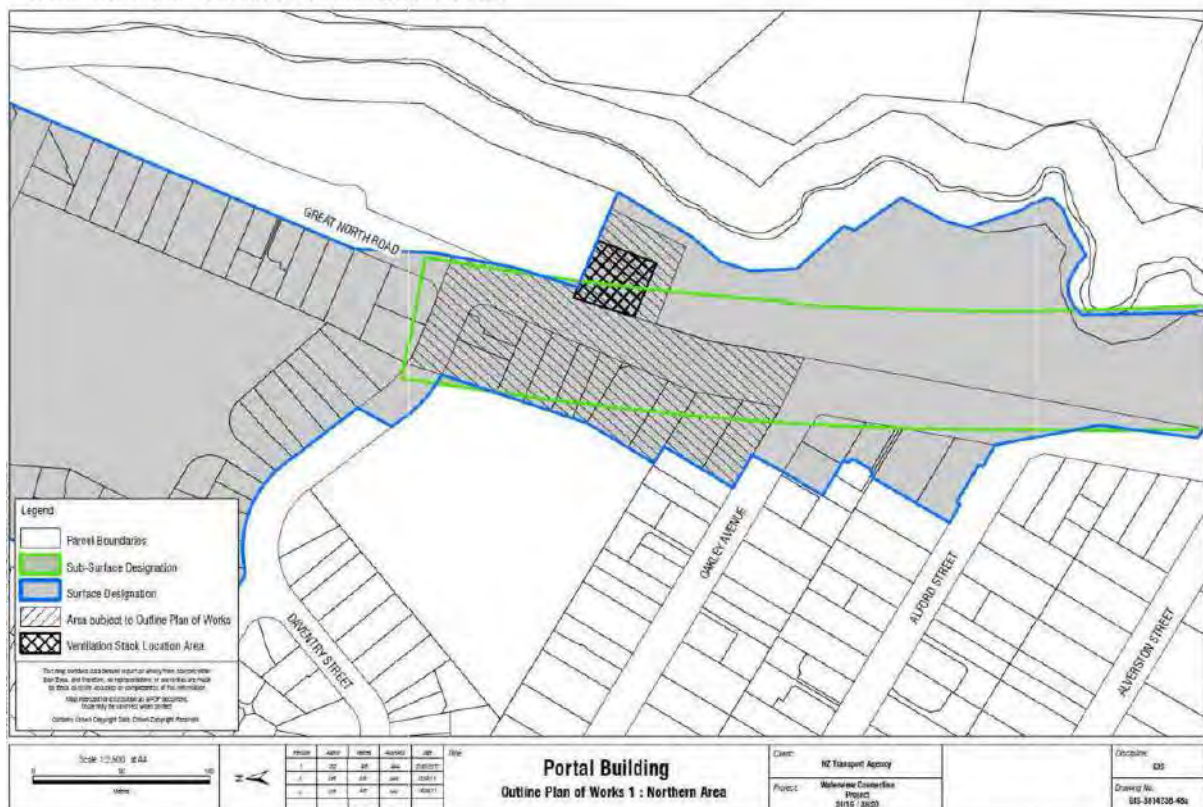


Figure DCB - OPW2 Southern Ventilation Buildings and Stack



Figure CEMP.A - Construction Environmental Management Framework

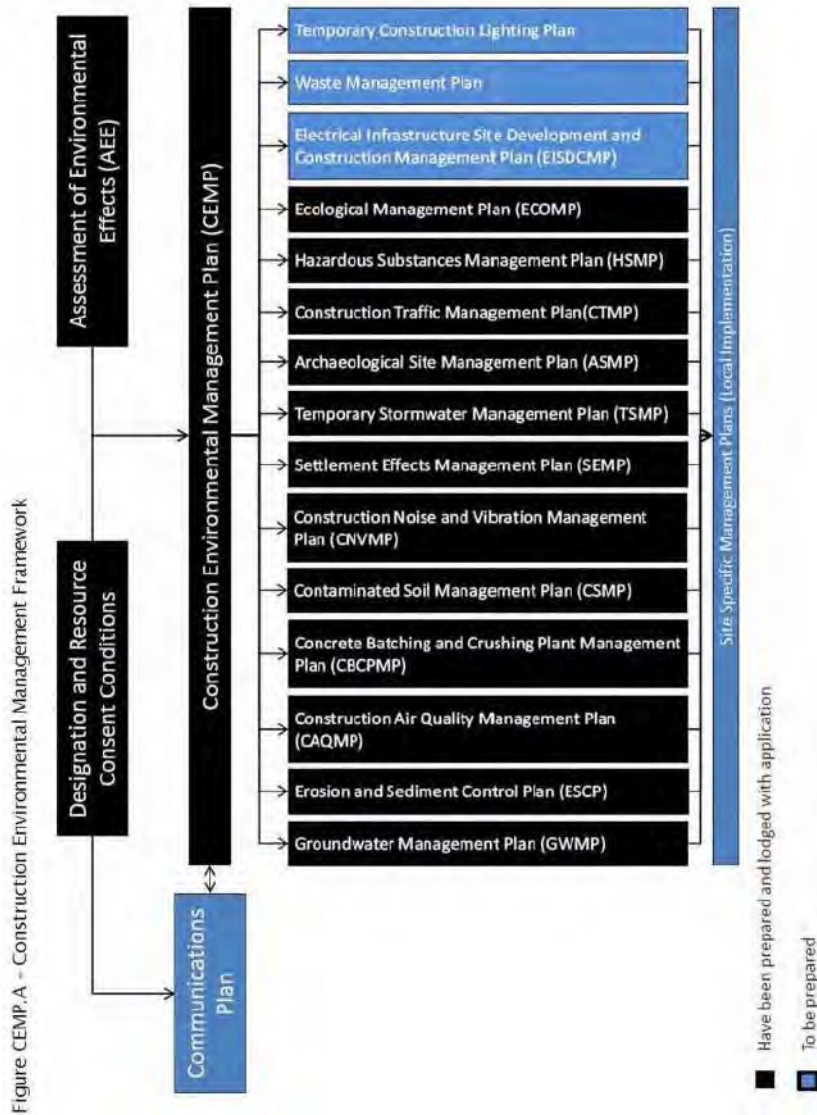
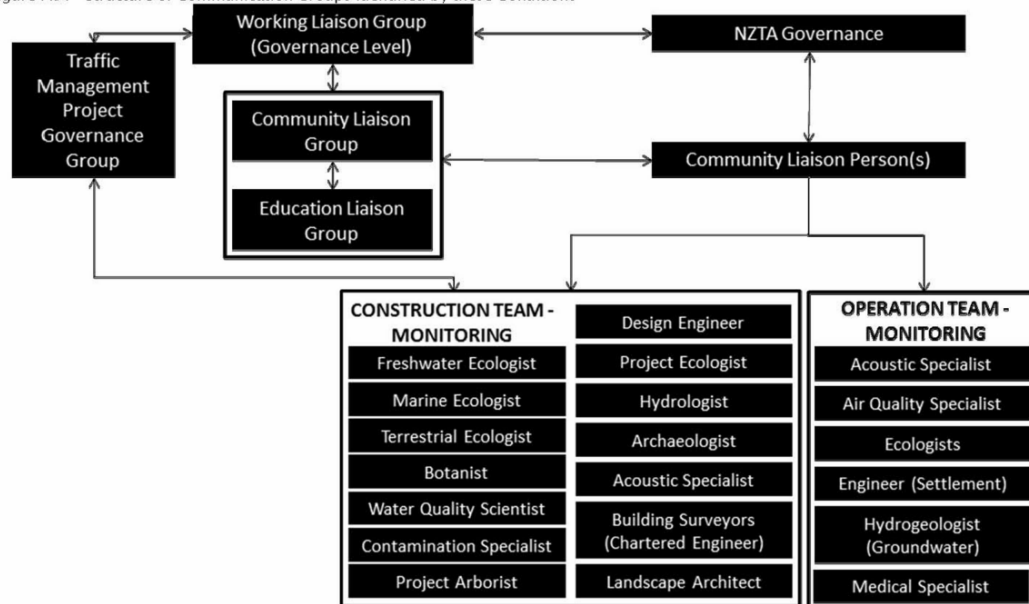


Figure PI.A - Structure of Communication Groups

Figure PI.A - Structure of Communication Groups Identified by these Conditions



## 6738 State Highway 16 - Te Atatu

Designation Number	6738
Requiring Authority	New Zealand Transport Agency
Location	State Highway 16 from Whau Creek to Henderson Creek, Te Atatu
Rollover Designation	Yes
Legacy Reference	Designation NZTA1, Auckland Council District Plan (Waitakere Section) 2003
Lapse Date	Given effect to (i.e. no lapse date)

### Purpose

Alteration to designation NZTA1, SH16, between Whau River and Henderson Creek, to include widening of the SH16 carriageway, modifications to the existing Te Atatu interchange, ancillary safety and operational services, temporary works, a cycleway and pedestrian path, and ancillary works and services – NOR1.

### Conditions

For a complete set of conditions, refer to the Waterview Connection Proposal Board of Inquiry decision titled “Final Report and Decision of the Board of Inquiry into the New Zealand Transport Agency Waterview Connection Proposal - Volume 2” dated June 2011.

#### General Designation Conditions

DC.1

Except as modified by the conditions below, the works shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency (NZTA being the Requiring Authority), the Notice(s) of Requirement and the supporting documents, and supplementary information provided in evidence. This information is summarised as follows:

- (a) Waterview Connection Project. Assessment of Environmental Effects Report (dated August 2010). Parts A- E;
- (b) Waterview Connection Project. Assessment of Environmental Effects Report (dated August 2010). Part F: Plans and Drawings, except as updated through the hearing (Refer Schedule A for current plan and drawing references); and
- (c) Waterview Connection Project. Assessment of Environmental Effects Report (dated August 2010). Part G: Technical Reports:
  - (i) Technical Report G.1 Assessment of Air Quality Effects
  - (ii) Technical Report G.2 Assessment of Archaeological Effects
  - (iii) Technical Report G.3 Assessment of Avian Ecological Effects
  - (iv) Technical Report G.4 Assessment of Coastal Processes
  - (v) Technical Report G.5 Assessment of Construction Noise Effects
  - (vi) Technical Report G.6 Assessment of Freshwater Ecological Effects
  - (vii) Technical Report G.7 Assessment of Groundwater Effects
  - (viii) Technical Report G.8 Assessment of Herpetofauna Ecological Effects
  - (ix) Technical Report G.9 Assessment of Land and Groundwater Contamination
  - (x) Technical Report G.10 Assessment of Lighting Effects
  - (xi) Technical Report G.11 Assessment of Marine Ecological Effects
  - (xii) Technical Report G.12 Assessment of Operational Noise Effects
  - (xiii) Technical Report G.13 Assessment of Ground Settlement Effects
  - (xiv) Technical Report G.14 Assessment of Social Effects
  - (xv) Technical Report G.15 Assessment of Stormwater and Streamworks Effects
  - (xvi) Technical Report G.16 Assessment of Temporary Traffic Effects
  - (xvii) Technical Report G.17 Assessment of Terrestrial Vegetation Effects
  - (xviii) Technical Report G.18 Assessment of Transport Effects  
Auckland Unitary Plan Operative in part



- (xix) Technical Report G.19 Assessment of Vibration Effects
- (xx) Technical Report G.20 Assessment of Visual and Landscape Effects
- (xxi) Technical Report G.21 Construction Environmental Management Plan (CEMP)
- (xxii) Technical Report G.22 Erosion and Sediment Control Plan (ESCP)
- (xxiii) Technical Report G.23 Coastal Works
- (xxiv) Technical Report G.24 Geotechnical Interpretive Report
- (xxv) Technical Report G.25 Traffic Modelling Report
- (xxvi) Technical Report G.26 Operational Model Validation Report
- (xxvii) Technical Report G.27 Stormwater Design Philosophy Statement
- (xxviii) Technical Report G.28 Geotechnical Factual Report – 500 Series
- (xxix) Technical Report G.29 Geotechnical Factual Report – 700 Series
- (xxx) Technical Report G.30 Assessment of Associated Sediment and Contaminant Loads
- (xxxi) Technical Report G.31: Technical Addendum Report (September 2010)
- (d) PT & Active Mode Transport Routes Existing and Proposed (Refer Schedule A, Row 22).
- (e) Waterview Connection Project, Evidence and Supplementary Information provided to the Board of Inquiry:
  - (i) Evidence in Chief (Numbers 1-37)
  - (ii) Rebuttal Evidence (Numbers 1-33)
  - (iii) Supplementary Information (Numbers 1-8)

#### DC.1A

Within 3 months of the designations being confirmed for the Project (or at least 1 month prior to any Auckland Council approvals or certifications required by these Conditions, whichever is the earlier), the NZTA shall update and finalise to the satisfaction of the Major Infrastructure Team Manager, Auckland Council all drawings and Plans cited in Schedule A, and provide a full set of the information and documentation referred to in Condition DC.1 to the Major Infrastructure Team Manager Auckland Council. At the same time the NZTA shall prepare to the satisfaction of the Major Infrastructure Team Leader, Auckland Council, a document for each designation which sets out the designation and have attached to it in text format a comprehensive set of the conditions imposed by the Board of Inquiry in its Final Decision as summarised in Schedule B, inclusive of any standard conditions and advice notes.

In particular (but not limited to), the following Plans will need to be amended in light of these Final Conditions:

- (a) F.2 Operational Scheme Plans (refer Schedule A, Row 3) require amendment detailing the amended location of the ventilation stacks and southern ventilation buildings;
- (b) F.5 Construction Scheme Plans (refer Schedule A, Row 4) require amendment to detail changes to the construction footprint for the amended location of the ventilation stacks and southern ventilation buildings and reconfiguration of Construction Yard 1);
- (c) F.6 Construction Yard Plans 101 and 107 (refer Schedule A, Row 7), detailing amendments to the Construction Yard 1 in light of the reconfiguration of this Yard and for Construction Yard 7 in light of the relocation of the northern ventilation stack (refer Schedule A, Row 34);
- (d) F.8 Plans of Structures and Architectural Features (refer Schedule A, Row 9), detailing the amended location of the northern ventilation stack and the design and location of the southern ventilation building and stack;
- (e) The CNVMP (including flow diagram and the supplementary evidence produced by Ms Wilkening) (refer Schedule A, Rows 36, 37 and 39);
- (f) The areas of the Open Space Restoration Plans (Schedule A, Row 30) to:
  - (i) Extend these areas in geographic extent to provide for the works identified in the Management Plan notations identified in the OS Conditions (in particular Conditions OS.5 and OS.6 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent) (e.g. these areas will (as relevant) include Eric Armishaw Park, Howlett Reserve and Waterview Esplanade Reserve); and
  - (ii) Exclude the operational area of designation required for the northern ventilation stack (as identified through the OPW process (refer Condition DC.8 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent); and
- (g) Schedule A, Row 28 the Plan detailing proposed open space impacts and replacements needs to be updated to recolour the two land parcels on Hendon Avenue (which are excluded from the replacement calculations) to 'brown' to confirm they are part of the operational impact and will not be returned as open space.

#### DC.2

Condition deleted.

#### DC.3

The NZTA shall update and finalise the relevant Construction and Operational Management Plans required under these conditions to ensure compliance with the designation conditions imposed by the Board of Inquiry. The relevant Management Plans shall be submitted to the Major Infrastructure Team Manager, Auckland Council within the timeframes specified in the following conditions. No works shall be undertaken until the relevant management plans have been finalised and certified or approved in accordance with the relevant conditions.

#### DC.4

Any Management Plans submitted to the Major Infrastructure Team Manager, Auckland Council for approval or certification may be submitted in stages to reflect any proposed staging of the physical works. Plans submitted shall clearly show the integration with adjacent stages and interrelated activities.

#### DC.5

In the event of any dispute, disagreement or inaction arising as to any Auckland Council Manager certification/ approvals required by the designation conditions, or as to the implementation of or monitoring required by the conditions, matters shall be referred in the first instance to the NZTA Regional State Highway Manager and to the Resource Consents Manager, Auckland Council to determine a process of resolution. If a resolution cannot be agreed, then the matter may be referred to an independent appropriately qualified expert, agreeable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree. The independent appropriately qualified expert shall be appointed within 10 working days of the NZTA or Auckland Council giving notice of their intention to seek expert determination. The expert shall, as soon as possible, issue his or her decision on the matter. In making the decision, the expert shall be entitled to seek further information and hear from the parties as he or she sees fit.

Advice note: The dispute resolution process provided for in this condition does not prejudice any party's right to take enforcement action in relation to the implementation of the designation conditions. However, the dispute resolution process will be applied before any formal enforcement action is taken by the Council, except in urgent situations.

#### DC.6

Except for Conditions DC.7, DC.8 and DC.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, the NZTA shall be exempt from providing an Outline Plan of Works for the Project, as provided for in Section 176A (2)(a) and (b) of the RMA.

Advice note: The Construction and Operational Management Plans, together with the provision of detailed drawings required by Condition DC.1(b) are considered sufficient detail in all aspects of the Project, with the exception of proposed works for the northern and southern ventilation buildings and stacks where further details are required.

#### DC.10

The NZTA shall give notice to the Manager Regional and Local Planning, Auckland Council in accordance with Section 182 and 181 respectively of the RMA for:

(a) Within six months of the State highway opening (being operational), removal of those parts of the designation that are not required for the long term operation, maintenance and mitigation of effects of the State highway.

Note: this condition is specific to land no longer required for construction purposes once the Project is completed and includes the land of 6 Barrymore Road, refer Condition OS.17 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

(b) The designation to be altered to remove those conditions no longer required for long term operation and maintenance of the Project.

#### DC.12

Unless otherwise provided for by Condition RC.2 of the Final Report and Decision of the Board of Inquiry into the

NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, if any monitoring required to be undertaken by any party by the designation conditions indicates non-compliance with any designation condition, the NZTA must provide written notice to the Major Infrastructure Team Manager Auckland Council as soon as it becomes aware of same, stating the following:

- (a) A description of the non-compliance; and
- (b) The measures NZTA proposes for addressing the non-compliance, including any additional mitigation measures.

Subject to the Council's approval, the NZTA must implement the additional mitigation measures to address the non-compliance.

#### DC.13

Pursuant to Section 36(1)(d) of the RMA, the requiring authority is required to pay to Auckland Council any administrative charge for the carrying out by the local authority of its functions in relation to the administration, monitoring, and supervision of designation conditions.

#### DC.14

The servants of agents of Auckland Council shall be permitted to have access to relevant parts of the Project at all reasonable times for the purpose of carrying out inspections, investigations, tests, measurements and/or to take samples.

### **Construction Environment Management Plan Conditions**

#### CEMP.1

Except where provided for in Condition CEMP.1A below, the NZTA shall update and finalise the draft Construction Environmental Management Plan (CEMP) including all the Management Plans which form part of the CEMP and are included as appendices, submitted with this application to ensure compliance with the consent and designation conditions imposed by the Board of Inquiry. The CEMP shall be provided to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to the commencement of works to certify compliance and consistency with the conditions. Construction shall not commence until certification is obtained.

Advice note: For clarity the CEMP will be updated and finalised in accordance with the conditions. Any amendments will be limited to reflecting the requirements of the conditions, specifying personnel, and completing the Environmental Risk Register.

Advice note: Particular care must be taken with development and operation of Construction Yard 7. When the CEMP is being updated and finalised, consideration must be given to the contents of the draft SSCEMP prepared for Construction Yard 7 (Row 41, Schedule A) recognising changes required by inclusion of the ventilation stack in this yard.

#### CEMP.1A

In the case of the trial embankment, where works will commence well in advance of the main construction works for the Causeway, the NZTA will provide to the Major Infrastructure Team Manager, Auckland Council, a site-specific CEMP for review and approval at least 20 working days prior to commencement of the trial embankment works.

#### CEMP.1B

For the purposes of staging works, as some works may commence well in advance of others, the NZTA may provide staged or site specific CEMPs for those works to the Major Infrastructure Team Manager, Auckland Council. The NZTA shall consult with the Team Manager about the need and timing for any other site-specific or staged CEMPs and shall provide any required site-specific or staged CEMPs to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to commencement of such the specific stage (including enabling) or site works.

#### CEMP.2

The certification process of the CEMP (and its appendices) shall confirm that the CEMP gives effect to the relevant

conditions, as well as those matters in CEMP.6, and that it includes details of:

- (a) Staff and contractors' responsibilities;
- (b) Training requirements for employees, sub-contractors and visitors;
- (c) Environmental incident and emergency management;
- (d) Communication and interface procedures (in accordance with the Communication Plan required under Condition PI.2);
- (e) Environmental complaints management (including the procedures required under Condition PI.4);
- (f) Compliance monitoring;
- (g) Reporting (including detail on the frequency of reporting to the Auckland Council);
- (h) Environmental auditing; and
- (i) Corrective action.

#### CEMP.3

The management of key environmental effects associated with the construction phase of the Project is detailed within environmental management plans that are included in the CEMP as appendices. This suite of management plans as shown on Figure CEMP.A comprises:

- (a) Construction Noise and Vibration Management Plan (CNVMP);
- (b) Construction Air Quality Management Plan (CAQMP);
- (c) Erosion and Sediment Control Plan (ESCP);
- (d) Temporary Stormwater Management Plan (TSMP);
- (e) Ecological Management Plan (ECOMP);
- (f) Groundwater Management Plan (GWMP);
- (g) Settlement Effects Management Plan (SEMP);
- (h) Contaminated Soils Management Plan (CSMP);
- (i) Hazardous Substances Management Plan (HSMP);
- (j) Archaeological Site Management Plan (ASMP);
- (k) Construction Traffic Management Plan (CTMP);
- (l) Concrete Batching and Crushing Plant Management Plan (CBCPMP);
- (m) Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP) (to be prepared in accordance with Condition CEMP.15);
- (n) Waste Management Plan (to be prepared in accordance with Condition CEMP.10); and
- (o) Temporary Construction Lighting Management Plan (to be prepared in accordance with Condition L.2).

#### CEMP.4

The CEMP shall be implemented and maintained throughout the entire construction period.

#### CEMP.5

A copy of the CEMP shall be held on each construction site at all times and be available for inspection on request by the Auckland Council.

#### CEMP.6

The finalised CEMP shall include specific details on demolition, construction and management of all works associated with the Project. The certification process of the CEMP shall confirm that the CEMP includes details of the following:

- (a) Details of the site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- (b) The location of large notice boards that clearly identify the NZTA and the Project name, together with the name, telephone, email address and address for service of the site or Project manager and the community liaison person;
- (c) An outline construction programme of the work indicating in particular likely time periods for road closures and anticipated traffic diversion effects;
- (d) The hours of work, which should reflect the need to ensure that residents enjoy reasonable freedom from noisy or intrusive construction activity in their neighbourhood at night, on Sundays and during public holidays;
- (e) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/

- storage of rubbish, storage and unloading of building materials and similar construction activities;
- (f) Location of worker's offices and conveniences (e.g. portaloos);
  - (g) Procedures of controlling sediment run-off, dust and the removal of soil, debris and demolition and construction materials from public roads or places. Dust mitigation measures should include use of water sprays to control dust nuisance on dry or windy days;
  - (h) Methods to stabilise ingress and egress points to construction sites, to the standard required by ARC Technical Publication 90 (Nov 2007);
  - (i) Procedures for ensuring that residents within 100m of construction areas or other people whose use of an area may be disrupted by construction works (for example the Te Atatu Boating Club for works on the Whau River) are given notice of the commencement of construction activities and are informed about the expected duration of the works, including potentially through the community liaison person;
  - (j) Procedures to be followed to ensure that those working in the vicinity of identified heritage and ecological features are aware of the heritage or ecological values of these features and the steps which need to be taken to meet the conditions applying to work on the site;
  - (k) Means of ensuring the safety of the general public;
  - (l) Procedures for the community liaison person to receive and respond to complaints about construction activities, including dust and odour from the works;
  - (m) Methods of mitigating the local and network wide effects of construction of individual elements of the Project, including measures to ensure that parking of staff vehicles on surrounding streets is restricted;
  - (n) All temporary boundary/ security fences shall be maintained in good order, with any graffiti removed as soon as possible;
  - (o) Confirmation of a Project Arborist and completion of a STEM assessment of the preliminary list of Amenity Trees in Schedule E.7 of the AEE to confirm the final Amenity Trees; and
  - (p) The process to minimise removal of Amenity Trees, maximise the protection of those retained, undertake relocation of Amenity Trees and replacement planting of specimen trees (in accordance with Conditions LV.10 and ARCH.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent).
  - (q) Advice note: For the purposes of CEMP.6(o) and (p), Amenity Tree is defined as a tree or trees that contribute significantly to amenity, taking into account its form, size, health, ecological or historical significance (a preliminary list of these trees is provided in Appendix E.7 of the AEE).

#### CEMP.7

The layout of the 12 Construction Yards, including associated buildings, fencing and site access shall be developed in accordance with Waterview Connection Project Construction Yards Plans (Refer Schedule A, Row 7). The layout drawings shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to the occupation of the yard, for review and certification that the final layout of the construction yards is in accordance with the conditions. The layout drawings shall incorporate the following:

- (a) The main access to the construction yards to be located as far as practicable from residential dwellings, taking into account site and public safety and environmental constraints, in the locations shown on Waterview Connection Project Construction Yards Drawings (Refer Schedule A, Row 7);
  - (b) Noisy construction activities to be located as far as practicable, and preferably no less than 100m, from residential dwellings; Construction of temporary boundary/ security fences to be undertaken in a manner which minimises impacts on existing trees;
  - (c) Temporary acoustic fences and visual barriers;
  - (d) Temporary buildings greater than 8 metres in height to be located in a position which minimises visual impact on adjacent residential dwellings; and
- Location of workers' and Project vehicle parking.

#### CEMP.8

All storage of material and equipment associated with the construction works shall take place within the boundaries of the designation.

#### CEMP.9

Temporary protection shall be installed to prevent vehicles damaging drains, footpaths, berms, kerbs, vehicle crossings and the roads during the site preparation and construction phase of the Project. Any damage to the drains, footpaths, berms, kerbs, vehicle crossings and the road attributable to any vehicle associated with construction activities shall be repaired to the same or similar standards as existed prior to such damage at no cost to the Auckland Council.

#### CEMP.10

The NZTA shall finalise and implement the Hazardous Substances Management Plan (HSMP), through the CEMP (as per Condition CEMP.1), submitted with this application, prior to works commencing on site. The certification process of the CEMP shall confirm that the HSMP clearly identifies the requirements for proper storage, handling, transport and disposal of hazardous substances during the construction phase of the Project and confirm that there shall be no storage of explosives on the Project site.

#### CEMP.11

The NZTA shall develop and implement a Waste Management Plan in accordance with the waste management principles, controls and methods set out in the CEMP. The Plan shall be provided to the Major Infrastructure Team Manager, Auckland Council and be implemented throughout the entire construction period.

#### CEMP.12

The CEMP shall be reviewed by the NZTA at least annually or as a result of a material change to the Project. The review shall take into consideration:

- (a) Compliance with designation and consent conditions;
- (b) Any changes to construction methods;
- (c) Key changes to roles and responsibilities within the Project;
- (d) Changes in industry best practice standards;
- (e) Changes in legal or other requirements;
- (f) Results of inspections, monitoring, incidents, corrective actions, internal or external assessments; and
- (g) Public complaints.

A summary of the review process undertaken shall be kept by the NZTA, provided annually to the Major Infrastructure Team Manager, Auckland Council and made available (with any related data) to the Auckland Council upon request.

#### CEMP.13

Following the review process (as described in Condition CEMP.12), the CEMP may require updating. Any material change proposed to the CEMP (including appended Management Plans) shall be submitted for approval to the Major Infrastructure Team Manager, Auckland Council at least 10 working days prior to the proposed changes taking effect.

#### Advice note:

Material change will include amendment to any base information informing the CEMP or any process, procedure or method of the CEMP (such as the environmental constraints map, compliance monitoring process, complaints procedure or mitigation / remedial methods identified) which has the potential to increase adverse effects on a particular value. For clarity changes to personnel and contact schedules do not constitute a material change.

#### CEMP.14

The CEMP shall include, as an appendix, an Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP). The EISDCMP shall be provided to the Major Infrastructure Team Manager, Auckland Council, and include:

- (a) Methods and measures:
  - (i) To ensure that the existing high voltage infrastructure can be accessed for maintenance at all reasonable times, or emergency works at all times, during and after construction activities.
  - (ii) To appropriately 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 the overhead transmission lines

- (iii) To ensure that no activity is undertaken during construction that would result in ground vibrations and/or ground instability likely to cause material damage to the transmission lines, including support structures.
- (iv) To ensure that changes to the drainage patterns and runoff characteristics do not result in adverse effects from stormwater on the foundations for any high voltage transmission line support structure.
- (b) Sufficient detail to confirm that new planting and maintenance of vegetation will comply with the New Zealand Electricity (Hazard from Trees) Regulations 2003, including, but not limited to, the provisions of Schedule (Growth Limit Zones) to those Regulations.
- (c) Sufficient detail to confirm that the works will comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001), including, but not limited to, the provisions of:
  - (i) Clause 2.2 with respect to excavations near overhead support structures;
  - (ii) Clause 2.4 with respect to buildings near overhead support structures;
  - (iii) Section 3 with respect to minimum separation between buildings and conductors;
  - (iv) Section 5 with respect to minimum safe distances for the operation of mobile plant; and,
  - (v) Table 4 with respect to minimum safe separation distances between the ground and the overhead conductors.
- (d) Confirmation that Transpower has been provided a copy of the EISCDMP for their review at least 20 working days prior to construction.

Advice note: With respect to clause (c), specific consideration must be given to the height and location of temporary structures (such as Project offices and other construction site facilities) and permanent structures (such as lighting poles, signage, gantries and acoustic barriers).

#### CEMP.15

The NZTA will be responsible for all service relocations required for construction of the Project. The NZTA shall liaise with the providers of infrastructure service networks (including, but not limited to water, gas, stormwater, wastewater, power and telecommunications), and private property owners with on-site services to develop methodologies and timing for necessary services relocation required for the Project, with the objective of minimising disruption to the operation of these service networks and onsite services.

Advice note:

- (a) It is noted that if separate consents are required for relocations for any services of network utility operators or landowners, such consents will be obtained before construction commences in the relevant area, and any effects of those relocations would be considered at that time. The same applies to any alteration of consents if required.
- (b) Network infrastructure owned and operated by Watercare Services is located within the designations. An operating agreement will be developed by the NZTA and Watercare Services which will include appropriate notification and access protocols where works are to be undertaken by either network operator on or adjacent to Watercare Services infrastructure within the designations.

#### **Public Information Conditions**

##### PI.1.

A community liaison person shall be appointed by the NZTA for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the Project. The liaison person's name and contact details shall be made available in the CEMP and on site signage by the NZTA. This person must be reasonably available for on-going consultation on all matters of concern to affected parties arising from the Project.

##### PI.2.

The NZTA shall prepare and implement a Communications Plan that sets out procedures detailing how the public, Ministry of Social Development, Housing New Zealand Corporation and other organisations representing the particular demographic characteristics of the community (including but not limited to Primary Health Organisations, general practitioners, youth, education organisations, aged care groups and groups representing ethnic and migrant communities) will be communicated with throughout the construction and monitoring periods (as prescribed in the designation and consent conditions).

In preparing the Communications Plan, the NZTA will liaise with Auckland Council to access its community liaison databases. The Communications Plan will include details of:

- (a) The site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- (b) In accordance with these Conditions, the database of the key construction activities and monitoring requirements that are the subject of the Communications Plan;
- (c) The database of stakeholders and residents who will be communicated with;
- (d) Communication methods, an assessment of how these methods reach the different audience/ stakeholder groups (including those methods set out in Condition CEMP.6), and detail on when each of these methods will be used (e.g. regular communication or event specific methods);
- (e) The appointed specialist in Environmental and Occupational Medicine, including contact details (as per Condition SO.13 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- (f) Any stakeholder specific communication plans required; and
- (g) Monitoring and review procedures for the Communications Plan.

The Communications Plan shall be written in accordance with the external communication procedures set out in the CEMP and provided at least 20 working days prior to construction commencing, to the Major Infrastructure Team Manager, Auckland Council, Working Liaison Group and the Community Liaison Group(s) established by Condition PI.5. The structure of the communication groups set out in these conditions is attached as Figure PI.A.

#### PI.3.

At least 15 working days prior to the commencement of construction, and at 15 working day intervals thereafter, or as required depending on the scale of works and effects on the community, advertisements will be placed in the relevant local newspapers and community notice boards (as identified in Condition CEMP.6(b)) detailing the nature of the forthcoming works, the location of the forthcoming works and hours of operation. All advertisements will include reference to a 24 hour toll free complaints telephone number. Where relevant, advertisements will also include but not be limited to details of:

- (a) Any traffic disruptions or controls or changes to property access, pedestrian/ cycle routes and bus stops; and
- (b) Any other construction activities, including night time works, blasting, and structure-borne noise, as identified in the conditions.

#### PI.4.

The NZTA shall manage, investigate and resolve (as appropriate) all complaints for the duration of the construction works in accordance with the environmental complaints section of the CEMP. The implementation strategy for complaints includes:

- (a) A 24 hour toll free telephone number and email address, which shall be provided to all potentially affected residents and businesses. The number shall be available and answered at all times during the entire duration of the works for the receipt and management of any complaints. A sign containing the contact details shall be located at each site specific work activity;
- (b) The NZTA shall maintain a record of all complaints made to this number, email or any site office, including the full details of the complainant and the nature of the complaint;
- (c) Upon receiving a complaint, within 10 days of complaint receipt, a formal written response will be provided to the complainant and Auckland Council;
- (d) The NZTA shall undertake corrective action where necessary to resolve any problem identified. All action taken and relevant information shall be documented. For the avoidance of doubt, 'where necessary' refers to where the works are not being carried out in accordance with conditions of this designation;
- (e) Where issues and complaints about effects cannot be resolved through the CEMP complaints management process, a meeting shall be held between the NZTA, the complainant and the Auckland Council representative(s) to discuss the complaint and ways in which the issue may be resolved. If parties cannot agree on a resolution, an independent qualified mediator will be appointed, agreeable to all parties and at the shared cost of all parties, to undertake mediation of the dispute or concerns; and
- (f) All information collected in Conditions PI.4 (b), (c) and (d) shall be detailed in a Construction Compliance Report (including the means by which the complaint was addressed, whether resolution was reached and how the response was carried out) prepared by the NZTA. This Report shall be submitted to the Major Infrastructure Team Manager, Auckland Council on a quarterly basis commencing at the beginning of the works and for the entire



duration of construction.

PI.5.

The NZTA shall establish Community Liaison Group(s) at least two months prior to construction commencing in each of the following key construction areas:

- (a) Te Atatu (including the SH16 Causeway)
- (b) Waterview (including works to St Lukes on SH16 and on the Waterview Estuary and Causeway Bridges)
- (c) Owairaka

and hold regular meetings (at least three monthly) throughout the construction period and up to 24 months following construction completion relevant to these areas (or less if the members of the Group agree), so that on-going monitoring information can continue to be disseminated.

The Community Liaison Group(s) shall be open to all interested parties within the Project area including, but not limited to the following groups:

- (a) Auckland Council and Auckland Transport;
- (b) Educational facilities within the Project area (including schools, kindergartens, childcare facilities and Unitec Institute of Technology);
- (c) Relevant community/ environmental groups (including but not limited to Friends of Oakley Creek, Star Mills Preservation Group, Cycle Action Auckland and representatives from those organisations identified in the Communications Plan (as required by Condition PI.2) and local residents;
- (d) Department of Conservation;
- (e) Local Boards;
- (f) Iwi groups with Mana Whenua;
- (g) Public transport providers; and
- (h) Housing New Zealand Corporation.

Advice note: The purpose of the Community Liaison Group(s) is to provide a regular forum through which information about the Project can be provided to the community, and an opportunity for concerns or issues to be raised.

PI.6.

The Community Liaison Group(s) shall be provided opportunities to review and comment on the following (amongst other things):

- (a) The Outline Plan of Works detailing designs for the northern and southern ventilation buildings and stacks (the outcomes of this consultation will be reported in accordance with the processes required in Conditions DC.8(n) and DC.9(k) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent ;
- (b) The Open Space Restoration Plans (as required by Condition OS.3);
- (c) Finalisation and amendment to Urban Design and Landscape Plans (UDL Plans) (as required by Condition LV.1);
- (d) The Oakley Inlet Heritage Plan (as required by Conditions OS.5(b)(i) and ARCH.6 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- (e) The detail of the Oakley Creek restoration (as required by Condition STW.20 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent);
- (f) Publicly available results of environmental monitoring as required by the designation and/or these Consents (e.g. air quality monitoring); and
- (g) The finalisation of the STEM assessment required by CEMP.6(o) and a schedule of trees that are required to be removed for consideration of timber use in heritage projects (as required by Condition SO.7).

Advice Note: Attention is drawn to the Vegetation conditions concerning identification and protection of Significant Vegetation and Valued Vegetation.

- (h) Detailed design features of the Te Atatu underpass (e.g. lighting and architectural treatment).

## Temporary Traffic Conditions

### TT.1

The NZTA shall update and finalise the Construction Traffic Management Plan (CTMP) submitted with this application, in accordance with these conditions, and implement it through the CEMP.

In finalising the CTMP, the NZTA shall:

- (a) Provide simulation modelling demonstrations to better understand the effects of construction of the Project on the affected road network;
- (b) Include measures to avoid road closures and restrictions of vehicle, bus, cycle and pedestrian movements;
- (c) Where road closures or restrictions cannot reasonably be avoided the particular vulnerabilities and sensitivities of pedestrian diversions and restricted conditions shall be taken into account in the planning of any closures or restrictions.

### TT.2

The CTMP shall require the development of Site Specific Traffic Management Plans (SSTMPs) and their approval by the Traffic Management Project Governance Group (as defined by the CTMP), for each construction activity that may affect traffic or transportation infrastructure and services. The SSTMPs shall be provided to the Traffic Management Coordinator(s) for the relevant Road Controlling Authority at least 10 working days prior to each construction activity.

### TT.3

Each SSTMP shall describe the measures that will be undertaken to avoid, remedy or mitigate the local and network wide effects of construction of the Project. In particular, the SSTMP shall include the following matters:

- (a) Traffic management measures to address and maintain, traffic capacity, including bus services, at peak traffic periods during weekdays (6:00 to 9:00 and 16:00 to 19:00) and peak traffic periods at weekends (including Te Atatu Road, Great North Road and Richardson Road);
- (b) Methods to manage the effects of traffic during construction including the requirement to detour or divert traffic. These methods shall seek to avoid, remedy or mitigate effects on access to and from businesses and other organisations in the area;
- (c) Any road closures that will be required and the nature and duration of any traffic management measures that will result, including any temporary restrictions, detours or diversions for general traffic and buses;
- (d) Methods to avoid, remedy or mitigate the local and network wide effects of the construction of individual elements of the project (e.g. intersections/ overbridges) and the use of staging to allow sections of the Project to be opened to the traffic while other sections are still under construction;
- (e) Methods to manage the effects of the delivery of construction material, plant and machinery (including cranes and oversized trucks) during construction;
- (f) Any routes where construction traffic movements will be restricted (either for particular times for construction periods);
- (g) Measures to maintain existing vehicle access, as far as practicable, or where the existing property access is to be removed or becomes unsafe as a result of the construction works, measures to provide alternative access arrangements in consultation with the Auckland Council and the affected landowner; and
- (h) Measures to maintain pedestrian and cycle access with thoroughfare to be maintained on all roads and footpaths adjacent to the construction works, where practicable (e.g. unless provision of such access is severed by the works or such access will become unsafe as a result of the construction works). Such access shall be safe, clearly identifiable, provide permanent surfacing and seek to minimise significant detours. (This Condition does not act as a qualification to the commitment to maintain access to open space and education facilities, as required in Condition OS.13).

### TT.4

The SSTMPs shall include traffic management measures developed in consultation with the Auckland Transport, Bus and Coach Association and the Auckland Council, to address and maintain, where practicable, existing levels of service for buses particularly at peak periods (6:00 to 9:00 and 16:00 to 19:00) on weekdays.

#### TT.5

The NZTA shall consult with the Traffic Operations Manager, Auckland Transport with regard to the most appropriate means for providing access on Council roads within and adjacent to the designation. The NZTA shall also coordinate and consult directly with the proponents of any major construction or major traffic generating event occurring concurrently with, and in the vicinity of the Project.

#### TT.6

The SSTMPs shall include measures developed in consultation with Auckland Transport to, as far as practicable, enable continued public walking and cycling passage along the existing Northwestern Cycleway (between Te Atatu Interchange and St Lukes Interchange) and along Great North Road and the public walkway along Oakley Creek, with any interruptions being as short as feasible.

#### TT.7

The NZTA shall undertake construction works so as to avoid significant long duration impacts or the full closure of Te Atatu Road for all road users heading to or from the Te Atatu Peninsula and to ensure that access for emergency service vehicles is maintained.

#### TT.8

The NZTA shall restrict construction truck movements during peak hours (6:00 to 9:00 and 16:00 to 19:00) on weekdays and during the peak periods at the weekends to avoid the following:

- (a) Te Atatu Road Interchange, during both morning and afternoon peak hours
- (b) Great North Road Interchange, city bound during the morning peak hours
- (c) Great North Road Interchange, west bound onto SH16 and southbound onto Great North road during the afternoon peak.

Construction truck movements during these hours shall only be allowed under exceptional circumstances agreed in advance with the Traffic Management Project Governance Group.

#### TT.9

The NZTA shall maintain at least the existing active traffic lane configuration capacity on SH16, at the Te Atatu Interchange area, Te Atatu Road, Richardson Road and on Great North Road during peak periods being 6:00 to 9:00 and 16:00 to 19:00 on weekdays and during the peak periods on weekends, for the duration of the temporary construction programme.

#### TT.10

The NZTA shall monitor the impact of construction traffic in terms of traffic speeds and volumes on SH16, Great North Road, Te Atatu Road and Richardson Road throughout the construction period to confirm the expected traffic effects as set out in the Temporary Traffic Assessment (Technical Report G.16) submitted with this application.

- (a) This monitoring will be undertaken on a daily, weekly and monthly basis; and
- (b) Monitoring results will be made available to the Traffic Operations Manager, Auckland Transport on request.

#### TT.11

If monitoring undertaken pursuant to Condition TT.10 indicates that traffic volumes or traffic conditions are significantly different from those expected, the SSTMPs will be reviewed and as appropriate amended to the satisfaction of the Traffic Management Project Governance Group.

### **Operational Traffic Conditions**

#### **Integration with Local Road**

##### **Network**

#### OT.1

The NZTA shall prepare in collaboration with Auckland Transport a Network Integration Plan (NIP) for the Project, or relevant Project phases, to demonstrate how the Project integrates with the existing local road network and with

future improvements (identified in the Western Ring Route (Northwest) Network Plan) planned by the Auckland Council. The NIP shall include details of proposed physical works at the interface between the State highway and the local road network, and shall address such matters as pedestrian/ cycle ways, lane configuration, traffic signal co-ordination, signage and provision for buses

In addition, the NIP will address:

- (a) The commitment of the NZTA to progress bus priority measures northbound on Great North Road as part of the reinstatement of Great North Road, as proposed by Auckland Transport and indicated on the Plans Great North Road Option 1 Proposed Road Marking (Schedule A, Row 33), subject to the agreement with Auckland Transport;
- (b) How the works committed to by the NZTA for pedestrian and cycle ways, as detailed in the PT and Active Mode Transport Routes Plan Set (Condition DC.1(d) (refer Schedule A, Row 22)), integrate with pedestrian and cycle ways on the wider transport network;
- (c) The Richardson Road Bridge, which shall be designed in general accordance with the structural plans (Schedule A, Row 9) and the commitment of the NZTA to provide a 2m footpath on Richardson Road Bridge, subject to confirming appropriate bus stop locations with Auckland Transport;
- (d) Integration of the works proposed on Te Atatu Road to appropriately transition between the Waterview Connection Project and any projects being progressed by Auckland Transport;
- (e) Opportunities to review traffic signal timings at the Te Atatu Interchange with a view to minimising delays to all users, including cyclists on the SH16 cycle way; and
- (f) The commitment of the NZTA to provide for cycle “aspects” (cycle signal lights) at the Great North Road Interchange.
- (g) As part of detailed design at the Te Atatu Interchange, the installation of underpasses and/or overbridges, provided however that should some not prove feasible in civil or traffic engineering design terms, the installation of coordinated traffic signal operation for cyclists on the north-western cycleway by means of synchronised cycle lights which seek to reduce delays for cyclists.

Works identified in the NIP which are the responsibility of the NZTA, will be undertaken as at the time of construction works for the Project.

### **Noise and Vibration Conditions – Construction**

#### **CNV.1**

The NZTA shall finalise and implement through the CEMP, a Construction Noise and Vibration Management Plan (CNVMP) throughout the entire construction period of the Project.

The CNVMP shall describe the measures adopted to meet:

- (a) the noise criteria set out in Condition CNV.2 and Condition CNV.3 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent;
- (b) the vibration criteria set out in Condition CNV.4 below; or
- (c) where (a) or (b) cannot be met, the process that will be followed to appropriately mitigate noise and vibration effects including methods that may be applied outside the designation.

The CNVMP shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to construction activities being undertaken for review and certification that the CNVMP, as a minimum, addresses the following:

- (i) Construction noise and vibration criteria (Condition CNV.2, Condition CNV.3 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, and Condition CNV.4);
- (ii) Hours of operation, including times and days when noisy and/or vibration inducing construction activities would occur;
- (iii) Machinery and equipment to be used;
- (iv) Vibration testing of equipment to confirm safe distances to buildings prior to construction;
- (v) Preparation of building condition surveys of critical dwellings prior to, during and after completion of construction works;
- (vi) Roles and responsibilities of personnel on site;
- (vii) Construction operator training procedures;

- (viii) Methods for monitoring and reporting on construction noise and vibration;
- (ix) A hierarchy of mitigation options that will be assessed for the Project noise mitigation, including alternative strategies where full compliance with the relevant noise and/or vibration criteria cannot be achieved;
- (x) Management schedules containing site specific information;
- (xi) Measures for liaising with and notifying potentially affected receivers of proposed construction activities and the potential for noise and vibration effects, specifically:
  - PPFs located within a horizontal distance of 35 metres of underground excavation works, along the tunnel alignment shall receive prior notification not greater than 7 days (and not less than 24 hours) prior to the commencement of works.
  - Methods for ensuring residents affected by night works (within 100m of the construction site night works, as defined on the maps (refer Schedule A, Row 35)) are notified of such works (i.e. any works during the hours of 20:00 to 06:30) at least 5 days prior to the commencement of any such work.
  - The maps showing PPFs to be notified of night works (refer Schedule A, Row 35), shall be reviewed and included within the CNVMP.
- (xii) Methods for receiving and handling complaints about construction noise and vibration;
- (xiii) Measures for preventing the occurrence of rogue fly rock, including management of charge weights and face loading procedures, stemming of charge holes and profiling of the face to maintain minimum burden (face cover);
- (xiv) Investigations on the practicability of implementing permanent noise mitigation works for construction mitigation (as per Condition CNV.7);
- (xv) Investigations of the practicability of implementing Building Modification mitigation, as required in accordance with Conditions ON.6 and ON.11, prior to commencement of construction within 100m of the relevant PPFs (including those on the Unitec site); and
- (xvi) The process for developing Site Specific Noise Management Plans (SSNMP), in accordance with the SSNMP Flow Chart (refer Schedule A, Row 36), including templates and a certification process for the Major Infrastructure Team Manager, Auckland Council (in accordance with Condition CNV.13) to confirm the process of SSNMP review of noise mitigation options where, the modelled/predicted levels or subsequent actual levels exceed the criteria in Conditions CNV.2 and/or CNV.4.

**CNV.2**

Except where certified by the Council through the SSNMP (in accordance with Condition CNV.13), construction noise (excluding noise from blasting Monday to Saturday inclusive) shall be measured and assessed in accordance with NZS 6803:1999 "Acoustics - Construction Noise" and shall comply with the following criteria: Note: In Condition CNV.2 (T) means a duration between 15 minutes and 60 minutes, in accordance with NZS6803:1999.

**(a) Project Construction Noise Criteria: Residential Receivers**

Time of Week	Time period	Project Construction Noise Criteria (Long Term Construction) dB		
		Sectors 1-7 LAeq(T)	Sectors 8-9 LAeq(T)	All Sectors LAFmax
Monday- Saturday	0630-0730	60	45	75
	0730-1800	70	70	85
	1800-2000	65	65	80
	2000-0630	60	45	75
Sundays and Public Holidays	0630-0730	45	45	75
	0730-1800	60	45	85
	1800-2000	45	45	75
	2000-0630	45	45	75

**(b) Project Construction Noise Criteria: Commercial and Industrial Receivers**

Time Period	Project Construction Noise Criteria (Long Term Construction) dB
	LAeq(T)

0730-1800	70
1800-0730	75

(c) Project Construction Noise Criteria: Internal Structure-borne Noise from tunnelling for Residential Receivers

Time Period	Project Construction Noise Criteria Inside	
0600-2200	35 dB LAeq(T)	All habitable rooms
2200-0600	30 dB LAeq(T)	Bedrooms

(d) Project Construction Noise Criteria: Internal noise for Licensed Educational Facilities

Time Period (School Days)	Project Construction Noise Criteria Inside	
Teaching Hours	45 dB LAeq(T)	Classrooms, library, offices, teaching, laboratories, manual arts, workshops
Teaching Hours	40 dB LAeq(T)	School hall, lecture theatres

*Note: In Condition CNV2(d) "Teaching hours" means: Primary schools and Kindergartens: 9am to 3pm Unitec: 8am to 9pm*

#### CNV.4

Except where certified by the Council through the SSNMP (in accordance with Condition CNV.13), construction vibration received by any building shall be measured and assessed in accordance with the German Standard DIN 4150-3:1999 "Structural vibration – Part 3: Effects of vibration on structures", and shall comply with the criteria set out as follows:

Type of Structure	Short-term vibration			Long-term vibration	
	PPV at the foundation at a frequency of			PPV at horizontal plane of highest floor (mm/s)	PPV at horizontal plane of highest floor (mm/s)
	1-10 Hz (mm/s)	1-50 Hz (mm/s)	50-100 Hz (mm/s)		
Commercial/Industrial	20	20-40	40-50	40	10
Residential/School	5	5-15	15-20	15	5
Historic or Sensitive structures	3	3-8	8-10	8	2.5

#### CNV.5

Notwithstanding Condition CNV.3 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent,

(a) Blasting activities shall be conducted so that 95% of the blasts undertaken (measured over any twenty blasts on the foundation of any building outside the designation boundary) shall produce peak particle velocities not exceeding 5mm/s and 100% of the blasts undertaken shall produce peak particle velocities not exceeding 10mm/s irrespective of the frequency of the blast measured.

(b) Construction activities, which occur within Sectors 1, 6, 8 and 9 which are identified in Technical Report no. G.19 Assessment of Vibration Effects, as being at a 'High Risk' of exceeding the DIN 4150-3:1999 criteria (being excavation, piling, compaction and drilling) shall be conducted so that 95% of the activities undertaken (measured over at least 20 representative samples of the relevant activity on any residential building) shall produce peak particle velocities not exceeding the relevant criterion in DIN 4150-3:1999 and 100% of the activities undertaken shall not exceed 10mm/s irrespective of the frequency of the activity measured.

#### CNV.6

Blasting shall be undertaken between 09:00h and 17:00h, Monday to Saturday, except that blasting may be undertaken between 09:00h and 17:00h on Sundays where:

- (a) The blasting is at least 50m inside the Sector 8 tunnel;
- (b) The blasting produces peak particle velocities at any residential building not exceeding 0.5mm/s; and
- (c) The Project construction noise criteria set out in Condition CNV.2 for Sundays are complied with.

#### CNV.7

Where practicable, permanent (traffic) noise barriers, required in any Sector as Detailed Mitigation Options for operational noise following completion of the Project (in accordance with Conditions ON.3 to ON.5) shall be erected prior to noise generating construction works commencing. Where this is not practicable, temporary noise mitigation measures shall be implemented in accordance with the CNVMP, prior to noise generating construction works commencing.

#### CNV.8

Pile driving or pile removal shall not be undertaken at night (i.e. during the hours of 20:00 – 06:30).

#### CNV.9

The concrete batch plants, rock crushing plants and the loading bays and conveyors for such plants shall be fully enclosed.

#### CNV.13

SSNMPs (required by Condition CNV.1(xvi)) above, shall be submitted to Major Infrastructure Team Manager, Auckland Council for review and certification at least 7 working days prior to the proposed works commencing. A decision will be provided by the Council within 5 working days of receipt of the SSNMP.

Works will not commence until certification is received from the Major Infrastructure Team Manager, Auckland Council. The Council may, at its discretion, waive the requirement for SSNMPs to be submitted to the Council where an SSNMP is required.

If monitoring shows that levels specified in a SSNMP are being exceeded, work generating the exceedence will stop and not recommence until further mitigation is implemented in accordance with an amended SSNMP certified by Council.

Advice note: It is accepted that the criteria of CNV.2 and CNV.4 may not be met at all times, but that the NZTA will take all practical steps to achieve compliance, taking into account the hierarchy of mitigation options outlined in Condition CNV.1 (ix).

### **Noise Conditions – Operation**

#### ON.1

For the purposes of Conditions ON.2-ON.14 the following terms will have the following meanings:

- Appendix E – means Appendix E to the Technical Report G.12 'Assessment of Operational Noise Effects' submitted with this application.
- BPO – means Best Practicable Option.
- Building Modification Mitigation – has the same meaning as in NZS 6806:2010.
- Design Year – means a point in time that is 10 years after the opening of the Project to the public
- Emergency Mechanical Services – means mechanical services used for emergency situations only.
- Habitable room – has the same meaning as in NZS 6806:2010.
- Noise Criteria Categories – means groups of preference for time-averaged sound levels established in accordance with NZS 6806:2010 when determining the BPO mitigation option; i.e. Category A - primary noise criterion, Category B - secondary noise criterion and Category C - internal noise criterion.
- NZS 6806:2010 – means NZS 6806:2010 Acoustics – Road-Traffic Noise – New and Altered Roads.
- PPFs – means only the premises and facilities identified in green, yellow or red in Appendix E.
- Structural mitigation – has the same meaning as in NZS 6806:2010.

#### ON.2

The NZTA shall implement the traffic noise mitigation measures identified as the "Preferred Mitigation Options" in Appendix E as part of the Project, in order to achieve the Noise Criteria Categories indicated in Appendix E ("Identified Categories"), where practicable and subject to Conditions ON.3-ON.11 below.

#### ON.3

The detailed design of the structural mitigation measures of the "Preferred Mitigation Options" (the Detailed Mitigation Options) shall be undertaken by a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council prior to construction of the Project, and, subject to Auckland Unitary Plan Operative in part

Condition ON.4, shall include, as a minimum, the following:

- (a) Noise barriers with the location, length and height in general accordance with Appendix E and designed in accordance with the ULDF (Section B) (refer Schedule A, Row 38); and
- (b) A requirement that Open Graded Porous Asphalt ("OGPA") or equivalent low-noise generating road surface be used on all surface roads throughout the Project, except at the Great North Road Interchange; and
- (c) For the Great North Road Interchange, a requirement that Twin Layer Open Graded Porous Asphalt ("Twin Layer OGPA") or equivalent low-noise generating road surface be used as shown in Appendix E.

#### ON.4

Where the design of the Detailed Mitigation Options identifies that it is not practicable to implement a particular structural mitigation measure in the location or of the length or height included in the "Preferred Mitigation Options", either:

- (a) If the design of the structural mitigation measures could be changed and would still achieve the same Identified Category at all relevant PPFs, and a suitably qualified expert approved by the Major Infrastructure Team Manager, Auckland Council, certifies to the Auckland Council that the changed structural mitigation measure would be consistent with adopting BPO in accordance with NZS 6806:2010, the Detailed Mitigation Options may include the changed mitigation measures; or
- (b) If the changed design of the structural mitigation measure would change the Noise Criteria Category at any relevant PPF from Category A or B to Category C but Major Infrastructure Team Manager, Auckland Council confirms that the changed structural mitigation measure would be consistent with adopting BPO in accordance with NZS 6806:2010, the Detailed Mitigation Options may include the changed structural mitigation measures.

#### ON.5

The Detailed Mitigation Options shall be implemented prior to completion of construction of the Project.

#### ON.6

(a) Sectors 1 to 8 - Prior to construction of the Project, a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council shall identify those PPFs within 100m of the edge of the closest traffic lane of the motorway carriageway where, following implementation of all the structural mitigation measures included in the Detailed Mitigation Options:

- i. A noise level increase of 3 decibels or more will occur due to road-traffic noise from the Project; and
- ii. Habitable spaces are likely to receive in excess of 45 dB LAeq(24h) from motorway operational noise with windows closed, in the Design Year.

For those PPFs, following the process set out in Conditions ON.7 to ON.11, it shall be determined which Building Modification Mitigation is required to achieve 40 dB LAeq inside habitable spaces.

(b) Sector 9 - Prior to construction of the Project, a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council shall identify those PPFs within 100m of the edge of the closest traffic lane of the motorway carriageway where, following implementation of all the structural mitigation measures included in the Detailed Mitigation Options, habitable spaces are likely to receive in excess of 40 dB LAeq(24h) from motorway operational noise with windows closed, in the Design Year. For those PPFs, following the process set out in ON.7 and ON.8, it shall be determined if Building Modification Mitigation may be required to achieve 40 dB LAeq inside habitable spaces. For those PPFs where Building Modification Mitigation is required to achieve 40 dB LAeq inside habitable spaces, this shall be implemented following the process set out in ON.9 to ON.11.

#### ON.7

(a) Prior to commencement of construction of any sector of the Project in the vicinity of a PPF identified under Condition ON.6, the NZTA shall write to the owner of each such building seeking access for the purpose of measuring internal noise levels and assessing the existing building envelope in relation to noise reduction performance.

(b) If the owner(s) of the building approve the NZTA's access to the property within 12 months of the date of the NZTA's letter (sent pursuant to Condition ON.7(a)), then no more than six months prior to commencement of construction in any sector of the Project, the NZTA shall instruct a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council, to visit the building to measure internal noise levels and assess the existing building envelope in relation to noise reduction



performance.

#### ON.8

Where a PPF identified under Condition ON.6 is identified, the NZTA shall be deemed to have complied with Condition ON.7 above where:

- (a) The NZTA (through its acoustics specialist) has visited the building; or
- (b) The owner(s) of the building approved the NZTA's access, but the NZTA could not gain entry for some reason after repeated attempts; or
- (c) The owner(s) of the building did not approve the NZTA's access to the property within the time period set out in Condition ON.7(b) (including where the owner(s) did not respond to the NZTA's letter (sent pursuant to Condition ON.7(a) within that period); or
- (d) The owner(s) of the building cannot, after reasonable enquiry, be found prior to completion of construction of the Project.

If any of (b) to (d) above apply to a particular Building, the NZTA shall not be required to implement any Building Modification Mitigation at that Building

#### ON.9

Subject to Condition ON.8, within 6 months of the assessment required under Condition ON.7(b), the NZTA shall give written notice to the owner of each PPF identified under Condition ON.6:

- (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 whether to accept Building Modification Mitigation for the building, and if the NZTA has advised the owner that more than one options for building modification mitigation is available, to advise which of those options the owner prefers.

#### ON.10

Once an agreement on Building Modification Mitigation is reached between the NZTA and the owner of an affected building, the mitigation shall be implemented (including the NZTA undertaking any required third party authorisation) in a reasonable and practical timeframe agreed between the NZTA and the owner. Building Modification Mitigation shall be to the standard specified in section 8.3.2 of NZS 6806:2010.

Advice Note: The NZTA will be responsible for obtaining any necessary building consents or other approvals to undertake the above Building Modification Mitigation.

#### ON.11

Subject to Condition ON.8, where Building Modification Mitigation is required, the NZTA shall be deemed to have complied with Condition ON.10 above where:

- (a) The NZTA has completed Building Modification Mitigation to the Building; or
- (b) The owner(s) of the Building did not accept the NZTA's offer to implement Building Modification Mitigation prior to the expiry of the timeframe stated in Condition ON.9(b) above (including where the owner(s) did not respond to the Requiring Authority within that period); or
- (c) The owner of the Building cannot, after reasonable enquiry, be found prior to completion of construction of the Project.

#### ON.12

The NZTA shall manage and maintain the Detailed Mitigation Options to ensure that, those mitigation works are maintained to retain their noise attenuation performance indefinitely

#### ON.14

(a) Prior to construction, the NZTA shall arrange for a suitably qualified and experienced acoustics specialist approved by the Major Infrastructure Team Manager, Auckland Council 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 Major Infrastructure Team Manager, Auckland Council to undertake traffic noise monitoring at the same sites surveyed in Condition ON.14 (a) 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 in accordance with ON.14(b) above shall be used to verify the computer noise model of the Detailed Mitigation Option. A report describing the findings of the verification shall be provided to the Major Infrastructure Team Manager, Auckland Council within one month of it being completed.

### **Vibration Conditions - Operation**

OV.1

Existing ambient vibration levels shall be measured at critical locations nominated by the NZTA, and submitted to the Major Infrastructure Team Manager, Auckland Council for approval prior to the commencement of works. These baseline measurements will establish pre-Project vibration levels for comparison with future vibration levels.

### **Air Quality Conditions – Construction**

#### **GENERAL CONDITIONS**

AQ.1.

The NZTA shall finalise and implement, through the CEMP, the Construction Air Quality Management Plan (CAQMP) and Concrete Batching and Crushing Management Plan (CBCMP) submitted with the application. The CAQMP and CBCMP shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to construction activities being undertaken for review and certification that the CAQMP and CBCMP includes the following details:

- (a) Daily visual monitoring of dust emissions;
- (b) Procedures for responding to process malfunctions and accidental dust discharges;
- (c) Criteria, including consideration of weather conditions and procedures for use of water sprays on stockpiles and operational areas of the site;
- (d) Continuous monitoring of Total Suspended Particulate (TSP) concentrations and meteorology;
- (e) Monitoring of the times of detectable odour emissions from the ground;
- (f) Procedures for responding to discharges of odour (including in the event of excavation of contaminated sites);
- (g) Monitoring of construction vehicle maintenance;
- (h) Process equipment inspection, maintenance, monitoring and recording, including baghouses, pressure relief valves and high level alarms;
- (i) Complaints investigation, monitoring and reporting; and
- (j) The identification of staff and contractors' responsibilities.

AQ.2.

The NZTA shall review the CAQMP and CBCMP at least annually and as a result of any material change to the Project. Any consequential changes will be undertaken in accordance with Condition CEMP.13.

AQ.3.

All construction activities shall be operated, maintained, supervised, monitored and controlled at all times so that all emissions authorised by this consent are maintained at the minimum practicable level.

AQ.4.

The NZTA shall undertake construction activities in accordance with the CEMP, CAQMP and CBCMP, such that:

- (a) Hard surfaced areas of the construction yards and active construction areas are vacuum swept or scraped down at least twice each week and additionally as reasonably required;
- (b) All unsealed areas of the site used for vehicle movement are maintained visibly damp by the use of water sprays or a water cart during weather conditions where the potential for dust emissions exist;
- (c) Wheel wash systems are installed at all truck exits from unpaved areas of the site onto public roads are used for all trucks that depart from the site;
- (d) All stockpiles are constructed and positioned to minimise the potential for dust emissions. The surfaces of all stockpiles are maintained adequately damp at all times to minimise the release of particulate matter;

(e) Belt conveyors for moving dry materials are fitted with water sprays or enclosed to minimise wind entrainment of dust. Where installed, water suppression is used whenever the conveyors are used for moving dry materials.

AQ.5.

Unless expressly provided for by conditions of this consent, there shall be no odour, dust or fumes beyond the site boundary caused by discharges from the site which, in the opinion of an enforcement officer, is noxious, offensive or objectionable.

AQ.6.

All offensive or objectionable dust beyond the boundary of the site caused as a result of processes on the site shall be mitigated forthwith in accordance with the requirements of the Construction Air Quality Management Plan.

AQ.7.

Beyond the site boundary there shall be no hazardous air pollutant caused by discharges from the site that causes, or is likely to cause, adverse effects on human health, environment or property.

AQ.8

No discharges from any activity on site shall give rise to visible emissions, other than water vapour, to an extent which, in the opinion of an enforcement officer, is noxious, dangerous, offensive or objectionable.

## **MONITORING**

AQ.14

The NZTA shall undertake visual inspections of dust emissions as follows:

(a) Visual inspections of all active construction areas at least three times daily during October to April inclusive, whenever there are construction activities. The results of visual monitoring shall be logged.

(b) Visual inspections of dust emissions from the concrete batching plants and rock crushing plant shall be undertaken daily while the plant is operating

AQ.15

The operation of water sprays shall be checked at least once each day.

AQ.16

Continuous monitoring of TSP concentrations shall be undertaken in at least one location in Sector 1, in at least two locations in Sectors 5 and/or 7, and in at least two locations in Sector 9 while construction activities are being undertaken in those Sectors. The locations of continuous TSP monitors shall, as far as practicable, comply with the requirements of AS/NZ 3580.1.1:2007 Method for Sampling and Analysis of Ambient Air – Guide to Siting Air Monitoring Equipment.

AQ.17.

Continuous monitoring of wind speed and direction shall be undertaken in at least one location in each of Sector 1, Sectors 5 or 7 and Sector 9 while construction activities are being undertaken in those Sectors. The locations of wind speed and direction monitors shall, as far as practicable, comply with the requirements of AS 2923:1987 Ambient Air – Guide for the Measurement of Horizontal Wind for Air Quality Applications and be at the same locations as the TSP monitors required by Condition AQ.16.

AQ.18.

The locations and types of continuous TSP and meteorological monitoring sites required by Conditions AQ.16 and AQ.17 shall be selected by the NZTA in consultation with the Auckland Council. In the event of a failure of the monitoring equipment, this shall be repaired or replaced within 2 working days

## **REPORTING**

AQ.19.

All records, logs, monitoring and test results that are required by the conditions of this consent shall be made available on request, during operating hours, to an Auckland Council enforcement officer and shall be kept for the duration of the consent.

AQ.20. If the monitoring required by Condition AQ.16 shows that concentrations of TSP in ambient air at or beyond the boundary of the site exceeds 80 micrograms/m<sup>3</sup> as a 24-hour average, the NZTA shall undertake an investigation into the cause of the exceedance in accordance with the CAQMP.

AQ.21.

A report into the outcome of any investigation required by Condition AQ.20 shall be forwarded to the Major Infrastructure Team Manager, Auckland Council within 10 working days of the exceedance. If the cause of the exceedance is identified as being an activity undertaken on the site, the report shall also identify additional measures to be taken to reduce discharges of particulate matter into air from that activity.

AQ.22.

Log books shall be maintained that record all relevant information that is required to demonstrate compliance with the conditions of this consent. This information shall include, but is not limited to:

- (a) Visual assessments of any dust emissions from the site and the source;
- (b) Any dust control equipment malfunction and any remedial action taken;
- (c) When a water cart was used and, if so, the frequency of use and the volume of water used (including identification of location);
- (d) All relevant details of the TSP and meteorological monitoring required by Conditions AQ.16 and AQ.17;
- (e) Any additional dust control measures undertaken; and
- (f) The date and time of the entry and the signature of the person entering the information.

AQ.23.

The NZTA shall maintain a log of any complaints received relating to air quality. Details of each complaint received shall be forwarded to the Major Infrastructure Team Manager, Auckland Council within 24 hours of receipt of the complaint. The log shall include any complaints lodged with the Auckland Council where the Council has informed the NZTA of the complaint. The log shall include, but not be limited to the following:

- (a) The date, time, location and nature of the complaint;
- (b) Weather conditions at the time of the complaint (including approximate wind speed, wind direction, cloud cover);
- (c) Any possible other contributing factors (such as a fire, smoky vehicle, a local chimney emission, etc.);
- (d) The name, phone number and address of the complainant (unless the complainant elects not to supply these details);
- (e) Any remedial actions undertaken; and
- (f) The date and time of the entry and the signature of the person entering the information.

## **Landscape and Visual Conditions**

LV.1.

The Urban Design and Landscape Plans (UDL Plans) (Plan Set F.16, refer Schedule A, Row 17) shall be reviewed and revised in accordance with the conditions and submitted to the Major Infrastructure Team Manager, Auckland Council for certification that they comply with the conditions of the consents/ designation prior to construction of the relevant Project stage, at least 20 working days prior to the commencement of construction.

The UDL Plans shall be updated to:

- (a) Reflect relevant details from the PT and Active Mode Transport Routes Plan Set (Schedule A, Row 23);
- (b) Remove the playing field at Waterview Reserve;
- (c) Confirm the reconfigured bund design at Alwyn Avenue (Schedule A, Row 42);
- (d) Reflect landscaping required in relation to the northern vent stack in Waterview Glades pursuant to Condition DC.8 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

LV.2.

In certifying the UDL Plans, prepared in accordance with Condition LV.1, the Major Infrastructure Team Manager, Auckland Council shall be satisfied the UDL plans includes:

- (a) The visual mitigation of infrastructure as detailed in Section B of the UDLF (refer Schedule A, Row 38).
- (b) Incorporation of art or art through design of structures, particularly as it relates to noise barriers and the Great North Road Interchange piers and ramps (Refer to clauses (g) and (i) below).
- (c) Planting to screen houses and noise walls (including cross section details);
- (d) Planting along the corridor on Traherne Island, in accordance with these conditions and the Ecological Management Plan;
- (e) Specimen planting on the Great North Road Interchange and the Te Atatu Road Interchange;
- (f) Specimen planting at the tunnel portals (except where this is within the OPW area);
- (g) Finalisation of the noise barriers (as required by Condition ON.3(a)) in accordance with the design principles for noise walls (refer Schedule A, Row 32);
- (h) Delineation of the final areas of the Open Space Restoration Plans in accordance with the Open Space Restoration Plans (Schedule A, Row 30), and reference that all works within the Open Space Restoration Plan Areas are subject to Conditions OS.5-OS.7 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, Conditions OS.1-OS.4 and OS.8;
- (i) Oakley Inlet Heritage Plan, prepared in accordance with Condition OS.5 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent, and in particular, consideration shall be given to the design treatment of the Great North Road Interchange piers and ramps to take into consideration the impact of the structures on the visual quality of the open space beneath;
- (j) Ecological Management Plan, prepared in accordance with Conditions V.1, A.1, H.1, F.1 and M.1 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent ;
- (k) Western Ring Route: Maioro Street Interchange and Waterview Connection - Oakley Creek Rehabilitation and Restoration Guidelines (Boffa Miskell, 2010); and
- (l) Details of artworks or art through design of structures within the Project (e.g. design detailing of median barriers, bridge railings, safety barriers, piers, retaining walls and tunnel portals), in accordance with Section B of the Urban Landscape and Design Framework (UDLF June 2010) (refer Schedule A, Row 38) and F.8:Plans of Structures and Architectural Features, but excluding the north and south ventilation buildings, plans sections and elevations.

LV.3.

The NZTA shall have implemented the UDL Plans within 6 months of practical completion of construction of the Project.

LV.4.

The landscaping shall be implemented in accordance with the UDL Plans within the first planting season following the completion of the construction works, provided that climatic conditions are suitable, otherwise at the first practicable opportunity thereafter, and shall be maintained for a period of 10 years thereafter. Should the landscaping be implemented in stages (depending on construction phases), landscaping shall be implemented in accordance with this Condition for each stage unless subsequent construction staging requires use of the proposed landscaping area.

Advice note: On-going control and management of the landscaping within the designation is the responsibility of the NZTA.

LV.5.

The NZTA shall implement the UDL Plans taking into account the pest plant management guidelines detailed in the Ecological Management Plan (as required by Condition CEMP.3).

LV.6.

The UDL Plans shall make provision for close planting of fast growing native shrubs or small trees (Griselina, Karo, Tarata or similar) along the security boundary of Construction Yard 1 facing Te Atatu Road. This planting

shall be implemented prior to operational use of the yard and maintained in a healthy state for the duration of the works programme. Such planting shall occur at no greater than 1.0m centres and shall comprise plants that are Pb28 or larger at the time of planting.

LV.8.

The NZTA shall ensure that any areas within the designation affected by construction activities have sub-soil rehabilitated and top-soil replaced so that the hydrological response including the volume of stormwater runoff generated is as close as practicable to the predevelopment situation. The methodologies to achieve this shall be documented and provided to the Major Infrastructure Team Manager, Auckland Council with the revised UDL Plans submitted pursuant to Condition LV.1.

LV.10.

The UDL Plans shall identify all Amenity Trees required to be removed over the construction of the Project (in accordance with Condition CEMP.6(o) and (p)). Replacement trees shall be sized at 160Lt and will either draw from the Coastal Forest or Basalt Rock Forest ecotypes listed in the Landscape Planting Schedules (provided in F.16, refer Schedule A, 17) or an agreed alternative species (confirmed by Major Infrastructure Team Manager, Auckland Council), except in the case of those trees subject to Condition ARCH.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

Advice note: This does not necessarily apply to any replacement planting in the Open Space Restoration Plan areas, which will be confirmed in approval from Auckland Council and will be in accordance with relevant Auckland Council Park guidelines (see Condition OS.4).

LV.11.

The UDL Plans shall make provision for the rehabilitation of McCormick Green at the completion of the SH16 construction works and removal of the construction stormwater pond. Works will be in general accordance with the UDL Plans 202 and 203, (Refer Schedule A, Row 17), providing for replacement Amenity Tree planting in accordance with Condition LV.10 above.

## **Open Space Conditions**

OS.1

For the purposes of Conditions OS.2 – OS.15 the following terms will have the following meanings:

- Full size – means a football (soccer) field with the dimensions 100m x 60m.
- Half size – means a football (soccer) field with the dimensions less than 100m x 60m but no smaller than 50m x 30m.
- Toddler – means a playground specifically designed for children between the ages of 1 and 3
- Junior – means a playground specifically designed for children between the ages of 4 and 8
- Youth – means a playground specifically designed for children between the ages of 9 – 14 years
- Open Space Restoration Plans – means those plans listed in Schedule A, row 30.
- Open for Play - means the sports field has a level surface and a dense weed-free sward of mature grass, goal posts and lighting if indicated in the Open Space Restoration Plans approved by the Auckland Council.
- Sand - carpeted - means the field has been levelled and irrigated, and conventional sub-soil drains, slit drains and a 50mm deep sand carpet have been installed. The field has been stolonised with a warm season grass such as kikuyu or couch.
- Auckland Council Park Guidelines – means the document by Auckland City Council titled “Furnishing our parks: design guidelines for park furniture”, dated September 2009
- Park furniture – means those items described in the Auckland Council Park Guidelines
- AS2560 – means the Australia New Zealand Standard for lighting of sports fields.
- AS4282 – means the Australia New Zealand Standard for the control of the obtrusive effects of outdoor lighting.
- Way finding exercise – means a process for determining the number, size, location and content of signage to provide clear direction for all park users.
- Skate-park for the purpose of condition OS.5(b)(iii) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent means a skate park with a size of approximately 1,400 sq. m. (generally 25 wide x 55m long), incorporating a range of design variations.

Suitable for beginners (providing training facilities to develop their skills) but primarily catering for intermediate to advanced level skaters.

- BMX bike track for the purpose of condition OS.5(b)(iii) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent means a low maintenance, non-competition BMX bike track, incorporating a range of design variations. Primarily catering for beginner and intermediate riders.

#### OS.2

The NZTA shall prepare Open Space Restoration Plans to outline how the open space replacement land, as defined in the Open Space Restoration Plan Areas (Schedule A, Row 30) (including land occupied during construction) will be reinstated or replaced on completion of construction, for handover to Auckland Council and those areas identified in Condition DC.1A(f) and Condition RC.3(f) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent. Following the consultation detailed in Condition OS.3 below, the Open Space Restoration Plans listed in Condition OS.3(a) to (f) shall be submitted within 12 months of construction commencing in the specific areas affecting the reserves or within 12 months of occupation of open space, whichever is the sooner, to the Major Infrastructure Team Manager, Auckland Council.

Advice note: Conditions OS.9 and OS.10 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent require certain works to be provided prior to occupation of Construction Yards 6 and 7 (Waterview Reserve) and Construction Yards 9- 12 (Alan Wood Reserve) and this may impact on the timing of Open Space Restoration Plans for these areas.

#### OS.3

The Open Space Restoration Plans shall be prepared in consultation with the Auckland Council, Iwi, the Community Liaison Groups (Condition PI.5), Heritage New Zealand, and other recreation users and other user representatives identified by Auckland Council. The Open Space Restoration Plans shall comprise the following specific plans:

- (a) Waterview Reserve Restoration Plan;
- (b) Alan Wood Restoration Plan (including Hendon Park and 25 Valonia Street);
- (c) Oakley Creek Esplanade (Waterview Glades) Restoration Plan;
- (d) Jack Colvin Park Restoration Plan;
- (e) Rosebank Domain Restoration Plan;
- (f) Harbourview-Orangihina Reserve Restoration Plan; and
- (g) The areas of the Open Space Restoration Plans are shown in the Open Space Restoration Plan Areas (Refer Schedule A, Row 30).

#### OS.4

All Open Space Restoration Plans shall be prepared in general accordance with the UDL Plans (Schedule A, Row 30), and shall include, but not be limited to, the following:

- (a) Details of, including the location, of any artworks and educational signage, and directional signage. In the case of Alan Wood Reserve, Waterview Reserve and Oakley Creek Esplanade (Waterview Glade) this shall include a “way-finding exercise” in accordance with Auckland Council practice, to determine all signage to be provided; and
- (b) Evidence of integration with the Oakley Creek restoration works required under Conditions STW.5, STW.20, V.16 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent and Condition LV.2(i); and a summary of the consultation undertaken (as required by Condition OS.3) and the response received; and
- (c) Details of any vehicle access through the reserves and parking areas; and
- (d) Park furniture (including quantity and quality) to be provided in accordance with relevant Auckland Council Park guidelines, except for:
  - (i) The riparian area within Alan Wood Reserve where the only furniture required is a maximum of 10 seats; and
  - (ii) Oakley Creek Esplanade (Waterview Glades) where the only furniture required is replacement of 3 existing seats; and
- (e) The inclusion and integration of the design for all pedestrian and cycleway linkages and facilities detailed on Auckland Unitary Plan Operative in part

the PT and Active Mode Transport Routes (Schedule A, Row 22). The design integration shall be in accordance with CPTED principles; and

(f) Implementation programme, including sequencing of works and completion dates. This shall include works that could be implemented prior to practical completion of construction works or are outside the Project area (e.g. upgrading of the Waterview Esplanade Reserve set out in Condition OS.5(b)(vii) of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent;

(g) Implementation programmes for planting and field reinstatement. This shall include:

(i) A 12 month maintenance period for built structures and soft landscaping; and

(ii) For any landscaping accessible to horses an assessment to demonstrate that the planting schedule is not toxic to horses and that consultation on this has been undertaken with the Te Atatu Pony Club;

(h) The specific requirements for each Restoration Plan area as set out in Conditions OS.5-OS.7 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent and Condition OS.8;

(i) Documentation of consultation undertaken required by Condition OS.3 and the views and concerns expressed by this consultation and the written approval of the Manager Community and Cultural Policy.

Advice note: For the avoidance of doubt provision of (a) to (h) above will require elevations, cross sections, engineering drawings and written documentation to supplement the UDL Plans. It is also noted that the UDL Plans identify landscaping, planting and other works beyond the Open Space Restoration Plans (refer Conditions LV.1 – LV.6 and LV.10 and Condition LV.9 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent). Educational signs and artworks are particularly encouraged.

### **Jack Colvin Park Restoration Plan (Specific)**

OS.8

In preparing the Jack Colvin Park Open Space Restoration Plan, equivalent reinstatement of the benched seating area will be offered to Auckland Council.

OS.13

During construction, the NZTA shall maintain pedestrian accessways to all open space available for public use during construction and education facilities where access is affected by the works, including any public access that crosses private land. Such access shall be safe, clearly identifiable, provide appropriate surfacing and seek to minimise significant detours. The access shall be of a same or similar standard as that disrupted and will be provided and maintained by the NZTA.

Advice note: This specifically includes the existing pedestrian access that provides a connection to the crossing over Oakley Creek between 1510 Great North Road and Unitec Mt Albert Campus.

OS.15

The works shall not result in any permanent loss of carparking from Western Springs Garden carpark.

### **Social Conditions**

SO.1

In addition to the Community Liaison Groups established pursuant to Condition PI.5, the NZTA shall establish an Education Liaison Group (including representatives from local schools, kindergartens, childcare facilities, Unitec Institute of Technology, the Ministry of Education and Housing New Zealand Corporation), to provide a forum through which:

(a) Relevant monitoring data can be provided (e.g. air quality monitoring);

(b) Notice can be provided of when particularly noisy activities will occur in close proximity to schools and education facilities, to enable the opportunity to identify any potential conflict with particular sensitive periods, and the requirement for specific mitigation strategies (e.g. rescheduling of construction activities where practicable);

(c) Particular concerns can be raised by educational facilities or parents, discussed and potentially addressed;

(d) Notice can be provided of potential construction impacts on school transport routes (including pedestrian/cycle access) to enable the opportunity to identify specific mitigation preferences of the education



facilities (e.g. any detour routes) and to enable these facilities to appropriately inform students and/or parents; and

(e) Learning and teaching opportunities for educational facilities to participate in Project works (e.g. planting or artworks).

The Education Liaison Group shall be established at least 2 months prior to construction commencing and shall have regular meetings (at least three monthly) throughout the construction period. The Education Liaison Group shall continue to meet for at least 12 months following the completion of the Project (or less if the members of the Education Liaison Group agree), so that ongoing monitoring information can continue to be disseminated.

## SO.2

In addition to Condition SO.1(b) above, where noisy construction activities (that are projected to exceed the Noise Criteria in the CNVMP) are proposed in close proximity or adjacent to schools/ childcare centres, the NZTA shall, when preparing their SSNMP (in accordance with Condition CNV.1) give specific consideration to options to carry out these works outside school hours or during school holidays as a mitigation option.

## SO.6

In addition to the Community Liaison Group established pursuant to Condition PI.5, the NZTA shall establish a Working Liaison Group (WLG) inviting the following:

- (a) Auckland Council;
- (b) Housing New Zealand Corporation;
- (c) Te Kawerau Iwi Tribal Authority;
- (d) Ngati Whatua o Orakei;
- (e) KiwiRail;
- (f) Department of Conservation;
- (g) Ministry of Education; and
- (h) Local Boards.

The purpose of this WLG will be to provide a forum through which:

- (a) Opportunities for public work development (including social housing, passenger transport or recreation / open space) are identified in areas where the NZTA confirms that the designation is no longer required (e.g. following construction activities);
- (b) Comment can be provided on updated Urban Design and Landscape Plans, including the finalised designs of structural elements for the Project (prior to their submission to the Auckland Council);
- (c) Opportunities for integration of other environmental projects (e.g. restoration plantings) are identified;
- (d) Consideration is given to appropriate protocols for commencement and completion of construction activities (including blessings for commencement of construction phases); and
- (e) Comment can be provided by Te Kawerau a Maki on the detailed lighting design of SH16, to consider how lighting effects on cultural sites and practices might be mitigated without compromising traffic safety or those performance standards identified in Condition L.1.

The Working Liaison Group shall be established at least 2 months prior to construction commencing and shall have regular meetings (at least three monthly) throughout the construction period.

## SO.7

A schedule of trees that require removal for construction of the Project will be identified and reported to the Community Liaison Group for their consideration of potential provision of timber for heritage projects (including in particular the provision of Robinia wood for heritage boat building). If the demand for this timber is identified to the Construction Team, appropriate measures for felling and removal from the site will be confirmed.

## SO.8

The NZTA will provide financial support to Te Atatu Pony Club over the period of occupation of Construction Yard 1 for additional feed supplement required as a consequence of the area of lost grazing. Support will be paid on receipt of proof of purchase up to a maximum of \$12,000/yr and excluding any existing feed purchase that is required by the club (e.g. the amount of additional feed purchased in the 2010 and 2011 years, when the club had full use of the proposed construction yard 1).

Except this condition will be amended if additional grazing land becomes available or is provided by the Auckland Council (Areas A and B identified in the Henderson Massey Local Board Minutes, dated 7 April 2011). In this instance, providing the forage on that pasture is suitable for food for horses, the amount payable would be pro-rated based on the shortfall in area from the 'pre-construction' lease area only.

#### SO.9

The NZTA will provide annual financial support to Te Atatu Pony Club for monies lost from the 'One Day Events' held on the Harbourview - Orangihina Park, calculated on the basis of average annual funds derived from such events over the Feb 2008 to Feb 2011 years (up to a limit of \$8,000). This payment will be over the period from the contractor's occupation of Construction Yard 1 to the confirmation of the Open Space Restoration Plan (required by Condition OS.2 – OS.4). If the Open Space Restoration Plan for Harbourview - Orangihina Park confirms that the Pony Club will be reinstated on the site, then payment will continue up until restoration is completed to the satisfaction of Auckland Council.

#### SO.10

Subject to any necessary consent and landowner approvals, the NZTA will construct a raceway on the alignment shown on the Plan 'Te Atatu Interchange': Construction Yard 1, including annotations (see Schedule A, Row 34). The raceway shall be not less than five metres wide and enclosed on both sides by timber rail fencing.

#### SO.11

The NZTA shall form a level, grassed area having approximate dimensions of 90 metres by 170 metres suitable for the exercise of horses, within the general location shown on the Drawing 'Te Atatu Interchange': Construction Yard 1 (see Schedule A, Row 34). Except this condition will cease to have effect if other adjacent land becomes available or is provided by the Auckland Council to the Te Atatu Pony Club for the duration of the NZTA's occupation of the land for Construction Yard 1 (for example, if the Areas A and B identified in the Henderson Massey Local Board Minutes, dated 7 April 2011 are made available).

#### SO.12

The NZTA shall comply with the obligations offered by the NZTA in its letter to the Te Atatu Pony Club, 21 March 2011, including the following:

- (a) Development of a Construction Yard Plan in consultation with the Te Atatu Pony Club and the Auckland Council to minimise the impacts on ponies and horses which will address:
  - (i) The location, timing and monitoring of construction yard activities which could affect ponies and horses; and
  - (ii) Confirm the programme of key events in the Te Atatu Pony Club calendar so that, any construction yard activities with the potential to cause disruption can be rescheduled; and
  - (iii) Confirm communication protocols between the NZTA and its contractors and the TAPC;

#### Advice note:

The attention of NZTA and the club is drawn to the PI suite of conditions concerning communication, consultation, and liaison.

(b) Subject to any necessary consent and landowner approvals, undertake the following works (where relevant, these works are to be in accordance with the details identified on the plan Te Atatu Interchange: Construction Yard 1 (see Schedule A, Row 34)):

- (i) Relocate existing water troughs (and their supply lines), trees (in accordance with Condition CEMP.6(n) and CEMP.6(o)) and horse jumps located within the construction yard to elsewhere in the remaining area leased by the Te Atatu Pony Club;
- (ii) Provide surface water drainage for the south western paddock adjacent to the Motorway (SH16).

### **Vegetation Conditions**

#### V.1

The NZTA shall finalise the ECOMP submitted with this application, prior to works commencing on site. The ECOMP shall be implemented through the CEMP. The ECOMP shall clearly identify the location and identity of:

- (a) All Significant Vegetation within the designation that is to be fully protected or relocated; and
- (b) All Valued Vegetation within the designation that is affected by the works (protected or removed).

Note: Significant and Valued Vegetation shall be as defined in the ECOMP.

#### V.2

The NZTA shall employ a suitably experienced botanist ('nominated botanist') for the duration of the works to monitor, supervise and direct all works affecting or otherwise in close proximity to the Significant Vegetation and Valued Vegetation identified in the ECOMP.

#### V.3

Prior to any site works commencing, a pre-commencement site meeting shall be held so that the conditions that pertain to the Significant Vegetation and Valued Vegetation and all vegetation in general (both native and exotic) are explained by the nominated botanist to all contractors or sub-contractors who will be working on site within the close vicinity of that vegetation.

#### V.4

The NZTA shall minimise the amount of vegetation (both native and exotic) which is to be cleared, with the exception of weeds (both woody and otherwise, unless agreed with the Major Infrastructure Team Manager, Auckland Council and the Community Liaison Group that the retention of these 'weeds' has other environmental or ecological benefits that warrant their retention). All vegetation clearance shall be undertaken in accordance with the measures set out in the ECOMP.

#### V.5

The NZTA shall install protective fencing around, or otherwise clearly demarcate, all of the Significant Vegetation identified in the ECOMP as requiring full protection, under the supervision of the nominated botanist.

#### V.6

The NZTA shall replace any terrestrial Valued Vegetation that is required to be removed as a result of construction activities, in accordance with the ECOMP and the Urban Design and Landscape Plans.

#### V.7

The nominated botanist shall supervise all trimming, pruning and relocation work associated with the Significant Vegetation and Valued Vegetation required as part of the works.

#### V.8

Immediately prior to planting, and for a period of 2 years following completion of construction, the NZTA shall undertake weed control and management of all invasive plant pests within the vegetated areas of the surface designation for the Project. Following this 2 year period, on-going control and management of all invasive plant pests within these areas will be the responsibility of the NZTA.

#### V.9

The nominated botanist shall undertake a monitoring programme throughout the construction period, including monitoring of:

- (a) The condition, repair and location of the temporary protective fencing or other forms of demarcation used to identify the Significant Vegetation;
- (b) Any works within the vicinity of the Significant Vegetation and Valued Vegetation;
- (c) The general health of the Significant Vegetation and Valued Vegetation (including any Significant or Valued Vegetation that has been relocated away from the works area); and
- (d) Compliance with the vegetation conditions of designation by way of fortnightly inspections during the construction period.

#### V.10

Any planting utilising native plants shall use plants genetically sourced from the Tamaki Ecological District where possible or otherwise shall use plants that have been genetically sourced from within the Auckland Ecological Region.

## **Avian Conditions**

### **A.1**

The NZTA shall finalise, and implement through the CEMP, ECOMP submitted with this application to include the matters set out in Conditions A.2 and A.5-A.6 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent and Conditions A.3 to A.4.

### **A.3**

The NZTA shall employ a suitably qualified ecologist to undertake monitoring of the roosting areas located at:

- (a) The existing high tide roost in Harbourview-Orangihina Park; and
- (b) The temporary construction roosting structure(s) pursuant to Condition A.2 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent.

Monitoring shall be undertaken on a monthly basis, with a monitoring report prepared on a quarterly basis. The monitoring report shall be made available to the Major Infrastructure Team Manager, Auckland Council and Department of Conservation upon request.

### **A.4**

Should the monitoring results indicate that the roosting sites have been abandoned, consultation shall be undertaken with the Department of Conservation and the Major Infrastructure Team Manager, Auckland Council to determine the need for and type of further management strategies (if any) required.

## **Herpetofauna Conditions**

### **H.1**

The NZTA shall finalise and implement through the CEMP, the ECOMP submitted with this application to include details of lizard management to be undertaken, including the following:

- (a) Lizard capture methodology, including timing;
- (b) Lizard release locations(s);
- (c) Lizard habitat enhancement at population release sites, including a detailed pest control programme for a minimum of one month prior to release and for a minimum of three consecutive years' duration after release;
- (d) Location(s), monitoring and maintenance of lizard protective fencing;
- (e) Post-release monitoring methodology; and
- (f) Lizard captive management methodology.

## **Lighting Conditions**

### **Operation**

#### **L.1**

Lighting shall be designed and screened to minimise the amount of lighting overspill and illumination of residential areas, in general accordance with the Waterview Connection Lighting Plan (Drawing Set F.11 (Refer Schedule A, Row 12):

- a) All motorway lighting shall be designed in accordance with "Roadlighting Standard AS/NZS1158";
- b) All other lighting shall be designed in accordance with relevant rules provided in the Unitary Plan;
- c) Fully cut off luminaires shall be used on SH20 from the Southern Tunnel Portal to the Maioro Street Interchange to minimised lighting overspill, as shown on Drawing Set F.11(Refer Schedule A, Row 12).  
Construction Zones and Construction Yards

#### **L.2**

A Temporary Construction Lighting Management Plan shall be prepared for all construction zones and construction yards prior to commencement of any night time works within the construction zones and construction yards. The Temporary Construction Lighting Management Plan shall be independently verified by a lighting specialist and provided to the Major Infrastructure Team Manager, Auckland Council for certification of compliance 10 working days prior to any night time work commencing.

The certification process shall ensure that the Plan includes (but is not be limited to):

- a) The layout and arrangement of all temporary lighting required for night time works, and shall show how this avoids the "Light Spill Restriction Zone" identified on the Construction Yard Plans (Refer Schedule A, Row 7)

submitted with the application, and that the temporary lighting complies with relevant rules provided in the Unitary Plan;

b) Provision for a 10m buffer between the night time work and any residential boundary at all times to minimise potential for light spill; and

c) General operating procedures outlined in the CEMP.

### L.3

Asymmetrical floodlights with horizontal glass visors that are not raised more than 3 degrees above the horizontal plane shall be used for any temporary construction night time lighting requirements. Alternative temporary lighting arrangements may be used, subject to the prior approval of the Major Infrastructure Team Manager, Auckland Council, where it can be demonstrated that the proposed lighting is similar or better to asymmetrical floodlights with glass visors. Glare shall be kept below the recommendation given in AS 4282 – 1997 “Control of the Obtrusive Effects of Outdoor Lighting” Tables 2.1 and 2.2.

## **Archaeology Conditions**

### ARCH.1

The NZTA shall complete, and implement through the CEMP, the Archaeological Site Management Plan (ASMP) submitted with the notice of requirement, to include, but not be limited to:

(a) Identification of the Project archaeologist, their role and responsibility on the Project;

(b) Who reports to the Project archaeologist;

(c) Specific sites requiring supervision, and measures to be undertaken to protect and manage these sites;

(d) Whether Heritage New Zealand and/or Auckland Council heritage and/or iwi supervision is required for the specific site (the latter to be determined through consultation with the relevant iwi groups); and

(e) Accidental discovery protocols in the event that unknown archaeological sites are uncovered.

### ARCH.2

The NZTA shall employ at its expense a qualified archaeologist (the Project archaeologist) who shall be on site to monitor all initial earthworks, including surface stripping of the site, for all specific areas identified in the ASMP to establish whether any sub-surface archaeological features are present. This includes, but is not limited to, the following areas:

(a) All unmodified areas in the vicinity of Rosebank Road;

(b) All works in the vicinity of the “Oakley Inlet Heritage Area”, located adjacent to the Great North Road Interchange;

(c) Works in the vicinity of two midden sites (recorded R11/2214 and R11/2215) within Great North Road Interchange, and all previously unmodified areas near the banks of the Oakley Inlet;

(d) Any ground disturbance works in Construction Yard 7 within Oakley Creek Reserve.

### ARCH.3

If any archaeological sites, including human remains are exposed during site works, then the following procedures shall apply:

(a) Immediately it becomes apparent that a possible archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease;

(b) The site supervisor shall immediately secure the area in a way that ensures that any artefacts or remains are untouched and notify the Project archaeologist;

(c) The Project archaeologist shall inspect the site to assess the relevance of the find, and then the Auckland Council shall be advised of the significance;

(d) If the site is confirmed to be an archaeological site by the Project archaeologist, the site supervisor shall then notify tangata whenua, Heritage New Zealand, and the Auckland Council that an archaeological site has been exposed so that appropriate action can be taken;

(e) In the case of human remains, the NZ Police, shall be notified.

### ARCH.8

All contractors and subcontractors working on the Project shall be trained on the archaeological requirements set out in the ASMP.

Advice note:

Any archaeological sites within the area affected by the Project shall not be modified or disturbed in any way unless written authorisation has been obtained from Heritage New Zealand.

### **Contaminated Land and Contaminated Discharges Conditions**

CL.1

The NZTA shall finalise and implement through the CEMP, the Contaminated Soil Management Plan (CSMP) submitted with this application prior to commencement of any site works. The CSMP shall include, but not be limited to:

- (a) Measures to be undertaken in the handling, storage and disposal of all material excavated during the construction works;
- (b) Soil validation testing and groundwater testing;
- (c) Soil verification testing to be undertaken to determine the nature of the excavated spoil and potential reuse or disposal options;
- (d) Measures to be undertaken in the event of unexpected contamination being identified during construction activities; and
- (e) Measures to be undertaken for the handling of asbestos containing material.

CL.4

All excavated soil shall be tested by the NZTA in general accordance with the CSMP, prior to either reuse on site or disposal off site. The testing regime shall be submitted for approval by the Major Infrastructure Team Manager, Auckland Council.

CL.5

The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council within 5 working days of identification of any contamination at the site which was not identified in the reports submitted in support of this application, including contaminated soil, surface water or groundwater. The removal of any excavated contaminated soil shall be in accordance with the CSMP. The removal and disposal of any contaminated groundwater/ surface water from the site shall be in accordance with the GWMP and the ESCP.

CL.6

The removal of any excavated contaminated soil shall be in accordance with the CSMP. The removal and disposal of any contaminated groundwater/ surface water from the site shall be in accordance with the GWMP and the ESCP.

CL.7

The NZTA shall engage a suitably qualified contaminated land specialist to supervise the works, excavation and removal of any contaminated soils from the site and undertake sampling (if required) of imported material.

CL.8

All testing / sampling techniques shall be carried out in accordance with the Ministry for the Environment Contaminated Land Management Guidelines or other equivalent standards approved in writing by the Major Infrastructure Team Manager, Auckland Council.

CL.11

The NZTA shall submit to the Major Infrastructure Team Manager, Auckland Council, a Site Closure Report no later than three (3) months after the completion of the earthworks. The Report shall be prepared in accordance with the Ministry for the Environment's Contaminated Land Management Guidelines and include:

- (a) Results of any soil reuse and imported material testing carried out to ensure compliance with the CSMP;
- (b) Volumes of soil removed from site;
- (c) Copies of the waste disposal receipts; and
- (d) Reports of any non-compliance with the CSMP procedures or complaints received while undertaking the site works.

### **Freshwater Conditions**

#### F.1

The NZTA shall finalise, and implement through the CEMP, the ECOMP submitted with this application. The ECOMP shall be updated to ensure compliance with the conditions of this consent and include changes to the details of construction processes prior to construction commencing. The ECOMP shall include, but not be limited to details of:

- (a) Monitoring of freshwater ecology;
- (b) Monitoring of freshwater and stream sediment quality;
- (c) Trigger event criteria for undertaking additional monitoring;
- (d) Procedures for responding to accidental discharges of contaminants to the freshwater environment; and
- (e) Contingency plans and/or remedial measures in the event monitoring results identify adverse effects.

#### F.2

The NZTA shall engage a suitably qualified ecologist and water quality scientist to undertake freshwater monitoring programme prior to, during and following construction to monitor the effect of the Project on the freshwater ecology. The freshwater monitoring shall be undertaken in Oakley Creek, Pixie Stream and Meola Creek. The freshwater monitoring programme shall be undertaken in accordance with the details set out in the ECOMP and include:

- (a) Cross sectional profiles;
- (b) Macro invertebrate sampling; and
- (c) Freshwater fish monitoring.

#### F.3

The freshwater monitoring programme shall, as a minimum, be undertaken in accordance with the following frequency:

- (a) Prior to construction – two baseline ecological surveys.
- (b) During construction – twice per year for fish and macro invertebrates and cross sectional profiles, within one month prior to the beginning of the earthworks season and within one month either side of the end of the earthworks season.
- (c) Post construction – on an annual basis for a maximum period of three years, or less if the Major Infrastructure Team Manager, Auckland Council is satisfied that no adverse effects have occurred or are likely to occur from the Project.
- (d) Monthly water quality samples at the five existing Oakley Creek sample locations to be analysed for pH, turbidity, suspended solids, metals (Zn, Cu and Pb) and nutrients.
- (e) Four “event based” samples per annum from each of the current two Oakley Creek sites. The samples are to be analysed for pH, turbidity, suspended solids, metals (Zn, Cu and Pb), hydrocarbons (TPH) and nutrients.
- (f) Two sediment quality samples per annum (January and July) at the five existing water quality Oakley Creek sites (if there is sufficient sediment to sample). The samples are to be analysed for metals (Zn, Cu and Pb), polycyclic aromatic hydrocarbons (PAH), hydrocarbons (TPH) and semi-volatile organic compounds.

Advice note: The sample collection and analysis required under sub-clauses (d) to (f) shall be undertaken following an IANZ accredited methodology by a suitably accredited laboratory (International Accreditation New Zealand).

#### F.4

The NZTA shall undertake additional freshwater monitoring in the event of a ‘trigger event’ for freshwater habitats. For the purposes of this consent, a ‘trigger event’ for freshwater habitats is defined in the ECOMP.

#### F.5

The NZTAs ecologist/hydrologist (required by condition F.2) shall review, every six months, the freshwater monitoring results, provided from Conditions F.2 to F.4, and results in monitoring detailed in earthworks Conditions E.9 and E.19 and Groundwater Condition G.10 of the Final Report and Decision of the Board of Inquiry into the NZTA Waterview Connection Proposal – Volume 2 Conditions of Consent. In the event that potential adverse effects are identified, including through review of the Condition G.10 monitoring results by the hydrologist and freshwater ecologist required by Condition G.12, the NZTA shall develop and submit for the approval of the Major Infrastructure Team Manager, Auckland Council appropriate contingency plans and/or

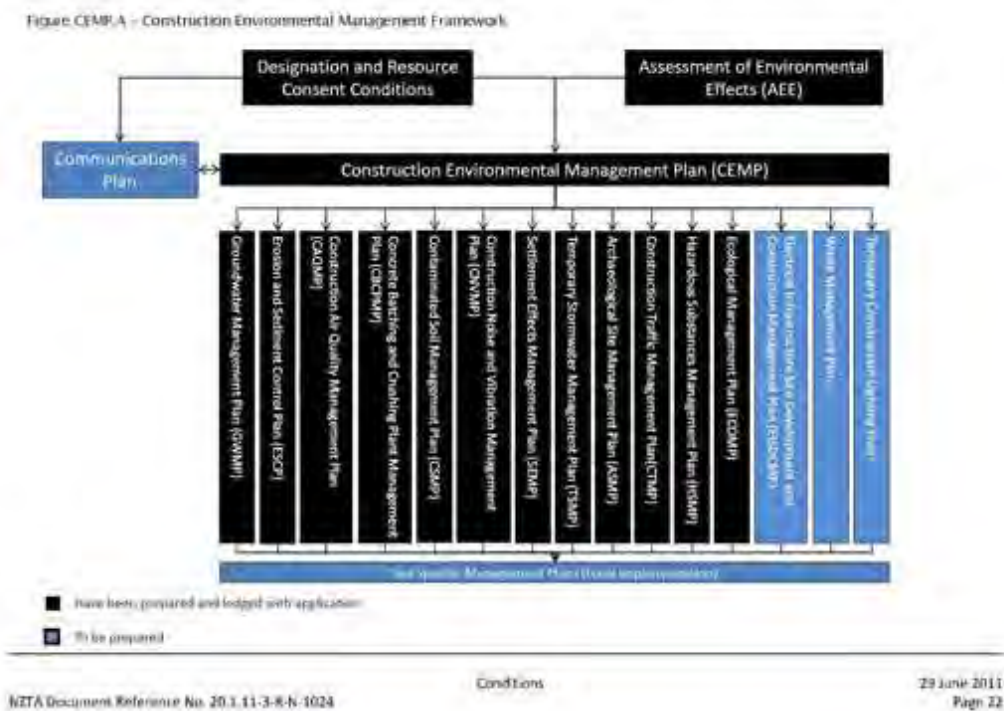
remedial measures in accordance with the measures set out in the ECOMP.

F.6

Freshwater monitoring reports shall be compiled from the monitoring undertaken pursuant to Conditions F.2 to F.4 and the review of Condition F.5, and a report provided to the Major Infrastructure Team Manager, Auckland Council every 6 months.

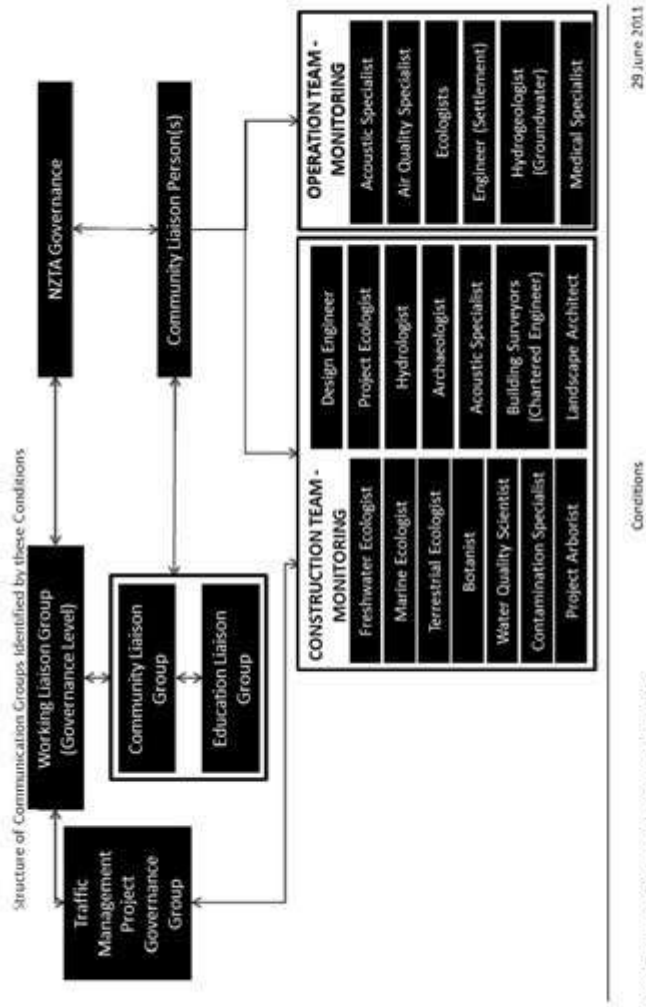
**Attachments**

**Attachment 1: Figure CEMP.A - Construction Environmental Management Framework**





Attachment 2: Figure PI.A - Structure of Communication Groups



**NOTIFICATION DETERMINATION AND  
RESOURCE CONSENT DECISION REPORT  
FOR A CHANGE OR CANCELLATION OF  
CONSENT CONDITIONS UNDER S127 OF  
THE RESOURCE MANAGEMENT ACT 1991**



**1.0 APPLICATION DESCRIPTION**

**1.1 Application and Property Details**

<b>Consent Application Numbers:</b>	41113 (Coastal Structure), 41114 (Coastal Structure) , 41118 (Coastal Structure), 41119 (Coastal Structure), 41121 (Reclamation), 41123 (Disturbance), 41124 (Occupation), 41125 (Occupation), 41126 (Occupation), 41128 (Occupation), 41371 (Occupation), 41120 (Reclamation), 41372 (Use of CMA), 41373 (Damming), 41374 (Damming), 41375 (Mangrove Removal), 41376 (Disturbance), R/VCC/2010/3396/1 (Land Use)
<b>Reporting Planner:</b>	Sarah Haarhoff – Senior Planner, Major Infrastructure
<b>Site Address:</b>	State Highway 16 (SH16) Causeway - section between the Great North Road interchange and the Te Atatu Peninsula.
<b>Applicant's Name:</b>	New Zealand Transport Agency (NZTA) – Deepak Rama
<b>Agent's Details:</b>	Causeway Alliance – Juliet Woodward
<b>Lodgement Date:</b>	21 November 2012
<b>Legal Description:</b>	N/A – State Highway
<b>Site Area:</b>	N/A – State Highway
<b>Operative Plans:</b>	District Plan: Auckland Council District Plan (Isthmus Section) (District Plan)  Regional Plan: Auckland Council Regional Plan (Coastal) (Regional Plan ((Coastal))
<b>Zoning:</b>	District Plan: Special Purpose 3 – Transport Corridor (SH 16) Open Space 1 – Conservation (Northern Side of Rosebank Park Domain and Traherne Island) Open Space 3 – Organised Recreation (Southern Side of Rosebank Park Domain)  Regional Plan (Coastal): Mooring Management Area (Whau River) Coastal Protection Area 2 (54) (Whau River) Coastal Protection Area 1 (53) (Pollen Island) General Management Area

<p><b>Special features or overlays:</b></p>	<p>District Plan:  B04-01 – Coastal Management Area  C01-01 – Scheduled Tree (Patiki Road)  C01-02 – Interchange Control Area (Patiki Road)  D02-01 – Significant Ecological Area Category A (Traherne Island)  D02-02 - Significant Ecological Area Category A (Traherne Island)  D04-20 - Significant Ecological Area Category A (Eric Armishaw Coastal Wetlands)</p> <p>Regional Plan (Coastal):  Gazetted Marine Reserve (Motu Manawa Pollen Island Marine Reserve)  Area of Significant Conservation Value (111)  Outstanding Landscape (Rating 6) – Traherne Island, Pollen Island, Northern and Western sides of Rosebank Park Domain  Significant Areas for Wading Birds (Traherne Island and Pollen Island)</p>				
<p><b>Designations/  Notice of Requirements:</b></p>	<p>A07-01 - Motorway (NZTA)  A07-01D – Motorway: Western Ring Route – Waterview Connection, Alteration to Designation A07-01 SH16 Along the Causeway and Rosebank Peninsula (NZTA)  A07-01E – Motorway: Western Ring Route – Waterview Connection, Alteration to Designation A07-01 SH16 Between Great North Road and St Lukes Interchange (NZTA)  C01-03 – Building Line Restriction for Road Widening (Auckland Council) (Patiki Road)  C01-05 - Building Line Restriction for Road Widening (Auckland Council) (Patiki Road)  C01-06 – Motorway Interchange Ramps (NZTA) (Patiki Road)  C01-07 – Construction of a Public Road (NZTA) (Patiki Road)</p>				
<p><b>Map Reference (NZTM) / GPS Ref:</b></p>	<p>Easting: 1747713.29 / Northing: 5919450.31 (Te Atatu Peninsula Boundary)  Easting: 1751265.32 / Northing: 5918008.33 (Great North Road Boundary)</p>				
<p><b>Date of Site Visit:</b></p>	<p>5 October 2012</p>				
<p><b>Section 92 request:</b></p>	<table border="1"> <thead> <tr> <th>Date Requested</th> <th>Date Received</th> </tr> </thead> <tbody> <tr> <td>10 December 2012</td> <td>21 December 2012, 31 January 2013</td> </tr> </tbody> </table>	Date Requested	Date Received	10 December 2012	21 December 2012, 31 January 2013
Date Requested	Date Received				
10 December 2012	21 December 2012, 31 January 2013				

## 1.2 Locality Plan



Source: Auckland Council GIS

## 1.3 Application Documents (Plans and Reference Documents)

The following information has been provided:

- Application form, AEE and attachments titled 'SH16 Causeway Upgrade Project Section 127 Application to Auckland Council to Change Condition RC.1 (by adding a new condition RC.1B) on Resource Consent Number EPA 10/2.009 (ACC:R/LUC/2010/3396), EPA 10/2.031 (ARC: 38335), EPA 10/2.032 (ARC: 38336), EPA 10/2.033 (ARC:38338), EPA 10/2.034 (ARC:38339), EPA 10/2.038 (ARC:38342), EPA 10/2.039 (ARC:38343), EPA 10/2.040 (ARC: 38344), EPA 10/2.041 (ARC:38345), EPA 10/2.052 (ARC: 38356), EPA 10/2.056 (ARC:38361), EPA 10/2.058 (ARC: 38363), EPA 10/2.059 (ARC: 38364)' prepared by the Causeway Alliance and dated 20 November 2012 (Revision 1);
- Further information letter titled 'Section 127 Application to Auckland Council to Change Condition RC.1 (by Addition Condition RC.1B)', prepared by Juliet Woodward – Causeway Alliance, dated 31 January 2013;
- Further information letter and attachments (including indicative plans) titled 'Section 127 Application to Auckland Council to Change Condition RC.1 (by Addition Condition RC.1B) – Request for Further Information Response', prepared by Juliet Woodward – Causeway Alliance, dated 21 December 2013;

The following plans have been provided:

Drawing number	Title	Architect/Author	Date
SH16-4-V-DG-7000	CMA Permanent Occupation Plan Sheet 1	Causeway Alliance	20/11/12 (Rev A)

SH16-4-V-DG-7001	<i>CMA Permanent Occupation Plan Sheet 2</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7002	<i>CMA Permanent Occupation Plan Sheet 3</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7003	<i>CMA Permanent Occupation Plan Sheet 4</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7004	<i>CMA Permanent Occupation Plan Sheet 5</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7005	<i>CMA Permanent Occupation Plan Sheet 6</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7010	<i>CMA Temporary Occupation Plan Sheet 1</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7011	<i>CMA Temporary Occupation Plan Sheet 2</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7012	<i>CMA Temporary Occupation Plan Sheet 3</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7013	<i>CMA Temporary Occupation Plan Sheet 4</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7014	<i>CMA Temporary Occupation Plan Sheet 5</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7015	<i>CMA Temporary Occupation Plan Sheet 6</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7020	<i>Reclamation Plan Sheet 1</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7021	<i>Reclamation Plan Sheet 2</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7022	<i>Reclamation Plan Sheet 3</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7023	<i>Reclamation Plan Sheet 4</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7024	<i>Reclamation Plan Sheet 5</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7025	<i>Reclamation Plan Sheet 6</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-41704-R-DG-071	<i>Typical Roding Cross Sections SH16 Mainline Sheet 1</i>	Causeway Alliance	9/11/12 (Rev B)
SH16-4-41704-R-DG-072	<i>Typical Roding Cross Sections SH16 Mainline Sheet 2</i>	Causeway Alliance	9/11/12 (Rev B)
SH16-4-10981-S-DG-043	<i>Causeway Boardwalk Sections and Details</i>	Causeway Alliance	9/11/12 (Rev A)
SH16-4-V-DG-7030	<i>Proposed Change in Permanent Footprint Sheet 1</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7031	<i>Proposed Change in Permanent Footprint Sheet 2</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7032	<i>Proposed Change in Permanent Footprint Sheet 3</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7033	<i>Proposed Change in Permanent Footprint Sheet 4</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7034	<i>Proposed Change in Permanent Footprint Sheet 5</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7035	<i>Proposed Change in Permanent Footprint Sheet 6</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7040	<i>Proposed Change in Temporary Footprint Sheet 1</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7041	<i>Proposed Change in Temporary Footprint Sheet 2</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7042	<i>Proposed Change in Temporary</i>	Causeway Alliance	20/11/12

	<i>Footprint Sheet 3</i>		(Rev A)
SH16-4-V-DG-7043	<i>Proposed Change in Temporary Footprint Sheet 4</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7044	<i>Proposed Change in Temporary Footprint Sheet 5</i>	Causeway Alliance	20/11/12 (Rev A)
SH16-4-V-DG-7045	<i>Proposed Change in Temporary Footprint Sheet 6</i>	Causeway Alliance	20/11/12 (Rev A)

The information has been reviewed and assessed by the following persons:

- Lisa Dunshea - Principal Specialist Urban Designer, Auckland Council
- Sam Morgan – Senior Consents and Compliance Advisor, Coastal, Auckland Council
- Ina Stenzel – Cycling and Walking Specialist, Auckland Transport
- Tracey Parsons – Ecologist, Auckland Council
- Peter Anderson – Ecologist, Auckland Council
- Tim Lovegrove – Senior Regional Advisor Fauna, Auckland Council
- Helen Caley – Senior Consents and Compliance Advisor, Earthworks and Contaminated Land, Auckland Council
- Jon Styles – Acoustic Engineer, Styles Group

## 2.0 THE PROPOSAL, SITE AND LOCALITY DESCRIPTION

### 2.1 Background

The Waterview Connection Project (the Waterview project) comprises 5 work packages and will be the final section completing Auckland's Western Ring Route. The Waterview project's resource consents and designations were approved on 29 June 2011 by the Board of Inquiry (BoI).

The Causeway section to which this application relates was referred to as Package 4 during the BoI process, and is further broken down into three sectors – Sector 2 (Whau River), Sector 3 (Rosebank Road – Terrestrial) and Sector 4 (Reclamation). The BoI granted consent to 33 regional consent applications that are of relevance to these sectors, including consents for:

- Contaminated site discharge;
- Reclamation;
- Earthworks;
- Stormwater discharge;
- Air discharge;
- Permanent and temporary coastal structures;

- Mangrove removal in the Coastal Marine Area (CMA);
- Disturbance of the foreshore and seabed;
- The use of the CMA by motor vehicles during construction;
- Taking and use of inner coastal water;
- Damming and impoundment of inner coastal water;
- Occupation of the CMA;
- Ongoing use of the CMA for transport purposes.

Of relevance to the Causeway section, Land Use consent under the Auckland Council District Plan (Isthmus Section) (the District Plan) was granted under s89(2) of the RMA for the construction, operation and maintenance of a State Highway on land that will be reclaimed.

The BoI also granted consent to designate new areas of land and alter existing designations to provide for the project. In particular, this resulted in changes to existing designation A07-01 contained in the District Plan.

In relation to the Causeway section, the approved consents were for a design which incorporated:

- An increase in lanes – two additional westbound lanes and one additional eastbound lane between the Great North Road and Rosebank Interchange, and one additional lane in each direction between Rosebank Road and Te Atatu;
- A symmetrical widening of the Causeway to the south and east;
- Construction of a shared path (pedestrian path and cycleway) running adjacent to the Causeway, at the same grade, requiring bridges where the Causeway is bridged;
- Construction methodologies and ground improvement solutions using ‘mudcrete’ or ‘deep soil mixed columns’;
- Stormwater treatment using bio-filters and proprietary cartridge filters.

The applicant has provided further detail of the Waterview project background and Causeway design in sections 1.1 and 2.0 of their AEE.

## 2.2 Proposal

The applicant seeks consent to insert a new condition, RC.1B, to allow for new plans to replace the previously approved plans referenced in RC.1 of the relevant consents in order to allow for design changes that are now proposed to the Causeway section of the Waterview project. This is proposed to apply to 17 of the regional consents and one District land use consent as further detailed in section 3.1 below.

The design changes subject to this application are detailed in section 1.2 and section 4.0 of the AEE and shown on the plans referenced in section 1.3 of this report, and are summarised as follows:

- Asymmetrical widening of the Causeway, resulting in additional widening (occupation and reclamation) to the north, with generally less occupation and reclamation to the south, and a reduction in the channel realignments required;
- A reduction in the overall footprint of the Causeway as the width will be reduced from 83m as consented to between 69m-79m in width (including existing reclamations);
- Altered bridge designs for the Causeway and Whau River bridges, and in particular:
  - incorporation of the shared path into the bridge structures, rather than creation of separate bridge structures as was consented;
  - reduction in the number of piles required for both bridges, and increase in the diameter of the piles on the Causeway bridge. On the Whau River bridge it is proposed that there will be 27 piles (21 of which will be in the CMA) where 42 piles were approved. For the Causeway Bridge 12 piles (6 of which will be in the CMA) are proposed of 1.2m diameter where 36 piles of 0.5m diameter were approved;
- Elevation (between 0.7m-1.0m) of the shared path between the Great North Road interchange to just before the Causeway bridge, and for a section leading up to Traherne Island (where previously the shared path was to be at the same grade as the Causeway carriageway for the entire length). It is noted that this does not affect the approved occupation areas of the CMA;
- An additional 22 stormwater outfalls located in the CMA due to a change in stormwater treatment devices;
- Extension of existing rock revetments to form seven new groynes located on the northern side of the Causeway to the east of Traherne Island for protection of the new embankment, and extension of four existing groynes on the northern side of the Causeway to the west of the Causeway bridge. The groynes are aimed at maintaining the position of the tidal channel to prevent it from meandering south and undermining the toe of the new embankment. The groynes will be approximately 15m in length, spaced at intervals of approximately 25m intervals to the west of the Causeway Bridge. The groynes will taper from 9m at the base to 1.5m at the tip, and will be between 1.0-1.5m above seabed level. It is noted that the applicant had originally applied for consent as it relates to the existing groynes, however the applicant has since confirmed their lawful establishment (refer email dated 19 February 2013, Attachment 3).

These design changes will affect 17 of the approved coastal permits for the following reasons:

- The areas of permanent occupation (and reclamation in some cases) of the CMA will be altered due to the asymmetrical widening of the causeway, increased diameter of bridge piles, additional stormwater outfalls in the CMA, and extension to the groyne structures;
- The areas of temporary occupation of the CMA will be altered due to the changes in location of the permanent structures and altered construction methodologies;
- The changes to construction areas and methodologies will affect the approved areas of disturbance and mangrove removal, and the extent and nature damming of inner coastal water;
- The use of the CMA for by motor vehicles will be altered given the changes in construction areas.



The District Plan land use consent is also affected as the reclamation areas have been altered.

It is noted that the above mentioned design changes have predominantly arisen through further development of construction methodologies and stormwater treatment solutions since the BoI consenting. In particular:

- Alternative construction methodologies and ground improvement solutions based on a pre-load and wick drain solution;
- Alternative stormwater treatment solution using proprietary cartridge filter treatment and grassed conveyance channels.

These construction methodologies and stormwater treatment solutions differ from those considered during the BoI process, however based on information provided by the Causeway Alliance it is considered that the changes are provided for through the conditions of consent and no changes to those consents are required under s127<sup>1</sup>.

In terms of the design changes, the AEE states that:

*'The proposed design refinements have minimised the extent of the Causeway footprint to the greatest extent possible, which is required in accordance with Resource Consent Condition M.12.'*

The AEE lists a number of benefits from the design changes including a reduction in the extent and scale of construction works required, decreased user and public disruption during the works, and a reduction in construction costs and timeframes.

The remaining 16 regional consents of relevance to the Causeway section of the project are not considered to require the addition of RC.1B for the following reasons:

- There will be no changes that affect the contaminated site discharge or earthworks consents;
- The stormwater discharge conditions of consent will be met;
- There will be no change to air discharges during the construction works;
- The ongoing use of the CMA for transport purposes will remain as consented;
- In some cases coastal structures will not be altered by the design changes (e.g. In sector 2 there will be no changes to the locations of stormwater outfalls).

The applicant has advised that no changes are required to Designation A07-01 as the purpose of the designation will not be changed and the area of current designation will remain unchanged as all changes will be within the CMA. It is however noted that there will be areas of the CMA that will be 'land' once reclaimed, and as such the requiring authority will need to update their designation accordingly in the future. The applicant has confirmed in their s92 response dated 21 December 2012 that this will be undertaken at a later date.

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<sup>1</sup> Refer to memo from Sandra Edwards, Council's Consents and Compliance Advisor – Coastal, dated 18 December 2012, and memo from Justine Coup, Senior Consents and Compliance Advisor – Stormwater Design, dated 13 February 2013 (Attachment 1).

### 2.3 Site, locality, catchment and environs description

The Causeway section of SH16 is approximately 4.2km in length and is currently a twin three lane motorway, extending across the CMA from the Great North Road interchange in the east to Te Atatu in the west.

The three sectors (sectors 2-4) that comprise the Causeway are described in detail in section 3.2 of the AEE. In particular the following is noted:

- The Causeway is largely located on existing reclaimed land, with Coastal Protection Area 1 (CPA1), Coastal Protection Area 2 (CPA2) and Mooring Management Area (MMA) zonings on either side of the Causeway.
- A portion of the Causeway crosses Traherne Island and the Rosebank Peninsula which are zoned Open Space 1 and 3, with Traherne Island identified as a Significant Ecological Area and a Significant Area for Wading Birds.
- On the north-eastern side of the Causeway and southern side from Rosebank Peninsula is the Motu Manawa Pollen Island Marine Reserve (the Marine Reserve) which extends from the Whau River to the west around Pollen Island to the north and through to the landward side of the Rosebank Peninsula. Pollen Island is identified as a Significant Area for Wading Birds.
- The Causeway has two existing bridges – the Whau River bridge and the Causeway bridge which is located to the west of the Great North Road interchange.
- Within the CMA at the eastern end of the Causeway the Eric Armishaw Coastal Wetlands are identified as a Significant Ecological Area.
- Traherne Island, Pollen Island, Northern and Western sides of Rosebank Park Domain are classified as an Outstanding Landscape.

It is noted that the existing Causeway and its construction has resulted in a highly modified coastal environment within the immediate vicinity of the state highway. It is also noted that there are a variety of adjacent land uses including motorway and road infrastructure, Open Space zones, and Business zones with the Rosebank Peninsula industrial area comprising of heavy industry and office development.

## 3.0 REASONS FOR THE APPLICATION

### 3.1 S127 Change or Cancellation of Conditions

Section 127(1) of the RMA 1991 enables the holder of a resource consent to apply to the consent authority for a change or cancellation of a condition of consent. Section 127(3) provides that the application be considered as a **discretionary activity**.

The applicant proposes to insert a new condition (RC.1B)<sup>2</sup> as it relates to the Causeway (sectors 2-4) in the following consents:

Original Consent Reference No.	S127 Consent Reference No.	Consent Type	Activity Type
38335	41113	Coastal Permit	Temporary structures in the CMA in GMA, CPA2, MMA
38336	41114	Coastal Permit	Permanent structures in the CMA in GMA, CPA2, MMA
38338	41118	Coastal Permit	Temporary structures in the CMA in CPA1
38339	41119	Coastal Permit	Permanent structures in the CMA in CPA 1
38342	41121	Coastal Permit	Reclamation in CPA1 and associated vegetation removal
38345	41123	Coastal Permit	Disturbance of foreshore and seabed and vegetation removal during construction in CPA1
38356	41124	Coastal Permit	Permanent occupation in the CMA in sector 1
35361	41125	Coastal Permit	Temporary occupation in the CMA in GMA
38363	41126	Coastal Permit	Temporary occupation in the CMA in CPA1
38364	41128	Coastal Permit	Permanent occupation in the CMA in sector 4
38360	41371	Coastal Permit	Permanent occupation in the CMA for stormwater outfalls in CPA1 in sector 4
36576	41120	Coastal Permit	Temporary reclamation for construction in CPA2
38346	41372	Coastal Permit	Use of motor vehicles in the CMA during construction in CPA1 and CPA2
38348	41373	Coastal Permit	Damming and impoundment of inner coastal water during construction in GMA
38349	41374	Coastal Permit	Damming and impoundment of inner coastal water during construction in CPA1
38344	41375	Coastal Permit	Removal of vegetation in CPA2
38343	41376	Coastal Permit	Disturbance of foreshore and seabed and vegetation removal during construction in GMA, CPA2, MMA
R/LUC/2010/3396	R/VCC/2010/3396/1	Land Use Consent	Activity on reclaimed land (s89 of the RMA)

<sup>2</sup> It is noted that the wording of this condition has been altered since the original application, refer to email dated 15 February 2013 confirming agreement of the applicant (Attachment 3).

The applicant proposes to insert a new condition RC.1B as it relates to the Causeway Upgrade Project (sectors 2-4) and associated design changes. This condition is proposed to read as follows:

### **RC.1B**

Except as modified by the conditions below, the SH16 Causeway Upgrade Project works (Sectors 2, 3 and 4 of the Waterview Connection Project) shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency (NZTA), in the resource consent applications, the supporting documents (as detailed in Condition DC.1), and in the supplementary information provided in evidence by the NZTA to the BOI, except where as amended by the application material provided with the s127 application referenced by Council as 41113, 41114, 41118, 41119, 41120, 41123, 41124, 41125, 41126, 41128, 41371, 41120, 41372, 41373, 41374, 41375, 41376, R/VCC/2010/3396/1, as follows:

- a) Application form, AEE, appendices and plans titled 'SH16 Causeway Upgrade Project Section 127 Application to Auckland Council to Change Condition RC.1 (by adding a new condition RC.1B) on Resource Consent Number EPA 10/2.009 (ACC:R/LUC/2010/3396), EPA 10/2.031 (ARC: 38335), EPA 10/2.032 (ARC 38336), EPA 10/2.033 (ARC:38338), EPA 10/2.034 (ARC:38339), EPA 10/2.038 (ARC:38342), EPA 10/2.039 (ARC:38343), EPA 10/2.040 (ARC: 38344), EPA 10/2.041 (ARC:38345), EPA 10/2.052 (ARC: 38356), EPA 10/2.056 (ARC:38361), EPA 10/2.058 (ARC: 38363), EPA 10/2.059 (ARC: 38364)' prepared by the Causeway Alliance and dated 20 November 2012 (Revision 1), including:
  - Addendum to Technical Report G.3 Assessment of Avian Ecological Effects
  - Addendum to Technical Report G.4 Assessment of Coastal Processes
  - Addendum to Technical Report G.5 Assessment of Construction Noise Effects
  - Addendum to Technical Report G.11 Assessment of Marine Ecological Effects
  - Addendum to Technical Report G.15 Assessment of Stormwater and Streamworks Effects
  - Addendum to Technical Report G.16 Assessment of Temporary Traffic Effects
  - Addendum to Technical Report G.17 Assessment of Terrestrial Vegetation Effects
  - Addendum to Technical Report G.19 Assessment of Vibration Effects
  - Addendum to Technical Report G.20 Assessment of Visual and Landscape Effects
- b) Further information letter titled 'Section 127 Application to Auckland Council to Change Condition RC.1 (by Addition Condition RC.1B)', prepared by Juliet Woodward – Causeway Alliance, dated 31 January 2013;

- c) Further information letter and attachments (including indicative plans) titled 'Section 127 Application to Auckland Council to Change Condition RC.1 (by Addition Condition RC.1B) – Request for Further Information Response', prepared by Juliet Woodward – Causeway Alliance, dated 21 December 2012.

Any minor changes to the design from that approved by this consent shall be submitted to the Major Infrastructure Team Manager, Auckland Council for approval at least 20 working days prior to any relevant construction being undertaken, and shall be supported by documentation of why the minor amendment is required and confirming any adverse effects are similar in nature to those approved.

**Advice Notes:**

Any design changes deemed to be more than minor by the Major Infrastructure Team Manager, Auckland Council may require a new consent or an application for change of conditions under s127 of the Resource Management Act.

It should be noted that the addendums to the technical reports provided with the s127 application should be referred to in relation to the following consent conditions as it relates to the SH16 Causeway Upgrade Project (Sectors 2-4 of the Waterview Connection Project):

<b>S127 Consent No.</b>	<b>Consent Condition</b>	<b>Addendum to Technical Report</b>
R/VCC/2010/3396/1	TT.10	Addendum to Technical Report G.16 Assessment of Temporary Traffic Effects
41124, 41371	SW.10, SW.16	Addendum to Technical Report G.15 Assessment of Stormwater and Streamworks Effects

### 3.2 Status of the Application

Overall, pursuant to s127(3) the application is considered to be a **discretionary activity**.

## 4.0 NOTIFICATION ASSESSMENT (SECTIONS 95A, 95C-95D)

### 4.1 Public Notification Assessment

#### 4.1.1 Statutory Considerations

Under section 127 an application to change or cancel a condition of a resource consent is to be treated as if it were an application for a **discretionary activity**.

Under section 127 only the change to the condition can be considered. It does not provide for the reconsideration of the entire application. The appropriate comparison is between any adverse effects from the activity in its original form and any adverse effects that would arise from the proposal in its changed / varied form.

An application for resource consent must be publicly notified if the activity will have or is likely to have adverse effects on the environment that are more than minor; if the applicant requests it is notified; or if a national environmental standard or a rule in a plan requires it.

Section 95A(3) provides that an application must not be publicly notified if a rule or national environmental standard precludes public notification and the applicant has not requested public notification.

However a council may publicly notify an application if special circumstances exist.

In identifying who is or is likely to be adversely affected by the application, section 127(4) of the RMA requires the consent authority to consider (in particular) every person who made a submission on the original application and every person who is affected, or is likely to be affected, by the new application. For determination of the notification process, the process to be followed will depend upon whether adverse effects are considered to be minor and whether or not approvals have been obtained from all affected persons.

#### **4.1.2 Request for Public Notification (Section 95A(2)(b))**

The applicant has not requested that the application be publicly notified.

#### **4.1.3 Plan or National Environmental Standard requires or precludes Public Notification (Section 95A(2)(c) and Section 95A(3)(a))**

In terms of s95A(2)(c) and 95A(3)(a) there are no rules in the relevant District Plan or Regional Plan which require or preclude public notification of the application.

#### **4.1.3.1 Effects that may be disregarded – Permitted Baseline Assessment**

The permitted baseline refers to permitted activities on the subject site. In this case the type and or complexity of effects associated with the proposed activity are such that the permitted baseline does not provide a useful comparison for the purpose of discounting effects. It is however noted that the application is for a change of conditions, and as such only the effects of the changes against those approved under the original consents and Bol process are addressed.

#### **4.1.4 Adverse Effects Assessment (Section 95A(2))**

Having regard to the above and after an analysis of the application, the following assessment addresses the adverse effects of the activity on the environment for public notification purposes. The AEE and technical report addendums lodged by the applicant provides a comprehensive assessment of adverse effects, and the following order of effects follows those contained in the AEE for ease of reference.

#### **4.1.4.1 Marine Ecology**

The proposal will result in changes to the areas of the CMA that will be subject to construction effects such as reclamation, vehicle use, mangrove removal, and temporary structures. Overall the majority of long term occupation and reclamation will be located to the north of the Causeway, with much less disturbance on the southern side of the Causeway than that previously approved.

The applicant has provided an assessment of the proposed design changes on the ecology of the CMA, prepared by Bioresearchers. In summary the report and AEE state that:

- The sediment grain size on the northern side of the Causeway is larger than that on the southern side given the existing tidal actions which typically disperse fine sediment. As such the risk of fine sediment during the works on the northern side being disturbed and deposited in the marine reserve is low.
- The benthic marine organisms on both the northern and southern sides of the Causeway are common species with low diversity, with no identified threatened species in close proximity of the proposed works areas on the northern side of the Causeway. In relation to the proposed extension to existing groynes and new groynes, while an additional area of benthic organisms will be disturbed, the applicant's ecological assessment states that there will be *'offset mitigation...by increasing the surface area of hard substrate that would be colonised by other marine organisms'*.

- The change in construction effects are determined by the applicant's ecological report to be *'no more than minor and...mitigated as per the mitigation required for the consented design.'*
- In terms of operational effects, stormwater discharge into the CMA will be required to meet the existing conditions of consent and as such there will be no change in effects. Traffic noise and vibration are also considered to be similar to those consented. In terms of hydrological effects any effects will be reduced due to the reduced realignment of adjacent channels.

The proposal has been reviewed by Council's Ecologist, Tracey Parsons (refer memo dated 5 February 2013, Attachment 2). Ms Parsons notes that despite the highly modified nature of the environment and due to the existing Causeway and industrial activity and associated existing stormwater and wastewater discharges, that it is a valued environment as a *'representative example of a low energy inner harbour ecosystem'* and due to its location with the Marine Reserve. Ms Parsons concludes that any construction, operational and permanent habitat loss effects will be similar in nature to the consented design, and temporary in nature with the exception of habitat loss.

In relation to the habitat loss on the northern side of the Causeway Ms Parsons notes that the area is low in diversity. In relation to the areas that will be affected around the Whau River and Causeway bridges Ms Parsons notes there is a high diversity of benthic organisms however this is *'likely to be due to the presence of the existing man-made structures that increase the habitat diversity'*, with similar recolonisation and diversity expected over time once construction is completed.

Ms Parsons raises no issues of contention in relation to the applicant's ecological assessment of the effects of the changes and overall concludes that:

*'Overall the changes to the proposed design...reduce the impacts on the marine environment, or remain the same as with the consented design, with the exception of an increase in the permanent footprint of the Causeway, which has little additional impact compared with the original design.'*

Based on the above assessments provided by the applicant and review by Council's ecologist it is considered that any effects on benthic organisms as a result of the construction works and operation of the Causeway in the long term will be similar to those consented under the original design. In particular it is noted that while additional works will be undertaken on the northern side of the Causeway within the Marine Reserve, the nature of the sediment and coastal processes in this area mean that any potential for fine sediment to be redistributed to smother benthic organisms is minimal. While an additional area of benthic organisms will be disturbed to the north of the Causeway the diversity in this location is deemed to be low and the hard groyne structures will provide a habitat suitable for other marine organisms. For these reasons it is overall considered that the proposed changes will not give rise to any additional effects above those consented under the original design in respect of marine ecology.

#### **4.1.4.2 Terrestrial Ecology**

The proposal will result in a reduction in the area on Traherne Island affected by the Causeway to that consented, with a 0.18 ha reduction in permanent footprint on Traherne Island North and 0.17 ha reduction in permanent footprint on Traherne Island South.

The applicant has provided an assessment of the proposed design changes on terrestrial ecology, prepared by Bioresearchers. In particular the ecological report notes the southern area of Traherne Island has greater ecological value in terms of vegetation and the habitat it provides to banded rail. The altered symmetry of the Causeway is also assessed to have in the long term

a lesser effect on salt marsh and salt scrub habitat in this area. In relation to the northern part of the island the report states that the altered design will result in less impact on existing flax land with emergent wattle habitats. The proposed design will result in the same amount of ecotone vegetation loss as that consented. It is noted that existing conditions of consent require mitigation planting for the vegetation loss. The relocation of the endangered plant *Mimulus ripens* is also required through conditions of consent and this will be undertaken as per the amended design.

The proposal has been reviewed by Council's Ecologist, Peter Anderson (refer email dated 14 February 2013, Attachment 2), who raises no issues of concern with the amended design and states that the provided reports are satisfactory.

Overall, it is considered that the proposal will have similar, if somewhat lesser effects on terrestrial ecology than that previously approved given that there will be less disturbance and permanent footprint on Traherne Island which has been assessed as having ecological value in terms of vegetation, and in particular salt marsh and flax land. It is considered that the existing conditions relating to the mitigation planting will adequately mitigate the effects of removal of ecotone vegetation and the relocation of *Mimulus ripens* will be undertaken in accordance with existing consent conditions.

#### **4.1.4.3 Avian Ecology**

The proposal will result in increased disturbance on the northern side of the Causeway, whereas the approved design affected both the northern and southern sides of the Causeway.

The applicant has provided an assessment of the proposed design changes on avian ecology, prepared by Bioresearchers. This report states that the southern side contains a number of roosting and feeding area, particularly for shags, white-faced herons and wrybill (a threatened species), whereas the northern side primarily subject to the amended proposal provides a low quality intertidal habitat and use of the area by avifauna is relatively low in comparison. The AEE states that the area of shellbank on the eastern side of Traherne Island that is used for roosting will require a lesser amount of temporary removal during the construction works than that required under the approved design. As mentioned in the previous section of this report the revised proposal will result in less banded rail habitat on Traherne Island requiring removal than the consented design.

The proposal has been reviewed by Council's Ecologist, Tim Lovegrove (refer email dated 14 February 2013, Attachment 2), who raises no issues of concern with the amended design and states that the provided reports are satisfactory.

Based on the assessment provided by the applicant it is considered that the proposed changes to the Causeway will have a lesser effect on existing known roosting habitats to that previously approved, particularly as there will be less disturbance and permanent occupation on the southern side of the Causeway. For this reason it is considered that any adverse effects on avian ecology will be less than those approved under the existing consents.

#### **4.1.4.4 Coastal Processes**

In terms of coastal processes the proposed changes will alter the areas of the CMA affected during construction, with overall more work undertaken on the northern seaward side of the Causeway and less on the southern side than previously approved. The area of temporary occupation of the CMA during the construction works will overall be reduced.

In relation to long term changes, the Causeway and bridges will be located further to the north. There will be a decrease in the footprint of the Causeway in the CMA as while there will be additional permanent occupation by structures there will be a lesser area of reclamation required.



There will also be less alteration of existing channels, however seven new groyne structures will be established and four existing groynes will be extended to protect the embankment of the Causeway structure on the northern seaward side.

The applicant has provided a coastal processes assessment prepared by NIWA which addresses the potential effects on geomorphology, hydrodynamic processes, sediment processes, and climate change as a result of the design changes. The conclusions of this report and the AEE are summarised as follows:

- The extension of the Causeway bridge to the north will straighten the existing adjacent tidal channel further to the north than that consented which may result in localised scouring from incoming tidal flows. To avoid scour effects on the new bridge abutments it is proposed to raise and widen the existing eastern-most groyne. The bridge alignment and groyne widening will result in no more than minor localised effects on the geomorphology of the tidal channel and its flanks to the north of the bridge.
- The reduction in number of piles for both bridge structures will reduce the effects on tidal flows to those consented, and the coastal processes assessment states that the increased diameter of the piles for the Causeway bridge will not substantially impede tidal flows, with only minor localised widening of eddies immediately downstream of each new pile. This will result in no more than minor effects in terms of scour on the channel, which is offset by the reduction in number of piles to that consented.
- In terms of additional reclamation works between Rosebank Peninsula and Traherne Island, there will be some additional works on an existing small drainage channel however these will be no more than minor and conditions of consent will ensure that there are no effects on hydrodynamic processes.
- The reduction in permanent occupation on the northern side of the Causeway will result in a reduced impact on the existing shoreline chenier beach deposits both during construction and in the long term, particularly between Traherne Island and Rosebank peninsula.
- Overall the reduction in the area of temporary works will reduce the effects of construction activities, particularly as it relates to disturbance of fine sediment and release into the water column. The existing conditions of consent will adequately mitigate any construction effects.
- In terms of climate change the amended design has incorporated provision for future proofing that can accommodate at least a 1.4m high sea level rise (currently it is designed for 0.8m sea level rise).
- The report overall concludes that the effects on coastal processes are overall reduced by the proposed design.

The proposal has been reviewed by Council's Senior Consents and Compliance Advisor - Coastal, Sam Morgan (refer memo dated 18 January 2013, Attachment 2). Mr Morgan has raised no issues of contention in relation to the applicant's coastal processes assessment, however he does provide some additional comments in relation to the additional 22 stormwater outlet structures that will be located in the CMA, which are summarised as follows:

- The gradients leading to the stormwater outlets are low and energy dissipation devices have been incorporated which will minimise the current velocities of stormwater entering the coastal environment. The outlets will result in *'no significant change to local processes...beyond those previously consented...'*

Overall Mr Morgan concludes that the proposed changes:

*'...are not considered to present significant risk of producing adverse effects on the coastal processes, beyond those that have already been considered under the original application. Further, many of the proposed changes will result in fewer disturbances to the CMA...'*

Given the assessment provided by the applicant and review undertaken by Mr Morgan it is considered that overall the proposed design changes will not have any greater effect on coastal processes than those consented for the original design. There may be some localised effects that will arise from specific design changes that were not part of the original application (e.g. localised scour and minor geomorphological changes to the tidal channel adjacent to the Causeway bridge), however these will be managed through existing consent conditions and additional mitigation measures (e.g. coastal protection groynes).

#### **4.1.4.5 Noise and Vibration**

The applicant has provided an assessment of potential noise and vibration effects that may arise from the proposed changes in terms of construction and operation of the Causeway, prepared by Marshall Day Acoustics.

In terms of construction effects the acoustic report and AEE notes the following:

- While the construction methodologies and stormwater solutions will be different from those originally proposed, the plant and equipment used for these works will be similar;
- Any effects on sensitive receivers will be similar to those under the consented design;
- There will be an insignificant change in vibration from the proposed changes to the construction methodologies.

In terms of operational effects the acoustic report and AEE note that there will be no changes in the number of vehicle lanes and hence the capacity of the Causeway will not be increased, resulting in additional traffic noise above that approved. The altered location of the Causeway will not result in any greater noise or vibration effects on sensitive receivers above those consented.

The proposal has been reviewed by Council's Consultant Acoustic Engineer – Jon Styles (refer email dated 6 February 2013, Attachment 2). Mr Styles generally concurs with the provided acoustic report, however he does note that there may be some change in construction noise effects due to the changes to the bridge pile size and distributions, resulting in some localised increases in noise, but decreases in noise elsewhere. Overall he states that the changes will not be significant and the *'...effects will be very similar'* to those consented.

Overall it is considered that any additional noise and vibration effects resulting from the construction methodology changes will be negligible, with operational noise similar to that consented. As such it is considered that the proposal will not give rise to any greater noise and vibration effects than those consented.

#### **4.1.4.6 Traffic and Shared Path**

A traffic assessment of the potential changes to construction traffic has been provided with the application, prepared by Traffic Planning Consultants.

In summary the assessment notes that there will be no greater construction traffic effects as a result of the proposed design and construction methodologies. Furthermore, the AEE notes that there will be constructability benefits such as:

- The shared path will be completed earlier in the construction staging than it would have under the consented design; and
- The reduction in earthworks required will result in fewer truck movements and a shorter construction programme, reducing the effects of construction truck movements.

The application was provided to Auckland Transport for comments on the proposed changes, and no issues were raised in respect of construction traffic.

Given the assessment provided by the applicant it is considered that the proposal will not result in any additional construction traffic effects above those that were previously consented.

The proposal includes alterations to the design of the pedestrian/cycleway shared path to that previously approved, whereby originally the shared path was to be built at the same grade with the carriageway for the entire length, with separate bridges to be constructed adjacent to the Causeway bridge and Whau River bridge to achieve this. The shared path will still run parallel to the carriageway and at grade for the most part. However, by incorporating the shared path into the structures of the Whau River and Causeway bridges, it will be elevated above the carriageway by 0.7m-1.0m between the Great North Road interchange to just before the Causeway bridge, and for a section leading up to Traherne Island.

Ina Stenzel, Cycling and Walking Specialist for Auckland Transport, raised queries in relation to the shared path in terms of gradients and materials which the applicant has largely clarified through their s92 response dated 21 December 2012. It is further noted that the requirement for detailed design plans at a later stage will ensure that such details are provided for approval by Council. Ms Stenzel has raised no further issues, noting that the shared path materials during detailed design will need to be carefully considered (refer email dated 11 January 2013, Attachment 2).

In relation to the shared path it is considered that the design changes are relatively minor, and detailed design will provide the opportunity for materials and gradients to be considered in detail to ensure that the path is designed to provide a safe environment to users. The provision of detailed design plans is a requirement of existing conditions of consent. As such any effects of the changes to the shared path are considered to be similar in nature to those approved.

#### **4.1.4.7 Stormwater**

The proposed design incorporates a different stormwater treatment solution to that considered under the BoI consents. As discussed in section 2.2 of this report, these changes are considered to be provided for within existing consent conditions and the applicant has advised that the conditions of the stormwater discharge consents will be met, in particular in relation to water quality.

Any effects of the additional 22 stormwater outfall structures on the CMA have been discussed in section 4.1.4.4 of this report.

#### **4.1.4.8 Contamination**

The previous investigations undertaken during the BoI process found that the Causeway is contaminated in areas, and as such conditions of consent were developed to manage any effects during construction and in the long term.

The proposal will involve different construction methodologies which have been deemed to be within scope of the existing consent conditions as discussed in section 2.2 of this report. Regardless of this the applicant has provided a contamination assessment addressing the effects of the changes on land and groundwater, prepared by Aecom. This report concludes that:

*'The asymmetrical land disturbance to the north is not expected to create significant additional adverse effects because there is no indication that the additional disturbed land would be significantly different than the land disturbed through implementation of the consented design.'*

*'The alternative ground improvement solution would provide similar net effects to the mudcrete solution.'*

This assessment has been reviewed by Council's Senior Consents and Compliance Advisor – Earthworks and Contaminated Land, Helen Caley (refer memo dated 16 January 2013, Attachment 2). Ms Caley has raised no issues of concern in relation to the proposed works and assessment provided and confirms that the minor changes proposed can be dealt with through existing conditions of the existing contamination consents granted by the Bol.

As such it is considered that the proposed works will be within scope of the contamination consents granted for the original proposal, with no additional effects above those granted.

#### **4.1.4.9 Visual Amenity and Landscape**

The proposal involves changes to the physical alignment of the Causeway, portions of shared path that will be raised above the carriageway rather than at grade, and the extension of four existing groynes and establishment of seven new groynes in the CMA on the northern side of the Causeway. Overall the footprint of the Causeway in the CMA will be reduced from that approved. It is noted that the Regional Plan (Coastal) identifies Traherne Island, Pollen Island, Northern and Western sides of Rosebank Park Domain as an Outstanding Landscape.

The applicant has provided a visual and landscape assessment prepared by Brown NZ Ltd. This assessment provides a detailed description of the effects, including descriptions of the effects of the changes on key viewpoints. The assessment states that:

*'Overall, it has been assessed that the proposed design changes will not appreciably change the nature or degree of impact of the Causeway in the CMA from a visual and landscape perspective. As such, the effects associated with the proposed design remain acceptable in terms of landscape, natural character and amenity values associated with the inner Waitemata Harbour and its Point Chevalier/Waterview/Rosebank peninsula margins.'*

In relation to the proposed new and extended groynes the assessment states that it *'...is doubtful that they could be distinguished from the main body of the Causeway...'* from most viewpoints, however they may be distinguishable as individual structures from some elevated apartments within Selwyn Village or from within close range in the CMA. Overall the report concludes that they would be visually subservient.

In terms of the raised sections of shared path, the assessment states that:

*'The proposal to elevate sections of the pedestrian/cycle shared path would introduce new structural elements to the application and there is the potential for these to impact on views from the motorway corridor (for car motorists in particular). However, overall the effects associated with these additions are considered to be commensurate with the effects of the Causeway as originally conceived and consented.'*

The proposal has been reviewed by Lisa Dunshea, Principal Specialist Urban Designer, refer memo dated 25 January 2013, Attachment 2. Through Ms Dunshea's review some s92 queries were raised in relation to specific design matters, which have been largely addressed by the applicant in their s92 response dated 21 December 2012. In particular, the further information states that the original design made provision for a 1.4m high sea level rise, and as such the

entire Causeway will sit lower in the landscape than that approved as it has been designed for a 0.8m high sea level rise. Furthermore, the bottom of the shared path will sit below the top level of the median barrier and has been designed for a 1.4m high sea level rise so will not need to be raised further in the future.

On review of the further information Ms Dunshea concludes that she is in agreement with the applicant's landscape assessment and advises that *'overall, it is considered that the proposed development is consistent with the intent of the Board of Inquiry scheme.'*

Given the specialist reviews and information provided it is considered that any effects of the proposed design changes will be similar to those consented in relation to visual amenity and landscape effects. In particular it is noted that the footprint of the Causeway will be less than consented and it will sit lower overall in the landscape. The groynes represent additional structures in the CMA that were not part of the original application, however they will be constructed out of rock rip rap and over time will provide a habitat for marine organisms, assisting in their integration into the landscape. Furthermore, the applicant has advised that the groynes will not be visible at high tide.

#### **4.1.4.10 Air Quality**

The applicant has advised that there will be no change in air quality effects during operation of the Causeway as there will be no additional vehicle lanes or motorway capacity above that consented. In relation to construction effects the construction activities are expected to be similar in nature to the original proposal, and existing conditions of consent will adequately mitigate and manage any potential air quality effects.

This assessment is concurred with and it is considered that the proposal will be able to operate within the existing air discharge consent approved by the Bol.

#### **4.1.4.11 Heritage and Archaeology**

The applicant has advised that the proposed changes will not result in any alterations to works on heritage or archaeological items to those previously consented.

#### **4.1.4.12 Conclusion**

In summary, having assessed the adverse effects of the activity on the environment, it is considered that the proposed changes will result in effects that are similar and no greater than those approved under the existing consents.

#### **4.1.5 Special Circumstances (Section 95A(4))**

There are no special circumstances surrounding this application.

#### **4.1.6 Public Notification Assessment Conclusion**

While the original applications were publicly notified through the Bol process, it is considered that this application can be processed without public notification for the following reasons:

- The adverse effects on the environment of the activity for which consent is sought will be similar to and no greater than those approved under the existing consents and any effects can be appropriately managed using the existing consent conditions to ensure that effects within be adequately mitigated.
- The applicant has undertaken a review of all 76 submissions made during the Waterview Connection Project Bol process, and in particular the AEE identifies parties who made

submissions of relevance to the Causeway section of the project (refer section 8.0 of the AEE). This assessment concludes that any effects of the proposed design changes on the original submitters are less than minor. This assessment is concurred with and given that the proposed design changes will result in effects that are of a similar nature to those consented, and less than minor, it is considered that no notification need be served on any parties who submitted on the original proposal. It is also noted that the applicant has undertaken preliminary public consultation on the proposed changes and no issues of concern have been recorded in the meeting minutes provided to date (refer section 10 and Appendix L to AEE).

- There are no special circumstances that would act as a basis for Council to exercise its discretion to notify under s95A(4).

## 5.0 NOTIFICATION RECOMMENDATION

### Non-Notification

Pursuant to section 95A and 95B of the RMA, this application may be processed without public notification or limited notification because the proposal will result in adverse effects on the environment that will be similar to and no greater than those approved under the existing consents and any effects can be appropriately managed using the existing consent conditions to ensure that effects within be adequately mitigated, as discussed in section 4.1.4,.

There are no persons considered to be adversely affected by the activity as discussed in section 4.1.6 of this report, as no persons who submitted on the original applications are considered to be adversely affected by the changes proposed given that the proposed design changes will result in effects that are of a similar nature to those consented.

Accordingly, it is recommended that the application proceed on a non-notified basis.



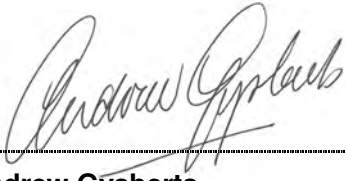
19 February 2013

**Sarah Haarhoff**  
**Senior Planner – Major Infrastructure**

**Date**

## 6.0 SECTION 95A AND 95B NOTIFICATION DETERMINATION (41113, 41114, 41118, 41119, 41120, 41123, 41124, 41125, 41126, 41128, 41371, 41120, 41372, 41373, 41374, 41375, 41376, R/VCC/2010/3396/1)

Acting under delegated authority, and for the reasons set out in the above assessment and recommendation, this application by NZTA for resource consent as it relates to the SH16 Causeway shall be processed on a non-notified basis.



19 February 2013

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**Andrew Gysberts**  
**Major Infrastructure Team Manager**

**Date**

## **7.0 CONSIDERATION OF APPLICATION**

### **7.1.1 Statutory Considerations**

When considering an application for a discretionary activity the consent authority must have regard to Part 2 of the RMA (“Purposes and Principles” – sections 5 to 8), and sections 104, 104B, 108 and where relevant sections 105, 106, 107, 107A – E of the RMA.

Under s104B a consent authority may grant or refuse consent for a discretionary activity or non complying activity, subject to the threshold test set out in s104D for non complying activities and, if it grants the application, may impose conditions under s108 of the RMA.

All considerations are subject to Part 2 of the RMA, which sets out the purpose and principles that guide this legislation. This means the matters in Part 2 prevail over other provisions of the RMA or provisions in planning instruments in the event of a conflict.

### **7.1.2 Section 104(1)(a) Actual and potential effects on the environment**

Section 104(1)(a) of the RMA requires that a council have regard to any actual and potential effects on the environment of allowing the activity.

Pursuant to s104(2), when forming an opinion for the purposes of s104(1)(a) a council may disregard an adverse effect of the activity on the environment if the plan or a NES permits an activity with that effect (i.e. a council may consider the “permitted baseline”). The use of the “permitted baseline” in relation to notification was discussed in Section 4.1.3.1 and it was considered that due to the type, scale and/or complexity of effects associated with the proposed activity, the permitted baseline did not provide a useful comparison for the purpose of discounting effects. This discussion and conclusion is also considered relevant for the purposes of the assessment under s104(1)(a).

Pursuant to s 104(3)(a), when forming an opinion for the purposes of s 104(1)(a) a council must not have regard to any effect on a person who has given written approval to the proposal, nor any trade competition or effects of trade competition. No persons have given their written approval to the application.

The assessment of adverse effects in section 4.1.4 undertaken for the purpose of notification concluded that the effects of the change will be similar to and no greater than those approved under the existing consents and any effects can be appropriately managed using the existing consent conditions to ensure that effects within be adequately mitigated. It is considered that this assessment is also relevant for the purposes of the assessment required under s104(1)(a). It is further noted that the proposal will result in the following positive effects in comparison to the previously approved design:

- The proposal will require a smaller area for temporary occupation, resulting in less construction effects, particularly as it relates to disturbance of fine sediment and release into the water column.
- The reduction in permanent occupation on the northern side of the Causeway will result in a reduced impact on the existing shoreline chenier beach deposits both during construction and in the long term, particularly between Traherne Island and Rosebank peninsula.
- The overall footprint and reclamation area of the Causeway will be less than that consented.



- The proposal involves less removal of vegetation on the southern end of Traherne Island which provides a habitat to Banded Rail.
- There will be fewer effects on the salt marsh and salt scrub habitat on Traherne Island.

In summary, it is considered on balance that any adverse effects would be similar to and no greater than those effects approved under the existing consents.

## 7.2 Section 104(1)(b)(iii) Relevant provisions of National Policy Statements

There are no National Policy Statements relevant to this application.

## 7.3 Section 104(1)(b)(iv): Relevant provisions of the New Zealand Coastal Policy Statement 2010

The New Zealand Coastal Policy Statement 2010 (NZCPS) is relevant to this application. The purpose of the NZCPS is to state policies in order to achieve the purpose of the RMA, in relation to the coastal environment of New Zealand.

The original consent applications were assessed against the NZCPS 2010, and the decision by the Bol notes the objectives and policies of relevance to the overall project, stating that the NZCPS has been given consideration to in the decision in relation to discussion over particular aspects of the proposal.

Given that the proposal will not result in any greater effects than those consented under the original applications and considered by the Bol in their decision it is considered that the proposal will be consistent with the relevant provisions on the NZCPS. In particular the following is noted:

- The proposal will allow for the upgrade of the state highway network while effects of the proposal on the coastal environment will be similar to those consented in terms of construction effects, and effects on chenier planes and sediment disturbance. Overall there will be a lesser footprint in the CMA as a result (Policy 6);
- The area of reclamation required for the amended design is less than that consented (Policy 10);
- There will be no greater effects on marine ecology than those previously approved (Policy 11);
- The existing environment where the works will be undertaken has been highly modified, and any visual amenity and landscape effects are considered to be similar to those consented and no greater in scale (Policy 13);
- The proposal will not result in any additional sedimentation and will reduce the amount of fine sediment disturbed during the works (Policy 22);
- There will be no additional contaminant discharges as a result of the proposal (Policy 23);
- The proposal has been designed for sea level rise now and in the future (Policy 24).

It is also noted that the applicant's AEE has undertaken a comprehensive assessment of the proposal of the NZCPS and found that the proposal is consistent with the '*overall objective and policy direction of the NZCPS*'. This assessment is concurred with.

Overall for the reasons above, it is considered that the proposed changes are consistent with the provisions of the NZCPS.

### **7.3.1 Hauraki Gulf Marine Park Act 2000 ( HGMPA)**

When considering an application for resource consent within the Hauraki Gulf, its islands, and catchments, a consent authority must have regard to ss7 and 8 of the HGMPA. These sections must be treated as a New Zealand coastal policy statement. Section 7 recognises the national significance of the Hauraki Gulf, its islands and catchments, while s8 outlines the objectives of the management of the Hauraki Gulf, its islands and catchments. The objectives are intended to protect, maintain and where appropriate enhance the life supporting capacity of the environment of the Gulf and its islands.

The decision by the Bol on the original applications stated that:

*'proper consideration of matters against the overarching policy framework of the NZCPS will generally determine whether the proposal is consistent with the HGMPA.'*

The matters to be considered in terms of the HGMPA are not dissimilar to those arising under the NZCPS, and in particular it is noted that the proposal will be in accordance with the matters under Section 7 as it will sustain the life supporting capacity of the Hauraki Gulf while providing for those matters listed in Section 7(2). In relation to the objectives under Section 8 the proposal is considered to result in similar adverse effects on the coastal environment than that previously approved and as such will be consistent with Section 8.

Overall for the reasons above, it is considered that the proposed changes are consistent with the provisions of the HGMPA.

### **7.4 Section 104(1)(b)(v) Relevant provisions of the Auckland Council Regional Policy Statement**

The Auckland Council Regional Policy Statement ("ACRPS") is a strategic document, which sets out the direction for managing the use, development and protection of the natural and physical resources of the Auckland region. This document became operative in 1999.

The strategic objectives and policies of the ACRPS provide a framework to achieve the integrated, consistent and co-ordinated management of the Region's resources.

Under the ACRPS, matters related to environmental protection, such as the coastal environment, water quality, water conservation and allocation and air quality have specific objectives, policies and methods to achieve sustainable and integrated management of major natural and physical resources in the Region.

The original consent applications were assessed against the ACRPS, and the decision by the Bol states that the proposal is consistent with the ACRPS. The applicant has also undertaken a comprehensive assessment of the proposal against the ACRPS which is generally concurred with.

It is considered that the proposal is consistent with the provisions of the ACRPS, and in particular Chapter 7 as it relates to the coastal environment. It is noted that the proposed changes are not considered to adversely affect the natural character of the coastal environment to a greater degree than that of the approved design, and there will be lesser effects on the sensitive ecological areas within the vicinity of the proposal. Furthermore the applicant has advised that stormwater discharge into the CMA will meet the required TSS removal as consented and as such water quality will be maintained.

Overall for the reasons above, it is considered that the proposed changes are consistent with the provisions of the ACRPS.

## **7.5 Section 104(1)(b)(vi) Provisions of the relevant Regional Plans and District Plan objectives, policies and rules**

### **7.5.1 Relevant objectives and policies of the Regional Plan (Coastal)**

As discussed in section 4.1 and 7.1.2 of this report the proposed changes will result in adverse effects that will be similar to and no greater than those approved under the existing consents and any effects can be appropriately managed using the existing consent conditions to ensure that effects within be adequately mitigated. Furthermore, the proposal will provide some positive benefits as the amended design will result in a smaller footprint in the CMA, shorter construction period, and a lesser impact upon existing ecological habitats and features.

The Bol decision on the original proposal does not make a substantive conclusion in part 9.7 of the decision as to whether the proposal is consistent with the objectives and policies of the Regional Plan (Coastal). It is however noted that the concluding comments of the decision (part 14) state that the issues relating to the CMA and in particular ecology, natural character, outstanding landscapes, and flora and fauna were adequately considered and provided for through the conditions of consent.

The AEE has undertaken a comprehensive assessment of the proposed changes against the relevant objectives and policies of the Regional Plan: Coastal, and this assessment is concurred with.

Overall for the reasons above, it is considered that the proposed changes are consistent with the provisions of the Regional Plan (Coastal).

### **7.5.2 Relevant objectives and policies of the District Plan (Isthmus Section)**

The original proposal required consent under section 89 of the RMA for the construction, operation and maintenance of a State Highway on land which is to be reclaimed.

The Bol decision undertook an assessment of the original proposal against the objectives and policies under Part 5B – Coastal and Part 12 – Transportation that are of relevance to the Causeway section. The objectives and policies of the coastal section were deemed to be satisfied, with those of the transportation section deemed to meet some, but not all policies. It is noted that the issues of contention in relation to the transportation policies related in particular to interconnectivity between areas. In this case these policies are not of relevance to the Causeway.

It is considered that the proposal will not raise any additional matters that would be inconsistent with the objectives and policies of the District Plan as the proposed use of land to be reclaimed will remain as previously consented, and overall the area of land to be reclaimed will be less than approved.

For the reasons above, it is considered that the proposed changes will not be inconsistent with the provisions of the District Plan.

## **7.6 Consideration of Part 2 (Purpose and Principles) of the RMA**

Section 104(1) requires the consideration of any resource consent application to have regard to specific factors, subject to Part 2 of the RMA (“Purpose and Principles”). The purpose of the RMA is to promote the sustainable management of natural and physical resources. Sustainable management means the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while: sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and safeguarding the life-supporting capacity of air, water, soil, and ecosystems; avoiding, remedying or mitigating any adverse effects of activities on the environment.

Granting the application to change the conditions of consent would be consistent with safeguarding the life-supporting capacity of water, soil, and ecosystems in a way which would enable the applicant and community to provide for their social wellbeing. The proposed changes will result in adverse effects which are no greater than those previously approved, and will provide some positive benefits. The existing and proposed conditions will ensure that any adverse effects are adequately avoided, remedied or mitigated.

Having considered the other matters set out in Part 2 of the RMA, it is concluded that the proposal will not affect any matters of national importance (section 6). Regard has been had to the identified matters of section 7 of the RMA. It is concluded that the application does not compromise the matters identified under section 7 of the RMA. Furthermore, it is considered that the proposal does not have any implication on the application of the principles of the Treaty of Waitangi.

## **7.7 Conclusion**

The proposal involves a change of conditions for 17 coastal consents and one land use consent as it relates to the SH16 Causeway (Sectors 2-4 of the Waterview Connection Project). The changes subject to this application primarily relate to the location and width of the Causeway, areas of temporary and permanent occupation and structures, a reduction in reclamation of the CMA, alterations to the bridge and shared path designs, and the extension of existing groynes and the establishment of new groynes. These changes are considered to be within the scope of the original consents and will result in adverse effects that are similar and no greater than those previously approved, with some positive effects as a result of the changes. The original applications were publicly notified through the Bol process; however it is considered that given that the proposed design changes will result in effects that are of a similar nature to those consented no persons are adversely affected, and it is considered that no notification need be served on any parties who submitted on the original proposal.

For the reasons described in this report, is considered that the proposed changes will be consistent with Part 2 of the RMA, and with the relevant policies of the NZCPS, HGMPA, ACRPS and the Regional Plan (Coastal) and District Plan (Isthmus Section).

## 8.0 RECOMMENDATION AND CONDITIONS

### 8.1 Recommendation

It is recommended that pursuant to sections 104, 104B and 127 of the RMA, consent is granted to the discretionary activity application by NZTA to authorise a change of conditions to insert a new condition (Condition RC1.B) to existing consents 38335, 38336, 38338, 38339, 38342, 38345, 38356, 35361, 38363, 38364, 38360, 36576, 38346, 38348, 38349, 38344, 38343, R/LUC/2010/3396 as it relates to the SH16 Causeway (Sectors 2-4) of the Waterview Connection Project, being application numbers 41113, 41114, 41118, 41119, 41121, 41123, 41124, 41125, 41126, 41128, 41371, 41120, 41372, 41373, 41374, 41375, 41376, R/VCC/2010/3396/1.

The reasons for this decision are as follows:

- The adverse effects on the environment of the activity for which consent is sought will be similar in nature to those consented. The proposal and associated effects are considered to be within the scope of the original consent, and adequately managed through existing consent conditions.
- The proposal is consistent with the relevant objectives and policies of the New Zealand Coastal Policy Statement, Hauraki Gulf Marine Park Act, Auckland Council Regional Policy Statement, the Auckland Council Regional Plan (Coastal) and the Auckland Council District Plan (Isthmus Section).
- The proposal is considered to be consistent with part 2 of the RMA and in particular the proposal will safeguard the life-supporting capacity of water, soil, and ecosystems in a way which would enable the applicant and community to provide for their social wellbeing.

### 8.2 Conditions

These consents 41113, 41114, 41118, 41119, 41121, 41123, 41124, 41125, 41126, 41128, 41371, 41120, 41372, 41373, 41374, 41375, 41376, R/VCC/2010/3396/1 insert a new condition RC1.B to the conditions of consents 38335, 38336, 38338, 38339, 38342, 38345, 38356, 35361, 38363, 38364, 38360, 36576, 38346, 38348, 38349, 38344, 38343, R/LUC/2010/3396 as it relates to the SH16 Causeway (Sectors 2, 3 and 4 of the Waterview Connection Project) only:

#### RC.1B

Except as modified by the conditions below, the SH16 Causeway Upgrade Project works (Sectors 2, 3 and 4 of the Waterview Connection Project) shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency (NZTA), in the resource consent applications, the supporting documents (as detailed in Condition DC.1), and in the supplementary information provided in evidence by the NZTA to the BOI, except where as amended by the application material provided with the s127 application referenced by Council as 41113, 41114, 41118, 41119, 41120, 41123, 41124, 41125, 41126, 41128, 41371, 41120, 41372, 41373, 41374, 41375, 41376, R/VCC/2010/3396/1, as follows:

- a) Application form, AEE, appendices and plans titled 'SH16 Causeway Upgrade Project Section 127 Application to Auckland Council to Change Condition RC.1 (by adding a new condition RC.1B) on Resource Consent Number EPA 10/2.009 (ACC:R/LUC/2010/3396), EPA 10/2.031 (ARC: 38335), EPA 10/2.032 (ARC 38336), EPA 10/2.033 (ARC:38338), EPA 10/2.034 (ARC:38339), EPA 10/2.038 (ARC:38342), EPA 10/2.039 (ARC:38343), EPA 10/2.040 (ARC: 38344), EPA 10/2.041 (ARC:38345), EPA 10/2.052 (ARC: 38356), EPA 10/2.056 (ARC:38361), EPA 10/2.058 (ARC: 38363), EPA 10/2.059 (ARC: 38364)' prepared by the Causeway Alliance and dated 20 November 2012 (Revision 1), including:
- Addendum to Technical Report G.3 Assessment of Avian Ecological Effects
  - Addendum to Technical Report G.4 Assessment of Coastal Processes
  - Addendum to Technical Report G.5 Assessment of Construction Noise Effects
  - Addendum to Technical Report G.11 Assessment of Marine Ecological Effects
  - Addendum to Technical Report G.15 Assessment of Stormwater and Streamworks Effects
  - Addendum to Technical Report G.16 Assessment of Temporary Traffic Effects
  - Addendum to Technical Report G.17 Assessment of Terrestrial Vegetation Effects
  - Addendum to Technical Report G.19 Assessment of Vibration Effects
  - Addendum to Technical Report G.20 Assessment of Visual and Landscape Effects
- b) Further information letter titled 'Section 127 Application to Auckland Council to Change Condition RC.1 (by Addition Condition RC.1B)', prepared by Juliet Woodward – Causeway Alliance, dated 31 January 2013;
- c) Further information letter and attachments (including indicative plans) titled 'Section 127 Application to Auckland Council to Change Condition RC.1 (by Addition Condition RC.1B) – Request for Further Information Response', prepared by Juliet Woodward – Causeway Alliance, dated 21 December 2012.

Any minor changes to the design from that approved by this consent shall be submitted to the Major Infrastructure Team Manager, Auckland Council for approval at least 20 working days prior to any relevant construction being undertaken, and shall be supported by documentation of why the minor amendment is required and confirming any adverse effects are similar in nature to those approved.

**Advice Notes:**

Any design changes deemed to be more than minor by the Major Infrastructure Team Manager, Auckland Council may require a new consent or an application for change of conditions under s127 of the Resource Management Act.

It should be noted that the addendums to the technical reports provided with the s127 application should be referred to in relation to the following consent conditions as it relates to the SH16 Causeway Upgrade Project (Sectors 2-4 of the Waterview Connection Project):

<b>S127 Consent No.</b>	<b>Consent Condition</b>	<b>Addendum to Technical Report</b>
R/VCC/2010/3396/1	TT.10	Addendum to Technical Report G.16 Assessment of Temporary Traffic Effects

41124, 41371	SW.10, SW.16	Addendum to Technical Report G.15 Assessment of Stormwater and Streamworks Effects
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**9.0 DECISION UNDER DELEGATED AUTHORITY**

**9.1 Adequacy of Information**

It is considered that the information submitted with the application is sufficiently comprehensive to enable the consideration of the above matters on an informed basis:

- a) The level of information provides a reasonable understanding of the nature and scope of the proposed activity as it relates to the New Zealand Coastal Policy Statement, Auckland Regional Policy Statement, Hauraki Gulf Marine Park Act, Auckland Council Regional Plan: (Coastal) and the Auckland Council District Plan (Isthmus Section).
- b) The extent and scale of any adverse effects on the environment are able to be assessed.
- c) Persons who may be adversely affected are able to be identified.

Report Prepared by:

Title: Sarah Haarhoff – Senior Planner, Major Infrastructure

Signed: 

Date: 19 February 2013

Report Reviewed by:

Title: Alan Moore – Team Leader, Coastal

Signed: \_\_\_\_\_

Date: 19 February 2013

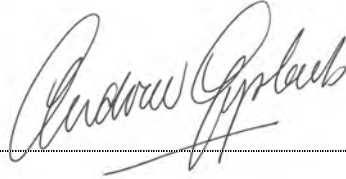
**9.2 Decision**

Acting under delegated authority and as recommended in section 8.1, the insertion of a new condition RC1.B to the conditions of consents 38335, 38336, 38338, 38339, 38342, 38345, 38356, 35361, 38363, 38364, 38360, 36576, 38346, 38348, 38349, 38344, 38343, R/LUC/2010/3396 by consents 41113, 41114, 41118, 41119, 41121, 41123, 41124, 41125, 41126, 41128, 41371, 41120, 41372, 41373, 41374, 41375, 41376, R/VCC/2010/3396/1 as it relates to the SH16 Causeway (Sectors 2, 3 and 4 of the Waterview Connection Project) only shall be granted consent.

Name: Andrew Gysberts

Title: Major Infrastructure Team Manager

Signed:



Date: 19 February 2013



## **EPA 10/2.032 – (ARC: 38336)**

This document has been prepared in compliance with conditions of the “*Final Report and Decision of the Board of Inquiry into the New Zealand Transport Agency Waterview Connection Proposal, Volume 2, Conditions of Consent*”. Schedule B of Volume 2 identifies the Conditions relevant to this Consent by the code and number as referenced throughout this document. In the event of dispute, Schedule B of Volume 2 shall take precedence over this Consent.

**Type:** Coastal Consent

**Description:** **Erection of Permanent Structures in the CMA (Sectors 1, 2, 4 and 5):**

This consent relates to the construction of permanent (operational phase) structures within the CMA including piers, ramps, bridges, stormwater discharge outfalls and other consequential activities such as disturbance and/or vegetation removal. In GMA, CPA 2 and Mooring Management Area – Henderson Creek, Whau River and Pt Chevalier.

**Duration:** 10 years

**Code:** RC = Standard Resource Consent Conditions

CEMP = Construction Environmental Management Plan Conditions

PI = Public Information Conditions

LV = Landscape and Visual Conditions

V = Vegetation Conditions

A = Avian Conditions

ARCH = Archaeology Conditions

C = Coastal Conditions

M = Marine Ecology Conditions

### **GENERAL CONDITIONS**

- 1) RC.1 Except as modified by the conditions below, the works shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency (NZTA), in the resource consent applications and the supporting documents (as detailed in Condition DC.1), and in the supplementary information provided in evidence by the NZTA.
- 2) RC.1A The NZTA shall implement the conditions of these consents in accordance with Schedule B, which sets out the Conditions that are to be applied to each consent including the duration of each consent.
- 3) RC.2 The Conditions of these consents may be reviewed by the Major Infrastructure Team Manager, Auckland Council, pursuant to Section 128 of the Resource Management Act 1991 (the Act), by the giving of notice pursuant to Section 129 of the Act, on the one year anniversary of the commencement of the consents and every year thereafter in order:
  - (a) To deal with any adverse effect on the environment which may arise from the exercise

of the consent and which it is appropriate to deal with at a later stage; or

- (b) To deal with any other adverse effect on the environment on which the exercise of the consent may have an influence.
- 4) RC.4 Any Management Plans submitted to the Major Infrastructure Team Manager, Auckland Council for approval or certification may be submitted in stages to reflect any proposed staging of the physical works. Plans submitted shall clearly show the integration with adjacent stages and interrelated activities.
- 5) RC.5 In the event of any dispute, disagreement or inaction arising as to any Auckland Council Manager certification/ approvals required by the consent conditions, or as to the implementation of or monitoring required by the conditions, matters shall be referred in the first instance to the NZTA Regional State Highway Manager and to the Resource Consents Manager, Auckland Council to determine a process of resolution.
- If a resolution cannot be agreed, then the matter may be referred to an independent appropriately qualified expert, agreeable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree.
- The independent appropriately qualified expert shall be appointed within 10 working days of the NZTA or Auckland Council giving notice of their intention to seek expert determination. The expert shall, as soon as possible, issue his or her decision on the matter. In making the decision, the expert shall be entitled to seek further information and hear from the parties as he or she sees fit.
- Advice note: The dispute resolution process provided for in this condition does not prejudice any party's right to take enforcement action in relation to the implementation of the designation conditions. However, the dispute resolution process will be applied before any formal enforcement action is taken by the Council except in urgent situations.
- 6) RC.6 Pursuant to Section 36(1)(d) of the RMA, the requiring authority is required to pay to Auckland Council any administrative charge for the carrying out by the local authority of its functions in relation to the administration, monitoring, and supervision of designation conditions.
- 7) RC.7 The servants of agents of Auckland Council shall be permitted to have access to relevant parts of the Project at all reasonable times for the purpose of carrying out inspections, investigations, tests, measurements and/or to take samples.
- 8) V.18 The NZTA shall implement the approved Traherne Island Weed and Pest Management Plan. Every 5 years, a suitably qualified and experienced ecologist engaged by NZTA shall review the plan in consultation with the Department of Conservation. The plan shall then be submitted to the Auckland Council for approval.
- 9) A.6 Animal pest control shall be undertaken by the NZTA on Traherne Island (northern and southern sides) and on the Coastal Marine Area (CMA) frontage of SH16 from Traherne Island North to Whau Creek, and on the southern side of SH16 from Traherne Island South to Whau River (in accordance with Condition V.17).

#### **PRE-CONSTRUCTION CONDITIONS**

- 10) RC.3 Within 3 months of the resource consents commencing for the Project (or at least 1 month prior to any Auckland Council approvals or certifications required by these Conditions, whichever is the earlier), the NZTA shall update and finalise to the satisfaction of the Major Infrastructure Team Manager, Auckland Council all drawings and Plans cited in Schedule A, together with a full set of the information and documentation referred to in Condition DC.1

and provide these to the Major Infrastructure Team Manager, Auckland Council. At the same time the NZTA shall prepare to the satisfaction of Auckland Council, a document for each resource consent which sets out the resource consent and have attached to it in text format a comprehensive set of the conditions imposed by the Board of Inquiry in its Final Decision as summarised in Schedule B, inclusive of any standard conditions and advice notes.

In particular (but not limited to), the following Plans will need to be amended in light of the Final Conditions:

- (a) F.2 Operational Scheme Plans (refer Schedule A, Row 3) require amendment detailing the amended location of the ventilation stacks and southern ventilation buildings;
- (b) F.5 Construction Scheme Plans (refer Schedule A, Row 4) require amendment to detail changes to construction footprint for the amended location of ventilation stacks and southern ventilation buildings and reconfiguration of Construction Yard 1);
- (c) F.6 Construction Yard Plans 101 and 107 (refer Schedule A, Row 7), detailing amendments to the Construction Yard 1 in light of the reconfiguration of this Yard and for Construction Yard 7 in light of the relocation of the northern ventilation stack (refer Schedule A, Row 34);
- (d) F.8 Plans of Structures and Architectural Features (refer Schedule A, Row 9), detailing the amended location of the Northern Ventilation Stack and the design and location of the Southern Ventilation Building and Stack;
- (e) The CNVMP (including flow diagram and the supplementary evidence produced by Ms Wilkening) (refer Schedule A, Rows 36, 37 and 39);
- (f) Update to the areas of the Open Space Restoration Plans (Schedule A, Row 30) to:
  - (i) Extend these areas in geographic extent to provide for the works identified in the Management Plan notations identified in the OS Conditions (in particular OS.5 and OS.6). (e.g. these areas will (as relevant) include Eric Armishaw Park, Howlett Reserve and Waterview Esplanade Reserve); and
  - (ii) Exclude the operational area of designation required for the northern ventilation stack (as identified through the OPW process (refer Condition DC.8); and
- (g) Schedule A, Row 28 the Plan detailing proposed open space impacts and replacements needs to be updated to recolour the two land parcels on Hendon Avenue (which are excluded from the replacement calculations) to 'brown' to confirm they are part of the operational impact and will not be returned as open space.

- 11) CEMP.1 Except where provided for in Condition CEMP.1A below, the NZTA shall update and finalise the draft Construction Environmental Management Plan (CEMP) including all the Management Plans which form part of the CEMP and are included as appendices, submitted with this application to ensure compliance with the consent and designation conditions imposed by the Board of Inquiry. The CEMP shall be provided to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to the commencement of works to certify compliance and consistency with the conditions. Construction shall not commence until certification is obtained.

*Advice note: For clarity the CEMP will be updated and finalised in accordance with the conditions. Any amendments will be limited to reflecting the requirements of the conditions, specifying personnel, and completing the Environmental Risk Register.*

*Advice Note: Particular care must be taken with development and operation of Construction Yard 7. When the CEMP is being updated and finalised, consideration must be given to the contents of the draft SSCEMP prepared for Construction Yard 7 (Row 41, Schedule A) recognising changes required by inclusion of the ventilation stack in this yard.*

- 12) CEMP.1B For the purposes of staging works, as some works may commence well in advance of others,

the NZTA may provide staged or site specific CEMPs for those works to the Major Infrastructure Team Manager, Auckland Council. The NZTA shall consult with the Team Manager about the need and timing for any other site-specific or staged CEMPs and shall provide any required site-specific or staged CEMPs to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to commencement of such the specific stage (including enabling) or site works.

- 13) CEMP.2 The certification process of the CEMP (and its appendices) shall confirm that the CEMP gives effect to the relevant conditions, as well as those matters in CEMP.6, and that it includes details of:
- (a) Staff and contractors' responsibilities;
  - (b) Training requirements for employees, sub-contractors and visitors;
  - (c) Environmental incident and emergency management;
  - (d) Communication and interface procedures (in accordance with the Communication Plan required under Condition PI.2);
  - (e) Environmental complaints management (including the procedures required under Condition PI.4);
  - (f) Compliance monitoring;
  - (g) Reporting (including detail on the frequency of reporting to the Auckland Council);
  - (h) Environmental auditing; and
  - (i) Corrective action.
- 14) CEMP.3 The management of key environmental effects associated with the construction phase of the Project is detailed within environmental management plans that are included in the CEMP as appendices. This suite of management plans as shown on Figure CEMP.A comprises:
- (a) Construction Noise and Vibration Management Plan (CNVMP);
  - (b) Construction Air Quality Management Plan (CAQMP);
  - (c) Erosion and Sediment Control Plan (ESCP);
  - (d) Temporary Stormwater Management Plan (TSMP);
  - (e) Ecological Management Plan (ECOMP);
  - (f) Groundwater Management Plan (GWMP);
  - (g) Settlement Effects Management Plan (SEMP);
  - (h) Contaminated Soils Management Plan (CSMP);
  - (i) Hazardous Substances Management Plan (HSMP);
  - (j) Archaeological Site Management Plan (ASMP);
  - (k) Construction Traffic Management Plan (CTMP);
  - (l) Concrete Batching and Crushing Plant Management Plan (CBCPMP);
  - (m) Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP) (to be prepared in accordance with Condition CEMP.15);
  - (n) Waste Management Plan (to be prepared in accordance with Condition CEMP.10) ; and
  - (o) Temporary Construction Lighting Management Plan (to be prepared in accordance with Condition L.2).
- 15) CEMP.6 The finalised CEMP shall include specific details on demolition, construction and management of all works associated with the Project. The certification process of the CEMP shall confirm that the CEMP includes details of the following:
- (a) Details of the site or Project manager and the community liaison person, including their

- contact details (phone, facsimile, postal address, email address);
- (b) The location of large notice boards that clearly identify the NZTA and the Project name, together with the name, telephone, email address and address for service of the site or Project manager and the community liaison person;
  - (c) An outline construction programme of the work indicating in particular likely time periods for road closures and anticipated traffic diversion effects;
  - (d) The hours of work, which should reflect the need to ensure that residents enjoy reasonable freedom from noisy or intrusive construction activity in their neighbourhood at night, on Sundays and during public holidays;
  - (e) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/ storage of rubbish, storage and unloading of building materials and similar construction activities;
  - (f) Location of worker's offices and conveniences (e.g. portaloos);
  - (g) Procedures of controlling sediment run-off, dust and the removal of soil, debris and demolition and construction materials from public roads or places. Dust mitigation measures should include use of water sprays to control dust nuisance on dry or windy days;
  - (h) Methods to stabilise ingress and egress points to construction sites, to the standard required by ARC Technical Publication 90 (Nov 2007);
- 16) CEMP.10 The NZTA shall finalise and implement the Hazardous Substances Management Plan (HSMP), through the CEMP (as per Condition CEMP.1), submitted with this application, prior to works commencing on site. The certification process of the CEMP shall confirm that the HSMP clearly identifies the requirements for proper storage, handling, transport and disposal of hazardous substances during the construction phase of the Project and confirm that there shall be no storage of explosives on the Project site.
- 17) CEMP.11 The NZTA shall develop and implement a Waste Management Plan in accordance with the waste management principles, controls and methods set out in the CEMP. The Plan shall be provided to the Major Infrastructure Team Manager, Auckland Council and be implemented throughout the entire construction period.
- 18) CEMP.15 The NZTA will be responsible for all service relocations required for construction of the Project. The NZTA shall liaise with the providers of infrastructure service networks (including, but not limited to water, gas, stormwater, wastewater, power and telecommunications), and private property owners with on-site services to develop methodologies and timing for necessary services relocation required for the Project, with the objective of minimising disruption to the operation of these service networks and on-site services.
- Advice note:*
- (a) *It is noted that if separate consents are required for relocations for any services of network utility operators or landowners, such consents will be obtained before construction commences in the relevant area, and any effects of those relocations would be considered at that time. The same applies to any alteration of consents if required.*
  - (b) *Network infrastructure owned and operated by Watercare Services is located within the designations. An operating agreement will be developed by the NZTA and Watercare Services which will include appropriate notification and access protocols where works are to be undertaken by either network operator on or adjacent to Watercare Services infrastructure within the designations.*

- 19) PI.1 A community liaison person shall be appointed by the NZTA for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the Project. The liaison person's name and contact details shall be made available in the CEMP and on site signage by the NZTA. This person must be reasonably available for on-going consultation on all matters of concern to affected parties arising from the Project.
- 20) PI.2 The NZTA shall prepare and implement a Communications Plan that sets out procedures detailing how the public, Ministry of Social Development, Housing New Zealand Corporation and other organisations representing the particular demographic characteristics of the community (including but not limited to Primary Health Organisations, general practitioners, youth, education organisations, aged care groups and groups representing ethnic and migrant communities) will be communicated with throughout the construction and monitoring periods (as prescribed in the designation and consent conditions).
- In preparing the Communications Plan, the NZTA will liaise with Auckland Council to access its community liaison databases. The Communications Plan will include details of:
- (a) The site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
  - (b) In accordance with these Conditions, the database of the key construction activities and monitoring requirements that are the subject of the Communications Plan;
  - (c) The database of stakeholders and residents who will be communicated with;
  - (d) Communication methods, an assessment of how these methods reach the different audience/stakeholder groups (including those methods set out in Condition CEMP.6), and detail on when each of these methods will be used (e.g. regular communication or event specific methods);
  - (e) The appointed specialist in Environmental and Occupational Medicine, including contact details (as per Condition SO.13);
  - (f) Any stakeholder specific communication plans required; and
  - (g) Monitoring and review procedures for the Communications Plan.
- The Communications Plan shall be written in accordance with the external communication procedures set out in the CEMP and provided at least 20 working days prior to construction commencing, to the Major Infrastructure Team Manager, Auckland Council, Working Liaison Group and the Community Liaison Group(s) established by Condition PI.5. The structure of the communication groups set out in these conditions is attached as Figure PI.A.
- 21) PI.5 The NZTA shall establish Community Liaison Group(s) at least two months prior to construction commencing in each of the following key construction areas:
- (a) Te Atatu (including the SH16 Causeway)
  - (b) Waterview (including works to St Lukes on SH16 and on the Waterview Estuary and Causeway Bridges)
  - (c) Owairaka
- and hold regular meetings (at least three monthly) throughout the construction period and up to 24 months following construction completion relevant to these areas (or less if the members of the Group agree), so that on-going monitoring information can continue to be disseminated.
- The Community Liaison Group(s) shall be open to all interested parties within the Project area including, but not limited to the following groups:
- (a) Auckland Council and Auckland Transport;
  - (b) Educational facilities within the Project area (including schools, kindergartens, childcare

facilities and Unitec Institute of Technology);

- (c) Relevant community/ environmental groups (including but not limited to Friends of Oakley Creek, Star Mills Preservation Group, Cycle Action Auckland and representatives from those organisations identified in the Communications Plan (as required by Condition Pl.2) and local residents;
- (d) Department of Conservation;
- (e) Local Boards;
- (f) Iwi groups with Mana Whenua;
- (g) Public transport providers; and
- (h) Housing New Zealand Corporation.

*Advice note: The purpose of the Community Liaison Group(s) is to provide a regular forum through which information about the Project can be provided to the community, and an opportunity for concerns or issues to be raised.*

- 22) V.11 Prior to commencement of works adjacent to Traherne Island, the NZTA shall employ a suitably qualified and experienced plant translocation expert to uplift and protect all areas of *Mimulus repens* on Traherne Island that will be affected by the work. The *Mimulus repens* shall be relocated to suitable and safe habitat away from the works area, or otherwise held and protected for the duration of the works in the vicinity of their original location and be replanted back at that location (or in close proximity to it) upon completion of the works. The location of the recipient sites will be determined in consultation with the Department of Conservation and in general accordance with the Traherne Island Natural Heritage Restoration Plan (2009 – 2014). Trials shall be undertaken to identify appropriate recipient sites, with these trial sites being monitored for a period of no less than 5 years, or until their failure. Where possible, recipient sites shall be located in currently weed-free areas. Where recipient sites may potentially be affected by weeds, they shall be subject to an on-going weed management plan. Should translocation attempts fail at all trial sites then the NZTA, in consultation with DOC, shall determine an alternative appropriate form of mitigation.
- 23) V.17 Prior to commencement of works adjacent to or on Traherne Island, the NZTA shall employ a suitably qualified and experienced ecologist for the preparation of a Traherne Island Weed and Pest Management Plan. The Plan shall be prepared in consultation with the Department of Conservation and be submitted to the Auckland Council for approval at least 20 working days prior to construction commencing.
- 24) A.1 The NZTA shall finalise, and implement through the CEMP, ECOMP submitted with this application to include the matters set out in Conditions A.2 to A.6.
- 25) ARCH *Any archaeological sites within the area affected by the Project shall not be modified or disturbed in any way unless written authorisation has been obtained from the NZ Historic Places Trust.*
- 26) C.1 The NZTA shall provide to the Major Infrastructure Team Manager, Auckland Council plans and drawings (including dimensioned, cross sections, elevations and site plans of all areas of proposed reclamation (including associated permanent and temporary CMA occupation), permanent structures and temporary structures) at least 20 working days before the proposed date of commencement of the construction of the reclamation, bridge piers or temporary structure.
- 27) M.1 The NZTA shall finalise and implement through the CEMP, the ECOMP submitted with this application. The ECOMP shall be revised to accurately reflect the conditions of this consent and changes to the details of construction processes prior to construction commencing. The ECOMP shall include, but not be limited to, details of:

- (a) Monitoring of marine habitats and ecological values;
- (b) Trigger event criteria for undertaking additional monitoring;
- (c) Procedures for responding to accidental discharges to the marine environment;
- (d) Complaints investigation, monitoring and reporting; and
- (e) The identification of staff and contractors' responsibilities.

## CONSTRUCTION CONDITIONS

- 28) CEMP.4 The CEMP shall be implemented and maintained throughout the entire construction period.
- 29) CEMP.5 A copy of the CEMP shall be held on each construction site at all times and be available for inspection on request by the Auckland Council.
- 30) CEMP.8 All storage of material and equipment associated with the construction works shall take place within the boundaries of the designation.
- 31) CEMP.12 The CEMP shall be reviewed by the NZTA at least annually or as a result of a material change to the Project. The review shall take into consideration:
- (a) Compliance with designation and consent conditions;
  - (b) Any changes to construction methods;
  - (c) Key changes to roles and responsibilities within the Project;
  - (d) Changes in industry best practice standards;
  - (e) Changes in legal or other requirements;
  - (f) Results of inspections, monitoring, incidents, corrective actions, internal or external assessments; and
  - (g) Public complaints.
- A summary of the review process undertaken shall be kept by the NZTA, provided annually to the Major Infrastructure Team Manager, Auckland Council and made available (with any related data) to the Auckland Council upon request.
- 32) CEMP.13 Following the review process (as described in Condition CEMP.12), the CEMP may require updating. Any material change proposed to the CEMP (including appended Management Plans) shall be submitted for approval to the Major Infrastructure Team Manager, Auckland Council at least 10 working days prior to the proposed changes taking effect.'
- Advice Note: Material change will include amendment to any base information informing the CEMP or any process, procedure or method of the CEMP (such as the environmental constraints map, compliance monitoring process, complaints procedure or mitigation / remedial methods identified) which has the potential to increase adverse effects on a particular value. For clarity changes to personnel and contact schedules do not constitute a material change.*
- 33) PI.3 At least 15 working days prior to the commencement of construction, and at 15 working day intervals thereafter, or as required depending on the scale of works and effects on the community, advertisements will be placed in the relevant local newspapers and community noticeboards (as identified in Condition CEMP.6(b)) detailing the nature of the forthcoming works, the location of the forthcoming works and hours of operation. All advertisements will include reference to a 24 hour toll free complaints telephone number. Where relevant, advertisements will also include but not be limited to details of:
- (a) Any traffic disruptions or controls or changes to property access, pedestrian/ cycle routes and bus stops; and



- (b) Any other construction activities, including night time works, blasting, and structure-borne noise, as identified in the conditions.
- 34) PI.4 The NZTA shall manage, investigate and resolve (as appropriate) all complaints for the duration of the construction works in accordance with the environmental complaints section of the CEMP. The implementation strategy for complaints includes:
- (a) A 24 hour toll free telephone number and email address, which shall be provided to all potentially affected residents and businesses. The number shall be available and answered at all times during the entire duration of the works for the receipt and management of any complaints. A sign containing the contact details shall be located at each site specific work activity;
  - (b) The NZTA shall maintain a record of all complaints made to this number, email or any site office, including the full details of the complainant and the nature of the complaint;
  - (c) Upon receiving a complaint, within 10 days of complaint receipt, a formal written response will be provided to the complainant and Auckland Council;
  - (d) The NZTA shall undertake corrective action where necessary to resolve any problem identified. All action taken and relevant information shall be documented. For the avoidance of doubt, 'where necessary' refers to where the works are not being carried out in accordance with conditions of this designation;
  - (e) Where issues and complaints about effects cannot be resolved through the CEMP complaints management process, a meeting shall be held between the NZTA, the complainant and the Auckland Council representative(s) to discuss the complaint and ways in which the issue may be resolved. If parties cannot agree on a resolution, an independent qualified mediator will be appointed, agreeable to all parties and at the shared cost of all parties, to undertake mediation of the dispute or concerns; and
  - (f) All information collected in Conditions PI.4 (b), (c) and (d) shall be detailed in a Construction Compliance Report (including the means by which the complaint was addressed, whether resolution was reached and how the response was carried out) prepared by the NZTA. This Report shall be submitted to the Major Infrastructure Team Manager, Auckland Council on a quarterly basis commencing at the beginning of the works and for the entire duration of construction.
- 35) PI.6 The Community Liaison Group(s) shall be provided opportunities to review and comment on the following (amongst other things):
- (a) The Outline Plan of Works detailing designs for the northern and southern ventilation buildings and stacks (the outcomes of this consultation will be reported in accordance with the processes required in DC.8(n) and DC.9(k));
  - (b) The Open Space Restoration Plans (as required by Condition OS.3);
  - (c) Finalisation and amendment to Urban Design and Landscape Plans (UDL Plans) (as required by Condition LV.1);
  - (d) The Oakley Inlet Heritage Plan (as required by Conditions OS.5(b)(i) and ARCH.6);
  - (e) The detail of the Oakley Creek restoration (as required by Condition STW.20);
  - (f) Publicly available results of environmental monitoring as required by the designation and/or these Consents (e.g. air quality monitoring); and
  - (g) The finalisation of the STEM assessment required by CEMP.6(o) and a schedule of trees that are required to be removed for consideration of timber use in heritage projects as required by Condition SO.7.

*Advice Note: Attention is drawn to the Vegetation conditions concerning identification and protection of Significant Vegetation and Valued Vegetation.*

- (h) Detailed design features of the Te Atatu underpass (e.g. lighting and architectural treatment).
- 36) LV.7 The NZTA shall ensure that the Temporary Embankments constructed for the Causeway are located on the seaward side of SH16 between the motorway end of Rosebank Road and the bridge over the Waterview Inlet.
- 37) A.2 The NZTA shall provide temporary high tide roosting structure(s) adjacent to the Causeway during construction, in accordance with the ECOMP, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council. The temporary bird roosts shall be sized in accordance with the ECOMP, and located within the Waterview Estuary adjacent to the southern side of the causeway and in the vicinity of the existing Causeway bridge.
- 38) A.5 Vegetation clearance at Traherne Island shall occur outside the bird breeding season of September to December. Elsewhere, vegetation clearance shall occur outside the bird breeding season of September to December where practicable.
- 39) ARCH.3 If any archaeological sites, including human remains are exposed during site works, then the following procedures shall apply:
- (a) Immediately it becomes apparent that a possible archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease;
  - (b) The site supervisor shall immediately secure the area in a way that ensures that any artefacts or remains are untouched and notify the Project archaeologist;
  - (c) The Project archaeologist shall inspect the site to assess the relevance of the find, and then the Auckland Council shall be advised of the significance;
  - (d) If the site is confirmed to be an archaeological site by the Project archaeologist, the site supervisor shall then notify tangata whenua, the New Zealand Historic Places Trust, and the Auckland Council that an archaeological site has been exposed so that appropriate action can be taken;
  - (e) In the case of human remains, the NZ Police shall be notified.
- 40) C.2 Construction shall be undertaken in accordance with the construction methodology detailed in the application, specifically Technical Report G.23 *Coastal Works* and Technical Report G.22 *Erosion and Sediment Control Plan*. The construction methodology shall include:
- (a) The use of temporary coffer dams to create dry working areas;
  - (b) Realignment of sections of existing low-tide channels in Oakley inlet and Waterview Estuary that will be directly affected by the reclamation works;
  - (c) Removal of mangroves to provide construction and ground-treatment access, placement of temporary coffer dams and to facilitate natural channel migration in the Whau River side drainage channel (east of Rosebank Domain);
  - (d) Installation or removal works to be undertaken at the best practicable time to minimise potential sediment disturbance.
- 41) C.3 The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council in writing of the proposed commencement date of the reclamation, structures and/or channel realignment works at least 10 working days prior to the proposed start date.
- 42) C.6 The NZTA shall maintain the site in good order and shall remedy all damage and disturbance caused by vehicle traffic, plant and equipment to the foreshore during construction, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.
- 43) C.7 Removal or pruning of vegetation in the CMA shall be limited to the areas of permanent and

temporary occupation as shown on the Waterview Connection Project Assessment of Environmental Effects Plan Set F.12 and F.13 submitted with the application (ref Schedule A, rows 13 and 14). Removal of mangroves shall be implemented in accordance with the principles detailed in the Ecological Management Plan.

- 44) C.11 (a) Provision for navigation of vessels beneath the Whau River Bridges during construction shall be maintained to the satisfaction of the Auckland Harbour Master;
- (b) Following construction, provision for the navigation of vessels beneath the Whau River Bridges be provided by the navigation channels and headspace clearance identified on the Plan Whau River Motorway and Pedestrian Bridges Elevation Plan 221 in F.8 (refer Schedule A, Row 9);
- (c) For purposes of safe navigation, the NZTA shall identify an appropriate pier to mark on the Whau River Bridges, in consultation with the Te Atatu Boating Club and to the satisfaction of the Auckland Harbour Master. This pier shall be surveyed and marked with height graduations advising available minimum headspace under the Bridges for different stages of the tide with an appropriate safety margin.
- 45) M.10 The NZTA shall maintain the coastal marine area free of any gross litter, rubbish and debris during construction.
- 46) M.11 Prior to excavation of sediment from the marine habitat remediation zone (MHRZ), mangrove vegetation will be removed from the sediment and disposed of at an appropriate offsite facility. The excavated sediment shall be stockpiled within an adjacent dry working area. When the sediment is returned to the MHRZ it will be levelled out to tie in with the existing mudflat. Where a routine marine benthic habitat monitoring site is within an area of MHRZ, additional monitoring of the depth of sediment overlying the improved ground/mudcrete will also be undertaken.

## **POST-CONSTRUCTION / OPERATIONS CONDITIONS**

- 47) V.15 Planting along and within the rock revetment of the widened SH16 causeway shall be undertaken by the NZTA at locations in general accordance with the Urban Design and Landscape Plans and planting schedules (Refer Schedule A, Row 17), as identified in those plans under the label "*Rock Armour with Saltwater Revetment Planting*". The planting treatments will be in accordance with the concepts of the ECOMP, Appendix I '*Conceptual Rock Revetment Planting Designs*'.
- 48) C.4 The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council in writing within 10 working days of the completion of each discrete area of reclamation, structures and/or channel realignment works.
- 49) C.5 The NZTA shall supply to the Major Infrastructure Team Manager, Auckland Council and LINZ Hydrographic Services and LINZ Topographic Services Land Information New Zealand, PO Box 5501, Wellington 6145), a complete set of "as built" plans, final topographic and bathymetric data, and appropriate certification confirming that the new reclamations, structures and channel realignment works have been built in accordance with sound engineering practice, within three months of the completion of the reclamation works.
- 50) C.8 The NZTA shall ensure the removal of all equipment, erosion and sediment control measures, surplus sediment and construction materials from the CMA within 20 working days following the completion of the construction works, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.

## **MONITORING**

- 51) A.3 The NZTA shall employ a suitably qualified ecologist to undertake monitoring of the roosting areas located at:
- (a) The existing high tide roost in Harbourview-Orangihina Park; and
  - (b) The temporary construction roosting structure(s) pursuant to Condition A.2.
- Monitoring shall be undertaken on a monthly basis, with a monitoring report prepared on a quarterly basis. The monitoring report shall be made available to the Major Infrastructure Team Manager, Auckland Council and Department of Conservation upon request.
- 52) A.4 Should the monitoring results indicate that the roosting sites have been abandoned, consultation shall be undertaken with the Department of Conservation and the Major Infrastructure Team Manager, Auckland Council to determine the need for and type of further management strategies (if any) required.
- 53) C.15 Within a month of the closure of the Rosebank culvert under SH16 (adjacent to the Rosebank Westbound Off-ramp), the NZTA shall undertake a single tidal salinity survey on a high spring tide (High Water at or above 3.4 m at Port of Auckland) without significant prior rainfall, to confirm and document that tidal flushing of brackish waters occurs in the boardwalk area presently serviced by the culvert. Salinity, water depth and the length of time either side of high water that the area is effectively inundated shall be monitored at one site near the eastern end of the boardwalk section of the shared cycleway [WGS-84 Map ref: -36.87057° N, 174.67408° E]. The monitoring information shall be made available to the Auckland Council.
- 54) C.16 On the northern side of the Causeway, from just before the commencement of construction in the CMA for each section of works, until 6 months after completion of each section, the NZTA shall undertake every two (2) months or after a severe wave-storm, intertidal beach profile surveys down to the spring low-tide mark along offshore-directed transects (one off the centre of the construction section and one either side at 20 m away from the ends of the construction site) and photographs documenting the physical state of the seabed around the perimeter of the cofferdam. The monitoring information shall be made available to the Auckland Council. If the monitoring identifies that excessive erosion or accretion has occurred from corner or end effects of the construction section, as confirmed by a coastal processes expert, further seabed erosion control measures or a sediment by-passing method (for accretion) to reduce localised effects seaward of the temporary occupation or permanent occupation designation (whichever applies) shall be implemented as soon as practicable. Details of the proposed measures or methods shall be made available to Auckland Council prior to implementation.
- 55) M.2 The NZTA shall engage a suitably qualified ecologist to undertake a marine habitat monitoring programme, as described in Conditions M.3 to M.6.
- 56) M.3 The marine benthic habitat monitoring programme shall be undertaken every 6 months:
- (a) At least 12 months prior to construction commencing, to allow for two baseline surveys to be undertaken;
  - (b) During construction; and
  - (c) For a maximum of 3 years following completion of the Project, or for a lesser time if the monitoring indicates no significant effects, as agreed with the Major Infrastructure Team Manager, Auckland Council.
- 57) M.4 The marine benthic habitat monitoring programme shall be undertaken in accordance with the details set out in the ECOMP and include:
- (a) Sampling of the marine invertebrate community composition (collection of sediment cores to a depth of approximately 15cm);

- (b) Sampling of the sediment surface (top 2cm) for sediment grain size; and
  - (c) Sampling of the sediment surface (top 2cm) for sediment quality (analysis of the concentration of copper, lead, zinc and polycyclic aromatic hydrocarbons).
- 58) M.5 The marine benthic habitat monitoring shall be undertaken within sampling grids (50m x 30m) broadly established at the following locations:
- (a) Two locations within Oakley Inlet;
  - (b) Four locations within Waterview Estuary; and
  - (c) Four locations north of the Causeway.
- Specific locations and experimental design shall be detailed in the ECOMP, and the design of the monitoring programme will be based on the *Estuarine Environmental Assessment and Monitoring: A National Protocol (Cawthron 2002)*.
- 59) M.6 The NZTA shall undertake additional marine habitat monitoring in the event of a 'trigger event' for marine ecology habitats. For the purposes of this consent, a 'trigger event' for marine ecology habitats is defined in the ECOMP.
- 60) M.7 The NZTA shall review the marine habitat monitoring results (pursuant to Conditions M.3 to M.6) and in the event that potential adverse effects are identified, the NZTA shall develop and implement appropriate contingency plans and/or remedial measures.

## REPORTING

- 61) M.8 The marine benthic habitat monitoring results shall be compiled by the NZTA, and a report provided to the Major Infrastructure Team Manager, Auckland Council every 6 months.

## **EPA 10/2.032 – (ARC: 38336)**

This document has been prepared in compliance with conditions of the “*Final Report and Decision of the Board of Inquiry into the New Zealand Transport Agency Waterview Connection Proposal, Volume 2, Conditions of Consent*”. Schedule B of Volume 2 identifies the Conditions relevant to this Consent by the code and number as referenced throughout this document. In the event of dispute, Schedule B of Volume 2 shall take precedence over this Consent.

**Type:** Coastal Consent

**Description:** **Erection of Permanent Structures in the CMA (Sectors 1, 2, 4 and 5):**

This consent relates to the construction of permanent (operational phase) structures within the CMA including piers, ramps, bridges, stormwater discharge outfalls and other consequential activities such as disturbance and/or vegetation removal. In GMA, CPA 2 and Mooring Management Area – Henderson Creek, Whau River and Pt Chevalier.

**Duration:** 10 years

**Code:** RC = Standard Resource Consent Conditions

CEMP = Construction Environmental Management Plan Conditions

PI = Public Information Conditions

LV = Landscape and Visual Conditions

V = Vegetation Conditions

A = Avian Conditions

ARCH = Archaeology Conditions

C = Coastal Conditions

M = Marine Ecology Conditions

### **GENERAL CONDITIONS**

- 1) RC.1 Except as modified by the conditions below, the works shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency (NZTA), in the resource consent applications and the supporting documents (as detailed in Condition DC.1), and in the supplementary information provided in evidence by the NZTA.
- 2) RC.1A The NZTA shall implement the conditions of these consents in accordance with Schedule B, which sets out the Conditions that are to be applied to each consent including the duration of each consent.
- 3) RC.2 The Conditions of these consents may be reviewed by the Major Infrastructure Team Manager, Auckland Council, pursuant to Section 128 of the Resource Management Act 1991 (the Act), by the giving of notice pursuant to Section 129 of the Act, on the one year anniversary of the commencement of the consents and every year thereafter in order:
  - (a) To deal with any adverse effect on the environment which may arise from the exercise

of the consent and which it is appropriate to deal with at a later stage; or

- (b) To deal with any other adverse effect on the environment on which the exercise of the consent may have an influence.
- 4) RC.4 Any Management Plans submitted to the Major Infrastructure Team Manager, Auckland Council for approval or certification may be submitted in stages to reflect any proposed staging of the physical works. Plans submitted shall clearly show the integration with adjacent stages and interrelated activities.
- 5) RC.5 In the event of any dispute, disagreement or inaction arising as to any Auckland Council Manager certification/ approvals required by the consent conditions, or as to the implementation of or monitoring required by the conditions, matters shall be referred in the first instance to the NZTA Regional State Highway Manager and to the Resource Consents Manager, Auckland Council to determine a process of resolution.
- If a resolution cannot be agreed, then the matter may be referred to an independent appropriately qualified expert, agreeable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree.
- The independent appropriately qualified expert shall be appointed within 10 working days of the NZTA or Auckland Council giving notice of their intention to seek expert determination. The expert shall, as soon as possible, issue his or her decision on the matter. In making the decision, the expert shall be entitled to seek further information and hear from the parties as he or she sees fit.
- Advice note: The dispute resolution process provided for in this condition does not prejudice any party's right to take enforcement action in relation to the implementation of the designation conditions. However, the dispute resolution process will be applied before any formal enforcement action is taken by the Council except in urgent situations.
- 6) RC.6 Pursuant to Section 36(1)(d) of the RMA, the requiring authority is required to pay to Auckland Council any administrative charge for the carrying out by the local authority of its functions in relation to the administration, monitoring, and supervision of designation conditions.
- 7) RC.7 The servants of agents of Auckland Council shall be permitted to have access to relevant parts of the Project at all reasonable times for the purpose of carrying out inspections, investigations, tests, measurements and/or to take samples.
- 8) V.18 The NZTA shall implement the approved Traherne Island Weed and Pest Management Plan. Every 5 years, a suitably qualified and experienced ecologist engaged by NZTA shall review the plan in consultation with the Department of Conservation. The plan shall then be submitted to the Auckland Council for approval.
- 9) A.6 Animal pest control shall be undertaken by the NZTA on Traherne Island (northern and southern sides) and on the Coastal Marine Area (CMA) frontage of SH16 from Traherne Island North to Whau Creek, and on the southern side of SH16 from Traherne Island South to Whau River (in accordance with Condition V.17).

#### **PRE-CONSTRUCTION CONDITIONS**

- 10) RC.3 Within 3 months of the resource consents commencing for the Project (or at least 1 month prior to any Auckland Council approvals or certifications required by these Conditions, whichever is the earlier), the NZTA shall update and finalise to the satisfaction of the Major Infrastructure Team Manager, Auckland Council all drawings and Plans cited in Schedule A, together with a full set of the information and documentation referred to in Condition DC.1

and provide these to the Major Infrastructure Team Manager, Auckland Council. At the same time the NZTA shall prepare to the satisfaction of Auckland Council, a document for each resource consent which sets out the resource consent and have attached to it in text format a comprehensive set of the conditions imposed by the Board of Inquiry in its Final Decision as summarised in Schedule B, inclusive of any standard conditions and advice notes.

In particular (but not limited to), the following Plans will need to be amended in light of the Final Conditions:

- (a) F.2 Operational Scheme Plans (refer Schedule A, Row 3) require amendment detailing the amended location of the ventilation stacks and southern ventilation buildings;
- (b) F.5 Construction Scheme Plans (refer Schedule A, Row 4) require amendment to detail changes to construction footprint for the amended location of ventilation stacks and southern ventilation buildings and reconfiguration of Construction Yard 1);
- (c) F.6 Construction Yard Plans 101 and 107 (refer Schedule A, Row 7), detailing amendments to the Construction Yard 1 in light of the reconfiguration of this Yard and for Construction Yard 7 in light of the relocation of the northern ventilation stack (refer Schedule A, Row 34);
- (d) F.8 Plans of Structures and Architectural Features (refer Schedule A, Row 9), detailing the amended location of the Northern Ventilation Stack and the design and location of the Southern Ventilation Building and Stack;
- (e) The CNVMP (including flow diagram and the supplementary evidence produced by Ms Wilkening) (refer Schedule A, Rows 36, 37 and 39);
- (f) Update to the areas of the Open Space Restoration Plans (Schedule A, Row 30) to:
  - (i) Extend these areas in geographic extent to provide for the works identified in the Management Plan notations identified in the OS Conditions (in particular OS.5 and OS.6). (e.g. these areas will (as relevant) include Eric Armishaw Park, Howlett Reserve and Waterview Esplanade Reserve); and
  - (ii) Exclude the operational area of designation required for the northern ventilation stack (as identified through the OPW process (refer Condition DC.8); and
- (g) Schedule A, Row 28 the Plan detailing proposed open space impacts and replacements needs to be updated to recolour the two land parcels on Hendon Avenue (which are excluded from the replacement calculations) to 'brown' to confirm they are part of the operational impact and will not be returned as open space.

- 11) CEMP.1 Except where provided for in Condition CEMP.1A below, the NZTA shall update and finalise the draft Construction Environmental Management Plan (CEMP) including all the Management Plans which form part of the CEMP and are included as appendices, submitted with this application to ensure compliance with the consent and designation conditions imposed by the Board of Inquiry. The CEMP shall be provided to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to the commencement of works to certify compliance and consistency with the conditions. Construction shall not commence until certification is obtained.

*Advice note: For clarity the CEMP will be updated and finalised in accordance with the conditions. Any amendments will be limited to reflecting the requirements of the conditions, specifying personnel, and completing the Environmental Risk Register.*

*Advice Note: Particular care must be taken with development and operation of Construction Yard 7. When the CEMP is being updated and finalised, consideration must be given to the contents of the draft SSCEMP prepared for Construction Yard 7 (Row 41, Schedule A) recognising changes required by inclusion of the ventilation stack in this yard.*

- 12) CEMP.1B For the purposes of staging works, as some works may commence well in advance of others,



the NZTA may provide staged or site specific CEMPs for those works to the Major Infrastructure Team Manager, Auckland Council. The NZTA shall consult with the Team Manager about the need and timing for any other site-specific or staged CEMPs and shall provide any required site-specific or staged CEMPs to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to commencement of such the specific stage (including enabling) or site works.

- 13) CEMP.2 The certification process of the CEMP (and its appendices) shall confirm that the CEMP gives effect to the relevant conditions, as well as those matters in CEMP.6, and that it includes details of:
- (a) Staff and contractors' responsibilities;
  - (b) Training requirements for employees, sub-contractors and visitors;
  - (c) Environmental incident and emergency management;
  - (d) Communication and interface procedures (in accordance with the Communication Plan required under Condition PI.2);
  - (e) Environmental complaints management (including the procedures required under Condition PI.4);
  - (f) Compliance monitoring;
  - (g) Reporting (including detail on the frequency of reporting to the Auckland Council);
  - (h) Environmental auditing; and
  - (i) Corrective action.
- 14) CEMP.3 The management of key environmental effects associated with the construction phase of the Project is detailed within environmental management plans that are included in the CEMP as appendices. This suite of management plans as shown on Figure CEMP.A comprises:
- (a) Construction Noise and Vibration Management Plan (CNVMP);
  - (b) Construction Air Quality Management Plan (CAQMP);
  - (c) Erosion and Sediment Control Plan (ESCP);
  - (d) Temporary Stormwater Management Plan (TSMP);
  - (e) Ecological Management Plan (ECOMP);
  - (f) Groundwater Management Plan (GWMP);
  - (g) Settlement Effects Management Plan (SEMP);
  - (h) Contaminated Soils Management Plan (CSMP);
  - (i) Hazardous Substances Management Plan (HSMP);
  - (j) Archaeological Site Management Plan (ASMP);
  - (k) Construction Traffic Management Plan (CTMP);
  - (l) Concrete Batching and Crushing Plant Management Plan (CBCPMP);
  - (m) Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP) (to be prepared in accordance with Condition CEMP.15);
  - (n) Waste Management Plan (to be prepared in accordance with Condition CEMP.10) ; and
  - (o) Temporary Construction Lighting Management Plan (to be prepared in accordance with Condition L.2).
- 15) CEMP.6 The finalised CEMP shall include specific details on demolition, construction and management of all works associated with the Project. The certification process of the CEMP shall confirm that the CEMP includes details of the following:
- (a) Details of the site or Project manager and the community liaison person, including their

- contact details (phone, facsimile, postal address, email address);
- (b) The location of large notice boards that clearly identify the NZTA and the Project name, together with the name, telephone, email address and address for service of the site or Project manager and the community liaison person;
  - (c) An outline construction programme of the work indicating in particular likely time periods for road closures and anticipated traffic diversion effects;
  - (d) The hours of work, which should reflect the need to ensure that residents enjoy reasonable freedom from noisy or intrusive construction activity in their neighbourhood at night, on Sundays and during public holidays;
  - (e) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/ storage of rubbish, storage and unloading of building materials and similar construction activities;
  - (f) Location of worker's offices and conveniences (e.g. portaloos);
  - (g) Procedures of controlling sediment run-off, dust and the removal of soil, debris and demolition and construction materials from public roads or places. Dust mitigation measures should include use of water sprays to control dust nuisance on dry or windy days;
  - (h) Methods to stabilise ingress and egress points to construction sites, to the standard required by ARC Technical Publication 90 (Nov 2007);
- 16) CEMP.10 The NZTA shall finalise and implement the Hazardous Substances Management Plan (HSMP), through the CEMP (as per Condition CEMP.1), submitted with this application, prior to works commencing on site. The certification process of the CEMP shall confirm that the HSMP clearly identifies the requirements for proper storage, handling, transport and disposal of hazardous substances during the construction phase of the Project and confirm that there shall be no storage of explosives on the Project site.
- 17) CEMP.11 The NZTA shall develop and implement a Waste Management Plan in accordance with the waste management principles, controls and methods set out in the CEMP. The Plan shall be provided to the Major Infrastructure Team Manager, Auckland Council and be implemented throughout the entire construction period.
- 18) CEMP.15 The NZTA will be responsible for all service relocations required for construction of the Project. The NZTA shall liaise with the providers of infrastructure service networks (including, but not limited to water, gas, stormwater, wastewater, power and telecommunications), and private property owners with on-site services to develop methodologies and timing for necessary services relocation required for the Project, with the objective of minimising disruption to the operation of these service networks and on-site services.
- Advice note:*
- (a) *It is noted that if separate consents are required for relocations for any services of network utility operators or landowners, such consents will be obtained before construction commences in the relevant area, and any effects of those relocations would be considered at that time. The same applies to any alteration of consents if required.*
  - (b) *Network infrastructure owned and operated by Watercare Services is located within the designations. An operating agreement will be developed by the NZTA and Watercare Services which will include appropriate notification and access protocols where works are to be undertaken by either network operator on or adjacent to Watercare Services infrastructure within the designations.*

- 19) PI.1 A community liaison person shall be appointed by the NZTA for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the Project. The liaison person's name and contact details shall be made available in the CEMP and on site signage by the NZTA. This person must be reasonably available for on-going consultation on all matters of concern to affected parties arising from the Project.
- 20) PI.2 The NZTA shall prepare and implement a Communications Plan that sets out procedures detailing how the public, Ministry of Social Development, Housing New Zealand Corporation and other organisations representing the particular demographic characteristics of the community (including but not limited to Primary Health Organisations, general practitioners, youth, education organisations, aged care groups and groups representing ethnic and migrant communities) will be communicated with throughout the construction and monitoring periods (as prescribed in the designation and consent conditions).
- In preparing the Communications Plan, the NZTA will liaise with Auckland Council to access its community liaison databases. The Communications Plan will include details of:
- (a) The site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
  - (b) In accordance with these Conditions, the database of the key construction activities and monitoring requirements that are the subject of the Communications Plan;
  - (c) The database of stakeholders and residents who will be communicated with;
  - (d) Communication methods, an assessment of how these methods reach the different audience/stakeholder groups (including those methods set out in Condition CEMP.6), and detail on when each of these methods will be used (e.g. regular communication or event specific methods);
  - (e) The appointed specialist in Environmental and Occupational Medicine, including contact details (as per Condition SO.13);
  - (f) Any stakeholder specific communication plans required; and
  - (g) Monitoring and review procedures for the Communications Plan.
- The Communications Plan shall be written in accordance with the external communication procedures set out in the CEMP and provided at least 20 working days prior to construction commencing, to the Major Infrastructure Team Manager, Auckland Council, Working Liaison Group and the Community Liaison Group(s) established by Condition PI.5. The structure of the communication groups set out in these conditions is attached as Figure PI.A.
- 21) PI.5 The NZTA shall establish Community Liaison Group(s) at least two months prior to construction commencing in each of the following key construction areas:
- (a) Te Atatu (including the SH16 Causeway)
  - (b) Waterview (including works to St Lukes on SH16 and on the Waterview Estuary and Causeway Bridges)
  - (c) Owairaka
- and hold regular meetings (at least three monthly) throughout the construction period and up to 24 months following construction completion relevant to these areas (or less if the members of the Group agree), so that on-going monitoring information can continue to be disseminated.
- The Community Liaison Group(s) shall be open to all interested parties within the Project area including, but not limited to the following groups:
- (a) Auckland Council and Auckland Transport;
  - (b) Educational facilities within the Project area (including schools, kindergartens, childcare

facilities and Unitec Institute of Technology);

- (c) Relevant community/ environmental groups (including but not limited to Friends of Oakley Creek, Star Mills Preservation Group, Cycle Action Auckland and representatives from those organisations identified in the Communications Plan (as required by Condition Pl.2) and local residents;
- (d) Department of Conservation;
- (e) Local Boards;
- (f) Iwi groups with Mana Whenua;
- (g) Public transport providers; and
- (h) Housing New Zealand Corporation.

*Advice note: The purpose of the Community Liaison Group(s) is to provide a regular forum through which information about the Project can be provided to the community, and an opportunity for concerns or issues to be raised.*

- 22) V.11 Prior to commencement of works adjacent to Traherne Island, the NZTA shall employ a suitably qualified and experienced plant translocation expert to uplift and protect all areas of *Mimulus repens* on Traherne Island that will be affected by the work. The *Mimulus repens* shall be relocated to suitable and safe habitat away from the works area, or otherwise held and protected for the duration of the works in the vicinity of their original location and be replanted back at that location (or in close proximity to it) upon completion of the works. The location of the recipient sites will be determined in consultation with the Department of Conservation and in general accordance with the Traherne Island Natural Heritage Restoration Plan (2009 – 2014). Trials shall be undertaken to identify appropriate recipient sites, with these trial sites being monitored for a period of no less than 5 years, or until their failure. Where possible, recipient sites shall be located in currently weed-free areas. Where recipient sites may potentially be affected by weeds, they shall be subject to an on-going weed management plan. Should translocation attempts fail at all trial sites then the NZTA, in consultation with DOC, shall determine an alternative appropriate form of mitigation.
- 23) V.17 Prior to commencement of works adjacent to or on Traherne Island, the NZTA shall employ a suitably qualified and experienced ecologist for the preparation of a Traherne Island Weed and Pest Management Plan. The Plan shall be prepared in consultation with the Department of Conservation and be submitted to the Auckland Council for approval at least 20 working days prior to construction commencing.
- 24) A.1 The NZTA shall finalise, and implement through the CEMP, ECOMP submitted with this application to include the matters set out in Conditions A.2 to A.6.
- 25) ARCH *Any archaeological sites within the area affected by the Project shall not be modified or disturbed in any way unless written authorisation has been obtained from the NZ Historic Places Trust.*
- 26) C.1 The NZTA shall provide to the Major Infrastructure Team Manager, Auckland Council plans and drawings (including dimensioned, cross sections, elevations and site plans of all areas of proposed reclamation (including associated permanent and temporary CMA occupation), permanent structures and temporary structures) at least 20 working days before the proposed date of commencement of the construction of the reclamation, bridge piers or temporary structure.
- 27) M.1 The NZTA shall finalise and implement through the CEMP, the ECOMP submitted with this application. The ECOMP shall be revised to accurately reflect the conditions of this consent and changes to the details of construction processes prior to construction commencing. The ECOMP shall include, but not be limited to, details of:

- (a) Monitoring of marine habitats and ecological values;
- (b) Trigger event criteria for undertaking additional monitoring;
- (c) Procedures for responding to accidental discharges to the marine environment;
- (d) Complaints investigation, monitoring and reporting; and
- (e) The identification of staff and contractors' responsibilities.

## CONSTRUCTION CONDITIONS

- 28) CEMP.4 The CEMP shall be implemented and maintained throughout the entire construction period.
- 29) CEMP.5 A copy of the CEMP shall be held on each construction site at all times and be available for inspection on request by the Auckland Council.
- 30) CEMP.8 All storage of material and equipment associated with the construction works shall take place within the boundaries of the designation.
- 31) CEMP.12 The CEMP shall be reviewed by the NZTA at least annually or as a result of a material change to the Project. The review shall take into consideration:
- (a) Compliance with designation and consent conditions;
  - (b) Any changes to construction methods;
  - (c) Key changes to roles and responsibilities within the Project;
  - (d) Changes in industry best practice standards;
  - (e) Changes in legal or other requirements;
  - (f) Results of inspections, monitoring, incidents, corrective actions, internal or external assessments; and
  - (g) Public complaints.
- A summary of the review process undertaken shall be kept by the NZTA, provided annually to the Major Infrastructure Team Manager, Auckland Council and made available (with any related data) to the Auckland Council upon request.
- 32) CEMP.13 Following the review process (as described in Condition CEMP.12), the CEMP may require updating. Any material change proposed to the CEMP (including appended Management Plans) shall be submitted for approval to the Major Infrastructure Team Manager, Auckland Council at least 10 working days prior to the proposed changes taking effect.'
- Advice Note: Material change will include amendment to any base information informing the CEMP or any process, procedure or method of the CEMP (such as the environmental constraints map, compliance monitoring process, complaints procedure or mitigation / remedial methods identified) which has the potential to increase adverse effects on a particular value. For clarity changes to personnel and contact schedules do not constitute a material change.*
- 33) PI.3 At least 15 working days prior to the commencement of construction, and at 15 working day intervals thereafter, or as required depending on the scale of works and effects on the community, advertisements will be placed in the relevant local newspapers and community noticeboards (as identified in Condition CEMP.6(b)) detailing the nature of the forthcoming works, the location of the forthcoming works and hours of operation. All advertisements will include reference to a 24 hour toll free complaints telephone number. Where relevant, advertisements will also include but not be limited to details of:
- (a) Any traffic disruptions or controls or changes to property access, pedestrian/ cycle routes and bus stops; and

- (b) Any other construction activities, including night time works, blasting, and structure-borne noise, as identified in the conditions.
- 34) PI.4 The NZTA shall manage, investigate and resolve (as appropriate) all complaints for the duration of the construction works in accordance with the environmental complaints section of the CEMP. The implementation strategy for complaints includes:
- (a) A 24 hour toll free telephone number and email address, which shall be provided to all potentially affected residents and businesses. The number shall be available and answered at all times during the entire duration of the works for the receipt and management of any complaints. A sign containing the contact details shall be located at each site specific work activity;
  - (b) The NZTA shall maintain a record of all complaints made to this number, email or any site office, including the full details of the complainant and the nature of the complaint;
  - (c) Upon receiving a complaint, within 10 days of complaint receipt, a formal written response will be provided to the complainant and Auckland Council;
  - (d) The NZTA shall undertake corrective action where necessary to resolve any problem identified. All action taken and relevant information shall be documented. For the avoidance of doubt, 'where necessary' refers to where the works are not being carried out in accordance with conditions of this designation;
  - (e) Where issues and complaints about effects cannot be resolved through the CEMP complaints management process, a meeting shall be held between the NZTA, the complainant and the Auckland Council representative(s) to discuss the complaint and ways in which the issue may be resolved. If parties cannot agree on a resolution, an independent qualified mediator will be appointed, agreeable to all parties and at the shared cost of all parties, to undertake mediation of the dispute or concerns; and
  - (f) All information collected in Conditions PI.4 (b), (c) and (d) shall be detailed in a Construction Compliance Report (including the means by which the complaint was addressed, whether resolution was reached and how the response was carried out) prepared by the NZTA. This Report shall be submitted to the Major Infrastructure Team Manager, Auckland Council on a quarterly basis commencing at the beginning of the works and for the entire duration of construction.
- 35) PI.6 The Community Liaison Group(s) shall be provided opportunities to review and comment on the following (amongst other things):
- (a) The Outline Plan of Works detailing designs for the northern and southern ventilation buildings and stacks (the outcomes of this consultation will be reported in accordance with the processes required in DC.8(n) and DC.9(k));
  - (b) The Open Space Restoration Plans (as required by Condition OS.3);
  - (c) Finalisation and amendment to Urban Design and Landscape Plans (UDL Plans) (as required by Condition LV.1);
  - (d) The Oakley Inlet Heritage Plan (as required by Conditions OS.5(b)(i) and ARCH.6);
  - (e) The detail of the Oakley Creek restoration (as required by Condition STW.20);
  - (f) Publicly available results of environmental monitoring as required by the designation and/or these Consents (e.g. air quality monitoring); and
  - (g) The finalisation of the STEM assessment required by CEMP.6(o) and a schedule of trees that are required to be removed for consideration of timber use in heritage projects as required by Condition SO.7.

*Advice Note: Attention is drawn to the Vegetation conditions concerning identification and protection of Significant Vegetation and Valued Vegetation.*

- (h) Detailed design features of the Te Atatu underpass (e.g. lighting and architectural treatment).
- 36) LV.7 The NZTA shall ensure that the Temporary Embankments constructed for the Causeway are located on the seaward side of SH16 between the motorway end of Rosebank Road and the bridge over the Waterview Inlet.
- 37) A.2 The NZTA shall provide temporary high tide roosting structure(s) adjacent to the Causeway during construction, in accordance with the ECOMP, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council. The temporary bird roosts shall be sized in accordance with the ECOMP, and located within the Waterview Estuary adjacent to the southern side of the causeway and in the vicinity of the existing Causeway bridge.
- 38) A.5 Vegetation clearance at Traherne Island shall occur outside the bird breeding season of September to December. Elsewhere, vegetation clearance shall occur outside the bird breeding season of September to December where practicable.
- 39) ARCH.3 If any archaeological sites, including human remains are exposed during site works, then the following procedures shall apply:
- (a) Immediately it becomes apparent that a possible archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease;
  - (b) The site supervisor shall immediately secure the area in a way that ensures that any artefacts or remains are untouched and notify the Project archaeologist;
  - (c) The Project archaeologist shall inspect the site to assess the relevance of the find, and then the Auckland Council shall be advised of the significance;
  - (d) If the site is confirmed to be an archaeological site by the Project archaeologist, the site supervisor shall then notify tangata whenua, the New Zealand Historic Places Trust, and the Auckland Council that an archaeological site has been exposed so that appropriate action can be taken;
  - (e) In the case of human remains, the NZ Police shall be notified.
- 40) C.2 Construction shall be undertaken in accordance with the construction methodology detailed in the application, specifically Technical Report G.23 *Coastal Works* and Technical Report G.22 *Erosion and Sediment Control Plan*. The construction methodology shall include:
- (a) The use of temporary coffer dams to create dry working areas;
  - (b) Realignment of sections of existing low-tide channels in Oakley inlet and Waterview Estuary that will be directly affected by the reclamation works;
  - (c) Removal of mangroves to provide construction and ground-treatment access, placement of temporary coffer dams and to facilitate natural channel migration in the Whau River side drainage channel (east of Rosebank Domain);
  - (d) Installation or removal works to be undertaken at the best practicable time to minimise potential sediment disturbance.
- 41) C.3 The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council in writing of the proposed commencement date of the reclamation, structures and/or channel realignment works at least 10 working days prior to the proposed start date.
- 42) C.6 The NZTA shall maintain the site in good order and shall remedy all damage and disturbance caused by vehicle traffic, plant and equipment to the foreshore during construction, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.
- 43) C.7 Removal or pruning of vegetation in the CMA shall be limited to the areas of permanent and

temporary occupation as shown on the Waterview Connection Project Assessment of Environmental Effects Plan Set F.12 and F.13 submitted with the application (ref Schedule A, rows 13 and 14). Removal of mangroves shall be implemented in accordance with the principles detailed in the Ecological Management Plan.

- 44) C.11 (a) Provision for navigation of vessels beneath the Whau River Bridges during construction shall be maintained to the satisfaction of the Auckland Harbour Master;
- (b) Following construction, provision for the navigation of vessels beneath the Whau River Bridges be provided by the navigation channels and headspace clearance identified on the Plan Whau River Motorway and Pedestrian Bridges Elevation Plan 221 in F.8 (refer Schedule A, Row 9);
- (c) For purposes of safe navigation, the NZTA shall identify an appropriate pier to mark on the Whau River Bridges, in consultation with the Te Atatu Boating Club and to the satisfaction of the Auckland Harbour Master. This pier shall be surveyed and marked with height graduations advising available minimum headspace under the Bridges for different stages of the tide with an appropriate safety margin.
- 45) M.10 The NZTA shall maintain the coastal marine area free of any gross litter, rubbish and debris during construction.
- 46) M.11 Prior to excavation of sediment from the marine habitat remediation zone (MHRZ), mangrove vegetation will be removed from the sediment and disposed of at an appropriate offsite facility. The excavated sediment shall be stockpiled within an adjacent dry working area. When the sediment is returned to the MHRZ it will be levelled out to tie in with the existing mudflat. Where a routine marine benthic habitat monitoring site is within an area of MHRZ, additional monitoring of the depth of sediment overlying the improved ground/ mudcrete will also be undertaken.

## **POST-CONSTRUCTION / OPERATIONS CONDITIONS**

- 47) V.15 Planting along and within the rock revetment of the widened SH16 causeway shall be undertaken by the NZTA at locations in general accordance with the Urban Design and Landscape Plans and planting schedules (Refer Schedule A, Row 17), as identified in those plans under the label "*Rock Armour with Saltwater Revetment Planting*". The planting treatments will be in accordance with the concepts of the ECOMP, Appendix I '*Conceptual Rock Revetment Planting Designs*'.
- 48) C.4 The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council in writing within 10 working days of the completion of each discrete area of reclamation, structures and/or channel realignment works.
- 49) C.5 The NZTA shall supply to the Major Infrastructure Team Manager, Auckland Council and LINZ Hydrographic Services and LINZ Topographic Services Land Information New Zealand, PO Box 5501, Wellington 6145), a complete set of "as built" plans, final topographic and bathymetric data, and appropriate certification confirming that the new reclamations, structures and channel realignment works have been built in accordance with sound engineering practice, within three months of the completion of the reclamation works.
- 50) C.8 The NZTA shall ensure the removal of all equipment, erosion and sediment control measures, surplus sediment and construction materials from the CMA within 20 working days following the completion of the construction works, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.

## **MONITORING**



- 51) A.3 The NZTA shall employ a suitably qualified ecologist to undertake monitoring of the roosting areas located at:
- (a) The existing high tide roost in Harbourview-Orangihina Park; and
  - (b) The temporary construction roosting structure(s) pursuant to Condition A.2.
- Monitoring shall be undertaken on a monthly basis, with a monitoring report prepared on a quarterly basis. The monitoring report shall be made available to the Major Infrastructure Team Manager, Auckland Council and Department of Conservation upon request.
- 52) A.4 Should the monitoring results indicate that the roosting sites have been abandoned, consultation shall be undertaken with the Department of Conservation and the Major Infrastructure Team Manager, Auckland Council to determine the need for and type of further management strategies (if any) required.
- 53) C.15 Within a month of the closure of the Rosebank culvert under SH16 (adjacent to the Rosebank Westbound Off-ramp), the NZTA shall undertake a single tidal salinity survey on a high spring tide (High Water at or above 3.4 m at Port of Auckland) without significant prior rainfall, to confirm and document that tidal flushing of brackish waters occurs in the boardwalk area presently serviced by the culvert. Salinity, water depth and the length of time either side of high water that the area is effectively inundated shall be monitored at one site near the eastern end of the boardwalk section of the shared cycleway [WGS-84 Map ref: -36.87057° N, 174.67408° E]. The monitoring information shall be made available to the Auckland Council.
- 54) C.16 On the northern side of the Causeway, from just before the commencement of construction in the CMA for each section of works, until 6 months after completion of each section, the NZTA shall undertake every two (2) months or after a severe wave-storm, intertidal beach profile surveys down to the spring low-tide mark along offshore-directed transects (one off the centre of the construction section and one either side at 20 m away from the ends of the construction site) and photographs documenting the physical state of the seabed around the perimeter of the cofferdam. The monitoring information shall be made available to the Auckland Council. If the monitoring identifies that excessive erosion or accretion has occurred from corner or end effects of the construction section, as confirmed by a coastal processes expert, further seabed erosion control measures or a sediment by-passing method (for accretion) to reduce localised effects seaward of the temporary occupation or permanent occupation designation (whichever applies) shall be implemented as soon as practicable. Details of the proposed measures or methods shall be made available to Auckland Council prior to implementation.
- 55) M.2 The NZTA shall engage a suitably qualified ecologist to undertake a marine habitat monitoring programme, as described in Conditions M.3 to M.6.
- 56) M.3 The marine benthic habitat monitoring programme shall be undertaken every 6 months:
- (a) At least 12 months prior to construction commencing, to allow for two baseline surveys to be undertaken;
  - (b) During construction; and
  - (c) For a maximum of 3 years following completion of the Project, or for a lesser time if the monitoring indicates no significant effects, as agreed with the Major Infrastructure Team Manager, Auckland Council.
- 57) M.4 The marine benthic habitat monitoring programme shall be undertaken in accordance with the details set out in the ECOMP and include:
- (a) Sampling of the marine invertebrate community composition (collection of sediment cores to a depth of approximately 15cm);

- (b) Sampling of the sediment surface (top 2cm) for sediment grain size; and
  - (c) Sampling of the sediment surface (top 2cm) for sediment quality (analysis of the concentration of copper, lead, zinc and polycyclic aromatic hydrocarbons).
- 58) M.5 The marine benthic habitat monitoring shall be undertaken within sampling grids (50m x 30m) broadly established at the following locations:
- (a) Two locations within Oakley Inlet;
  - (b) Four locations within Waterview Estuary; and
  - (c) Four locations north of the Causeway.
- Specific locations and experimental design shall be detailed in the ECOMP, and the design of the monitoring programme will be based on the *Estuarine Environmental Assessment and Monitoring: A National Protocol (Cawthron 2002)*.
- 59) M.6 The NZTA shall undertake additional marine habitat monitoring in the event of a 'trigger event' for marine ecology habitats. For the purposes of this consent, a 'trigger event' for marine ecology habitats is defined in the ECOMP.
- 60) M.7 The NZTA shall review the marine habitat monitoring results (pursuant to Conditions M.3 to M.6) and in the event that potential adverse effects are identified, the NZTA shall develop and implement appropriate contingency plans and/or remedial measures.

## REPORTING

- 61) M.8 The marine benthic habitat monitoring results shall be compiled by the NZTA, and a report provided to the Major Infrastructure Team Manager, Auckland Council every 6 months.

## **EPA 10/2.034 – (ARC: 38339)**

This document has been prepared in compliance with conditions of the “*Final Report and Decision of the Board of Inquiry into the New Zealand Transport Agency Waterview Connection Proposal, Volume 2, Conditions of Consent*”. Schedule B of Volume 2 identifies the Conditions relevant to this Consent by the code and number as referenced throughout this document. In the event of dispute, Schedule B of Volume 2 shall take precedence over this Consent.

**Type:** Coastal Consent

**Description:** **Erection of Permanent Structures in the CMA (Sectors 3 and 4):**

This consent relates to the construction of permanent (operational phase) structures within the CMA including piers, ramps, stormwater discharge outfalls and other consequential activities such as disturbance and/or vegetation removal. In CPA 1 – Waterview Estuary.

**Duration:** 10 years

**Code:** RC = Standard Resource Consent Conditions

CEMP = Construction Environmental Management Plan Conditions

PI = Public Information Conditions

CNV = Noise and Vibration Conditions - Construction

V = Vegetation Conditions

A = Avian Conditions

ARCH = Archaeology Conditions

C = Coastal Conditions

M = Marine Ecology Conditions

### **GENERAL CONDITIONS**

- 1) RC.1 Except as modified by the conditions below, the works shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency (NZTA), in the resource consent applications and the supporting documents (as detailed in Condition DC.1), and in the supplementary information provided in evidence by the NZTA.
- 2) RC.1A The NZTA shall implement the conditions of these consents in accordance with Schedule B, which sets out the Conditions that are to be applied to each consent including the duration of each consent.
- 3) RC.2 The Conditions of these consents may be reviewed by the Major Infrastructure Team Manager, Auckland Council, pursuant to Section 128 of the Resource Management Act 1991 (the Act), by the giving of notice pursuant to Section 129 of the Act, on the one year anniversary of the commencement of the consents and every year thereafter in order:
  - (a) To deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or

- (b) To deal with any other adverse effect on the environment on which the exercise of the consent may have an influence.
- 4) RC.4 Any Management Plans submitted to the Major Infrastructure Team Manager, Auckland Council for approval or certification may be submitted in stages to reflect any proposed staging of the physical works. Plans submitted shall clearly show the integration with adjacent stages and interrelated activities.
- 5) RC.5 In the event of any dispute, disagreement or inaction arising as to any Auckland Council Manager certification/ approvals required by the consent conditions, or as to the implementation of or monitoring required by the conditions, matters shall be referred in the first instance to the NZTA Regional State Highway Manager and to the Resource Consents Manager, Auckland Council to determine a process of resolution.
- If a resolution cannot be agreed, then the matter may be referred to an independent appropriately qualified expert, agreeable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree.
- The independent appropriately qualified expert shall be appointed within 10 working days of the NZTA or Auckland Council giving notice of their intention to seek expert determination. The expert shall, as soon as possible, issue his or her decision on the matter. In making the decision, the expert shall be entitled to seek further information and hear from the parties as he or she sees fit.
- Advice note: The dispute resolution process provided for in this condition does not prejudice any party's right to take enforcement action in relation to the implementation of the designation conditions. However, the dispute resolution process will be applied before any formal enforcement action is taken by the Council except in urgent situations.
- 6) RC.6 Pursuant to Section 36(1)(d) of the RMA, the requiring authority is required to pay to Auckland Council any administrative charge for the carrying out by the local authority of its functions in relation to the administration, monitoring, and supervision of designation conditions.
- 7) RC.7 The servants of agents of Auckland Council shall be permitted to have access to relevant parts of the Project at all reasonable times for the purpose of carrying out inspections, investigations, tests, measurements and/or to take samples.
- 8) V.18 The NZTA shall implement the approved Traherne Island Weed and Pest Management Plan. Every 5 years, a suitably qualified and experienced ecologist engaged by NZTA shall review the plan in consultation with the Department of Conservation. The plan shall then be submitted to the Auckland Council for approval.
- 9) A.6 Animal pest control shall be undertaken by the NZTA on Traherne Island (northern and southern sides) and on the Coastal Marine Area (CMA) frontage of SH16 from Traherne Island North to Whau Creek, and on the southern side of SH16 from Traherne Island South to Whau River (in accordance with Condition V.17).

## **PRE-CONSTRUCTION CONDITIONS**

- 10) RC.3 Within 3 months of the resource consents commencing for the Project (or at least 1 month prior to any Auckland Council approvals or certifications required by these Conditions, whichever is the earlier), the NZTA shall update and finalise to the satisfaction of the Major Infrastructure Team Manager, Auckland Council all drawings and Plans cited in Schedule A, together with a full set of the information and documentation referred to in Condition DC.1 and provide these to the Major Infrastructure Team Manager, Auckland Council. At the same time the NZTA shall prepare to the satisfaction of Auckland Council, a document for each

resource consent which sets out the resource consent and have attached to it in text format a comprehensive set of the conditions imposed by the Board of Inquiry in its Final Decision as summarised in Schedule B, inclusive of any standard conditions and advice notes.

In particular (but not limited to), the following Plans will need to be amended in light of the Final Conditions:

- (a) F.2 Operational Scheme Plans (refer Schedule A, Row 3) require amendment detailing the amended location of the ventilation stacks and southern ventilation buildings;
- (b) F.5 Construction Scheme Plans (refer Schedule A, Row 4) require amendment to detail changes to construction footprint for the amended location of ventilation stacks and southern ventilation buildings and reconfiguration of Construction Yard 1);
- (c) F.6 Construction Yard Plans 101 and 107 (refer Schedule A, Row 7), detailing amendments to the Construction Yard 1 in light of the reconfiguration of this Yard and for Construction Yard 7 in light of the relocation of the northern ventilation stack (refer Schedule A, Row 34);
- (d) F.8 Plans of Structures and Architectural Features (refer Schedule A, Row 9), detailing the amended location of the Northern Ventilation Stack and the design and location of the Southern Ventilation Building and Stack;
- (e) The CNVMP (including flow diagram and the supplementary evidence produced by Ms Wilkening) (refer Schedule A, Rows 36, 37 and 39);
- (f) Update to the areas of the Open Space Restoration Plans (Schedule A, Row 30) to:
  - (i) Extend these areas in geographic extent to provide for the works identified in the Management Plan notations identified in the OS Conditions (in particular OS.5 and OS.6). (e.g. these areas will (as relevant) include Eric Armishaw Park, Howlett Reserve and Waterview Esplanade Reserve); and
  - (ii) Exclude the operational area of designation required for the northern ventilation stack (as identified through the OPW process (refer Condition DC.8); and
- (g) Schedule A, Row 28 the Plan detailing proposed open space impacts and replacements needs to be updated to recolour the two land parcels on Hendon Avenue (which are excluded from the replacement calculations) to 'brown' to confirm they are part of the operational impact and will not be returned as open space.

- 11) CEMP.1 Except where provided for in Condition CEMP.1A below, the NZTA shall update and finalise the draft Construction Environmental Management Plan (CEMP) including all the Management Plans which form part of the CEMP and are included as appendices, submitted with this application to ensure compliance with the consent and designation conditions imposed by the Board of Inquiry. The CEMP shall be provided to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to the commencement of works to certify compliance and consistency with the conditions. Construction shall not commence until certification is obtained.

*Advice note: For clarity the CEMP will be updated and finalised in accordance with the conditions. Any amendments will be limited to reflecting the requirements of the conditions, specifying personnel, and completing the Environmental Risk Register.*

*Advice Note: Particular care must be taken with development and operation of Construction Yard 7. When the CEMP is being updated and finalised, consideration must be given to the contents of the draft SSCEMP prepared for Construction Yard 7 (Row 41, Schedule A) recognising changes required by inclusion of the ventilation stack in this yard.*

- 12) CEMP.1B For the purposes of staging works, as some works may commence well in advance of others, the NZTA may provide staged or site specific CEMPs for those works to the Major Infrastructure Team Manager, Auckland Council. The NZTA shall consult with the Team

Manager about the need and timing for any other site-specific or staged CEMPs and shall provide any required site-specific or staged CEMPs to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to commencement of such the specific stage (including enabling) or site works.

- 13) CEMP.2 The certification process of the CEMP (and its appendices) shall confirm that the CEMP gives effect to the relevant conditions, as well as those matters in CEMP.6, and that it includes details of:
- (a) Staff and contractors' responsibilities;
  - (b) Training requirements for employees, sub-contractors and visitors;
  - (c) Environmental incident and emergency management;
  - (d) Communication and interface procedures (in accordance with the Communication Plan required under Condition PI.2);
  - (e) Environmental complaints management (including the procedures required under Condition PI.4);
  - (f) Compliance monitoring;
  - (g) Reporting (including detail on the frequency of reporting to the Auckland Council);
  - (h) Environmental auditing; and
  - (i) Corrective action.
- 14) CEMP.3 The management of key environmental effects associated with the construction phase of the Project is detailed within environmental management plans that are included in the CEMP as appendices. This suite of management plans as shown on Figure CEMP.A comprises:
- (a) Construction Noise and Vibration Management Plan (CNVMP);
  - (b) Construction Air Quality Management Plan (CAQMP);
  - (c) Erosion and Sediment Control Plan (ESCP);
  - (d) Temporary Stormwater Management Plan (TSMP);
  - (e) Ecological Management Plan (ECOMP);
  - (f) Groundwater Management Plan (GWMP);
  - (g) Settlement Effects Management Plan (SEMP);
  - (h) Contaminated Soils Management Plan (CSMP);
  - (i) Hazardous Substances Management Plan (HSMP);
  - (j) Archaeological Site Management Plan (ASMP);
  - (k) Construction Traffic Management Plan (CTMP);
  - (l) Concrete Batching and Crushing Plant Management Plan (CBCPMP);
  - (m) Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP) (to be prepared in accordance with Condition CEMP.15);
  - (n) Waste Management Plan (to be prepared in accordance with Condition CEMP.10) ; and
  - (o) Temporary Construction Lighting Management Plan (to be prepared in accordance with Condition L.2).
- 15) CEMP.6 The finalised CEMP shall include specific details on demolition, construction and management of all works associated with the Project. The certification process of the CEMP shall confirm that the CEMP includes details of the following:
- (a) Details of the site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
  - (b) The location of large notice boards that clearly identify the NZTA and the Project name,

- together with the name, telephone, email address and address for service of the site or Project manager and the community liaison person;
- (c) An outline construction programme of the work indicating in particular likely time periods for road closures and anticipated traffic diversion effects;
  - (d) The hours of work, which should reflect the need to ensure that residents enjoy reasonable freedom from noisy or intrusive construction activity in their neighbourhood at night, on Sundays and during public holidays;
  - (e) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/ storage of rubbish, storage and unloading of building materials and similar construction activities;
  - (f) Location of worker's offices and conveniences (e.g. porta-loos);
  - (g) Procedures of controlling sediment run-off, dust and the removal of soil, debris and demolition and construction materials from public roads or places. Dust mitigation measures should include use of water sprays to control dust nuisance on dry or windy days;
  - (h) Methods to stabilise ingress and egress points to construction sites, to the standard required by ARC Technical Publication 90 (Nov 2007);
- 16) CEMP.10 The NZTA shall finalise and implement the Hazardous Substances Management Plan (HSMP), through the CEMP (as per Condition CEMP.1), submitted with this application, prior to works commencing on site. The certification process of the CEMP shall confirm that the HSMP clearly identifies the requirements for proper storage, handling, transport and disposal of hazardous substances during the construction phase of the Project and confirm that there shall be no storage of explosives on the Project site.
- 17) CEMP.11 The NZTA shall develop and implement a Waste Management Plan in accordance with the waste management principles, controls and methods set out in the CEMP. The Plan shall be provided to the Major Infrastructure Team Manager, Auckland Council and be implemented throughout the entire construction period.
- 18) CEMP.15 The NZTA will be responsible for all service relocations required for construction of the Project. The NZTA shall liaise with the providers of infrastructure service networks (including, but not limited to water, gas, stormwater, wastewater, power and telecommunications), and private property owners with on-site services to develop methodologies and timing for necessary services relocation required for the Project, with the objective of minimising disruption to the operation of these service networks and on-site services.
- Advice note:*
- (a) *It is noted that if separate consents are required for relocations for any services of network utility operators or landowners, such consents will be obtained before construction commences in the relevant area, and any effects of those relocations would be considered at that time. The same applies to any alteration of consents if required.*
  - (b) *Network infrastructure owned and operated by Watercare Services is located within the designations. An operating agreement will be developed by the NZTA and Watercare Services which will include appropriate notification and access protocols where works are to be undertaken by either network operator on or adjacent to Watercare Services infrastructure within the designations.*
- 19) PI.1 A community liaison person shall be appointed by the NZTA for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the Project. The liaison person's name and contact details shall be

made available in the CEMP and on site signage by the NZTA. This person must be reasonably available for on-going consultation on all matters of concern to affected parties arising from the Project.

- 20) PI.2 The NZTA shall prepare and implement a Communications Plan that sets out procedures detailing how the public, Ministry of Social Development, Housing New Zealand Corporation and other organisations representing the particular demographic characteristics of the community (including but not limited to Primary Health Organisations, general practitioners, youth, education organisations, aged care groups and groups representing ethnic and migrant communities) will be communicated with throughout the construction and monitoring periods (as prescribed in the designation and consent conditions).

In preparing the Communications Plan, the NZTA will liaise with Auckland Council to access its community liaison databases. The Communications Plan will include details of:

- (a) The site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- (b) In accordance with these Conditions, the database of the key construction activities and monitoring requirements that are the subject of the Communications Plan;
- (c) The database of stakeholders and residents who will be communicated with;
- (d) Communication methods, an assessment of how these methods reach the different audience/stakeholder groups (including those methods set out in Condition CEMP.6), and detail on when each of these methods will be used (e.g. regular communication or event specific methods);
- (e) The appointed specialist in Environmental and Occupational Medicine, including contact details (as per Condition SO.13);
- (f) Any stakeholder specific communication plans required; and
- (g) Monitoring and review procedures for the Communications Plan.

The Communications Plan shall be written in accordance with the external communication procedures set out in the CEMP and provided at least 20 working days prior to construction commencing, to the Major Infrastructure Team Manager, Auckland Council, Working Liaison Group and the Community Liaison Group(s) established by Condition PI.5. The structure of the communication groups set out in these conditions is attached as Figure PI.A.

- 21) PI.5 The NZTA shall establish Community Liaison Group(s) at least two months prior to construction commencing in each of the following key construction areas:

- (a) Te Atatu (including the SH16 Causeway)
- (b) Waterview (including works to St Lukes on SH16 and on the Waterview Estuary and Causeway Bridges)
- (c) Owairaka

and hold regular meetings (at least three monthly) throughout the construction period and up to 24 months following construction completion relevant to these areas (or less if the members of the Group agree), so that on-going monitoring information can continue to be disseminated.

The Community Liaison Group(s) shall be open to all interested parties within the Project area including, but not limited to the following groups:

- (a) Auckland Council and Auckland Transport;
- (b) Educational facilities within the Project area (including schools, kindergartens, childcare facilities and Unitec Institute of Technology);
- (c) Relevant community/ environmental groups (including but not limited to Friends of Oakley Creek, Star Mills Preservation Group, Cycle Action Auckland and



representatives from those organisations identified in the Communications Plan (as required by Condition PI.2) and local residents;

- (d) Department of Conservation;
- (e) Local Boards;
- (f) Iwi groups with Mana Whenua;
- (g) Public transport providers; and
- (h) Housing New Zealand Corporation.

*Advice note: The purpose of the Community Liaison Group(s) is to provide a regular forum through which information about the Project can be provided to the community, and an opportunity for concerns or issues to be raised.*

- 22) CNV.1 The NZTA shall finalise and implement through the CEMP, a Construction Noise and Vibration Management Plan (CNVMP) throughout the entire construction period of the Project.

The CNVMP shall describe the measures adopted to meet:

- (a) the noise criteria set out in Conditions CNV.2 and 3 below;
- (b) the vibration criteria set out in Condition CNV.4 below; or
- (c) where (a) or (b) cannot be met, the process that will be followed to appropriately mitigate noise and vibration effects including methods that may be applied outside the designation.

The CNVMP shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to construction activities being undertaken for review and certification that the CNVMP, as a minimum, addresses the following:

- (i) Construction noise and vibration criteria (Conditions CNV.2, CNV.3, and CNV.4);
- (ii) Hours of operation, including times and days when noisy and/or vibration inducing construction activities would occur;
- (iii) Machinery and equipment to be used;
- (iv) Vibration testing of equipment to confirm safe distances to buildings prior to construction;
- (v) Preparation of building condition surveys of critical dwellings prior to, during and after completion of construction works;
- (vi) Roles and responsibilities of personnel on site;
- (vii) Construction operator training procedures;
- (viii) Methods for monitoring and reporting on construction noise and vibration;
- (ix) A hierarchy of mitigation options that will be assessed for the Project noise mitigation, including alternative strategies where full compliance with the relevant noise and/or vibration criteria cannot be achieved;
- (x) Management schedules containing site specific information;
- (xi) Measures for liaising with and notifying potentially affected receivers of proposed construction activities and the potential for noise and vibration effects, specifically:
  - PPFs located within a horizontal distance of 35 metres of underground excavation works, along the tunnel alignment shall receive prior notification not greater than 7 days (and not less than 24 hours) prior to the commencement of works.
  - Methods for ensuring residents affected by night works (within 100m of the construction site night works, as defined on the maps (refer Schedule A,

Row 35) are notified of such works (i.e. any works during the hours of 20:00 to 06:30) at least 5 days prior to the commencement of any such work.

- The maps showing PPFs to be notified of night works (refer Schedule A, Row 35, shall be reviewed and included within the CNVMP.

- (xii) Methods for receiving and handling complaints about construction noise and vibration;
  - (xiii) Measures for preventing the occurrence of rogue fly rock, including management of charge weights and face loading procedures, stemming of charge holes and profiling of the face to maintain minimum burden (face cover);
  - (xiv) Investigations on the practicability of implementing permanent noise mitigation works for construction mitigation (as per Condition CNV.7);
  - (xv) Investigations of the practicability of implementing Building Modification mitigation, as required in accordance with Conditions ON.6 and ON.11, prior to commencement of construction within 100m of the relevant PPFs (including those on the Unitec site); and
  - (xvi) The process for developing Site Specific Noise Management Plans (SSNMP), in accordance with the SSNMP Flow Chart (refer Schedule A, Row 36), including templates and a certification process for the Major Infrastructure Team Manager, Auckland Council (in accordance with Condition CNV.13) to confirm the process of SSNMP review of noise mitigation options where, the modelled/predicted levels or subsequent actual levels exceed the criteria in Conditions CNV.2 and/or CNV.4.
- 23) V.11 Prior to commencement of works adjacent to Traherne Island, the NZTA shall employ a suitably qualified and experienced plant translocation expert to uplift and protect all areas of *Mimulus repens* on Traherne Island that will be affected by the work. The *Mimulus repens* shall be relocated to suitable and safe habitat away from the works area, or otherwise held and protected for the duration of the works in the vicinity of their original location and be replanted back at that location (or in close proximity to it) upon completion of the works. The location of the recipient sites will be determined in consultation with the Department of Conservation and in general accordance with the Traherne Island Natural Heritage Restoration Plan (2009 – 2014). Trials shall be undertaken to identify appropriate recipient sites, with these trial sites being monitored for a period of no less than 5 years, or until their failure. Where possible, recipient sites shall be located in currently weed-free areas. Where recipient sites may potentially be affected by weeds, they shall be subject to an on-going weed management plan. Should translocation attempts fail at all trial sites then the NZTA, in consultation with DOC, shall determine an alternative appropriate form of mitigation.
- 24) V.17 Prior to commencement of works adjacent to or on Traherne Island, the NZTA shall employ a suitably qualified and experienced ecologist for the preparation of a Traherne Island Weed and Pest Management Plan. The Plan shall be prepared in consultation with the Department of Conservation and be submitted to the Auckland Council for approval at least 20 working days prior to construction commencing.
- 25) A.1 The NZTA shall finalise, and implement through the CEMP, ECOMP submitted with this application to include the matters set out in Conditions A.2 to A.6.
- 26) ARCH. Advice Note *Any archaeological sites within the area affected by the Project shall not be modified or disturbed in any way unless written authorisation has been obtained from the NZ Historic Places Trust.*
- 27) C.1 The NZTA shall provide to the Major Infrastructure Team Manager, Auckland Council plans and drawings (including dimensioned, cross sections, elevations and site plans of all areas

of proposed reclamation (including associated permanent and temporary CMA occupation), permanent structures and temporary structures) at least 20 working days before the proposed date of commencement of the construction of the reclamation, bridge piers or temporary structure.

- 28) M.1 The NZTA shall finalise and implement through the CEMP, the ECOMP submitted with this application. The ECOMP shall be revised to accurately reflect the conditions of this consent and changes to the details of construction processes prior to construction commencing. The ECOMP shall include, but not be limited to, details of:
- (a) Monitoring of marine habitats and ecological values;
  - (b) Trigger event criteria for undertaking additional monitoring;
  - (c) Procedures for responding to accidental discharges to the marine environment;
  - (d) Complaints investigation, monitoring and reporting; and
  - (e) The identification of staff and contractors' responsibilities.

### CONSTRUCTION CONDITIONS

- 29) CEMP.4 The CEMP shall be implemented and maintained throughout the entire construction period.
- 30) CEMP.5 A copy of the CEMP shall be held on each construction site at all times and be available for inspection on request by the Auckland Council.
- 31) CEMP.8 All storage of material and equipment associated with the construction works shall take place within the boundaries of the designation.
- 32) CEMP.12 The CEMP shall be reviewed by the NZTA at least annually or as a result of a material change to the Project. The review shall take into consideration:
- (a) Compliance with designation and consent conditions;
  - (b) Any changes to construction methods;
  - (c) Key changes to roles and responsibilities within the Project;
  - (d) Changes in industry best practice standards;
  - (e) Changes in legal or other requirements;
  - (f) Results of inspections, monitoring, incidents, corrective actions, internal or external assessments; and
  - (g) Public complaints.
- A summary of the review process undertaken shall be kept by the NZTA, provided annually to the Major Infrastructure Team Manager, Auckland Council and made available (with any related data) to the Auckland Council upon request.
- 33) CEMP.13 Following the review process (as described in Condition CEMP.12), the CEMP may require updating. Any material change proposed to the CEMP (including appended Management Plans) shall be submitted for approval to the Major Infrastructure Team Manager, Auckland Council at least 10 working days prior to the proposed changes taking effect.'
- Advice Note: Material change will include amendment to any base information informing the CEMP or any process, procedure or method of the CEMP (such as the environmental constraints map, compliance monitoring process, complaints procedure or mitigation / remedial methods identified) which has the potential to increase adverse effects on a particular value. For clarity changes to personnel and contact schedules do not constitute a material change.*
- 34) PI.3 At least 15 working days prior to the commencement of construction, and at 15 working day intervals thereafter, or as required depending on the scale of works and effects on the

community, advertisements will be placed in the relevant local newspapers and community noticeboards (as identified in Condition CEMP.6(b)) detailing the nature of the forthcoming works, the location of the forthcoming works and hours of operation. All advertisements will include reference to a 24 hour toll free complaints telephone number. Where relevant, advertisements will also include but not be limited to details of:

- (a) Any traffic disruptions or controls or changes to property access, pedestrian/ cycle routes and bus stops; and
- (b) Any other construction activities, including night time works, blasting, and structure-borne noise, as identified in the conditions.

35) PI.4 The NZTA shall manage, investigate and resolve (as appropriate) all complaints for the duration of the construction works in accordance with the environmental complaints section of the CEMP. The implementation strategy for complaints includes:

- (a) A 24 hour toll free telephone number and email address, which shall be provided to all potentially affected residents and businesses. The number shall be available and answered at all times during the entire duration of the works for the receipt and management of any complaints. A sign containing the contact details shall be located at each site specific work activity;
- (b) The NZTA shall maintain a record of all complaints made to this number, email or any site office, including the full details of the complainant and the nature of the complaint;
- (c) Upon receiving a complaint, within 10 days of complaint receipt, a formal written response will be provided to the complainant and Auckland Council;
- (d) The NZTA shall undertake corrective action where necessary to resolve any problem identified. All action taken and relevant information shall be documented. For the avoidance of doubt, 'where necessary' refers to where the works are not being carried out in accordance with conditions of this designation;
- (e) Where issues and complaints about effects cannot be resolved through the CEMP complaints management process, a meeting shall be held between the NZTA, the complainant and the Auckland Council representative(s) to discuss the complaint and ways in which the issue may be resolved. If parties cannot agree on a resolution, an independent qualified mediator will be appointed, agreeable to all parties and at the shared cost of all parties, to undertake mediation of the dispute or concerns; and
- (f) All information collected in Conditions PI.4 (b), (c) and (d) shall be detailed in a Construction Compliance Report (including the means by which the complaint was addressed, whether resolution was reached and how the response was carried out) prepared by the NZTA. This Report shall be submitted to the Major Infrastructure Team Manager, Auckland Council on a quarterly basis commencing at the beginning of the works and for the entire duration of construction.

36) PI.6 The Community Liaison Group(s) shall be provided opportunities to review and comment on the following (amongst other things):

- (a) The Outline Plan of Works detailing designs for the northern and southern ventilation buildings and stacks (the outcomes of this consultation will be reported in accordance with the processes required in DC.8(n) and DC.9(k));
- (b) The Open Space Restoration Plans (as required by Condition OS.3);
- (c) Finalisation and amendment to Urban Design and Landscape Plans (UDL Plans) (as required by Condition LV.1);
- (d) The Oakley Inlet Heritage Plan (as required by Conditions OS.5(b)(i) and ARCH.6);

- (e) The detail of the Oakley Creek restoration (as required by Condition STW.20);
- (f) Publicly available results of environmental monitoring as required by the designation and/or these Consents (e.g. air quality monitoring); and
- (g) The finalisation of the STEM assessment required by CEMP.6(o) and a schedule of trees that are required to be removed for consideration of timber use in heritage projects as required by Condition SO.7.

*Advice Note: Attention is drawn to the Vegetation conditions concerning identification and protection of Significant Vegetation and Valued Vegetation.*

- (h) Detailed design features of the Te Atatu underpass (e.g. lighting and architectural treatment).

37) CNV.2 Except where certified by the Council through the SSNMP (in accordance with Condition CNV.13), construction noise (excluding noise from blasting Monday to Saturday inclusive) shall be measured and assessed in accordance with NZS 6803:1999 “Acoustics - Construction Noise” and shall comply with the following criteria:

Note: In Condition CNV.2 (T) means a duration between 15 minutes and 60 minutes, in accordance with NZS6803:1999.

(a) Project Construction Noise Criteria: Residential Receivers

Time of week	Time period	Project Construction Noise Criteria (Long Term Construction) dB		
		Sectors 1 to 7	Sectors 8 and 9	All Sectors
		$L_{Aeq(T)}$	$L_{Aeq(T)}$	$L_{AFmax}$
Monday - Saturday	0630-0730	60	45	75
	0730-1800	70	70	85
	1800-2000	65	65	80
	2000-0630	60	45	75
Sundays and Public Holidays	0630-0730	45	45	75
	0730-1800	60	45	85
	1800-2000	45	45	75
	2000-0630	45	45	75

(b) Project Construction Noise Criteria: Commercial and Industrial Receivers

Time period	Project Construction Noise Criteria (Long Term Construction) dB
	$L_{Aeq(T)}$
0730-1800	70
1800-0730	75

(c) Project Construction Noise Criteria: Internal Structure-borne Noise from tunnelling for Residential Receivers

Time period	Project Construction Noise Criteria Inside
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0600-2200	35 dB $L_{Aeq(T)}$	All habitable rooms
2200-0600	30 dB $L_{Aeq(T)}$	Bedrooms

(d) Project Construction Noise Criteria: Internal noise for Licensed Educational Facilities

Time period (School Days)	Project Construction Noise Criteria Inside	
Teaching Hours	45 dB $L_{Aeq(T)}$ or existing, whichever is the higher	Classrooms, library, offices, teaching, laboratories, manual arts, workshops
Teaching Hours	40 dB $L_{Aeq(T)}$ or existing, whichever is the higher	School hall, lecture theatres

*Note: In Condition CNV2(d) "Teaching hours" means:*

*Primary schools and Kindergartens: 9am to 3pm*

*Unitec: 8am to 9pm*

- 38) CNV.7 Where practicable, permanent (traffic) noise barriers, required in any Sector as Detailed Mitigation Options for operational noise following completion of the Project (in accordance with Conditions ON.3 to ON.5) shall be erected prior to noise generating construction works commencing. Where this is not practicable, temporary noise mitigation measures shall be implemented in accordance with the CNVMP, prior to noise generating construction works commencing.
- 39) CNV.8 Pile driving or pile removal shall not be undertaken at night (i.e. during the hours of 20:00 – 06:30).
- 40) CNV.9 The concrete batch plants, rock crushing plants and the loading bays and conveyors for such plants shall be fully enclosed.
- 41) CNV.13 SSNMPs (required by Condition CNV.1(xvi)) above, shall be submitted to Major Infrastructure Team Manager, Auckland Council for review and certification at least 7 working days prior to the proposed works commencing. A decision will be provided by the Council within 5 working days of receipt of the SSNMP.
- Works will not commence until certification is received from the Major Infrastructure Team Manager, Auckland Council. The Council may, at its discretion, waive the requirement for SSNMPs to be submitted to the Council where an SSNMP is required.
- If monitoring shows that levels specified in a SSNMP are being exceeded, work generating the exceedance will stop and not recommence until further mitigation is implemented in accordance with an amended SSNMP certified by Council.
- Advice note: It is accepted that the criteria of CNV.2 and CNV.4 may not be met at all times, but that the NZTA will take all practical steps to achieve compliance, taking into account the hierarchy of mitigation options outlined in Condition CNV.1 (ix).*
- 42) A.2 The NZTA shall provide temporary high tide roosting structure(s) adjacent to the Causeway during construction, in accordance with the ECOMP, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council. The temporary bird roosts shall be sized in accordance with the ECOMP, and located within the Waterview Estuary adjacent to the southern side of the causeway and in the vicinity of the existing Causeway bridge.

- 43) A.5 Vegetation clearance at Traherne Island shall occur outside the bird breeding season of September to December. Elsewhere, vegetation clearance shall occur outside the bird breeding season of September to December where practicable.
- 44) ARCH.3 If any archaeological sites, including human remains are exposed during site works, then the following procedures shall apply:
- (a) Immediately it becomes apparent that a possible archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease;
  - (b) The site supervisor shall immediately secure the area in a way that ensures that any artefacts or remains are untouched and notify the Project archaeologist;
  - (c) The Project archaeologist shall inspect the site to assess the relevance of the find, and then the Auckland Council shall be advised of the significance;
  - (d) If the site is confirmed to be an archaeological site by the Project archaeologist, the site supervisor shall then notify tangata whenua, the New Zealand Historic Places Trust, and the Auckland Council that an archaeological site has been exposed so that appropriate action can be taken;
  - (e) In the case of human remains, the NZ Police shall be notified.
- 45) C.2 Construction shall be undertaken in accordance with the construction methodology detailed in the application, specifically Technical Report G.23 *Coastal Works* and Technical Report G.22 *Erosion and Sediment Control Plan*. The construction methodology shall include:
- (a) The use of temporary coffer dams to create dry working areas;
  - (b) Realignment of sections of existing low-tide channels in Oakley inlet and Waterview Estuary that will be directly affected by the reclamation works;
  - (c) Removal of mangroves to provide construction and ground-treatment access, placement of temporary coffer dams and to facilitate natural channel migration in the Whau River side drainage channel (east of Rosebank Domain);
  - (d) Installation or removal works to be undertaken at the best practicable time to minimise potential sediment disturbance.
- 46) C.3 The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council in writing of the proposed commencement date of the reclamation, structures and/or channel realignment works at least 10 working days prior to the proposed start date.
- 47) C.6 The NZTA shall maintain the site in good order and shall remedy all damage and disturbance caused by vehicle traffic, plant and equipment to the foreshore during construction, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.
- 48) C.7 Removal or pruning of vegetation in the CMA shall be limited to the areas of permanent and temporary occupation as shown on the Waterview Connection Project Assessment of Environmental Effects Plan Set F.12 and F.13 submitted with the application (ref Schedule A, rows 13 and 14). Removal of mangroves shall be implemented in accordance with the principles detailed in the Ecological Management Plan.
- 49) M.10 The NZTA shall maintain the coastal marine area free of any gross litter, rubbish and debris during construction.
- 50) M.11 Prior to excavation of sediment from the marine habitat remediation zone (MHRZ), mangrove vegetation will be removed from the sediment and disposed of at an appropriate offsite facility. The excavated sediment shall be stockpiled within an adjacent dry working area. When the sediment is returned to the MHRZ it will be levelled out to tie in with the existing mudflat. Where a routine marine benthic habitat monitoring site is within an area of

MHRZ, additional monitoring of the depth of sediment overlying the improved ground/mudcrete will also be undertaken.

## POST-CONSTRUCTION CONDITIONS

- 51) V.15 Planting along and within the rock revetment of the widened SH16 causeway shall be undertaken by the NZTA at locations in general accordance with the Urban Design and Landscape Plans and planting schedules (Refer Schedule A, Row 17), as identified in those plans under the label "*Rock Armour with Saltwater Revetment Planting*". The planting treatments will be in accordance with the concepts of the ECOMP, Appendix I '*Conceptual Rock Revetment Planting Designs*'.
- 52) C.4 The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council in writing within 10 working days of the completion of each discrete area of reclamation, structures and/or channel realignment works.
- 53) C.5 The NZTA shall supply to the Major Infrastructure Team Manager, Auckland Council and LINZ Hydrographic Services and LINZ Topographic Services Land Information New Zealand, PO Box 5501, Wellington 6145), a complete set of "as built" plans, final topographic and bathymetric data, and appropriate certification confirming that the new reclamations, structures and channel realignment works have been built in accordance with sound engineering practice, within three months of the completion of the reclamation works.
- 54) C.8 The NZTA shall ensure the removal of all equipment, erosion and sediment control measures, surplus sediment and construction materials from the CMA within 20 working days following the completion of the construction works, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.

## MONITORING

- 55) A.3 The NZTA shall employ a suitably qualified ecologist to undertake monitoring of the roosting areas located at:
- (a) The existing high tide roost in Harbourview-Orangihina Park; and
  - (b) The temporary construction roosting structure(s) pursuant to Condition A.2.
- Monitoring shall be undertaken on a monthly basis, with a monitoring report prepared on a quarterly basis. The monitoring report shall be made available to the Major Infrastructure Team Manager, Auckland Council and Department of Conservation upon request.
- 56) A.4 Should the monitoring results indicate that the roosting sites have been abandoned, consultation shall be undertaken with the Department of Conservation and the Major Infrastructure Team Manager, Auckland Council to determine the need for and type of further management strategies (if any) required.
- 57) C.16 On the northern side of the Causeway, from just before the commencement of construction in the CMA for each section of works, until 6 months after completion of each section, the NZTA shall undertake every two (2) months or after a severe wave-storm, intertidal beach profile surveys down to the spring low-tide mark along offshore-directed transects (one off the centre of the construction section and one either side at 20 m away from the ends of the construction site) and photographs documenting the physical state of the seabed around the perimeter of the cofferdam. The monitoring information shall be made available to the



Auckland Council. If the monitoring identifies that excessive erosion or accretion has occurred from corner or end effects of the construction section, as confirmed by a coastal processes expert, further seabed erosion control measures or a sediment by-passing method (for accretion) to reduce localised effects seaward of the temporary occupation or permanent occupation designation (whichever applies) shall be implemented as soon as practicable. Details of the proposed measures or methods shall be made available to Auckland Council prior to implementation.

- 58) M.2 The NZTA shall engage a suitably qualified ecologist to undertake a marine habitat monitoring programme, as described in Conditions M.3 to M.6.
- 59) M.3 The marine benthic habitat monitoring programme shall be undertaken every 6 months:
- (a) At least 12 months prior to construction commencing, to allow for two baseline surveys to be undertaken;
  - (b) During construction; and
  - (c) For a maximum of 3 years following completion of the Project, or for a lesser time if the monitoring indicates no significant effects, as agreed with the Major Infrastructure Team Manager, Auckland Council.
- 60) M.4 The marine benthic habitat monitoring programme shall be undertaken in accordance with the details set out in the ECOMP and include:
- (a) Sampling of the marine invertebrate community composition (collection of sediment cores to a depth of approximately 15cm);
  - (b) Sampling of the sediment surface (top 2cm) for sediment grain size; and
  - (c) Sampling of the sediment surface (top 2cm) for sediment quality (analysis of the concentration of copper, lead, zinc and polycyclic aromatic hydrocarbons).
- 61) M.5 The marine benthic habitat monitoring shall be undertaken within sampling grids (50m x 30m) broadly established at the following locations:
- (a) Two locations within Oakley Inlet;
  - (b) Four locations within Waterview Estuary; and
  - (c) Four locations north of the Causeway.
- Specific locations and experimental design shall be detailed in the ECOMP, and the design of the monitoring programme will be based on the *Estuarine Environmental Assessment and Monitoring: A National Protocol (Cawthron 2002)*.
- 62) M.6 The NZTA shall undertake additional marine habitat monitoring in the event of a 'trigger event' for marine ecology habitats. For the purposes of this consent, a 'trigger event' for marine ecology habitats is defined in the ECOMP.
- 63) M.7 The NZTA shall review the marine habitat monitoring results (pursuant to Conditions M.3 to M.6) and in the event that potential adverse effects are identified, the NZTA shall develop and implement appropriate contingency plans and/or remedial measures.

## REPORTING

- 64) M.8 The marine benthic habitat monitoring results shall be compiled by the NZTA, and a report provided to the Major Infrastructure Team Manager, Auckland Council every 6 months.

## **EPA 10/2.034 – (ARC: 38339)**

This document has been prepared in compliance with conditions of the “*Final Report and Decision of the Board of Inquiry into the New Zealand Transport Agency Waterview Connection Proposal, Volume 2, Conditions of Consent*”. Schedule B of Volume 2 identifies the Conditions relevant to this Consent by the code and number as referenced throughout this document. In the event of dispute, Schedule B of Volume 2 shall take precedence over this Consent.

**Type:** Coastal Consent

**Description:** **Erection of Permanent Structures in the CMA (Sectors 3 and 4):**

This consent relates to the construction of permanent (operational phase) structures within the CMA including piers, ramps, stormwater discharge outfalls and other consequential activities such as disturbance and/or vegetation removal. In CPA 1 – Waterview Estuary.

**Duration:** 10 years

**Code:** RC = Standard Resource Consent Conditions

CEMP = Construction Environmental Management Plan Conditions

PI = Public Information Conditions

CNV = Noise and Vibration Conditions - Construction

V = Vegetation Conditions

A = Avian Conditions

ARCH = Archaeology Conditions

C = Coastal Conditions

M = Marine Ecology Conditions

### **GENERAL CONDITIONS**

- 1) RC.1 Except as modified by the conditions below, the works shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency (NZTA), in the resource consent applications and the supporting documents (as detailed in Condition DC.1), and in the supplementary information provided in evidence by the NZTA.
- 2) RC.1A The NZTA shall implement the conditions of these consents in accordance with Schedule B, which sets out the Conditions that are to be applied to each consent including the duration of each consent.
- 3) RC.2 The Conditions of these consents may be reviewed by the Major Infrastructure Team Manager, Auckland Council, pursuant to Section 128 of the Resource Management Act 1991 (the Act), by the giving of notice pursuant to Section 129 of the Act, on the one year anniversary of the commencement of the consents and every year thereafter in order:
  - (a) To deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or

- (b) To deal with any other adverse effect on the environment on which the exercise of the consent may have an influence.
- 4) RC.4 Any Management Plans submitted to the Major Infrastructure Team Manager, Auckland Council for approval or certification may be submitted in stages to reflect any proposed staging of the physical works. Plans submitted shall clearly show the integration with adjacent stages and interrelated activities.
- 5) RC.5 In the event of any dispute, disagreement or inaction arising as to any Auckland Council Manager certification/ approvals required by the consent conditions, or as to the implementation of or monitoring required by the conditions, matters shall be referred in the first instance to the NZTA Regional State Highway Manager and to the Resource Consents Manager, Auckland Council to determine a process of resolution.
- If a resolution cannot be agreed, then the matter may be referred to an independent appropriately qualified expert, agreeable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree.
- The independent appropriately qualified expert shall be appointed within 10 working days of the NZTA or Auckland Council giving notice of their intention to seek expert determination. The expert shall, as soon as possible, issue his or her decision on the matter. In making the decision, the expert shall be entitled to seek further information and hear from the parties as he or she sees fit.
- Advice note: The dispute resolution process provided for in this condition does not prejudice any party's right to take enforcement action in relation to the implementation of the designation conditions. However, the dispute resolution process will be applied before any formal enforcement action is taken by the Council except in urgent situations.
- 6) RC.6 Pursuant to Section 36(1)(d) of the RMA, the requiring authority is required to pay to Auckland Council any administrative charge for the carrying out by the local authority of its functions in relation to the administration, monitoring, and supervision of designation conditions.
- 7) RC.7 The servants of agents of Auckland Council shall be permitted to have access to relevant parts of the Project at all reasonable times for the purpose of carrying out inspections, investigations, tests, measurements and/or to take samples.
- 8) V.18 The NZTA shall implement the approved Traherne Island Weed and Pest Management Plan. Every 5 years, a suitably qualified and experienced ecologist engaged by NZTA shall review the plan in consultation with the Department of Conservation. The plan shall then be submitted to the Auckland Council for approval.
- 9) A.6 Animal pest control shall be undertaken by the NZTA on Traherne Island (northern and southern sides) and on the Coastal Marine Area (CMA) frontage of SH16 from Traherne Island North to Whau Creek, and on the southern side of SH16 from Traherne Island South to Whau River (in accordance with Condition V.17).

## **PRE-CONSTRUCTION CONDITIONS**

- 10) RC.3 Within 3 months of the resource consents commencing for the Project (or at least 1 month prior to any Auckland Council approvals or certifications required by these Conditions, whichever is the earlier), the NZTA shall update and finalise to the satisfaction of the Major Infrastructure Team Manager, Auckland Council all drawings and Plans cited in Schedule A, together with a full set of the information and documentation referred to in Condition DC.1 and provide these to the Major Infrastructure Team Manager, Auckland Council. At the same time the NZTA shall prepare to the satisfaction of Auckland Council, a document for each

resource consent which sets out the resource consent and have attached to it in text format a comprehensive set of the conditions imposed by the Board of Inquiry in its Final Decision as summarised in Schedule B, inclusive of any standard conditions and advice notes.

In particular (but not limited to), the following Plans will need to be amended in light of the Final Conditions:

- (a) F.2 Operational Scheme Plans (refer Schedule A, Row 3) require amendment detailing the amended location of the ventilation stacks and southern ventilation buildings;
- (b) F.5 Construction Scheme Plans (refer Schedule A, Row 4) require amendment to detail changes to construction footprint for the amended location of ventilation stacks and southern ventilation buildings and reconfiguration of Construction Yard 1);
- (c) F.6 Construction Yard Plans 101 and 107 (refer Schedule A, Row 7), detailing amendments to the Construction Yard 1 in light of the reconfiguration of this Yard and for Construction Yard 7 in light of the relocation of the northern ventilation stack (refer Schedule A, Row 34);
- (d) F.8 Plans of Structures and Architectural Features (refer Schedule A, Row 9), detailing the amended location of the Northern Ventilation Stack and the design and location of the Southern Ventilation Building and Stack;
- (e) The CNVMP (including flow diagram and the supplementary evidence produced by Ms Wilkening) (refer Schedule A, Rows 36, 37 and 39);
- (f) Update to the areas of the Open Space Restoration Plans (Schedule A, Row 30) to:
  - (i) Extend these areas in geographic extent to provide for the works identified in the Management Plan notations identified in the OS Conditions (in particular OS.5 and OS.6). (e.g. these areas will (as relevant) include Eric Armishaw Park, Howlett Reserve and Waterview Esplanade Reserve); and
  - (ii) Exclude the operational area of designation required for the northern ventilation stack (as identified through the OPW process (refer Condition DC.8); and
- (g) Schedule A, Row 28 the Plan detailing proposed open space impacts and replacements needs to be updated to recolour the two land parcels on Hendon Avenue (which are excluded from the replacement calculations) to 'brown' to confirm they are part of the operational impact and will not be returned as open space.

- 11) CEMP.1 Except where provided for in Condition CEMP.1A below, the NZTA shall update and finalise the draft Construction Environmental Management Plan (CEMP) including all the Management Plans which form part of the CEMP and are included as appendices, submitted with this application to ensure compliance with the consent and designation conditions imposed by the Board of Inquiry. The CEMP shall be provided to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to the commencement of works to certify compliance and consistency with the conditions. Construction shall not commence until certification is obtained.

*Advice note: For clarity the CEMP will be updated and finalised in accordance with the conditions. Any amendments will be limited to reflecting the requirements of the conditions, specifying personnel, and completing the Environmental Risk Register.*

*Advice Note: Particular care must be taken with development and operation of Construction Yard 7. When the CEMP is being updated and finalised, consideration must be given to the contents of the draft SSCEMP prepared for Construction Yard 7 (Row 41, Schedule A) recognising changes required by inclusion of the ventilation stack in this yard.*

- 12) CEMP.1B For the purposes of staging works, as some works may commence well in advance of others, the NZTA may provide staged or site specific CEMPs for those works to the Major Infrastructure Team Manager, Auckland Council. The NZTA shall consult with the Team

Manager about the need and timing for any other site-specific or staged CEMPs and shall provide any required site-specific or staged CEMPs to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to commencement of such the specific stage (including enabling) or site works.

- 13) CEMP.2 The certification process of the CEMP (and its appendices) shall confirm that the CEMP gives effect to the relevant conditions, as well as those matters in CEMP.6, and that it includes details of:
- (a) Staff and contractors' responsibilities;
  - (b) Training requirements for employees, sub-contractors and visitors;
  - (c) Environmental incident and emergency management;
  - (d) Communication and interface procedures (in accordance with the Communication Plan required under Condition PI.2);
  - (e) Environmental complaints management (including the procedures required under Condition PI.4);
  - (f) Compliance monitoring;
  - (g) Reporting (including detail on the frequency of reporting to the Auckland Council);
  - (h) Environmental auditing; and
  - (i) Corrective action.
- 14) CEMP.3 The management of key environmental effects associated with the construction phase of the Project is detailed within environmental management plans that are included in the CEMP as appendices. This suite of management plans as shown on Figure CEMP.A comprises:
- (a) Construction Noise and Vibration Management Plan (CNVMP);
  - (b) Construction Air Quality Management Plan (CAQMP);
  - (c) Erosion and Sediment Control Plan (ESCP);
  - (d) Temporary Stormwater Management Plan (TSMP);
  - (e) Ecological Management Plan (ECOMP);
  - (f) Groundwater Management Plan (GWMP);
  - (g) Settlement Effects Management Plan (SEMP);
  - (h) Contaminated Soils Management Plan (CSMP);
  - (i) Hazardous Substances Management Plan (HSMP);
  - (j) Archaeological Site Management Plan (ASMP);
  - (k) Construction Traffic Management Plan (CTMP);
  - (l) Concrete Batching and Crushing Plant Management Plan (CBCPMP);
  - (m) Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP) (to be prepared in accordance with Condition CEMP.15);
  - (n) Waste Management Plan (to be prepared in accordance with Condition CEMP.10) ; and
  - (o) Temporary Construction Lighting Management Plan (to be prepared in accordance with Condition L.2).
- 15) CEMP.6 The finalised CEMP shall include specific details on demolition, construction and management of all works associated with the Project. The certification process of the CEMP shall confirm that the CEMP includes details of the following:
- (a) Details of the site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
  - (b) The location of large notice boards that clearly identify the NZTA and the Project name,

- together with the name, telephone, email address and address for service of the site or Project manager and the community liaison person;
- (c) An outline construction programme of the work indicating in particular likely time periods for road closures and anticipated traffic diversion effects;
  - (d) The hours of work, which should reflect the need to ensure that residents enjoy reasonable freedom from noisy or intrusive construction activity in their neighbourhood at night, on Sundays and during public holidays;
  - (e) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/ storage of rubbish, storage and unloading of building materials and similar construction activities;
  - (f) Location of worker's offices and conveniences (e.g. porta-loos);
  - (g) Procedures of controlling sediment run-off, dust and the removal of soil, debris and demolition and construction materials from public roads or places. Dust mitigation measures should include use of water sprays to control dust nuisance on dry or windy days;
  - (h) Methods to stabilise ingress and egress points to construction sites, to the standard required by ARC Technical Publication 90 (Nov 2007);
- 16) CEMP.10 The NZTA shall finalise and implement the Hazardous Substances Management Plan (HSMP), through the CEMP (as per Condition CEMP.1), submitted with this application, prior to works commencing on site. The certification process of the CEMP shall confirm that the HSMP clearly identifies the requirements for proper storage, handling, transport and disposal of hazardous substances during the construction phase of the Project and confirm that there shall be no storage of explosives on the Project site.
- 17) CEMP.11 The NZTA shall develop and implement a Waste Management Plan in accordance with the waste management principles, controls and methods set out in the CEMP. The Plan shall be provided to the Major Infrastructure Team Manager, Auckland Council and be implemented throughout the entire construction period.
- 18) CEMP.15 The NZTA will be responsible for all service relocations required for construction of the Project. The NZTA shall liaise with the providers of infrastructure service networks (including, but not limited to water, gas, stormwater, wastewater, power and telecommunications), and private property owners with on-site services to develop methodologies and timing for necessary services relocation required for the Project, with the objective of minimising disruption to the operation of these service networks and on-site services.
- Advice note:*
- (a) *It is noted that if separate consents are required for relocations for any services of network utility operators or landowners, such consents will be obtained before construction commences in the relevant area, and any effects of those relocations would be considered at that time. The same applies to any alteration of consents if required.*
  - (b) *Network infrastructure owned and operated by Watercare Services is located within the designations. An operating agreement will be developed by the NZTA and Watercare Services which will include appropriate notification and access protocols where works are to be undertaken by either network operator on or adjacent to Watercare Services infrastructure within the designations.*
- 19) PI.1 A community liaison person shall be appointed by the NZTA for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the Project. The liaison person's name and contact details shall be

made available in the CEMP and on site signage by the NZTA. This person must be reasonably available for on-going consultation on all matters of concern to affected parties arising from the Project.

- 20) PI.2 The NZTA shall prepare and implement a Communications Plan that sets out procedures detailing how the public, Ministry of Social Development, Housing New Zealand Corporation and other organisations representing the particular demographic characteristics of the community (including but not limited to Primary Health Organisations, general practitioners, youth, education organisations, aged care groups and groups representing ethnic and migrant communities) will be communicated with throughout the construction and monitoring periods (as prescribed in the designation and consent conditions).

In preparing the Communications Plan, the NZTA will liaise with Auckland Council to access its community liaison databases. The Communications Plan will include details of:

- (a) The site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- (b) In accordance with these Conditions, the database of the key construction activities and monitoring requirements that are the subject of the Communications Plan;
- (c) The database of stakeholders and residents who will be communicated with;
- (d) Communication methods, an assessment of how these methods reach the different audience/stakeholder groups (including those methods set out in Condition CEMP.6), and detail on when each of these methods will be used (e.g. regular communication or event specific methods);
- (e) The appointed specialist in Environmental and Occupational Medicine, including contact details (as per Condition SO.13);
- (f) Any stakeholder specific communication plans required; and
- (g) Monitoring and review procedures for the Communications Plan.

The Communications Plan shall be written in accordance with the external communication procedures set out in the CEMP and provided at least 20 working days prior to construction commencing, to the Major Infrastructure Team Manager, Auckland Council, Working Liaison Group and the Community Liaison Group(s) established by Condition PI.5. The structure of the communication groups set out in these conditions is attached as Figure PI.A.

- 21) PI.5 The NZTA shall establish Community Liaison Group(s) at least two months prior to construction commencing in each of the following key construction areas:

- (a) Te Atatu (including the SH16 Causeway)
- (b) Waterview (including works to St Lukes on SH16 and on the Waterview Estuary and Causeway Bridges)
- (c) Owairaka

and hold regular meetings (at least three monthly) throughout the construction period and up to 24 months following construction completion relevant to these areas (or less if the members of the Group agree), so that on-going monitoring information can continue to be disseminated.

The Community Liaison Group(s) shall be open to all interested parties within the Project area including, but not limited to the following groups:

- (a) Auckland Council and Auckland Transport;
- (b) Educational facilities within the Project area (including schools, kindergartens, childcare facilities and Unitec Institute of Technology);
- (c) Relevant community/ environmental groups (including but not limited to Friends of Oakley Creek, Star Mills Preservation Group, Cycle Action Auckland and

representatives from those organisations identified in the Communications Plan (as required by Condition PI.2) and local residents;

- (d) Department of Conservation;
- (e) Local Boards;
- (f) Iwi groups with Mana Whenua;
- (g) Public transport providers; and
- (h) Housing New Zealand Corporation.

*Advice note: The purpose of the Community Liaison Group(s) is to provide a regular forum through which information about the Project can be provided to the community, and an opportunity for concerns or issues to be raised.*

- 22) CNV.1 The NZTA shall finalise and implement through the CEMP, a Construction Noise and Vibration Management Plan (CNVMP) throughout the entire construction period of the Project.

The CNVMP shall describe the measures adopted to meet:

- (a) the noise criteria set out in Conditions CNV.2 and 3 below;
- (b) the vibration criteria set out in Condition CNV.4 below; or
- (c) where (a) or (b) cannot be met, the process that will be followed to appropriately mitigate noise and vibration effects including methods that may be applied outside the designation.

The CNVMP shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to construction activities being undertaken for review and certification that the CNVMP, as a minimum, addresses the following:

- (i) Construction noise and vibration criteria (Conditions CNV.2, CNV.3, and CNV.4);
- (ii) Hours of operation, including times and days when noisy and/or vibration inducing construction activities would occur;
- (iii) Machinery and equipment to be used;
- (iv) Vibration testing of equipment to confirm safe distances to buildings prior to construction;
- (v) Preparation of building condition surveys of critical dwellings prior to, during and after completion of construction works;
- (vi) Roles and responsibilities of personnel on site;
- (vii) Construction operator training procedures;
- (viii) Methods for monitoring and reporting on construction noise and vibration;
- (ix) A hierarchy of mitigation options that will be assessed for the Project noise mitigation, including alternative strategies where full compliance with the relevant noise and/or vibration criteria cannot be achieved;
- (x) Management schedules containing site specific information;
- (xi) Measures for liaising with and notifying potentially affected receivers of proposed construction activities and the potential for noise and vibration effects, specifically:
  - PPFs located within a horizontal distance of 35 metres of underground excavation works, along the tunnel alignment shall receive prior notification not greater than 7 days (and not less than 24 hours) prior to the commencement of works.
  - Methods for ensuring residents affected by night works (within 100m of the construction site night works, as defined on the maps (refer Schedule A,



Row 35) are notified of such works (i.e. any works during the hours of 20:00 to 06:30) at least 5 days prior to the commencement of any such work.

- The maps showing PPFs to be notified of night works (refer Schedule A, Row 35, shall be reviewed and included within the CNVMP.

- (xii) Methods for receiving and handling complaints about construction noise and vibration;
  - (xiii) Measures for preventing the occurrence of rogue fly rock, including management of charge weights and face loading procedures, stemming of charge holes and profiling of the face to maintain minimum burden (face cover);
  - (xiv) Investigations on the practicability of implementing permanent noise mitigation works for construction mitigation (as per Condition CNV.7);
  - (xv) Investigations of the practicability of implementing Building Modification mitigation, as required in accordance with Conditions ON.6 and ON.11, prior to commencement of construction within 100m of the relevant PPFs (including those on the Unitec site); and
  - (xvi) The process for developing Site Specific Noise Management Plans (SSNMP), in accordance with the SSNMP Flow Chart (refer Schedule A, Row 36), including templates and a certification process for the Major Infrastructure Team Manager, Auckland Council (in accordance with Condition CNV.13) to confirm the process of SSNMP review of noise mitigation options where, the modelled/predicted levels or subsequent actual levels exceed the criteria in Conditions CNV.2 and/or CNV.4.
- 23) V.11 Prior to commencement of works adjacent to Traherne Island, the NZTA shall employ a suitably qualified and experienced plant translocation expert to uplift and protect all areas of *Mimulus repens* on Traherne Island that will be affected by the work. The *Mimulus repens* shall be relocated to suitable and safe habitat away from the works area, or otherwise held and protected for the duration of the works in the vicinity of their original location and be replanted back at that location (or in close proximity to it) upon completion of the works. The location of the recipient sites will be determined in consultation with the Department of Conservation and in general accordance with the Traherne Island Natural Heritage Restoration Plan (2009 – 2014). Trials shall be undertaken to identify appropriate recipient sites, with these trial sites being monitored for a period of no less than 5 years, or until their failure. Where possible, recipient sites shall be located in currently weed-free areas. Where recipient sites may potentially be affected by weeds, they shall be subject to an on-going weed management plan. Should translocation attempts fail at all trial sites then the NZTA, in consultation with DOC, shall determine an alternative appropriate form of mitigation.
- 24) V.17 Prior to commencement of works adjacent to or on Traherne Island, the NZTA shall employ a suitably qualified and experienced ecologist for the preparation of a Traherne Island Weed and Pest Management Plan. The Plan shall be prepared in consultation with the Department of Conservation and be submitted to the Auckland Council for approval at least 20 working days prior to construction commencing.
- 25) A.1 The NZTA shall finalise, and implement through the CEMP, ECOMP submitted with this application to include the matters set out in Conditions A.2 to A.6.
- 26) ARCH. Advice Note *Any archaeological sites within the area affected by the Project shall not be modified or disturbed in any way unless written authorisation has been obtained from the NZ Historic Places Trust.*
- 27) C.1 The NZTA shall provide to the Major Infrastructure Team Manager, Auckland Council plans and drawings (including dimensioned, cross sections, elevations and site plans of all areas

of proposed reclamation (including associated permanent and temporary CMA occupation), permanent structures and temporary structures) at least 20 working days before the proposed date of commencement of the construction of the reclamation, bridge piers or temporary structure.

- 28) M.1 The NZTA shall finalise and implement through the CEMP, the ECOMP submitted with this application. The ECOMP shall be revised to accurately reflect the conditions of this consent and changes to the details of construction processes prior to construction commencing. The ECOMP shall include, but not be limited to, details of:
- (a) Monitoring of marine habitats and ecological values;
  - (b) Trigger event criteria for undertaking additional monitoring;
  - (c) Procedures for responding to accidental discharges to the marine environment;
  - (d) Complaints investigation, monitoring and reporting; and
  - (e) The identification of staff and contractors' responsibilities.

### CONSTRUCTION CONDITIONS

- 29) CEMP.4 The CEMP shall be implemented and maintained throughout the entire construction period.
- 30) CEMP.5 A copy of the CEMP shall be held on each construction site at all times and be available for inspection on request by the Auckland Council.
- 31) CEMP.8 All storage of material and equipment associated with the construction works shall take place within the boundaries of the designation.
- 32) CEMP.12 The CEMP shall be reviewed by the NZTA at least annually or as a result of a material change to the Project. The review shall take into consideration:
- (a) Compliance with designation and consent conditions;
  - (b) Any changes to construction methods;
  - (c) Key changes to roles and responsibilities within the Project;
  - (d) Changes in industry best practice standards;
  - (e) Changes in legal or other requirements;
  - (f) Results of inspections, monitoring, incidents, corrective actions, internal or external assessments; and
  - (g) Public complaints.
- A summary of the review process undertaken shall be kept by the NZTA, provided annually to the Major Infrastructure Team Manager, Auckland Council and made available (with any related data) to the Auckland Council upon request.
- 33) CEMP.13 Following the review process (as described in Condition CEMP.12), the CEMP may require updating. Any material change proposed to the CEMP (including appended Management Plans) shall be submitted for approval to the Major Infrastructure Team Manager, Auckland Council at least 10 working days prior to the proposed changes taking effect.'
- Advice Note: Material change will include amendment to any base information informing the CEMP or any process, procedure or method of the CEMP (such as the environmental constraints map, compliance monitoring process, complaints procedure or mitigation / remedial methods identified) which has the potential to increase adverse effects on a particular value. For clarity changes to personnel and contact schedules do not constitute a material change.*
- 34) PI.3 At least 15 working days prior to the commencement of construction, and at 15 working day intervals thereafter, or as required depending on the scale of works and effects on the

community, advertisements will be placed in the relevant local newspapers and community noticeboards (as identified in Condition CEMP.6(b)) detailing the nature of the forthcoming works, the location of the forthcoming works and hours of operation. All advertisements will include reference to a 24 hour toll free complaints telephone number. Where relevant, advertisements will also include but not be limited to details of:

- (a) Any traffic disruptions or controls or changes to property access, pedestrian/ cycle routes and bus stops; and
- (b) Any other construction activities, including night time works, blasting, and structure-borne noise, as identified in the conditions.

35) PI.4 The NZTA shall manage, investigate and resolve (as appropriate) all complaints for the duration of the construction works in accordance with the environmental complaints section of the CEMP. The implementation strategy for complaints includes:

- (a) A 24 hour toll free telephone number and email address, which shall be provided to all potentially affected residents and businesses. The number shall be available and answered at all times during the entire duration of the works for the receipt and management of any complaints. A sign containing the contact details shall be located at each site specific work activity;
- (b) The NZTA shall maintain a record of all complaints made to this number, email or any site office, including the full details of the complainant and the nature of the complaint;
- (c) Upon receiving a complaint, within 10 days of complaint receipt, a formal written response will be provided to the complainant and Auckland Council;
- (d) The NZTA shall undertake corrective action where necessary to resolve any problem identified. All action taken and relevant information shall be documented. For the avoidance of doubt, 'where necessary' refers to where the works are not being carried out in accordance with conditions of this designation;
- (e) Where issues and complaints about effects cannot be resolved through the CEMP complaints management process, a meeting shall be held between the NZTA, the complainant and the Auckland Council representative(s) to discuss the complaint and ways in which the issue may be resolved. If parties cannot agree on a resolution, an independent qualified mediator will be appointed, agreeable to all parties and at the shared cost of all parties, to undertake mediation of the dispute or concerns; and
- (f) All information collected in Conditions PI.4 (b), (c) and (d) shall be detailed in a Construction Compliance Report (including the means by which the complaint was addressed, whether resolution was reached and how the response was carried out) prepared by the NZTA. This Report shall be submitted to the Major Infrastructure Team Manager, Auckland Council on a quarterly basis commencing at the beginning of the works and for the entire duration of construction.

36) PI.6 The Community Liaison Group(s) shall be provided opportunities to review and comment on the following (amongst other things):

- (a) The Outline Plan of Works detailing designs for the northern and southern ventilation buildings and stacks (the outcomes of this consultation will be reported in accordance with the processes required in DC.8(n) and DC.9(k));
- (b) The Open Space Restoration Plans (as required by Condition OS.3);
- (c) Finalisation and amendment to Urban Design and Landscape Plans (UDL Plans) (as required by Condition LV.1);
- (d) The Oakley Inlet Heritage Plan (as required by Conditions OS.5(b)(i) and ARCH.6);

- (e) The detail of the Oakley Creek restoration (as required by Condition STW.20);
- (f) Publicly available results of environmental monitoring as required by the designation and/or these Consents (e.g. air quality monitoring); and
- (g) The finalisation of the STEM assessment required by CEMP.6(o) and a schedule of trees that are required to be removed for consideration of timber use in heritage projects as required by Condition SO.7.

*Advice Note: Attention is drawn to the Vegetation conditions concerning identification and protection of Significant Vegetation and Valued Vegetation.*

- (h) Detailed design features of the Te Atatu underpass (e.g. lighting and architectural treatment).

37) CNV.2 Except where certified by the Council through the SSNMP (in accordance with Condition CNV.13), construction noise (excluding noise from blasting Monday to Saturday inclusive) shall be measured and assessed in accordance with NZS 6803:1999 “Acoustics - Construction Noise” and shall comply with the following criteria:

Note: In Condition CNV.2 (T) means a duration between 15 minutes and 60 minutes, in accordance with NZS6803:1999.

(a) Project Construction Noise Criteria: Residential Receivers

Time of week	Time period	Project Construction Noise Criteria (Long Term Construction) dB		
		Sectors 1 to 7	Sectors 8 and 9	All Sectors
		$L_{Aeq(T)}$	$L_{Aeq(T)}$	$L_{AFmax}$
Monday - Saturday	0630-0730	60	45	75
	0730-1800	70	70	85
	1800-2000	65	65	80
	2000-0630	60	45	75
Sundays and Public Holidays	0630-0730	45	45	75
	0730-1800	60	45	85
	1800-2000	45	45	75
	2000-0630	45	45	75

(b) Project Construction Noise Criteria: Commercial and Industrial Receivers

Time period	Project Construction Noise Criteria (Long Term Construction) dB
	$L_{Aeq(T)}$
0730-1800	70
1800-0730	75

(c) Project Construction Noise Criteria: Internal Structure-borne Noise from tunnelling for Residential Receivers

Time period	Project Construction Noise Criteria Inside
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0600-2200	35 dB $L_{Aeq(T)}$	All habitable rooms
2200-0600	30 dB $L_{Aeq(T)}$	Bedrooms

(d) Project Construction Noise Criteria: Internal noise for Licensed Educational Facilities

Time period (School Days)	Project Construction Noise Criteria Inside	
Teaching Hours	45 dB $L_{Aeq(T)}$ or existing, whichever is the higher	Classrooms, library, offices, teaching, laboratories, manual arts, workshops
Teaching Hours	40 dB $L_{Aeq(T)}$ or existing, whichever is the higher	School hall, lecture theatres

Note: In Condition CNV2(d) "Teaching hours" means:

Primary schools and Kindergartens: 9am to 3pm

Unitec: 8am to 9pm

- 38) CNV.7 Where practicable, permanent (traffic) noise barriers, required in any Sector as Detailed Mitigation Options for operational noise following completion of the Project (in accordance with Conditions ON.3 to ON.5) shall be erected prior to noise generating construction works commencing. Where this is not practicable, temporary noise mitigation measures shall be implemented in accordance with the CNVMP, prior to noise generating construction works commencing.
- 39) CNV.8 Pile driving or pile removal shall not be undertaken at night (i.e. during the hours of 20:00 – 06:30).
- 40) CNV.9 The concrete batch plants, rock crushing plants and the loading bays and conveyors for such plants shall be fully enclosed.
- 41) CNV.13 SSNMPs (required by Condition CNV.1(xvi)) above, shall be submitted to Major Infrastructure Team Manager, Auckland Council for review and certification at least 7 working days prior to the proposed works commencing. A decision will be provided by the Council within 5 working days of receipt of the SSNMP.
- Works will not commence until certification is received from the Major Infrastructure Team Manager, Auckland Council. The Council may, at its discretion, waive the requirement for SSNMPs to be submitted to the Council where an SSNMP is required.
- If monitoring shows that levels specified in a SSNMP are being exceeded, work generating the exceedance will stop and not recommence until further mitigation is implemented in accordance with an amended SSNMP certified by Council.
- Advice note: It is accepted that the criteria of CNV.2 and CNV.4 may not be met at all times, but that the NZTA will take all practical steps to achieve compliance, taking into account the hierarchy of mitigation options outlined in Condition CNV.1 (ix).*
- 42) A.2 The NZTA shall provide temporary high tide roosting structure(s) adjacent to the Causeway during construction, in accordance with the ECOMP, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council. The temporary bird roosts shall be sized in accordance with the ECOMP, and located within the Waterview Estuary adjacent to the southern side of the causeway and in the vicinity of the existing Causeway bridge.

- 43) A.5 Vegetation clearance at Traherne Island shall occur outside the bird breeding season of September to December. Elsewhere, vegetation clearance shall occur outside the bird breeding season of September to December where practicable.
- 44) ARCH.3 If any archaeological sites, including human remains are exposed during site works, then the following procedures shall apply:
- (a) Immediately it becomes apparent that a possible archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease;
  - (b) The site supervisor shall immediately secure the area in a way that ensures that any artefacts or remains are untouched and notify the Project archaeologist;
  - (c) The Project archaeologist shall inspect the site to assess the relevance of the find, and then the Auckland Council shall be advised of the significance;
  - (d) If the site is confirmed to be an archaeological site by the Project archaeologist, the site supervisor shall then notify tangata whenua, the New Zealand Historic Places Trust, and the Auckland Council that an archaeological site has been exposed so that appropriate action can be taken;
  - (e) In the case of human remains, the NZ Police shall be notified.
- 45) C.2 Construction shall be undertaken in accordance with the construction methodology detailed in the application, specifically Technical Report G.23 *Coastal Works* and Technical Report G.22 *Erosion and Sediment Control Plan*. The construction methodology shall include:
- (a) The use of temporary coffer dams to create dry working areas;
  - (b) Realignment of sections of existing low-tide channels in Oakley inlet and Waterview Estuary that will be directly affected by the reclamation works;
  - (c) Removal of mangroves to provide construction and ground-treatment access, placement of temporary coffer dams and to facilitate natural channel migration in the Whau River side drainage channel (east of Rosebank Domain);
  - (d) Installation or removal works to be undertaken at the best practicable time to minimise potential sediment disturbance.
- 46) C.3 The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council in writing of the proposed commencement date of the reclamation, structures and/or channel realignment works at least 10 working days prior to the proposed start date.
- 47) C.6 The NZTA shall maintain the site in good order and shall remedy all damage and disturbance caused by vehicle traffic, plant and equipment to the foreshore during construction, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.
- 48) C.7 Removal or pruning of vegetation in the CMA shall be limited to the areas of permanent and temporary occupation as shown on the Waterview Connection Project Assessment of Environmental Effects Plan Set F.12 and F.13 submitted with the application (ref Schedule A, rows 13 and 14). Removal of mangroves shall be implemented in accordance with the principles detailed in the Ecological Management Plan.
- 49) M.10 The NZTA shall maintain the coastal marine area free of any gross litter, rubbish and debris during construction.
- 50) M.11 Prior to excavation of sediment from the marine habitat remediation zone (MHRZ), mangrove vegetation will be removed from the sediment and disposed of at an appropriate offsite facility. The excavated sediment shall be stockpiled within an adjacent dry working area. When the sediment is returned to the MHRZ it will be levelled out to tie in with the existing mudflat. Where a routine marine benthic habitat monitoring site is within an area of

MHRZ, additional monitoring of the depth of sediment overlying the improved ground/mudcrete will also be undertaken.

## POST-CONSTRUCTION CONDITIONS

- 51) V.15 Planting along and within the rock revetment of the widened SH16 causeway shall be undertaken by the NZTA at locations in general accordance with the Urban Design and Landscape Plans and planting schedules (Refer Schedule A, Row 17), as identified in those plans under the label "*Rock Armour with Saltwater Revetment Planting*". The planting treatments will be in accordance with the concepts of the ECOMP, Appendix I '*Conceptual Rock Revetment Planting Designs*'.
- 52) C.4 The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council in writing within 10 working days of the completion of each discrete area of reclamation, structures and/or channel realignment works.
- 53) C.5 The NZTA shall supply to the Major Infrastructure Team Manager, Auckland Council and LINZ Hydrographic Services and LINZ Topographic Services Land Information New Zealand, PO Box 5501, Wellington 6145), a complete set of "as built" plans, final topographic and bathymetric data, and appropriate certification confirming that the new reclamations, structures and channel realignment works have been built in accordance with sound engineering practice, within three months of the completion of the reclamation works.
- 54) C.8 The NZTA shall ensure the removal of all equipment, erosion and sediment control measures, surplus sediment and construction materials from the CMA within 20 working days following the completion of the construction works, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.

## MONITORING

- 55) A.3 The NZTA shall employ a suitably qualified ecologist to undertake monitoring of the roosting areas located at:
- (a) The existing high tide roost in Harbourview-Orangihina Park; and
  - (b) The temporary construction roosting structure(s) pursuant to Condition A.2.
- Monitoring shall be undertaken on a monthly basis, with a monitoring report prepared on a quarterly basis. The monitoring report shall be made available to the Major Infrastructure Team Manager, Auckland Council and Department of Conservation upon request.
- 56) A.4 Should the monitoring results indicate that the roosting sites have been abandoned, consultation shall be undertaken with the Department of Conservation and the Major Infrastructure Team Manager, Auckland Council to determine the need for and type of further management strategies (if any) required.
- 57) C.16 On the northern side of the Causeway, from just before the commencement of construction in the CMA for each section of works, until 6 months after completion of each section, the NZTA shall undertake every two (2) months or after a severe wave-storm, intertidal beach profile surveys down to the spring low-tide mark along offshore-directed transects (one off the centre of the construction section and one either side at 20 m away from the ends of the construction site) and photographs documenting the physical state of the seabed around the perimeter of the cofferdam. The monitoring information shall be made available to the

Auckland Council. If the monitoring identifies that excessive erosion or accretion has occurred from corner or end effects of the construction section, as confirmed by a coastal processes expert, further seabed erosion control measures or a sediment by-passing method (for accretion) to reduce localised effects seaward of the temporary occupation or permanent occupation designation (whichever applies) shall be implemented as soon as practicable. Details of the proposed measures or methods shall be made available to Auckland Council prior to implementation.

- 58) M.2 The NZTA shall engage a suitably qualified ecologist to undertake a marine habitat monitoring programme, as described in Conditions M.3 to M.6.
- 59) M.3 The marine benthic habitat monitoring programme shall be undertaken every 6 months:
- (a) At least 12 months prior to construction commencing, to allow for two baseline surveys to be undertaken;
  - (b) During construction; and
  - (c) For a maximum of 3 years following completion of the Project, or for a lesser time if the monitoring indicates no significant effects, as agreed with the Major Infrastructure Team Manager, Auckland Council.
- 60) M.4 The marine benthic habitat monitoring programme shall be undertaken in accordance with the details set out in the ECOMP and include:
- (a) Sampling of the marine invertebrate community composition (collection of sediment cores to a depth of approximately 15cm);
  - (b) Sampling of the sediment surface (top 2cm) for sediment grain size; and
  - (c) Sampling of the sediment surface (top 2cm) for sediment quality (analysis of the concentration of copper, lead, zinc and polycyclic aromatic hydrocarbons).
- 61) M.5 The marine benthic habitat monitoring shall be undertaken within sampling grids (50m x 30m) broadly established at the following locations:
- (a) Two locations within Oakley Inlet;
  - (b) Four locations within Waterview Estuary; and
  - (c) Four locations north of the Causeway.
- Specific locations and experimental design shall be detailed in the ECOMP, and the design of the monitoring programme will be based on the *Estuarine Environmental Assessment and Monitoring: A National Protocol (Cawthron 2002)*.
- 62) M.6 The NZTA shall undertake additional marine habitat monitoring in the event of a 'trigger event' for marine ecology habitats. For the purposes of this consent, a 'trigger event' for marine ecology habitats is defined in the ECOMP.
- 63) M.7 The NZTA shall review the marine habitat monitoring results (pursuant to Conditions M.3 to M.6) and in the event that potential adverse effects are identified, the NZTA shall develop and implement appropriate contingency plans and/or remedial measures.

## REPORTING

- 64) M.8 The marine benthic habitat monitoring results shall be compiled by the NZTA, and a report provided to the Major Infrastructure Team Manager, Auckland Council every 6 months.



## VARIATION TO THE AUTHORITY TO CARRY OUT A PUBLIC WORK IN THE MOTU MANAWA-POLLEN ISLAND MARINE RESERVE

<b>Reason for this briefing</b>	The New Zealand Transport Agency (the Agency) has requested the joint consent of the Minister of Transport and the Minister of Conservation to grant a variation to an "Authority to Carry out a Public Work in the Motu Manawa-Pollen Island Marine Reserve" (the Authority). Previous Ministers of Transport and Conservation granted the Authority on 11 August 2011, which was subsequently varied in 2013.
<b>Action required</b>	To consider and make a decision on the Agency's application for a variation to the Authority. A joint Ministry of Transport and Department of Conservation submission is attached to assist you in this process and record your decision.
<b>Deadline</b>	1 June 2017.
<b>Reason for deadline</b>	To finalise the variation.

### Contact for telephone discussion (if required)

Name	Position	Telephone		First contact
		Direct line	After hours	
Jennifer Din	Solicitor	021 050 6036		✓
John Edwards	Principal Adviser	021 133 3275		
David Bowden	Chief Legal Adviser	021 138 1110		

### MINISTER'S COMMENTS:

<b>Date:</b>	10 May 2017	<b>Briefing number:</b>	OC04726
<b>Attention:</b>	Hon Simon Bridges (Minister of Transport)	<b>Security level:</b>	In Confidence

### Minister of Transport's office actions

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> <i>Noted</i>        | <input type="checkbox"/> <i>Seen</i>                 | <input type="checkbox"/> <i>Approved</i>            |
| <input type="checkbox"/> <i>Needs change</i> | <input type="checkbox"/> <i>Referred to</i>          |   |
| <input type="checkbox"/> <i>Withdrawn</i>    | <input type="checkbox"/> <i>Not seen by Minister</i> | <input type="checkbox"/> <i>Overtaken by events</i> |

## **Purpose of report**

1. This cover report provides an overview of the attached joint submission from the Ministry of Transport and Department of Conservation. The attached submission seeks your and the Minister of Conservation's decision on whether to vary an authority under the Marine Reserves Act 1971 (the Authority). The Authority was granted to the New Zealand Transport Agency (the Agency).

## **Background**

2. In August 2011, previous Ministers of Transport and Conservation granted the Agency an Authority to carry out public works in the Motu Manawa - Pollen Island Marine Reserve (the reserve). The Authority was required under the Marine Reserves Act 1971 to allow the widening of State Highway 16 in Auckland as part of the Waterview Connection, which is a road of national significance.
3. In 2013, the Authority was subsequently varied as a result of a change to the location and extent of works within the reserve.
4. The Agency is now seeking the joint consent of the Minister of Transport and the Minister of Conservation to further vary the Authority. A joint submission from the Department of Conservation and the Ministry of Transport, along with other relevant documents are attached to help you make an informed decision. The Minister of Conservation has also been provided with the same bundle of documents to make an informed decision on the application.

## **Next steps**

5. Based on your consideration of the attached submission, you are able to grant or decline the Agency's application for a variation. The report advises you to grant the application. You may also grant the application with conditions. Should you wish to do so, you and the Minister of Conservation would need to jointly agree to any conditions. If you consider that any conditions are necessary, then you may wish to meet with the Minister of Conservation. Similarly, the Minister of Conservation may wish to meet with you, if they consider any conditions are necessary.
6. Should you decide to approve the application, and the Minister of Conservation independently reaches the same view, you will then be invited to meet with the Minister of Conservation to sign the formal variation and a letter to the Agency enclosing the variation to the Authority. If you decide to decline the variation, then we will send you a draft letter advising the Agency of the refusal of its request, for your signature.

## **Risks**

7. Although there are risks with your decision to consent to or decline the application, we consider the risks are low. If you provide consent, there is a risk of judicial review by either the Forest and Bird Protection Society Inc or any other interest groups. If you decline the application, the Agency could also ask for a judicial review challenging whether your decision was reasonable in the circumstances, took account of all relevant matters, and was procedurally fair. As you will see in the attached submission, the overall assessment is that the risks of challenge for this decision are low.
8. All relevant information is before you to enable you to make an informed decision.

**Recommendations**

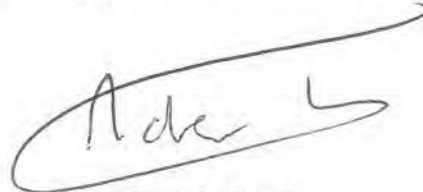
9. We recommend that you:

- (a) **note** that the Agency has made an application for variation to the Authority granted under the Marine Reserves Act 1971 on 11 August 2011
- (b) **note** that all the recommendations in the attached submission are necessary to show that you and the Minister of Conservation have properly exercised your statutory power of decision
- (c) **note** that in considering the application, you are doing so independently from the Minister of Conservation
- (d) **note** that should you decide to approve the application, and the Minister of Conservation independently reaches the same view, you will then be invited to meet with the Minister of Conservation to sign the formal variation and a letter to the Agency enclosing the variation to the Authority
- (e) **consider** the attached submission to you and the Minister of Conservation on the Agency's request to further vary the Authority granted under the Marine Reserves Act 1971.

Yes/No



Jennifer Din  
Solicitor



Andrew Jackson  
Deputy Chief Executive

**MINISTER'S SIGNATURE:**



**DATE:** 30 May 2017



Departmental Briefing

To: Minister of Conservation and the  
 Minister of Transport

Date: 8 May 2017

<b>Subject</b>	The New Zealand Transport Agency (the Transport Agency) request to further vary the works authority granted in 2011 under the Marine Reserves Act 1971 to undertake public works in the Motu Manawa – Pollen Island Marine Reserve (the Marine Reserve) in Auckland.
<b>Action sought</b>	Consent to the further works and sign the variation
<b>Time frame</b>	1 June 2017

<b>Paper type:</b>	Statutory	<b>Department's priority:</b>	High
<b>Risk assessment:</b>	Forest & Bird and iwi raised no issues and effects are not significant.	<b>Level of risk:</b>	Low

**Contacts for telephone discussion (if required)**

	Name	Position	Telephone	
1	Darcy Liddell	Permissions Advisor	07 8581018	
2	Kevin Smith	Solicitor	07 8581059	
3	Anna Ginnaw	Permissions / Statutory Land Management Manager (Acting)	07 858 1050	027 536 6957
4	Jennifer Din	Solicitor Ministry of Transport	021 0506036	
5	John Edwards	Principal Adviser Ministry of Transport	021 1333 275	

## Executive summary

1. The Waterview Connection Project in Auckland involved the upgrade of the State Highway 16 Causeway. The upgrade involved public works within the Motu Manawa-Pollen Island Marine Reserve ("the Marine Reserve"). These were approved in 2011, with a variation approved in 2013.
2. Due to design refinements and concern over a retaining wall failure, changes to approved works have occurred. The changes comprise increases in the permanent and temporary occupation of the Marine Reserve, construction of a fill embankment shared path, and emergency works relating to a retaining wall within the Reserve.
3. The Transport Agency therefore requested a further variation to cover the changes. This paper seeks your joint approval of a draft variation to replace the 2013 variation, formally authorising the altered works. The Marine Reserves Act ("the Act") requires your joint consent to the works (section 4(3)).
4. Overall, the latest changes result in a reduction in the footprint of the works within the Marine Reserve from that approved under the 2011 Works Authority. Most of the permanent occupation applied for lies within the already-approved and constructed temporary occupation.
5. Section 4(3) of the Act does not contain any specific criteria against which the Transport Agency's variation application is to be assessed. Rather, it requires you to have regard to the purpose of the relevant legislation, and weigh the potential benefits and adverse effects of the variation.
6. Officials consider the further works are not inconsistent with relevant legislation. In terms of the relevant benefits and detriments, in all cases the adverse effects range from being less than currently approved, to minor.
7. The Department of Conservation considered the application and the Deputy Director General-Operations endorsed approval of the application. The Department considered the impacts of the latest changes to public works on the natural values, habitats and marine life of the Marine Reserve and the proposed measures to address the impacts.
8. Ministry of Transport officials have also assessed the application taking cognisance of the land transport legislation, and consider it is appropriate to authorise the further variation.
9. The risks of approving the further variation are low. Forest & Bird and iwi were consulted, with no opposition raised. The changes to the works do not have significant effects.

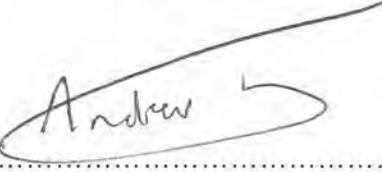
It is recommended that you –

		Minister of Conservation decision	Minister of Transport decision
(a)	<u>Note</u> that the New Zealand Transport Agency has requested your joint consent to further vary the Authority to undertake public works within the Motu Manawa Pollen Island Marine Reserve associated with the widening of the State Highway 16 causeway.	( yes / no )	(yes / no )
(b)	<u>Note</u> that section 4(3) of the Marine Reserves Act 1971 requires you to undertake a joint decision making process in regard to the application to further vary the Authority.	( yes / no )	(yes / no )
(c)	<u>Note</u> that the latest changes to the public works will still result in an overall reduction in the area of the Marine Reserve removed permanently from approximately 3.64 hectares to 2.85 hectares compared to the 2011 Works Approval.	( yes / no )	(yes / no )
(d)	<u>Note</u> that the Department of Conservation has assessed the application and concluded that to approve the public works would be consistent to the purpose of the Act.	( yes / no )	(yes / no )
(e)	<u>Note</u> that Ministry of Transport has considered the assessment by the Department of Conservation and considers that making the temporary variations permanent will have little or no effect on the policy imperatives of the land transport legislation. The Department of Conservation's assessment provides that making the variation permanent will have minor environmental impacts, and that removing the temporary variations will result in greater loss to the natural environment. Based on this assessment, the Ministry of Transport considers it appropriate to make the variations permanent. It is agreed that on balance, the expected benefits due to the increase in footprint of 0.9 hectares will outweigh any effects of the permanent removal of 2.85 hectares from the Marine Reserve.	( yes / no )	(yes / no )
(f)	<u>Note</u> that the New Zealand Transport Agency were provided an opportunity to comment on the Department of Conservation report and they only questioned the need for replacement plantings at the Rosebank Fill Embankment. A condition is proposed to help protect and preserve the ecology and environment of the Marine Reserve by requiring locally sourced plantings.	( yes / no )	(yes / no )
(g)	<u>Note</u> that the Ministry of Transport have jointly been involved with the Department of Conservation in preparing this briefing.	( yes / no )	(yes / no )

(h)	<p><u>Consent</u> to the application by New Zealand Transport Agency to further vary the Authority to Carry out a Public Work in the Marine Reserve and grant an authorisation to vary under section 4 (3) of the Marine Reserves Act 1971:</p> <p><u>Sign</u> the Variation of the Authority to the New Zealand Transport Agency at Attachment 4 provided you are satisfied with the conditions.</p>	( yes / no )	( <u>yes</u> / no )
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 .....  
 Mike Slater  
 Deputy Director-General Operations  
 for Director-General

..... / ..... / .....  
 Honourable Maggie Barry ONZM  
 Minister of Conservation

  
 .....  
 Andrew Jackson  
 Deputy Chief Executive  
 Ministry of Transport

 30 / 5 / 17  
 .....  
 Honourable Simon Bridges  
 Minister of Transport

## **Purpose**

1. The purpose of this paper is to provide information to assist your joint decision on an application made by the Transport Agency pursuant to section 4(3) of the Act to further vary the Authority to undertake public works in the Marine Reserve.

## **Background**

2. A description of the Waterview Connection Project in Auckland and related works approvals within the Motu-Manawa Pollen Island Marine Reserve is at Attachment 1.

## **Comment**

### The application

3. The Transport Agency has made the current application to obtain formal approval of changes to approved works (see copy of application by Causeway Alliance dated July 2016 including revised plans for the public works, under appendix six of the Department of Conservation Report, at Attachment 2). A summary of the latest changes to the public works in the Marine Reserve are in appendix 1 of this report.
4. The application states that not removing the temporary footprint will avoid adverse effects on the Marine Reserve environment and that overall the net footprint of the project will still be reduced, thereby helping to protect and preserve the ecology and environment of the Marine Reserve.

### The Department of Conservation Assessment

5. The Department has assessed the application and endorses it (see the Department of Conservation Report, at Attachment 2).
6. The key environmental impacts resulting from the design changes relate to coastal processes, marine and avian ecology, and stormwater within the Marine Reserve.
7. Impacts on coastal processes within the Marine Reserve relate to geomorphology, hydrodynamic and sediment processes within the coastal and intertidal areas. Any impacts that occur within the Marine Reserve resulting from the latest changes will be largely a result of the emergency works at retaining wall number four, the Rosebank fill embankment, and the temporary stability berm on the northern side of the causeway. Overall, the change in impacts on these coastal processes within the Marine Reserve will range from being less than currently approved, to minor.
8. Marine ecology impacts will include the loss of habitat, sediment disturbance, associated with the construction and operation of the project. The marine ecological assessment undertaken for the latest changes in the proposed works within the Marine Reserve concludes that the impacts on marine ecology will range from being less than currently approved, to minor.
9. Areas within, and surrounding, the Marine Reserve provide unique habitat for several important bird species. The latest changes to the works will not result in any reduction in the diversity of birdlife within and in proximity to the Marine Reserve.
10. No additional conditions to those of the Authority are proposed other than one requiring replacement plantings as the species named *Carex dissita* planted between the Rosebank Fill Embankment and the SH16 motorway is not a locally sourced species.



## **Risk Assessment**

11. There is a low risk that if the application for a Variation to the Authority is granted it could be subject to a judicial review in the High Court either by the Forest and Bird Protection Society Inc and any other interest groups. There is a risk that if the application is declined or deferred it could be subject to a judicial review in the High Court by the Transport Agency. The advice that you have been presented with is consistent with that provided by our experts, and all relevant information is before you to enable you to make an informed decision.

## **Consultation**

12. The applicant consulted with Forest and Bird, Ngati Whatua o Orakei, Te Kawerau A Maki, Ngati Tamaoho Trust, Te Akitai Waiohua Iwi Authority and Te Ara Rangatu o Te Iwi o Ngati Te Ata Waiohua on the proposed design changes and all were of the view that the changes would either be neutral or positive or no comment was received.
13. The Department consulted iwi on the application by providing iwi a copy of it by email on 29/6/16, as per the Iwi Engagement Framework/Tamaki Makaurau iwi contacts list. No responses were received by the 20-working day deadline of 26/7/16.

## **Legislation**

14. The relevant pieces of legislation are: Marine Reserves Act 1971, Hauraki Gulf Marine Park Act 2000, The Government Rounding Powers Act 1989 and The Land Transport Management Act 2003. A description of the relevant provisions of the above legislation is at Attachment 3.

## Decision making process

15. In making a decision on the subject application both of you must have considered the purposes and policy goals of the relevant Acts and weighed alongside each other the detriment to the Marine Reserve and the countervailing benefits in terms of the land transport legislation. Both of you should then make a decision on whether or not to grant consent to the application for the variation subject to any additional appropriate condition(s), if required.
16. Applications under section 4(3) can be declined if, despite any additional conditions and considering the purposes of a marine reserve, the detriments to the Marine Reserve are so significant that the countervailing benefits would not be sufficient to justify giving consent. Section 4 (3) is not intended to allow the policy goals of the Act to be seriously and irretrievably compromised in order to pursue the policy goals of the land transport legislation. The Department of Conservation and Ministry of transport officials consider that approving the application would not be inconsistent with relevant legislation and statutory documents, as set out below, and any detriments of the works will range from being less than currently approved, to minor.

## Assessment under the Marine Reserves Act 1971

17. It is considered that to approve the latest changes to public works in the Marine Reserve would not be inconsistent to the purpose of the Marine Reserves Act.
18. The general purpose of the Act, set out in the long title, is to make provision for the setting up and management of marine reserves in their natural state for scientific study of marine life.

19. Section 3(1) of the Act reinforces this purpose by noting that the preservation of marine reserves for the purpose of scientific study is a matter of national interest.
20. Section 3(2) of the Act contains the more specific management imperatives of marine reserves requiring that:
  - a) They are preserved as far as possible in their natural state.
  - b) The marine life within is as far as possible protected and preserved.
  - c) Their value as the natural habitat of marine life as far as possible is maintained.
  - d) Unless necessary allow for unrestricted public access.
21. The latest changes in public works within the Marine Reserve will result in an overall reduction in permanent works (including reclamation) in the Marine Reserve in comparison to those approved by the 2011 Authority. Furthermore, the proposal needs to be put into context and cognisance needs to be given to the fact that the Project is a Road of National Significance. Additionally, as evident from the Department of Conservation Report, the level of impacts from the latest changes in public works is considered to be no more than minor and in many instances, will avoid impacts from removing works and reinstating with revetment works as required under the 2011 Authority and 2013 variation.
22. In terms of protecting and preserving marine life within the Marine Reserve it is not required to be done at all costs; the proviso is "as far as possible". This qualification anticipates that there may be circumstances, such as is the case here, where marine life could be impacted upon in some way.
23. The areas impacted by the latest changes to public works are predominately intertidal mudflats. Disturbance to the intertidal animals would have been temporary during the period the emergency works and when the Rosebank fill embankment works were undertaken. Mobile marine species inhabiting the affected areas would have moved away and will return in due course. Further, the level of effect would be less than that approved by the 2011 Authority.
24. In terms of the last imperative, it is considered that the public rights of access to the Marine Reserve would not be compromised by the changes to public works within the Marine Reserve.
25. Section 9 of the Act requires the Director-General of Conservation to administer, manage and control marine reserves in accordance with approved general policies, conservation management strategies, and conservation management plans.
26. The Conservation General Policy relevant to this application is Policy 4.4(d). It states on page 25 that:

*"Marine reserves will be managed to be maintained or restored to a natural state as far as possible."*
27. Policy 4.4(d) of the Conservation General Policy reflects the overall management provisions emphasising the policy approach of maintaining or restoring as far as possible the natural state of marine reserves.
28. The proviso "as far as possible", however, envisages there may be circumstances, such as this case; where approval for public works would not undermine the integrity of the management policy.

#### Assessment under the Hauraki Gulf Marine Park Act 2000

29. As noted above, the Marine Reserve forms part of the Hauraki Gulf Marine Park. In consequence, when making your decision on this application, in addition to considering

the provisions of the Marine Reserves Act 1971, you are also required (by section 13 of the Hauraki Gulf Marine Park Act) to "have particular regard" to the provisions of sections 7 and 8 of the Hauraki Gulf Marine Park Act.

30. Sections 7 and 8 requires you to satisfy yourself that the decision meets those of the purposes which are of most relevance, to the extent that this can be achieved in harmony with other relevant considerations applying to the decision you are being asked to make.
31. We consider that approving the application to the latest changes would not be contrary to sections 7 and 8 of the Hauraki Gulf Marine Park Act as they do not alter discharges and monitoring that will enhance the physical resources and life supporting capacity of the Marine Reserve.

#### Assessment under the Land Transport Legislation

32. In 2013, a temporary variation was granted to allow for the widening of State Highway 16. At the time, the variation was considered to be consistent with the policy imperatives of the transport legislation because it would allow highway improvements to enhance safety, reduce congestion and provide enhanced economic outcomes. The widening of State Highway 16 is now complete and these initial transport policy imperatives have been met. Making the 2013 variation permanent will have little or no effect on the countervailing benefits and detriments related to land transport legislation. The Department of Conservation's assessment provided that making the variation permanent will have minor environmental impacts, but that removing the temporary variation would result in greater loss to the natural environment. Based on this assessment, the Ministry of Transport considers it appropriate to make the variation permanent.

#### Assessment under the Auckland Conservation Management Strategy 2014

33. The operative Auckland Conservation Management Strategy 2014 on page 54 states:

*Policy 9.2.2.5 states: Ensure human activities and visitor facilities do not negatively impact on opportunities for scientific research, the natural, historic and cultural values of marine reserves, or other visitors.*

34. The impacts resulting from the design changes on the opportunities for scientific research, marine reserve values and visitors will be less than or the same as currently approved, or minor in regard to the constructed embankment.

#### **Next steps**

35. After going through the process outlined above, if you are minded to grant the application for a further variation we have attached a Variation to the Authority for your signature.

#### **Attachments**

- Attachment 1: Waterview connection project and current approvals to public works within the Motu Manawa-Pollen Island Marine Reserve
- Attachment 2: Department of Conservation Report and Appendices.
- Attachment 3: Description of relevant legislation provisions
- Attachment 4: Recommendation to further vary the Authority

## **Appendix 1 – Summary of the latest changes to the public works in the Marine Reserve**

1. Emergency works in 2014 consisting of coastal rock placed at the base of Retaining Wall No. 4, situated between Patiki and Rosebank on State Highway 16 at the end of the Rosebank Peninsular. The works were constructed to effectively buttress the base of the slope and counterbalance potential failure after heavy rainfall occurred. This had a secondary advantage of coastal rock being placed within part of the Pollen Island Drainage Channel to protect the southern edge of the channel. A total of 50 m<sup>2</sup> of permanent occupation resulted from the emergency works.
2. To permanently occupy the northern side of the Whau River with 12 pile casings left from the temporary staging bridges when the Whau River Bridge was constructed.
3. 840m<sup>2</sup> of additional permanent reclamation is proposed near the Patiki Off-ramp and mostly lies within the already approved and constructed temporary occupation. The temporary occupation was required to be built to the same engineering standards as if it were permanent. By leaving the temporary occupation permanently it will avoid potential adverse environmental effects to the coastal environment from removing it and reconstructing coastal protection works (revetment). Approval is also sought for 150m<sup>2</sup> of additional temporary occupation that was required.
4. A fill embankment shared path in the Rosebank off-ramp area on the southern side of the State Highway 16 motorway and at the same location where the previously approved timber boardwalk was to be constructed. It was identified that the approved boardwalk would be unable to support the vehicle loadings required for Auckland Transport to undertake the necessary maintenance of the shared path (Auckland Transport will own and operate the shared path once complete). The embankment required 1130 m<sup>2</sup> of Coastal Marine Area additional to that currently approved.
5. A 297m<sup>2</sup> increase in reclamation and permanent occupation footprint on the south side of Traherne Island. The increased permanent occupation was required to provide stability to the permanent motorway embankment due to cracking and lateral movement. The change in permanent occupation extends to the approved temporary occupation boundary.
6. An increase in permanent occupation of the Marine Reserve of 6655m<sup>2</sup> on the northern side of the causeway in order to provide more stability as marine sediments were found to be weaker than expected. A temporary stability berm needed to be left permanently together with a new rock revetment with a slope of 1:3.
7. The proposal to increase the permanent occupation by approximately 33.25m<sup>2</sup> out to the approved temporary occupation at the Rosebank Road On-ramp. By leaving the temporary occupation permanently it will avoid potential adverse environmental effects to the coastal environment from removing it and reconstructing revetment works.

**ENDS**

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**FURTHER VARIATION TO THE AUTHORITY TO CARRY OUT A PUBLIC WORK  
IN THE MOTU MANAWA – POLLEN ISLAND MARINE RESERVE DATED 8  
AUGUST 2011**

PURSUANT to section 4(3) of the Marine Reserves Act 1971, the Minister of Conservation and the Minister of Transport approve the New Zealand Transport Agency's (the applicant) application to vary its authority to carry out a public work in the Motu Manawa – Pollen Island Marine Reserve that was granted in 2011 (the Authority).

The approval of this variation is subject to the following amendments to the Authority:

1. replacement of condition 2 of the Authority with:

**“2. General**

2.1 The public work shall be undertaken in general accordance with the documentation submitted as identified below in 2.1.1-2.1.6:

- 2.1.1 Application to *undertake a Public Work within the Motu Manawa Marine Reserve dated Apr-11* as amended by 2.1.2, 2.1.3, 2.1.4, 2.1.5 and 2.1.6 below.
- 2.1.2 SH16 Causeway Upgrade Project Application to the Minister of Conservation and the Minister of Transport to Change condition 2 of the Authority to Carry Out a Public Work in the Motu Manawa Pollen Island Marine Reserve including use of an alternative ground improvement methodology based on pre-load and wick drain solution, as issued 8 August 2011, dated 20 March 2013.
- 2.1.3 Habitat Loss Calculations contained in the Application to the Minister of Conservation and the Minister of Transport to Change Condition 2 of the Authority to Carry Out a Public Work in the Motu Manawa Pollen Island Marine Reserve as issued 8 August 2011 dated 20 March 2013 – Appendix G: SH16 Causeway Upgrade Project Change in Ecological Impacts.
- 2.1.4 Updated plans (dated 22 January 2013) referenced as SH16 Works in the Motu Manawa Pollen Island Marine Reserve SH16-4-V-DG-7080-7085 Revision A.
- 2.1.5 Updated plans (dated 22 January 2013) referenced as Coastal Discharge in the Motu Manawa Pollen Island Marine Reserve SH16-4-V-DG-7070-7075 Revision A.
- 2.1.6 SH16 Causeway Upgrade Project Application to the Minister of Conservation and the Minister of Transport to further change condition 2 of the Authority to carry out a Public Work in the Motu Manawa Pollen Island Marine Reserve including increases in the permanent and temporary occupation of the Marine Reserve, as issued 8 August 2011, dated 12 July 2016.”

2. insertion of condition 6, which reads:

**“6. Plantings near the Rosebank Fill Embankment**

The species named *Carex dissita* that has been planted between the Rosebank Fill Embankment and SH16 shall be removed and replaced with one or more of the following locally sourced species: *Apodasmia similis*, *Coprosma propinqua* (Auckland material only), or *Phormium tenax* (Auckland material only).

3. The public work shall be undertaken in accordance with conditions 1, 3, 4 and 5 of the Authority.

Hon Maggie Barry  
**Minister of Conservation**  
Date:



Hon Simon Bridges  
**Minister of Transport**  
Date:

## **EPA 10/2.034 – (ARC: 38339)**

This document has been prepared in compliance with conditions of the “*Final Report and Decision of the Board of Inquiry into the New Zealand Transport Agency Waterview Connection Proposal, Volume 2, Conditions of Consent*”. Schedule B of Volume 2 identifies the Conditions relevant to this Consent by the code and number as referenced throughout this document. In the event of dispute, Schedule B of Volume 2 shall take precedence over this Consent.

**Type:** Coastal Consent

**Description:** **Erection of Permanent Structures in the CMA (Sectors 3 and 4):**

This consent relates to the construction of permanent (operational phase) structures within the CMA including piers, ramps, stormwater discharge outfalls and other consequential activities such as disturbance and/or vegetation removal. In CPA 1 – Waterview Estuary.

**Duration:** 10 years

**Code:** RC = Standard Resource Consent Conditions

CEMP = Construction Environmental Management Plan Conditions

PI = Public Information Conditions

CNV = Noise and Vibration Conditions - Construction

V = Vegetation Conditions

A = Avian Conditions

ARCH = Archaeology Conditions

C = Coastal Conditions

M = Marine Ecology Conditions

### **GENERAL CONDITIONS**

- 1) RC.1 Except as modified by the conditions below, the works shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency (NZTA), in the resource consent applications and the supporting documents (as detailed in Condition DC.1), and in the supplementary information provided in evidence by the NZTA.
- 2) RC.1A The NZTA shall implement the conditions of these consents in accordance with Schedule B, which sets out the Conditions that are to be applied to each consent including the duration of each consent.
- 3) RC.2 The Conditions of these consents may be reviewed by the Major Infrastructure Team Manager, Auckland Council, pursuant to Section 128 of the Resource Management Act 1991 (the Act), by the giving of notice pursuant to Section 129 of the Act, on the one year anniversary of the commencement of the consents and every year thereafter in order:
  - (a) To deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or

- (b) To deal with any other adverse effect on the environment on which the exercise of the consent may have an influence.
- 4) RC.4 Any Management Plans submitted to the Major Infrastructure Team Manager, Auckland Council for approval or certification may be submitted in stages to reflect any proposed staging of the physical works. Plans submitted shall clearly show the integration with adjacent stages and interrelated activities.
- 5) RC.5 In the event of any dispute, disagreement or inaction arising as to any Auckland Council Manager certification/ approvals required by the consent conditions, or as to the implementation of or monitoring required by the conditions, matters shall be referred in the first instance to the NZTA Regional State Highway Manager and to the Resource Consents Manager, Auckland Council to determine a process of resolution.
- If a resolution cannot be agreed, then the matter may be referred to an independent appropriately qualified expert, agreeable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree.
- The independent appropriately qualified expert shall be appointed within 10 working days of the NZTA or Auckland Council giving notice of their intention to seek expert determination. The expert shall, as soon as possible, issue his or her decision on the matter. In making the decision, the expert shall be entitled to seek further information and hear from the parties as he or she sees fit.
- Advice note: The dispute resolution process provided for in this condition does not prejudice any party's right to take enforcement action in relation to the implementation of the designation conditions. However, the dispute resolution process will be applied before any formal enforcement action is taken by the Council except in urgent situations.
- 6) RC.6 Pursuant to Section 36(1)(d) of the RMA, the requiring authority is required to pay to Auckland Council any administrative charge for the carrying out by the local authority of its functions in relation to the administration, monitoring, and supervision of designation conditions.
- 7) RC.7 The servants of agents of Auckland Council shall be permitted to have access to relevant parts of the Project at all reasonable times for the purpose of carrying out inspections, investigations, tests, measurements and/or to take samples.
- 8) V.18 The NZTA shall implement the approved Traherne Island Weed and Pest Management Plan. Every 5 years, a suitably qualified and experienced ecologist engaged by NZTA shall review the plan in consultation with the Department of Conservation. The plan shall then be submitted to the Auckland Council for approval.
- 9) A.6 Animal pest control shall be undertaken by the NZTA on Traherne Island (northern and southern sides) and on the Coastal Marine Area (CMA) frontage of SH16 from Traherne Island North to Whau Creek, and on the southern side of SH16 from Traherne Island South to Whau River (in accordance with Condition V.17).

## **PRE-CONSTRUCTION CONDITIONS**

- 10) RC.3 Within 3 months of the resource consents commencing for the Project (or at least 1 month prior to any Auckland Council approvals or certifications required by these Conditions, whichever is the earlier), the NZTA shall update and finalise to the satisfaction of the Major Infrastructure Team Manager, Auckland Council all drawings and Plans cited in Schedule A, together with a full set of the information and documentation referred to in Condition DC.1 and provide these to the Major Infrastructure Team Manager, Auckland Council. At the same time the NZTA shall prepare to the satisfaction of Auckland Council, a document for each



resource consent which sets out the resource consent and have attached to it in text format a comprehensive set of the conditions imposed by the Board of Inquiry in its Final Decision as summarised in Schedule B, inclusive of any standard conditions and advice notes.

In particular (but not limited to), the following Plans will need to be amended in light of the Final Conditions:

- (a) F.2 Operational Scheme Plans (refer Schedule A, Row 3) require amendment detailing the amended location of the ventilation stacks and southern ventilation buildings;
- (b) F.5 Construction Scheme Plans (refer Schedule A, Row 4) require amendment to detail changes to construction footprint for the amended location of ventilation stacks and southern ventilation buildings and reconfiguration of Construction Yard 1);
- (c) F.6 Construction Yard Plans 101 and 107 (refer Schedule A, Row 7), detailing amendments to the Construction Yard 1 in light of the reconfiguration of this Yard and for Construction Yard 7 in light of the relocation of the northern ventilation stack (refer Schedule A, Row 34);
- (d) F.8 Plans of Structures and Architectural Features (refer Schedule A, Row 9), detailing the amended location of the Northern Ventilation Stack and the design and location of the Southern Ventilation Building and Stack;
- (e) The CNVMP (including flow diagram and the supplementary evidence produced by Ms Wilkening) (refer Schedule A, Rows 36, 37 and 39);
- (f) Update to the areas of the Open Space Restoration Plans (Schedule A, Row 30) to:
  - (i) Extend these areas in geographic extent to provide for the works identified in the Management Plan notations identified in the OS Conditions (in particular OS.5 and OS.6). (e.g. these areas will (as relevant) include Eric Armishaw Park, Howlett Reserve and Waterview Esplanade Reserve); and
  - (ii) Exclude the operational area of designation required for the northern ventilation stack (as identified through the OPW process (refer Condition DC.8); and
- (g) Schedule A, Row 28 the Plan detailing proposed open space impacts and replacements needs to be updated to recolour the two land parcels on Hendon Avenue (which are excluded from the replacement calculations) to 'brown' to confirm they are part of the operational impact and will not be returned as open space.

- 11) CEMP.1 Except where provided for in Condition CEMP.1A below, the NZTA shall update and finalise the draft Construction Environmental Management Plan (CEMP) including all the Management Plans which form part of the CEMP and are included as appendices, submitted with this application to ensure compliance with the consent and designation conditions imposed by the Board of Inquiry. The CEMP shall be provided to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to the commencement of works to certify compliance and consistency with the conditions. Construction shall not commence until certification is obtained.

*Advice note: For clarity the CEMP will be updated and finalised in accordance with the conditions. Any amendments will be limited to reflecting the requirements of the conditions, specifying personnel, and completing the Environmental Risk Register.*

*Advice Note: Particular care must be taken with development and operation of Construction Yard 7. When the CEMP is being updated and finalised, consideration must be given to the contents of the draft SSCEMP prepared for Construction Yard 7 (Row 41, Schedule A) recognising changes required by inclusion of the ventilation stack in this yard.*

- 12) CEMP.1B For the purposes of staging works, as some works may commence well in advance of others, the NZTA may provide staged or site specific CEMPs for those works to the Major Infrastructure Team Manager, Auckland Council. The NZTA shall consult with the Team

Manager about the need and timing for any other site-specific or staged CEMPs and shall provide any required site-specific or staged CEMPs to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to commencement of such the specific stage (including enabling) or site works.

- 13) CEMP.2 The certification process of the CEMP (and its appendices) shall confirm that the CEMP gives effect to the relevant conditions, as well as those matters in CEMP.6, and that it includes details of:
- (a) Staff and contractors' responsibilities;
  - (b) Training requirements for employees, sub-contractors and visitors;
  - (c) Environmental incident and emergency management;
  - (d) Communication and interface procedures (in accordance with the Communication Plan required under Condition PI.2);
  - (e) Environmental complaints management (including the procedures required under Condition PI.4);
  - (f) Compliance monitoring;
  - (g) Reporting (including detail on the frequency of reporting to the Auckland Council);
  - (h) Environmental auditing; and
  - (i) Corrective action.
- 14) CEMP.3 The management of key environmental effects associated with the construction phase of the Project is detailed within environmental management plans that are included in the CEMP as appendices. This suite of management plans as shown on Figure CEMP.A comprises:
- (a) Construction Noise and Vibration Management Plan (CNVMP);
  - (b) Construction Air Quality Management Plan (CAQMP);
  - (c) Erosion and Sediment Control Plan (ESCP);
  - (d) Temporary Stormwater Management Plan (TSMP);
  - (e) Ecological Management Plan (ECOMP);
  - (f) Groundwater Management Plan (GWMP);
  - (g) Settlement Effects Management Plan (SEMP);
  - (h) Contaminated Soils Management Plan (CSMP);
  - (i) Hazardous Substances Management Plan (HSMP);
  - (j) Archaeological Site Management Plan (ASMP);
  - (k) Construction Traffic Management Plan (CTMP);
  - (l) Concrete Batching and Crushing Plant Management Plan (CBCPMP);
  - (m) Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP) (to be prepared in accordance with Condition CEMP.15);
  - (n) Waste Management Plan (to be prepared in accordance with Condition CEMP.10) ; and
  - (o) Temporary Construction Lighting Management Plan (to be prepared in accordance with Condition L.2).
- 15) CEMP.6 The finalised CEMP shall include specific details on demolition, construction and management of all works associated with the Project. The certification process of the CEMP shall confirm that the CEMP includes details of the following:
- (a) Details of the site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
  - (b) The location of large notice boards that clearly identify the NZTA and the Project name,

- together with the name, telephone, email address and address for service of the site or Project manager and the community liaison person;
- (c) An outline construction programme of the work indicating in particular likely time periods for road closures and anticipated traffic diversion effects;
  - (d) The hours of work, which should reflect the need to ensure that residents enjoy reasonable freedom from noisy or intrusive construction activity in their neighbourhood at night, on Sundays and during public holidays;
  - (e) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/ storage of rubbish, storage and unloading of building materials and similar construction activities;
  - (f) Location of worker's offices and conveniences (e.g. porta-loos);
  - (g) Procedures of controlling sediment run-off, dust and the removal of soil, debris and demolition and construction materials from public roads or places. Dust mitigation measures should include use of water sprays to control dust nuisance on dry or windy days;
  - (h) Methods to stabilise ingress and egress points to construction sites, to the standard required by ARC Technical Publication 90 (Nov 2007);
- 16) CEMP.10 The NZTA shall finalise and implement the Hazardous Substances Management Plan (HSMP), through the CEMP (as per Condition CEMP.1), submitted with this application, prior to works commencing on site. The certification process of the CEMP shall confirm that the HSMP clearly identifies the requirements for proper storage, handling, transport and disposal of hazardous substances during the construction phase of the Project and confirm that there shall be no storage of explosives on the Project site.
- 17) CEMP.11 The NZTA shall develop and implement a Waste Management Plan in accordance with the waste management principles, controls and methods set out in the CEMP. The Plan shall be provided to the Major Infrastructure Team Manager, Auckland Council and be implemented throughout the entire construction period.
- 18) CEMP.15 The NZTA will be responsible for all service relocations required for construction of the Project. The NZTA shall liaise with the providers of infrastructure service networks (including, but not limited to water, gas, stormwater, wastewater, power and telecommunications), and private property owners with on-site services to develop methodologies and timing for necessary services relocation required for the Project, with the objective of minimising disruption to the operation of these service networks and on-site services.
- Advice note:*
- (a) *It is noted that if separate consents are required for relocations for any services of network utility operators or landowners, such consents will be obtained before construction commences in the relevant area, and any effects of those relocations would be considered at that time. The same applies to any alteration of consents if required.*
  - (b) *Network infrastructure owned and operated by Watercare Services is located within the designations. An operating agreement will be developed by the NZTA and Watercare Services which will include appropriate notification and access protocols where works are to be undertaken by either network operator on or adjacent to Watercare Services infrastructure within the designations.*
- 19) PI.1 A community liaison person shall be appointed by the NZTA for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the Project. The liaison person's name and contact details shall be

made available in the CEMP and on site signage by the NZTA. This person must be reasonably available for on-going consultation on all matters of concern to affected parties arising from the Project.

- 20) PI.2 The NZTA shall prepare and implement a Communications Plan that sets out procedures detailing how the public, Ministry of Social Development, Housing New Zealand Corporation and other organisations representing the particular demographic characteristics of the community (including but not limited to Primary Health Organisations, general practitioners, youth, education organisations, aged care groups and groups representing ethnic and migrant communities) will be communicated with throughout the construction and monitoring periods (as prescribed in the designation and consent conditions).

In preparing the Communications Plan, the NZTA will liaise with Auckland Council to access its community liaison databases. The Communications Plan will include details of:

- (a) The site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- (b) In accordance with these Conditions, the database of the key construction activities and monitoring requirements that are the subject of the Communications Plan;
- (c) The database of stakeholders and residents who will be communicated with;
- (d) Communication methods, an assessment of how these methods reach the different audience/stakeholder groups (including those methods set out in Condition CEMP.6), and detail on when each of these methods will be used (e.g. regular communication or event specific methods);
- (e) The appointed specialist in Environmental and Occupational Medicine, including contact details (as per Condition SO.13);
- (f) Any stakeholder specific communication plans required; and
- (g) Monitoring and review procedures for the Communications Plan.

The Communications Plan shall be written in accordance with the external communication procedures set out in the CEMP and provided at least 20 working days prior to construction commencing, to the Major Infrastructure Team Manager, Auckland Council, Working Liaison Group and the Community Liaison Group(s) established by Condition PI.5. The structure of the communication groups set out in these conditions is attached as Figure PI.A.

- 21) PI.5 The NZTA shall establish Community Liaison Group(s) at least two months prior to construction commencing in each of the following key construction areas:

- (a) Te Atatu (including the SH16 Causeway)
- (b) Waterview (including works to St Lukes on SH16 and on the Waterview Estuary and Causeway Bridges)
- (c) Owairaka

and hold regular meetings (at least three monthly) throughout the construction period and up to 24 months following construction completion relevant to these areas (or less if the members of the Group agree), so that on-going monitoring information can continue to be disseminated.

The Community Liaison Group(s) shall be open to all interested parties within the Project area including, but not limited to the following groups:

- (a) Auckland Council and Auckland Transport;
- (b) Educational facilities within the Project area (including schools, kindergartens, childcare facilities and Unitec Institute of Technology);
- (c) Relevant community/ environmental groups (including but not limited to Friends of Oakley Creek, Star Mills Preservation Group, Cycle Action Auckland and

representatives from those organisations identified in the Communications Plan (as required by Condition PI.2) and local residents;

- (d) Department of Conservation;
- (e) Local Boards;
- (f) Iwi groups with Mana Whenua;
- (g) Public transport providers; and
- (h) Housing New Zealand Corporation.

*Advice note: The purpose of the Community Liaison Group(s) is to provide a regular forum through which information about the Project can be provided to the community, and an opportunity for concerns or issues to be raised.*

- 22) CNV.1 The NZTA shall finalise and implement through the CEMP, a Construction Noise and Vibration Management Plan (CNVMP) throughout the entire construction period of the Project.

The CNVMP shall describe the measures adopted to meet:

- (a) the noise criteria set out in Conditions CNV.2 and 3 below;
- (b) the vibration criteria set out in Condition CNV.4 below; or
- (c) where (a) or (b) cannot be met, the process that will be followed to appropriately mitigate noise and vibration effects including methods that may be applied outside the designation.

The CNVMP shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to construction activities being undertaken for review and certification that the CNVMP, as a minimum, addresses the following:

- (i) Construction noise and vibration criteria (Conditions CNV.2, CNV.3, and CNV.4);
- (ii) Hours of operation, including times and days when noisy and/or vibration inducing construction activities would occur;
- (iii) Machinery and equipment to be used;
- (iv) Vibration testing of equipment to confirm safe distances to buildings prior to construction;
- (v) Preparation of building condition surveys of critical dwellings prior to, during and after completion of construction works;
- (vi) Roles and responsibilities of personnel on site;
- (vii) Construction operator training procedures;
- (viii) Methods for monitoring and reporting on construction noise and vibration;
- (ix) A hierarchy of mitigation options that will be assessed for the Project noise mitigation, including alternative strategies where full compliance with the relevant noise and/or vibration criteria cannot be achieved;
- (x) Management schedules containing site specific information;
- (xi) Measures for liaising with and notifying potentially affected receivers of proposed construction activities and the potential for noise and vibration effects, specifically:
  - PPFs located within a horizontal distance of 35 metres of underground excavation works, along the tunnel alignment shall receive prior notification not greater than 7 days (and not less than 24 hours) prior to the commencement of works.
  - Methods for ensuring residents affected by night works (within 100m of the construction site night works, as defined on the maps (refer Schedule A,

Row 35) are notified of such works (i.e. any works during the hours of 20:00 to 06:30) at least 5 days prior to the commencement of any such work.

- The maps showing PPFs to be notified of night works (refer Schedule A, Row 35, shall be reviewed and included within the CNVMP.

- (xii) Methods for receiving and handling complaints about construction noise and vibration;
  - (xiii) Measures for preventing the occurrence of rogue fly rock, including management of charge weights and face loading procedures, stemming of charge holes and profiling of the face to maintain minimum burden (face cover);
  - (xiv) Investigations on the practicability of implementing permanent noise mitigation works for construction mitigation (as per Condition CNV.7);
  - (xv) Investigations of the practicability of implementing Building Modification mitigation, as required in accordance with Conditions ON.6 and ON.11, prior to commencement of construction within 100m of the relevant PPFs (including those on the Unitec site); and
  - (xvi) The process for developing Site Specific Noise Management Plans (SSNMP), in accordance with the SSNMP Flow Chart (refer Schedule A, Row 36), including templates and a certification process for the Major Infrastructure Team Manager, Auckland Council (in accordance with Condition CNV.13) to confirm the process of SSNMP review of noise mitigation options where, the modelled/predicted levels or subsequent actual levels exceed the criteria in Conditions CNV.2 and/or CNV.4.
- 23) V.11 Prior to commencement of works adjacent to Traherne Island, the NZTA shall employ a suitably qualified and experienced plant translocation expert to uplift and protect all areas of *Mimulus repens* on Traherne Island that will be affected by the work. The *Mimulus repens* shall be relocated to suitable and safe habitat away from the works area, or otherwise held and protected for the duration of the works in the vicinity of their original location and be replanted back at that location (or in close proximity to it) upon completion of the works. The location of the recipient sites will be determined in consultation with the Department of Conservation and in general accordance with the Traherne Island Natural Heritage Restoration Plan (2009 – 2014). Trials shall be undertaken to identify appropriate recipient sites, with these trial sites being monitored for a period of no less than 5 years, or until their failure. Where possible, recipient sites shall be located in currently weed-free areas. Where recipient sites may potentially be affected by weeds, they shall be subject to an on-going weed management plan. Should translocation attempts fail at all trial sites then the NZTA, in consultation with DOC, shall determine an alternative appropriate form of mitigation.
- 24) V.17 Prior to commencement of works adjacent to or on Traherne Island, the NZTA shall employ a suitably qualified and experienced ecologist for the preparation of a Traherne Island Weed and Pest Management Plan. The Plan shall be prepared in consultation with the Department of Conservation and be submitted to the Auckland Council for approval at least 20 working days prior to construction commencing.
- 25) A.1 The NZTA shall finalise, and implement through the CEMP, ECOMP submitted with this application to include the matters set out in Conditions A.2 to A.6.
- 26) ARCH. Advice Note *Any archaeological sites within the area affected by the Project shall not be modified or disturbed in any way unless written authorisation has been obtained from the NZ Historic Places Trust.*
- 27) C.1 The NZTA shall provide to the Major Infrastructure Team Manager, Auckland Council plans and drawings (including dimensioned, cross sections, elevations and site plans of all areas

of proposed reclamation (including associated permanent and temporary CMA occupation), permanent structures and temporary structures) at least 20 working days before the proposed date of commencement of the construction of the reclamation, bridge piers or temporary structure.

- 28) M.1 The NZTA shall finalise and implement through the CEMP, the ECOMP submitted with this application. The ECOMP shall be revised to accurately reflect the conditions of this consent and changes to the details of construction processes prior to construction commencing. The ECOMP shall include, but not be limited to, details of:
- (a) Monitoring of marine habitats and ecological values;
  - (b) Trigger event criteria for undertaking additional monitoring;
  - (c) Procedures for responding to accidental discharges to the marine environment;
  - (d) Complaints investigation, monitoring and reporting; and
  - (e) The identification of staff and contractors' responsibilities.

### CONSTRUCTION CONDITIONS

- 29) CEMP.4 The CEMP shall be implemented and maintained throughout the entire construction period.
- 30) CEMP.5 A copy of the CEMP shall be held on each construction site at all times and be available for inspection on request by the Auckland Council.
- 31) CEMP.8 All storage of material and equipment associated with the construction works shall take place within the boundaries of the designation.
- 32) CEMP.12 The CEMP shall be reviewed by the NZTA at least annually or as a result of a material change to the Project. The review shall take into consideration:
- (a) Compliance with designation and consent conditions;
  - (b) Any changes to construction methods;
  - (c) Key changes to roles and responsibilities within the Project;
  - (d) Changes in industry best practice standards;
  - (e) Changes in legal or other requirements;
  - (f) Results of inspections, monitoring, incidents, corrective actions, internal or external assessments; and
  - (g) Public complaints.
- A summary of the review process undertaken shall be kept by the NZTA, provided annually to the Major Infrastructure Team Manager, Auckland Council and made available (with any related data) to the Auckland Council upon request.
- 33) CEMP.13 Following the review process (as described in Condition CEMP.12), the CEMP may require updating. Any material change proposed to the CEMP (including appended Management Plans) shall be submitted for approval to the Major Infrastructure Team Manager, Auckland Council at least 10 working days prior to the proposed changes taking effect.'
- Advice Note: Material change will include amendment to any base information informing the CEMP or any process, procedure or method of the CEMP (such as the environmental constraints map, compliance monitoring process, complaints procedure or mitigation / remedial methods identified) which has the potential to increase adverse effects on a particular value. For clarity changes to personnel and contact schedules do not constitute a material change.*
- 34) PI.3 At least 15 working days prior to the commencement of construction, and at 15 working day intervals thereafter, or as required depending on the scale of works and effects on the

community, advertisements will be placed in the relevant local newspapers and community noticeboards (as identified in Condition CEMP.6(b)) detailing the nature of the forthcoming works, the location of the forthcoming works and hours of operation. All advertisements will include reference to a 24 hour toll free complaints telephone number. Where relevant, advertisements will also include but not be limited to details of:

- (a) Any traffic disruptions or controls or changes to property access, pedestrian/ cycle routes and bus stops; and
- (b) Any other construction activities, including night time works, blasting, and structure-borne noise, as identified in the conditions.

35) PI.4 The NZTA shall manage, investigate and resolve (as appropriate) all complaints for the duration of the construction works in accordance with the environmental complaints section of the CEMP. The implementation strategy for complaints includes:

- (a) A 24 hour toll free telephone number and email address, which shall be provided to all potentially affected residents and businesses. The number shall be available and answered at all times during the entire duration of the works for the receipt and management of any complaints. A sign containing the contact details shall be located at each site specific work activity;
- (b) The NZTA shall maintain a record of all complaints made to this number, email or any site office, including the full details of the complainant and the nature of the complaint;
- (c) Upon receiving a complaint, within 10 days of complaint receipt, a formal written response will be provided to the complainant and Auckland Council;
- (d) The NZTA shall undertake corrective action where necessary to resolve any problem identified. All action taken and relevant information shall be documented. For the avoidance of doubt, 'where necessary' refers to where the works are not being carried out in accordance with conditions of this designation;
- (e) Where issues and complaints about effects cannot be resolved through the CEMP complaints management process, a meeting shall be held between the NZTA, the complainant and the Auckland Council representative(s) to discuss the complaint and ways in which the issue may be resolved. If parties cannot agree on a resolution, an independent qualified mediator will be appointed, agreeable to all parties and at the shared cost of all parties, to undertake mediation of the dispute or concerns; and
- (f) All information collected in Conditions PI.4 (b), (c) and (d) shall be detailed in a Construction Compliance Report (including the means by which the complaint was addressed, whether resolution was reached and how the response was carried out) prepared by the NZTA. This Report shall be submitted to the Major Infrastructure Team Manager, Auckland Council on a quarterly basis commencing at the beginning of the works and for the entire duration of construction.

36) PI.6 The Community Liaison Group(s) shall be provided opportunities to review and comment on the following (amongst other things):

- (a) The Outline Plan of Works detailing designs for the northern and southern ventilation buildings and stacks (the outcomes of this consultation will be reported in accordance with the processes required in DC.8(n) and DC.9(k));
- (b) The Open Space Restoration Plans (as required by Condition OS.3);
- (c) Finalisation and amendment to Urban Design and Landscape Plans (UDL Plans) (as required by Condition LV.1);
- (d) The Oakley Inlet Heritage Plan (as required by Conditions OS.5(b)(i) and ARCH.6);



- (e) The detail of the Oakley Creek restoration (as required by Condition STW.20);
- (f) Publicly available results of environmental monitoring as required by the designation and/or these Consents (e.g. air quality monitoring); and
- (g) The finalisation of the STEM assessment required by CEMP.6(o) and a schedule of trees that are required to be removed for consideration of timber use in heritage projects as required by Condition SO.7.

*Advice Note: Attention is drawn to the Vegetation conditions concerning identification and protection of Significant Vegetation and Valued Vegetation.*

- (h) Detailed design features of the Te Atatu underpass (e.g. lighting and architectural treatment).

37) CNV.2 Except where certified by the Council through the SSNMP (in accordance with Condition CNV.13), construction noise (excluding noise from blasting Monday to Saturday inclusive) shall be measured and assessed in accordance with NZS 6803:1999 “Acoustics - Construction Noise” and shall comply with the following criteria:

Note: In Condition CNV.2 (T) means a duration between 15 minutes and 60 minutes, in accordance with NZS6803:1999.

(a) Project Construction Noise Criteria: Residential Receivers

Time of week	Time period	Project Construction Noise Criteria (Long Term Construction) dB		
		Sectors 1 to 7	Sectors 8 and 9	All Sectors
		$L_{Aeq(T)}$	$L_{Aeq(T)}$	$L_{AFmax}$
Monday - Saturday	0630-0730	60	45	75
	0730-1800	70	70	85
	1800-2000	65	65	80
	2000-0630	60	45	75
Sundays and Public Holidays	0630-0730	45	45	75
	0730-1800	60	45	85
	1800-2000	45	45	75
	2000-0630	45	45	75

(b) Project Construction Noise Criteria: Commercial and Industrial Receivers

Time period	Project Construction Noise Criteria (Long Term Construction) dB
	$L_{Aeq(T)}$
0730-1800	70
1800-0730	75

(c) Project Construction Noise Criteria: Internal Structure-borne Noise from tunnelling for Residential Receivers

Time period	Project Construction Noise Criteria Inside
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0600-2200	35 dB $L_{Aeq(T)}$	All habitable rooms
2200-0600	30 dB $L_{Aeq(T)}$	Bedrooms

(d) Project Construction Noise Criteria: Internal noise for Licensed Educational Facilities

Time period (School Days)	Project Construction Noise Criteria Inside	
Teaching Hours	45 dB $L_{Aeq(T)}$ or existing, whichever is the higher	Classrooms, library, offices, teaching, laboratories, manual arts, workshops
Teaching Hours	40 dB $L_{Aeq(T)}$ or existing, whichever is the higher	School hall, lecture theatres

*Note: In Condition CNV2(d) "Teaching hours" means:*

*Primary schools and Kindergartens: 9am to 3pm*

*Unitec: 8am to 9pm*

- 38) CNV.7 Where practicable, permanent (traffic) noise barriers, required in any Sector as Detailed Mitigation Options for operational noise following completion of the Project (in accordance with Conditions ON.3 to ON.5) shall be erected prior to noise generating construction works commencing. Where this is not practicable, temporary noise mitigation measures shall be implemented in accordance with the CNVMP, prior to noise generating construction works commencing.
- 39) CNV.8 Pile driving or pile removal shall not be undertaken at night (i.e. during the hours of 20:00 – 06:30).
- 40) CNV.9 The concrete batch plants, rock crushing plants and the loading bays and conveyors for such plants shall be fully enclosed.
- 41) CNV.13 SSNMPs (required by Condition CNV.1(xvi)) above, shall be submitted to Major Infrastructure Team Manager, Auckland Council for review and certification at least 7 working days prior to the proposed works commencing. A decision will be provided by the Council within 5 working days of receipt of the SSNMP.
- Works will not commence until certification is received from the Major Infrastructure Team Manager, Auckland Council. The Council may, at its discretion, waive the requirement for SSNMPs to be submitted to the Council where an SSNMP is required.
- If monitoring shows that levels specified in a SSNMP are being exceeded, work generating the exceedance will stop and not recommence until further mitigation is implemented in accordance with an amended SSNMP certified by Council.
- Advice note: It is accepted that the criteria of CNV.2 and CNV.4 may not be met at all times, but that the NZTA will take all practical steps to achieve compliance, taking into account the hierarchy of mitigation options outlined in Condition CNV.1 (ix).*
- 42) A.2 The NZTA shall provide temporary high tide roosting structure(s) adjacent to the Causeway during construction, in accordance with the ECOMP, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council. The temporary bird roosts shall be sized in accordance with the ECOMP, and located within the Waterview Estuary adjacent to the southern side of the causeway and in the vicinity of the existing Causeway bridge.

- 43) A.5 Vegetation clearance at Traherne Island shall occur outside the bird breeding season of September to December. Elsewhere, vegetation clearance shall occur outside the bird breeding season of September to December where practicable.
- 44) ARCH.3 If any archaeological sites, including human remains are exposed during site works, then the following procedures shall apply:
- (a) Immediately it becomes apparent that a possible archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease;
  - (b) The site supervisor shall immediately secure the area in a way that ensures that any artefacts or remains are untouched and notify the Project archaeologist;
  - (c) The Project archaeologist shall inspect the site to assess the relevance of the find, and then the Auckland Council shall be advised of the significance;
  - (d) If the site is confirmed to be an archaeological site by the Project archaeologist, the site supervisor shall then notify tangata whenua, the New Zealand Historic Places Trust, and the Auckland Council that an archaeological site has been exposed so that appropriate action can be taken;
  - (e) In the case of human remains, the NZ Police shall be notified.
- 45) C.2 Construction shall be undertaken in accordance with the construction methodology detailed in the application, specifically Technical Report G.23 *Coastal Works* and Technical Report G.22 *Erosion and Sediment Control Plan*. The construction methodology shall include:
- (a) The use of temporary coffer dams to create dry working areas;
  - (b) Realignment of sections of existing low-tide channels in Oakley inlet and Waterview Estuary that will be directly affected by the reclamation works;
  - (c) Removal of mangroves to provide construction and ground-treatment access, placement of temporary coffer dams and to facilitate natural channel migration in the Whau River side drainage channel (east of Rosebank Domain);
  - (d) Installation or removal works to be undertaken at the best practicable time to minimise potential sediment disturbance.
- 46) C.3 The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council in writing of the proposed commencement date of the reclamation, structures and/or channel realignment works at least 10 working days prior to the proposed start date.
- 47) C.6 The NZTA shall maintain the site in good order and shall remedy all damage and disturbance caused by vehicle traffic, plant and equipment to the foreshore during construction, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.
- 48) C.7 Removal or pruning of vegetation in the CMA shall be limited to the areas of permanent and temporary occupation as shown on the Waterview Connection Project Assessment of Environmental Effects Plan Set F.12 and F.13 submitted with the application (ref Schedule A, rows 13 and 14). Removal of mangroves shall be implemented in accordance with the principles detailed in the Ecological Management Plan.
- 49) M.10 The NZTA shall maintain the coastal marine area free of any gross litter, rubbish and debris during construction.
- 50) M.11 Prior to excavation of sediment from the marine habitat remediation zone (MHRZ), mangrove vegetation will be removed from the sediment and disposed of at an appropriate offsite facility. The excavated sediment shall be stockpiled within an adjacent dry working area. When the sediment is returned to the MHRZ it will be levelled out to tie in with the existing mudflat. Where a routine marine benthic habitat monitoring site is within an area of

MHRZ, additional monitoring of the depth of sediment overlying the improved ground/mudcrete will also be undertaken.

## POST-CONSTRUCTION CONDITIONS

- 51) V.15 Planting along and within the rock revetment of the widened SH16 causeway shall be undertaken by the NZTA at locations in general accordance with the Urban Design and Landscape Plans and planting schedules (Refer Schedule A, Row 17), as identified in those plans under the label "*Rock Armour with Saltwater Revetment Planting*". The planting treatments will be in accordance with the concepts of the ECOMP, Appendix I '*Conceptual Rock Revetment Planting Designs*'.
- 52) C.4 The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council in writing within 10 working days of the completion of each discrete area of reclamation, structures and/or channel realignment works.
- 53) C.5 The NZTA shall supply to the Major Infrastructure Team Manager, Auckland Council and LINZ Hydrographic Services and LINZ Topographic Services Land Information New Zealand, PO Box 5501, Wellington 6145), a complete set of "as built" plans, final topographic and bathymetric data, and appropriate certification confirming that the new reclamations, structures and channel realignment works have been built in accordance with sound engineering practice, within three months of the completion of the reclamation works.
- 54) C.8 The NZTA shall ensure the removal of all equipment, erosion and sediment control measures, surplus sediment and construction materials from the CMA within 20 working days following the completion of the construction works, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.

## MONITORING

- 55) A.3 The NZTA shall employ a suitably qualified ecologist to undertake monitoring of the roosting areas located at:
- (a) The existing high tide roost in Harbourview-Orangihina Park; and
  - (b) The temporary construction roosting structure(s) pursuant to Condition A.2.
- Monitoring shall be undertaken on a monthly basis, with a monitoring report prepared on a quarterly basis. The monitoring report shall be made available to the Major Infrastructure Team Manager, Auckland Council and Department of Conservation upon request.
- 56) A.4 Should the monitoring results indicate that the roosting sites have been abandoned, consultation shall be undertaken with the Department of Conservation and the Major Infrastructure Team Manager, Auckland Council to determine the need for and type of further management strategies (if any) required.
- 57) C.16 On the northern side of the Causeway, from just before the commencement of construction in the CMA for each section of works, until 6 months after completion of each section, the NZTA shall undertake every two (2) months or after a severe wave-storm, intertidal beach profile surveys down to the spring low-tide mark along offshore-directed transects (one off the centre of the construction section and one either side at 20 m away from the ends of the construction site) and photographs documenting the physical state of the seabed around the perimeter of the cofferdam. The monitoring information shall be made available to the

Auckland Council. If the monitoring identifies that excessive erosion or accretion has occurred from corner or end effects of the construction section, as confirmed by a coastal processes expert, further seabed erosion control measures or a sediment by-passing method (for accretion) to reduce localised effects seaward of the temporary occupation or permanent occupation designation (whichever applies) shall be implemented as soon as practicable. Details of the proposed measures or methods shall be made available to Auckland Council prior to implementation.

- 58) M.2 The NZTA shall engage a suitably qualified ecologist to undertake a marine habitat monitoring programme, as described in Conditions M.3 to M.6.
- 59) M.3 The marine benthic habitat monitoring programme shall be undertaken every 6 months:
- (a) At least 12 months prior to construction commencing, to allow for two baseline surveys to be undertaken;
  - (b) During construction; and
  - (c) For a maximum of 3 years following completion of the Project, or for a lesser time if the monitoring indicates no significant effects, as agreed with the Major Infrastructure Team Manager, Auckland Council.
- 60) M.4 The marine benthic habitat monitoring programme shall be undertaken in accordance with the details set out in the ECOMP and include:
- (a) Sampling of the marine invertebrate community composition (collection of sediment cores to a depth of approximately 15cm);
  - (b) Sampling of the sediment surface (top 2cm) for sediment grain size; and
  - (c) Sampling of the sediment surface (top 2cm) for sediment quality (analysis of the concentration of copper, lead, zinc and polycyclic aromatic hydrocarbons).
- 61) M.5 The marine benthic habitat monitoring shall be undertaken within sampling grids (50m x 30m) broadly established at the following locations:
- (a) Two locations within Oakley Inlet;
  - (b) Four locations within Waterview Estuary; and
  - (c) Four locations north of the Causeway.
- Specific locations and experimental design shall be detailed in the ECOMP, and the design of the monitoring programme will be based on the *Estuarine Environmental Assessment and Monitoring: A National Protocol (Cawthron 2002)*.
- 62) M.6 The NZTA shall undertake additional marine habitat monitoring in the event of a 'trigger event' for marine ecology habitats. For the purposes of this consent, a 'trigger event' for marine ecology habitats is defined in the ECOMP.
- 63) M.7 The NZTA shall review the marine habitat monitoring results (pursuant to Conditions M.3 to M.6) and in the event that potential adverse effects are identified, the NZTA shall develop and implement appropriate contingency plans and/or remedial measures.

## REPORTING

- 64) M.8 The marine benthic habitat monitoring results shall be compiled by the NZTA, and a report provided to the Major Infrastructure Team Manager, Auckland Council every 6 months.

## **EPA 10/2.036 – (ARC: 38341)**

This document has been prepared in compliance with conditions of the “*Final Report and Decision of the Board of Inquiry into the New Zealand Transport Agency Waterview Connection Proposal, Volume 2, Conditions of Consent*”. Schedule B of Volume 2 identifies the Conditions relevant to this Consent by the code and number as referenced throughout this document. In the event of dispute, Schedule B of Volume 2 shall take precedence over this Consent.

**Type:** Coastal Consent

**Description:** **Erection of Permanent Structures in the CMA (Sector 5):**

This consent relates to the construction of permanent (operational phase) structures within the CMA including piers, ramps, stormwater discharge devices, heritage bridge and other consequential activities such as disturbance and/or vegetation removal. In CPA 1 – Oakley Creek Inlet.

**Duration:** 10 years

**Code:** RC = Standard Resource Consent Conditions

CEMP = Construction Environmental Management Plan Conditions

PI = Public Information Conditions

ARCH = Archaeology Conditions

C = Coastal Conditions

M = Marine Ecology Conditions

### **GENERAL CONDITIONS**

- 1) RC.1 Except as modified by the conditions below, the works shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency (NZTA), in the resource consent applications and the supporting documents (as detailed in Condition DC.1), and in the supplementary information provided in evidence by the NZTA.
- 2) RC.1A The NZTA shall implement the conditions of these consents in accordance with Schedule B, which sets out the Conditions that are to be applied to each consent including the duration of each consent.
- 3) RC.2 The Conditions of these consents may be reviewed by the Major Infrastructure Team Manager, Auckland Council, pursuant to Section 128 of the Resource Management Act 1991 (the Act), by the giving of notice pursuant to Section 129 of the Act, on the one year anniversary of the commencement of the consents and every year thereafter in order:
  - (a) To deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
  - (b) To deal with any other adverse effect on the environment on which the exercise of the consent may have an influence.
- 4) RC.4 Any Management Plans submitted to the Major Infrastructure Team Manager, Auckland Council for approval or certification may be submitted in stages to reflect any proposed staging of the physical works. Plans submitted shall clearly show the integration with adjacent

stages and interrelated activities.

- 5) RC.5 In the event of any dispute, disagreement or inaction arising as to any Auckland Council Manager certification/ approvals required by the consent conditions, or as to the implementation of or monitoring required by the conditions, matters shall be referred in the first instance to the NZTA Regional State Highway Manager and to the Resource Consents Manager, Auckland Council to determine a process of resolution.
- If a resolution cannot be agreed, then the matter may be referred to an independent appropriately qualified expert, agreeable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree.
- The independent appropriately qualified expert shall be appointed within 10 working days of the NZTA or Auckland Council giving notice of their intention to seek expert determination. The expert shall, as soon as possible, issue his or her decision on the matter. In making the decision, the expert shall be entitled to seek further information and hear from the parties as he or she sees fit.
- Advice note: The dispute resolution process provided for in this condition does not prejudice any party's right to take enforcement action in relation to the implementation of the designation conditions. However, the dispute resolution process will be applied before any formal enforcement action is taken by the Council except in urgent situations.
- 6) RC.6 Pursuant to Section 36(1)(d) of the RMA, the requiring authority is required to pay to Auckland Council any administrative charge for the carrying out by the local authority of its functions in relation to the administration, monitoring, and supervision of designation conditions.
- 7) RC.7 The servants of agents of Auckland Council shall be permitted to have access to relevant parts of the Project at all reasonable times for the purpose of carrying out inspections, investigations, tests, measurements and/or to take samples.

## **PRE-CONSTRUCTION CONDITIONS**

- 8) RC.3 Within 3 months of the resource consents commencing for the Project (or at least 1 month prior to any Auckland Council approvals or certifications required by these Conditions, whichever is the earlier), the NZTA shall update and finalise to the satisfaction of the Major Infrastructure Team Manager, Auckland Council all drawings and Plans cited in Schedule A, together with a full set of the information and documentation referred to in Condition DC.1 and provide these to the Major Infrastructure Team Manager, Auckland Council. At the same time the NZTA shall prepare to the satisfaction of Auckland Council, a document for each resource consent which sets out the resource consent and have attached to it in text format a comprehensive set of the conditions imposed by the Board of Inquiry in its Final Decision as summarised in Schedule B, inclusive of any standard conditions and advice notes.
- In particular (but not limited to), the following Plans will need to be amended in light of the Final Conditions:
- (a) F.2 Operational Scheme Plans (refer Schedule A, Row 3) require amendment detailing the amended location of the ventilation stacks and southern ventilation buildings;
  - (b) F.5 Construction Scheme Plans (refer Schedule A, Row 4) require amendment to detail changes to construction footprint for the amended location of ventilation stacks and southern ventilation buildings and reconfiguration of Construction Yard 1);
  - (c) F.6 Construction Yard Plans 101 and 107 (refer Schedule A, Row 7), detailing

- amendments to the Construction Yard 1 in light of the reconfiguration of this Yard and for Construction Yard 7 in light of the relocation of the northern ventilation stack (refer Schedule A, Row 34);
- (d) F.8 Plans of Structures and Architectural Features (refer Schedule A, Row 9), detailing the amended location of the Northern Ventilation Stack and the design and location of the Southern Ventilation Building and Stack;
  - (e) The CNVMP (including flow diagram and the supplementary evidence produced by Ms Wilkening) (refer Schedule A, Rows 36, 37 and 39);
  - (f) Update to the areas of the Open Space Restoration Plans (Schedule A, Row 30) to:
    - (i) Extend these areas in geographic extent to provide for the works identified in the Management Plan notations identified in the OS Conditions (in particular OS.5 and OS.6). (e.g. these areas will (as relevant) include Eric Armishaw Park, Howlett Reserve and Waterview Esplanade Reserve); and
    - (ii) Exclude the operational area of designation required for the northern ventilation stack (as identified through the OPW process (refer Condition DC.8); and
  - (g) Schedule A, Row 28 the Plan detailing proposed open space impacts and replacements needs to be updated to recolour the two land parcels on Hendon Avenue (which are excluded from the replacement calculations) to 'brown' to confirm they are part of the operational impact and will not be returned as open space.
- 9) CEMP.1 Except where provided for in Condition CEMP.1A below, the NZTA shall update and finalise the draft Construction Environmental Management Plan (CEMP) including all the Management Plans which form part of the CEMP and are included as appendices, submitted with this application to ensure compliance with the consent and designation conditions imposed by the Board of Inquiry. The CEMP shall be provided to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to the commencement of works to certify compliance and consistency with the conditions. Construction shall not commence until certification is obtained.
- Advice note: For clarity the CEMP will be updated and finalised in accordance with the conditions. Any amendments will be limited to reflecting the requirements of the conditions, specifying personnel, and completing the Environmental Risk Register.*
- Advice Note: Particular care must be taken with development and operation of Construction Yard 7. When the CEMP is being updated and finalised, consideration must be given to the contents of the draft SSCEMP prepared for Construction Yard 7 (Row 41, Schedule A) recognising changes required by inclusion of the ventilation stack in this yard.*
- 10) CEMP.1B For the purposes of staging works, as some works may commence well in advance of others, the NZTA may provide staged or site specific CEMPs for those works to the Major Infrastructure Team Manager, Auckland Council. The NZTA shall consult with the Team Manager about the need and timing for any other site-specific or staged CEMPs and shall provide any required site-specific or staged CEMPs to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to commencement of such the specific stage (including enabling) or site works.
- 11) CEMP.2 The certification process of the CEMP (and its appendices) shall confirm that the CEMP gives effect to the relevant conditions, as well as those matters in CEMP.6, and that it includes details of:
- (a) Staff and contractors' responsibilities;
  - (b) Training requirements for employees, sub-contractors and visitors;
  - (c) Environmental incident and emergency management;
  - (d) Communication and interface procedures (in accordance with the Communication Plan



- required under Condition PI.2);
  - (e) Environmental complaints management (including the procedures required under Condition PI.4);
  - (f) Compliance monitoring;
  - (g) Reporting (including detail on the frequency of reporting to the Auckland Council);
  - (h) Environmental auditing; and
  - (i) Corrective action.
  
- 12) CEMP.3 The management of key environmental effects associated with the construction phase of the Project is detailed within environmental management plans that are included in the CEMP as appendices. This suite of management plans as shown on Figure CEMP.A comprises:
  - (a) Construction Noise and Vibration Management Plan (CNVMP);
  - (b) Construction Air Quality Management Plan (CAQMP);
  - (c) Erosion and Sediment Control Plan (ESCP);
  - (d) Temporary Stormwater Management Plan (TSMP);
  - (e) Ecological Management Plan (ECOMP);
  - (f) Groundwater Management Plan (GWMP);
  - (g) Settlement Effects Management Plan (SEMP);
  - (h) Contaminated Soils Management Plan (CSMP);
  - (i) Hazardous Substances Management Plan (HSMP);
  - (j) Archaeological Site Management Plan (ASMP);
  - (k) Construction Traffic Management Plan (CTMP);
  - (l) Concrete Batching and Crushing Plant Management Plan (CBCPMP);
  - (m) Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP) (to be prepared in accordance with Condition CEMP.15);
  - (n) Waste Management Plan (to be prepared in accordance with Condition CEMP.10) ;
  - and
  - (o) Temporary Construction Lighting Management Plan (to be prepared in accordance with Condition L.2).
  
- 13) CEMP.6 The finalised CEMP shall include specific details on demolition, construction and management of all works associated with the Project. The certification process of the CEMP shall confirm that the CEMP includes details of the following:
  - (a) details of the site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
  - (b) The location of large notice boards that clearly identify the NZTA and the Project name, together with the name, telephone, email address and address for service of the site or Project manager and the community liaison person;
  - (c) An outline construction programme of the work indicating in particular likely time periods for road closures and anticipated traffic diversion effects;
  - (d) The hours of work, which should reflect the need to ensure that residents enjoy reasonable freedom from noisy or intrusive construction activity in their neighbourhood at night, on Sundays and during public holidays;
  - (e) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/ storage of rubbish, storage and unloading of building materials and similar construction activities;

- (f) Location of worker's offices and conveniences (e.g. portaloo's);
  - (g) Procedures of controlling sediment run-off, dust and the removal of soil, debris and demolition and construction materials from public roads or places. Dust mitigation measures should include use of water sprays to control dust nuisance on dry or windy days;
  - (h) Methods to stabilise ingress and egress points to construction sites, to the standard required by ARC Technical Publication 90 (Nov 2007);
- 14) CEMP.10 The NZTA shall finalise and implement the Hazardous Substances Management Plan (HSMP), through the CEMP (as per Condition CEMP.1), submitted with this application, prior to works commencing on site. The certification process of the CEMP shall confirm that the HSMP clearly identifies the requirements for proper storage, handling, transport and disposal of hazardous substances during the construction phase of the Project and confirm that there shall be no storage of explosives on the Project site.
- 15) CEMP.11 The NZTA shall develop and implement a Waste Management Plan in accordance with the waste management principles, controls and methods set out in the CEMP. The Plan shall be provided to the Major Infrastructure Team Manager, Auckland Council and be implemented throughout the entire construction period.
- 16) CEMP.15 The NZTA will be responsible for all service relocations required for construction of the Project. The NZTA shall liaise with the providers of infrastructure service networks (including, but not limited to water, gas, stormwater, wastewater, power and telecommunications), and private property owners with on-site services to develop methodologies and timing for necessary services relocation required for the Project, with the objective of minimising disruption to the operation of these service networks and on-site services.
- Advice note:*
- (a) *It is noted that if separate consents are required for relocations for any services of network utility operators or landowners, such consents will be obtained before construction commences in the relevant area, and any effects of those relocations would be considered at that time. The same applies to any alteration of consents if required.*
  - (b) *Network infrastructure owned and operated by Watercare Services is located within the designations. An operating agreement will be developed by the NZTA and Watercare Services which will include appropriate notification and access protocols where works are to be undertaken by either network operator on or adjacent to Watercare Services infrastructure within the designations.*
- 17) PI.1 A community liaison person shall be appointed by the NZTA for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the Project. The liaison person's name and contact details shall be made available in the CEMP and on site signage by the NZTA. This person must be reasonably available for on-going consultation on all matters of concern to affected parties arising from the Project.
- 18) PI.2 The NZTA shall prepare and implement a Communications Plan that sets out procedures detailing how the public, Ministry of Social Development, Housing New Zealand Corporation and other organisations representing the particular demographic characteristics of the community (including but not limited to Primary Health Organisations, general practitioners, youth, education organisations, aged care groups and groups representing ethnic and migrant communities) will be communicated with throughout the construction and monitoring periods (as prescribed in the designation and consent

conditions).

In preparing the Communications Plan, the NZTA will liaise with Auckland Council to access its community liaison databases. The Communications Plan will include details of:

- (a) The site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- (b) In accordance with these Conditions, the database of the key construction activities and monitoring requirements that are the subject of the Communications Plan;
- (c) The database of stakeholders and residents who will be communicated with;
- (d) Communication methods, an assessment of how these methods reach the different audience/stakeholder groups (including those methods set out in Condition CEMP.6), and detail on when each of these methods will be used (e.g. regular communication or event specific methods);
- (e) The appointed specialist in Environmental and Occupational Medicine, including contact details (as per Condition SO.13);
- (f) Any stakeholder specific communication plans required; and
- (g) Monitoring and review procedures for the Communications Plan.

The Communications Plan shall be written in accordance with the external communication procedures set out in the CEMP and provided at least 20 working days prior to construction commencing, to the Major Infrastructure Team Manager, Auckland Council, Working Liaison Group and the Community Liaison Group(s) established by Condition PI.5. The structure of the communication groups set out in these conditions is attached as Figure PI.A.

19) PI.5

The NZTA shall establish Community Liaison Group(s) at least two months prior to construction commencing in each of the following key construction areas:

- (a) Te Atatu (including the SH16 Causeway)
- (b) Waterview (including works to St Lukes on SH16 and on the Waterview Estuary and Causeway Bridges)
- (c) Owairaka

and hold regular meetings (at least three monthly) throughout the construction period and up to 24 months following construction completion relevant to these areas (or less if the members of the Group agree), so that on-going monitoring information can continue to be disseminated.

The Community Liaison Group(s) shall be open to all interested parties within the Project area including, but not limited to the following groups:

- (a) Auckland Council and Auckland Transport;
- (b) Educational facilities within the Project area (including schools, kindergartens, childcare facilities and Unitec Institute of Technology);
- (c) Relevant community/ environmental groups (including but not limited to Friends of Oakley Creek, Star Mills Preservation Group, Cycle Action Auckland and representatives from those organisations identified in the Communications Plan (as required by Condition PI.2) and local residents;
- (d) Department of Conservation;
- (e) Local Boards;
- (f) Iwi groups with Mana Whenua;
- (g) Public transport providers; and
- (h) Housing New Zealand Corporation.

*Advice note: The purpose of the Community Liaison Group(s) is to provide a regular forum through which information about the Project can be provided to the community, and an opportunity for concerns or issues to be raised.*

- 20) ARCH.2(b) The NZTA shall employ at its expense a qualified archaeologist (the Project archaeologist) who shall be on site to monitor all initial earthworks, including surface stripping of the site, for all specific areas identified in the ASMP to establish whether any sub-surface archaeological features are present. This includes, but is not limited to, all works in the vicinity of the "Oakley Inlet Heritage Area", located adjacent to the Great North Road Interchange;
- 21) ARCH.5 In accordance with the ASMP, the following specific measures shall be implemented in the area identified as the "Oakley Inlet Heritage Area" (including recorded sites R11/2191, R11/2202, R11/2203 and R11/2459), located adjacent to the Great North Road Interchange:
- (a) In determining the details of construction methodology and site access, the NZTA shall ensure that there is no impact on sites R11/2202, R11/2203 and the main features of site R11/2191 (the basalt walls, boiler, building foundations and platforms). When the details have been determined, a plan will be prepared in consultation with the Project archaeologist that outlines the areas of archaeological value to be fenced off and protected from any adverse effects during the construction process. The Heritage Manager, Environmental Services, Auckland Council shall be consulted in the drafting of the plan and shall certify that the extent and method of fencing will protect the areas of archaeological value prior to commencement of construction works within the area. This plan will be added to the Archaeological Constraints layer in the GIS layers included as an Appendix of the ASMP in the CEMP.
  - (b) All works in the Oakley Inlet Heritage Area shall be monitored by the Project archaeologist;
  - (c) Machine access to construction works in this area shall be planned so as to minimise adverse effects on archaeological features;
  - (d) During and following removal of houses north of Cowley Street and west of Great North Road in the area where the mill workers' cottages and mill race were once located, investigations shall be undertaken to establish and record any archaeological remains that may have survived;
  - (e) Remedial or limited restoration works shall be carried out to the basalt walls, wheel pit, boiler and bridge abutment of the mill/tannery/ quarry site (R11/2191), to a specification prepared by a heritage professional, to ensure their long term preservation. The specification shall be prepared in consultation with the Heritage Manager, Environmental Services, Auckland Council;
  - (f) A vegetation management plan shall be prepared and implemented to remove vegetation that is damaging archaeological features in this area and to protect and enhance features with appropriate vegetation cover. This plan shall form part of the Waterview Reserve Restoration Plan (refer to Conditions ARCH.6 and OS.5) and shall be prepared in consultation with the Heritage Manager, Environmental Services, Auckland Council;
  - (g) The design and location of any walkways and paths and structures within the Oakley Inlet Heritage Area shall include consideration of historic paths and accessways accessways (excluding the piers associated with the SH16 Interchange).
- 22) ARCH. Advice *Any archaeological sites within the area affected by the Project shall not be modified or disturbed in any way unless written authorisation has been obtained from the NZ Historic*

- Note *Places Trust.*
- 23) C.1 The NZTA shall provide to the Major Infrastructure Team Manager, Auckland Council plans and drawings (including dimensioned, cross sections, elevations and site plans of all areas of proposed reclamation (including associated permanent and temporary CMA occupation), permanent structures and temporary structures) at least 20 working days before the proposed date of commencement of the construction of the reclamation, bridge piers or temporary structure.
- 24) M.1 The NZTA shall finalise and implement through the CEMP, the ECOMP submitted with this application. The ECOMP shall be revised to accurately reflect the conditions of this consent and changes to the details of construction processes prior to construction commencing. The ECOMP shall include, but not be limited to, details of:
- (a) Monitoring of marine habitats and ecological values;
  - (b) Trigger event criteria for undertaking additional monitoring;
  - (c) Procedures for responding to accidental discharges to the marine environment;
  - (d) Complaints investigation, monitoring and reporting; and
  - (e) The identification of staff and contractors' responsibilities.

## CONSTRUCTION CONDITIONS

- 25) CEMP.4 The CEMP shall be implemented and maintained throughout the entire construction period.
- 26) CEMP.5 A copy of the CEMP shall be held on each construction site at all times and be available for inspection on request by the Auckland Council.
- 27) CEMP.8 All storage of material and equipment associated with the construction works shall take place within the boundaries of the designation.
- 28) CEMP.12 The CEMP shall be reviewed by the NZTA at least annually or as a result of a material change to the Project. The review shall take into consideration:
- (a) Compliance with designation and consent conditions;
  - (b) Any changes to construction methods;
  - (c) Key changes to roles and responsibilities within the Project;
  - (d) Changes in industry best practice standards;
  - (e) Changes in legal or other requirements;
  - (f) Results of inspections, monitoring, incidents, corrective actions, internal or external assessments; and
  - (g) Public complaints.
- A summary of the review process undertaken shall be kept by the NZTA, provided annually to the Major Infrastructure Team Manager, Auckland Council and made available (with any related data) to the Auckland Council upon request.
- 29) CEMP.13 Following the review process (as described in Condition CEMP.12), the CEMP may require updating. Any material change proposed to the CEMP (including appended Management Plans) shall be submitted for approval to the Major Infrastructure Team Manager, Auckland Council at least 10 working days prior to the proposed changes taking effect.'
- Advice Note: Material change will include amendment to any base information informing the CEMP or any process, procedure or method of the CEMP (such as the environmental constraints map, compliance monitoring process, complaints procedure or mitigation / remedial methods identified) which has the potential to increase adverse effects on a*

*particular value. For clarity changes to personnel and contact schedules do not constitute a material change.*

- 30) PI.3 At least 15 working days prior to the commencement of construction, and at 15 working day intervals thereafter, or as required depending on the scale of works and effects on the community, advertisements will be placed in the relevant local newspapers and community noticeboards (as identified in Condition CEMP.6(b)) detailing the nature of the forthcoming works, the location of the forthcoming works and hours of operation. All advertisements will include reference to a 24 hour toll free complaints telephone number. Where relevant, advertisements will also include but not be limited to details of:
- (a) Any traffic disruptions or controls or changes to property access, pedestrian/ cycle routes and bus stops; and
  - (b) Any other construction activities, including night time works, blasting, and structure-borne noise, as identified in the conditions.
- 31) PI.4 The NZTA shall manage, investigate and resolve (as appropriate) all complaints for the duration of the construction works in accordance with the environmental complaints section of the CEMP. The implementation strategy for complaints includes:
- (a) A 24 hour toll free telephone number and email address, which shall be provided to all potentially affected residents and businesses. The number shall be available and answered at all times during the entire duration of the works for the receipt and management of any complaints. A sign containing the contact details shall be located at each site specific work activity;
  - (b) The NZTA shall maintain a record of all complaints made to this number, email or any site office, including the full details of the complainant and the nature of the complaint;
  - (c) Upon receiving a complaint, within 10 days of complaint receipt, a formal written response will be provided to the complainant and Auckland Council;
  - (d) The NZTA shall undertake corrective action where necessary to resolve any problem identified. All action taken and relevant information shall be documented. For the avoidance of doubt, 'where necessary' refers to where the works are not being carried out in accordance with conditions of this designation;
  - (e) Where issues and complaints about effects cannot be resolved through the CEMP complaints management process, a meeting shall be held between the NZTA, the complainant and the Auckland Council representative(s) to discuss the complaint and ways in which the issue may be resolved. If parties cannot agree on a resolution, an independent qualified mediator will be appointed, agreeable to all parties and at the shared cost of all parties, to undertake mediation of the dispute or concerns; and
  - (f) All information collected in Conditions PI.4 (b), (c) and (d) shall be detailed in a Construction Compliance Report (including the means by which the complaint was addressed, whether resolution was reached and how the response was carried out) prepared by the NZTA. This Report shall be submitted to the Major Infrastructure Team Manager, Auckland Council on a quarterly basis commencing at the beginning of the works and for the entire duration of construction.
- 32) PI.6 The Community Liaison Group(s) shall be provided opportunities to review and comment on the following (amongst other things):
- (a) The Outline Plan of Works detailing designs for the northern and southern ventilation buildings and stacks (the outcomes of this consultation will be reported in accordance with the processes required in DC.8(n) and DC.9(k);
  - (b) The Open Space Restoration Plans (as required by Condition OS.3);
  - (c) Finalisation and amendment to Urban Design and Landscape Plans (UDL Plans) (as

- required by Condition LV.1);
- (d) The Oakley Inlet Heritage Plan (as required by Conditions OS.5(b)(i) and ARCH.6);
  - (e) The detail of the Oakley Creek restoration (as required by Condition STW.20);
  - (f) Publicly available results of environmental monitoring as required by the designation and/or these Consents (e.g. air quality monitoring); and
  - (g) The finalisation of the STEM assessment required by CEMP.6(o) and a schedule of trees that are required to be removed for consideration of timber use in heritage projects as required by Condition SO.7.
- Advice Note: Attention is drawn to the Vegetation conditions concerning identification and protection of Significant Vegetation and Valued Vegetation.*
- (h) Detailed design features of the Te Atatu underpass (e.g. lighting and architectural treatment).
- 33) ARCH.3 If any archaeological sites, including human remains are exposed during site works, then the following procedures shall apply:
- (a) Immediately it becomes apparent that a possible archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease;
  - (b) The site supervisor shall immediately secure the area in a way that ensures that any artefacts or remains are untouched and notify the Project archaeologist;
  - (c) The Project archaeologist shall inspect the site to assess the relevance of the find, and then the Auckland Council shall be advised of the significance;
  - (d) If the site is confirmed to be an archaeological site by the Project archaeologist, the site supervisor shall then notify tangata whenua, the New Zealand Historic Places Trust, and the Auckland Council that an archaeological site has been exposed so that appropriate action can be taken;
  - (e) In the case of human remains, the NZ Police shall be notified.
- 34) C.2 Construction shall be undertaken in accordance with the construction methodology detailed in the application, specifically Technical Report G.23 *Coastal Works* and Technical Report G.22 *Erosion and Sediment Control Plan*. The construction methodology shall include:
- (a) The use of temporary coffer dams to create dry working areas;
  - (b) Realignment of sections of existing low-tide channels in Oakley inlet and Waterview Estuary that will be directly affected by the reclamation works;
  - (c) Removal of mangroves to provide construction and ground-treatment access, placement of temporary coffer dams and to facilitate natural channel migration in the Whau River side drainage channel (east of Rosebank Domain);
  - (d) Installation or removal works to be undertaken at the best practicable time to minimise potential sediment disturbance.
- 35) C.3 The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council in writing of the proposed commencement date of the reclamation, structures and/or channel realignment works at least 10 working days prior to the proposed start date.
- 36) C.6 The NZTA shall maintain the site in good order and shall remedy all damage and disturbance caused by vehicle traffic, plant and equipment to the foreshore during construction, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.
- 37) C.7 Removal or pruning of vegetation in the CMA shall be limited to the areas of permanent and temporary occupation as shown on the Waterview Connection Project Assessment of

Environmental Effects Plan Set F.12 and F.13 submitted with the application (ref Schedule A, rows 13 and 14). Removal of mangroves shall be implemented in accordance with the principles detailed in the Ecological Management Plan.

- 38) M.10 The NZTA shall maintain the coastal marine area free of any gross litter, rubbish and debris during construction.
- 39) M.11 Prior to excavation of sediment from the marine habitat remediation zone (MHRZ), mangrove vegetation will be removed from the sediment and disposed of at an appropriate offsite facility. The excavated sediment shall be stockpiled within an adjacent dry working area. When the sediment is returned to the MHRZ it will be levelled out to tie in with the existing mudflat. Where a routine marine benthic habitat monitoring site is within an area of MHRZ, additional monitoring of the depth of sediment overlying the improved ground/mudcrete will also be undertaken.

### **POST-CONSTRUCTION CONDITIONS**

- 40) C.4 The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council in writing within 10 working days of the completion of each discrete area of reclamation, structures and/or channel realignment works.
- 41) C.5 The NZTA shall supply to the Major Infrastructure Team Manager, Auckland Council and LINZ Hydrographic Services and LINZ Topographic Services Land Information New Zealand, PO Box 5501, Wellington 6145), a complete set of “as built” plans, final topographic and bathymetric data, and appropriate certification confirming that the new reclamations, structures and channel realignment works have been built in accordance with sound engineering practice, within three months of the completion of the reclamation works.
- 42) C.8 The NZTA shall ensure the removal of all equipment, erosion and sediment control measures, surplus sediment and construction materials from the CMA within 20 working days following the completion of the construction works, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.

### **MONITORING**

- 43) M.2 The NZTA shall engage a suitably qualified ecologist to undertake a marine habitat monitoring programme, as described in Conditions M.3 to M.6.
- 44) M.3 The marine benthic habitat monitoring programme shall be undertaken every 6 months:
- (a) At least 12 months prior to construction commencing, to allow for two baseline surveys to be undertaken;
  - (b) During construction; and
  - (c) For a maximum of 3 years following completion of the Project, or for a lesser time if the monitoring indicates no significant effects, as agreed with the Major Infrastructure Team Manager, Auckland Council.
- 45) M.4 The marine benthic habitat monitoring programme shall be undertaken in accordance with the details set out in the ECOMP and include:
- (a) Sampling of the marine invertebrate community composition (collection of sediment cores to a depth of approximately 15cm);
  - (b) Sampling of the sediment surface (top 2cm) for sediment grain size; and
  - (c) Sampling of the sediment surface (top 2cm) for sediment quality (analysis of the



concentration of copper, lead, zinc and polycyclic aromatic hydrocarbons).

- 46) M.5 The marine benthic habitat monitoring shall be undertaken within sampling grids (50m x 30m) broadly established at the following locations:
- (a) Two locations within Oakley Inlet;
  - (b) Four locations within Waterview Estuary; and
  - (c) Four locations north of the Causeway.
- Specific locations and experimental design shall be detailed in the ECOMP, and the design of the monitoring programme will be based on the *Estuarine Environmental Assessment and Monitoring: A National Protocol (Cawthron 2002)*.
- 47) M.6 The NZTA shall undertake additional marine habitat monitoring in the event of a 'trigger event' for marine ecology habitats. For the purposes of this consent, a 'trigger event' for marine ecology habitats is defined in the ECOMP.
- 48) M.7 The NZTA shall review the marine habitat monitoring results (pursuant to Conditions M.3 to M.6) and in the event that potential adverse effects are identified, the NZTA shall develop and implement appropriate contingency plans and/or remedial measures.

## **REPORTING**

- 49) M.8 The marine benthic habitat monitoring results shall be compiled by the NZTA, and a report provided to the Major Infrastructure Team Manager, Auckland Council every 6 months.

## **EPA 10/2.036 – (ARC: 38341)**

This document has been prepared in compliance with conditions of the “*Final Report and Decision of the Board of Inquiry into the New Zealand Transport Agency Waterview Connection Proposal, Volume 2, Conditions of Consent*”. Schedule B of Volume 2 identifies the Conditions relevant to this Consent by the code and number as referenced throughout this document. In the event of dispute, Schedule B of Volume 2 shall take precedence over this Consent.

**Type:** Coastal Consent

**Description:** **Erection of Permanent Structures in the CMA (Sector 5):**

This consent relates to the construction of permanent (operational phase) structures within the CMA including piers, ramps, stormwater discharge devices, heritage bridge and other consequential activities such as disturbance and/or vegetation removal. In CPA 1 – Oakley Creek Inlet.

**Duration:** 10 years

**Code:** RC = Standard Resource Consent Conditions

CEMP = Construction Environmental Management Plan Conditions

PI = Public Information Conditions

ARCH = Archaeology Conditions

C = Coastal Conditions

M = Marine Ecology Conditions

### **GENERAL CONDITIONS**

- 1) RC.1 Except as modified by the conditions below, the works shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency (NZTA), in the resource consent applications and the supporting documents (as detailed in Condition DC.1), and in the supplementary information provided in evidence by the NZTA.
- 2) RC.1A The NZTA shall implement the conditions of these consents in accordance with Schedule B, which sets out the Conditions that are to be applied to each consent including the duration of each consent.
- 3) RC.2 The Conditions of these consents may be reviewed by the Major Infrastructure Team Manager, Auckland Council, pursuant to Section 128 of the Resource Management Act 1991 (the Act), by the giving of notice pursuant to Section 129 of the Act, on the one year anniversary of the commencement of the consents and every year thereafter in order:
  - (a) To deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
  - (b) To deal with any other adverse effect on the environment on which the exercise of the consent may have an influence.
- 4) RC.4 Any Management Plans submitted to the Major Infrastructure Team Manager, Auckland Council for approval or certification may be submitted in stages to reflect any proposed staging of the physical works. Plans submitted shall clearly show the integration with adjacent

stages and interrelated activities.

- 5) RC.5 In the event of any dispute, disagreement or inaction arising as to any Auckland Council Manager certification/ approvals required by the consent conditions, or as to the implementation of or monitoring required by the conditions, matters shall be referred in the first instance to the NZTA Regional State Highway Manager and to the Resource Consents Manager, Auckland Council to determine a process of resolution.
- If a resolution cannot be agreed, then the matter may be referred to an independent appropriately qualified expert, agreeable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree.
- The independent appropriately qualified expert shall be appointed within 10 working days of the NZTA or Auckland Council giving notice of their intention to seek expert determination. The expert shall, as soon as possible, issue his or her decision on the matter. In making the decision, the expert shall be entitled to seek further information and hear from the parties as he or she sees fit.
- Advice note: The dispute resolution process provided for in this condition does not prejudice any party's right to take enforcement action in relation to the implementation of the designation conditions. However, the dispute resolution process will be applied before any formal enforcement action is taken by the Council except in urgent situations.
- 6) RC.6 Pursuant to Section 36(1)(d) of the RMA, the requiring authority is required to pay to Auckland Council any administrative charge for the carrying out by the local authority of its functions in relation to the administration, monitoring, and supervision of designation conditions.
- 7) RC.7 The servants of agents of Auckland Council shall be permitted to have access to relevant parts of the Project at all reasonable times for the purpose of carrying out inspections, investigations, tests, measurements and/or to take samples.

## **PRE-CONSTRUCTION CONDITIONS**

- 8) RC.3 Within 3 months of the resource consents commencing for the Project (or at least 1 month prior to any Auckland Council approvals or certifications required by these Conditions, whichever is the earlier), the NZTA shall update and finalise to the satisfaction of the Major Infrastructure Team Manager, Auckland Council all drawings and Plans cited in Schedule A, together with a full set of the information and documentation referred to in Condition DC.1 and provide these to the Major Infrastructure Team Manager, Auckland Council. At the same time the NZTA shall prepare to the satisfaction of Auckland Council, a document for each resource consent which sets out the resource consent and have attached to it in text format a comprehensive set of the conditions imposed by the Board of Inquiry in its Final Decision as summarised in Schedule B, inclusive of any standard conditions and advice notes.
- In particular (but not limited to), the following Plans will need to be amended in light of the Final Conditions:
- (a) F.2 Operational Scheme Plans (refer Schedule A, Row 3) require amendment detailing the amended location of the ventilation stacks and southern ventilation buildings;
  - (b) F.5 Construction Scheme Plans (refer Schedule A, Row 4) require amendment to detail changes to construction footprint for the amended location of ventilation stacks and southern ventilation buildings and reconfiguration of Construction Yard 1);
  - (c) F.6 Construction Yard Plans 101 and 107 (refer Schedule A, Row 7), detailing

- amendments to the Construction Yard 1 in light of the reconfiguration of this Yard and for Construction Yard 7 in light of the relocation of the northern ventilation stack (refer Schedule A, Row 34);
- (d) F.8 Plans of Structures and Architectural Features (refer Schedule A, Row 9), detailing the amended location of the Northern Ventilation Stack and the design and location of the Southern Ventilation Building and Stack;
  - (e) The CNVMP (including flow diagram and the supplementary evidence produced by Ms Wilkening) (refer Schedule A, Rows 36, 37 and 39);
  - (f) Update to the areas of the Open Space Restoration Plans (Schedule A, Row 30) to:
    - (i) Extend these areas in geographic extent to provide for the works identified in the Management Plan notations identified in the OS Conditions (in particular OS.5 and OS.6). (e.g. these areas will (as relevant) include Eric Armishaw Park, Howlett Reserve and Waterview Esplanade Reserve); and
    - (ii) Exclude the operational area of designation required for the northern ventilation stack (as identified through the OPW process (refer Condition DC.8); and
  - (g) Schedule A, Row 28 the Plan detailing proposed open space impacts and replacements needs to be updated to recolour the two land parcels on Hendon Avenue (which are excluded from the replacement calculations) to 'brown' to confirm they are part of the operational impact and will not be returned as open space.
- 9) CEMP.1 Except where provided for in Condition CEMP.1A below, the NZTA shall update and finalise the draft Construction Environmental Management Plan (CEMP) including all the Management Plans which form part of the CEMP and are included as appendices, submitted with this application to ensure compliance with the consent and designation conditions imposed by the Board of Inquiry. The CEMP shall be provided to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to the commencement of works to certify compliance and consistency with the conditions. Construction shall not commence until certification is obtained.
- Advice note: For clarity the CEMP will be updated and finalised in accordance with the conditions. Any amendments will be limited to reflecting the requirements of the conditions, specifying personnel, and completing the Environmental Risk Register.*
- Advice Note: Particular care must be taken with development and operation of Construction Yard 7. When the CEMP is being updated and finalised, consideration must be given to the contents of the draft SSCEMP prepared for Construction Yard 7 (Row 41, Schedule A) recognising changes required by inclusion of the ventilation stack in this yard.*
- 10) CEMP.1B For the purposes of staging works, as some works may commence well in advance of others, the NZTA may provide staged or site specific CEMPs for those works to the Major Infrastructure Team Manager, Auckland Council. The NZTA shall consult with the Team Manager about the need and timing for any other site-specific or staged CEMPs and shall provide any required site-specific or staged CEMPs to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to commencement of such the specific stage (including enabling) or site works.
- 11) CEMP.2 The certification process of the CEMP (and its appendices) shall confirm that the CEMP gives effect to the relevant conditions, as well as those matters in CEMP.6, and that it includes details of:
- (a) Staff and contractors' responsibilities;
  - (b) Training requirements for employees, sub-contractors and visitors;
  - (c) Environmental incident and emergency management;
  - (d) Communication and interface procedures (in accordance with the Communication Plan

- required under Condition PI.2);
  - (e) Environmental complaints management (including the procedures required under Condition PI.4);
  - (f) Compliance monitoring;
  - (g) Reporting (including detail on the frequency of reporting to the Auckland Council);
  - (h) Environmental auditing; and
  - (i) Corrective action.
  
- 12) CEMP.3 The management of key environmental effects associated with the construction phase of the Project is detailed within environmental management plans that are included in the CEMP as appendices. This suite of management plans as shown on Figure CEMP.A comprises:
  - (a) Construction Noise and Vibration Management Plan (CNVMP);
  - (b) Construction Air Quality Management Plan (CAQMP);
  - (c) Erosion and Sediment Control Plan (ESCP);
  - (d) Temporary Stormwater Management Plan (TSMP);
  - (e) Ecological Management Plan (ECOMP);
  - (f) Groundwater Management Plan (GWMP);
  - (g) Settlement Effects Management Plan (SEMP);
  - (h) Contaminated Soils Management Plan (CSMP);
  - (i) Hazardous Substances Management Plan (HSMP);
  - (j) Archaeological Site Management Plan (ASMP);
  - (k) Construction Traffic Management Plan (CTMP);
  - (l) Concrete Batching and Crushing Plant Management Plan (CBCPMP);
  - (m) Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP) (to be prepared in accordance with Condition CEMP.15);
  - (n) Waste Management Plan (to be prepared in accordance with Condition CEMP.10) ;
  - and
  - (o) Temporary Construction Lighting Management Plan (to be prepared in accordance with Condition L.2).
  
- 13) CEMP.6 The finalised CEMP shall include specific details on demolition, construction and management of all works associated with the Project. The certification process of the CEMP shall confirm that the CEMP includes details of the following:
  - (a) details of the site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
  - (b) The location of large notice boards that clearly identify the NZTA and the Project name, together with the name, telephone, email address and address for service of the site or Project manager and the community liaison person;
  - (c) An outline construction programme of the work indicating in particular likely time periods for road closures and anticipated traffic diversion effects;
  - (d) The hours of work, which should reflect the need to ensure that residents enjoy reasonable freedom from noisy or intrusive construction activity in their neighbourhood at night, on Sundays and during public holidays;
  - (e) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/ storage of rubbish, storage and unloading of building materials and similar construction activities;

- (f) Location of worker's offices and conveniences (e.g. portaloo's);
  - (g) Procedures of controlling sediment run-off, dust and the removal of soil, debris and demolition and construction materials from public roads or places. Dust mitigation measures should include use of water sprays to control dust nuisance on dry or windy days;
  - (h) Methods to stabilise ingress and egress points to construction sites, to the standard required by ARC Technical Publication 90 (Nov 2007);
- 14) CEMP.10 The NZTA shall finalise and implement the Hazardous Substances Management Plan (HSMP), through the CEMP (as per Condition CEMP.1), submitted with this application, prior to works commencing on site. The certification process of the CEMP shall confirm that the HSMP clearly identifies the requirements for proper storage, handling, transport and disposal of hazardous substances during the construction phase of the Project and confirm that there shall be no storage of explosives on the Project site.
- 15) CEMP.11 The NZTA shall develop and implement a Waste Management Plan in accordance with the waste management principles, controls and methods set out in the CEMP. The Plan shall be provided to the Major Infrastructure Team Manager, Auckland Council and be implemented throughout the entire construction period.
- 16) CEMP.15 The NZTA will be responsible for all service relocations required for construction of the Project. The NZTA shall liaise with the providers of infrastructure service networks (including, but not limited to water, gas, stormwater, wastewater, power and telecommunications), and private property owners with on-site services to develop methodologies and timing for necessary services relocation required for the Project, with the objective of minimising disruption to the operation of these service networks and on-site services.
- Advice note:*
- (a) *It is noted that if separate consents are required for relocations for any services of network utility operators or landowners, such consents will be obtained before construction commences in the relevant area, and any effects of those relocations would be considered at that time. The same applies to any alteration of consents if required.*
  - (b) *Network infrastructure owned and operated by Watercare Services is located within the designations. An operating agreement will be developed by the NZTA and Watercare Services which will include appropriate notification and access protocols where works are to be undertaken by either network operator on or adjacent to Watercare Services infrastructure within the designations.*
- 17) PI.1 A community liaison person shall be appointed by the NZTA for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the Project. The liaison person's name and contact details shall be made available in the CEMP and on site signage by the NZTA. This person must be reasonably available for on-going consultation on all matters of concern to affected parties arising from the Project.
- 18) PI.2 The NZTA shall prepare and implement a Communications Plan that sets out procedures detailing how the public, Ministry of Social Development, Housing New Zealand Corporation and other organisations representing the particular demographic characteristics of the community (including but not limited to Primary Health Organisations, general practitioners, youth, education organisations, aged care groups and groups representing ethnic and migrant communities) will be communicated with throughout the construction and monitoring periods (as prescribed in the designation and consent

conditions).

In preparing the Communications Plan, the NZTA will liaise with Auckland Council to access its community liaison databases. The Communications Plan will include details of:

- (a) The site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- (b) In accordance with these Conditions, the database of the key construction activities and monitoring requirements that are the subject of the Communications Plan;
- (c) The database of stakeholders and residents who will be communicated with;
- (d) Communication methods, an assessment of how these methods reach the different audience/stakeholder groups (including those methods set out in Condition CEMP.6), and detail on when each of these methods will be used (e.g. regular communication or event specific methods);
- (e) The appointed specialist in Environmental and Occupational Medicine, including contact details (as per Condition SO.13);
- (f) Any stakeholder specific communication plans required; and
- (g) Monitoring and review procedures for the Communications Plan.

The Communications Plan shall be written in accordance with the external communication procedures set out in the CEMP and provided at least 20 working days prior to construction commencing, to the Major Infrastructure Team Manager, Auckland Council, Working Liaison Group and the Community Liaison Group(s) established by Condition PI.5. The structure of the communication groups set out in these conditions is attached as Figure PI.A.

19) PI.5

The NZTA shall establish Community Liaison Group(s) at least two months prior to construction commencing in each of the following key construction areas:

- (a) Te Atatu (including the SH16 Causeway)
- (b) Waterview (including works to St Lukes on SH16 and on the Waterview Estuary and Causeway Bridges)
- (c) Owairaka

and hold regular meetings (at least three monthly) throughout the construction period and up to 24 months following construction completion relevant to these areas (or less if the members of the Group agree), so that on-going monitoring information can continue to be disseminated.

The Community Liaison Group(s) shall be open to all interested parties within the Project area including, but not limited to the following groups:

- (a) Auckland Council and Auckland Transport;
- (b) Educational facilities within the Project area (including schools, kindergartens, childcare facilities and Unitec Institute of Technology);
- (c) Relevant community/ environmental groups (including but not limited to Friends of Oakley Creek, Star Mills Preservation Group, Cycle Action Auckland and representatives from those organisations identified in the Communications Plan (as required by Condition PI.2) and local residents;
- (d) Department of Conservation;
- (e) Local Boards;
- (f) Iwi groups with Mana Whenua;
- (g) Public transport providers; and
- (h) Housing New Zealand Corporation.

*Advice note: The purpose of the Community Liaison Group(s) is to provide a regular forum through which information about the Project can be provided to the community, and an opportunity for concerns or issues to be raised.*

- 20) ARCH.2(b) The NZTA shall employ at its expense a qualified archaeologist (the Project archaeologist) who shall be on site to monitor all initial earthworks, including surface stripping of the site, for all specific areas identified in the ASMP to establish whether any sub-surface archaeological features are present. This includes, but is not limited to, all works in the vicinity of the "Oakley Inlet Heritage Area", located adjacent to the Great North Road Interchange;
- 21) ARCH.5 In accordance with the ASMP, the following specific measures shall be implemented in the area identified as the "Oakley Inlet Heritage Area" (including recorded sites R11/2191, R11/2202, R11/2203 and R11/2459), located adjacent to the Great North Road Interchange:
- (a) In determining the details of construction methodology and site access, the NZTA shall ensure that there is no impact on sites R11/2202, R11/2203 and the main features of site R11/2191 (the basalt walls, boiler, building foundations and platforms). When the details have been determined, a plan will be prepared in consultation with the Project archaeologist that outlines the areas of archaeological value to be fenced off and protected from any adverse effects during the construction process. The Heritage Manager, Environmental Services, Auckland Council shall be consulted in the drafting of the plan and shall certify that the extent and method of fencing will protect the areas of archaeological value prior to commencement of construction works within the area. This plan will be added to the Archaeological Constraints layer in the GIS layers included as an Appendix of the ASMP in the CEMP.
  - (b) All works in the Oakley Inlet Heritage Area shall be monitored by the Project archaeologist;
  - (c) Machine access to construction works in this area shall be planned so as to minimise adverse effects on archaeological features;
  - (d) During and following removal of houses north of Cowley Street and west of Great North Road in the area where the mill workers' cottages and mill race were once located, investigations shall be undertaken to establish and record any archaeological remains that may have survived;
  - (e) Remedial or limited restoration works shall be carried out to the basalt walls, wheel pit, boiler and bridge abutment of the mill/tannery/ quarry site (R11/2191), to a specification prepared by a heritage professional, to ensure their long term preservation. The specification shall be prepared in consultation with the Heritage Manager, Environmental Services, Auckland Council;
  - (f) A vegetation management plan shall be prepared and implemented to remove vegetation that is damaging archaeological features in this area and to protect and enhance features with appropriate vegetation cover. This plan shall form part of the Waterview Reserve Restoration Plan (refer to Conditions ARCH.6 and OS.5) and shall be prepared in consultation with the Heritage Manager, Environmental Services, Auckland Council;
  - (g) The design and location of any walkways and paths and structures within the Oakley Inlet Heritage Area shall include consideration of historic paths and accessways accessways (excluding the piers associated with the SH16 Interchange).
- 22) ARCH. Advice *Any archaeological sites within the area affected by the Project shall not be modified or disturbed in any way unless written authorisation has been obtained from the NZ Historic*



- Note *Places Trust.*
- 23) C.1 The NZTA shall provide to the Major Infrastructure Team Manager, Auckland Council plans and drawings (including dimensioned, cross sections, elevations and site plans of all areas of proposed reclamation (including associated permanent and temporary CMA occupation), permanent structures and temporary structures) at least 20 working days before the proposed date of commencement of the construction of the reclamation, bridge piers or temporary structure.
- 24) M.1 The NZTA shall finalise and implement through the CEMP, the ECOMP submitted with this application. The ECOMP shall be revised to accurately reflect the conditions of this consent and changes to the details of construction processes prior to construction commencing. The ECOMP shall include, but not be limited to, details of:
- (a) Monitoring of marine habitats and ecological values;
  - (b) Trigger event criteria for undertaking additional monitoring;
  - (c) Procedures for responding to accidental discharges to the marine environment;
  - (d) Complaints investigation, monitoring and reporting; and
  - (e) The identification of staff and contractors' responsibilities.

## **CONSTRUCTION CONDITIONS**

- 25) CEMP.4 The CEMP shall be implemented and maintained throughout the entire construction period.
- 26) CEMP.5 A copy of the CEMP shall be held on each construction site at all times and be available for inspection on request by the Auckland Council.
- 27) CEMP.8 All storage of material and equipment associated with the construction works shall take place within the boundaries of the designation.
- 28) CEMP.12 The CEMP shall be reviewed by the NZTA at least annually or as a result of a material change to the Project. The review shall take into consideration:
- (a) Compliance with designation and consent conditions;
  - (b) Any changes to construction methods;
  - (c) Key changes to roles and responsibilities within the Project;
  - (d) Changes in industry best practice standards;
  - (e) Changes in legal or other requirements;
  - (f) Results of inspections, monitoring, incidents, corrective actions, internal or external assessments; and
  - (g) Public complaints.
- A summary of the review process undertaken shall be kept by the NZTA, provided annually to the Major Infrastructure Team Manager, Auckland Council and made available (with any related data) to the Auckland Council upon request.
- 29) CEMP.13 Following the review process (as described in Condition CEMP.12), the CEMP may require updating. Any material change proposed to the CEMP (including appended Management Plans) shall be submitted for approval to the Major Infrastructure Team Manager, Auckland Council at least 10 working days prior to the proposed changes taking effect.'
- Advice Note: Material change will include amendment to any base information informing the CEMP or any process, procedure or method of the CEMP (such as the environmental constraints map, compliance monitoring process, complaints procedure or mitigation / remedial methods identified) which has the potential to increase adverse effects on a*

*particular value. For clarity changes to personnel and contact schedules do not constitute a material change.*

- 30) PI.3 At least 15 working days prior to the commencement of construction, and at 15 working day intervals thereafter, or as required depending on the scale of works and effects on the community, advertisements will be placed in the relevant local newspapers and community noticeboards (as identified in Condition CEMP.6(b)) detailing the nature of the forthcoming works, the location of the forthcoming works and hours of operation. All advertisements will include reference to a 24 hour toll free complaints telephone number. Where relevant, advertisements will also include but not be limited to details of:
- (a) Any traffic disruptions or controls or changes to property access, pedestrian/ cycle routes and bus stops; and
  - (b) Any other construction activities, including night time works, blasting, and structure-borne noise, as identified in the conditions.
- 31) PI.4 The NZTA shall manage, investigate and resolve (as appropriate) all complaints for the duration of the construction works in accordance with the environmental complaints section of the CEMP. The implementation strategy for complaints includes:
- (a) A 24 hour toll free telephone number and email address, which shall be provided to all potentially affected residents and businesses. The number shall be available and answered at all times during the entire duration of the works for the receipt and management of any complaints. A sign containing the contact details shall be located at each site specific work activity;
  - (b) The NZTA shall maintain a record of all complaints made to this number, email or any site office, including the full details of the complainant and the nature of the complaint;
  - (c) Upon receiving a complaint, within 10 days of complaint receipt, a formal written response will be provided to the complainant and Auckland Council;
  - (d) The NZTA shall undertake corrective action where necessary to resolve any problem identified. All action taken and relevant information shall be documented. For the avoidance of doubt, 'where necessary' refers to where the works are not being carried out in accordance with conditions of this designation;
  - (e) Where issues and complaints about effects cannot be resolved through the CEMP complaints management process, a meeting shall be held between the NZTA, the complainant and the Auckland Council representative(s) to discuss the complaint and ways in which the issue may be resolved. If parties cannot agree on a resolution, an independent qualified mediator will be appointed, agreeable to all parties and at the shared cost of all parties, to undertake mediation of the dispute or concerns; and
  - (f) All information collected in Conditions PI.4 (b), (c) and (d) shall be detailed in a Construction Compliance Report (including the means by which the complaint was addressed, whether resolution was reached and how the response was carried out) prepared by the NZTA. This Report shall be submitted to the Major Infrastructure Team Manager, Auckland Council on a quarterly basis commencing at the beginning of the works and for the entire duration of construction.
- 32) PI.6 The Community Liaison Group(s) shall be provided opportunities to review and comment on the following (amongst other things):
- (a) The Outline Plan of Works detailing designs for the northern and southern ventilation buildings and stacks (the outcomes of this consultation will be reported in accordance with the processes required in DC.8(n) and DC.9(k);
  - (b) The Open Space Restoration Plans (as required by Condition OS.3);
  - (c) Finalisation and amendment to Urban Design and Landscape Plans (UDL Plans) (as

- required by Condition LV.1);
- (d) The Oakley Inlet Heritage Plan (as required by Conditions OS.5(b)(i) and ARCH.6);
  - (e) The detail of the Oakley Creek restoration (as required by Condition STW.20);
  - (f) Publicly available results of environmental monitoring as required by the designation and/or these Consents (e.g. air quality monitoring); and
  - (g) The finalisation of the STEM assessment required by CEMP.6(o) and a schedule of trees that are required to be removed for consideration of timber use in heritage projects as required by Condition SO.7.
- Advice Note: Attention is drawn to the Vegetation conditions concerning identification and protection of Significant Vegetation and Valued Vegetation.*
- (h) Detailed design features of the Te Atatu underpass (e.g. lighting and architectural treatment).
- 33) ARCH.3 If any archaeological sites, including human remains are exposed during site works, then the following procedures shall apply:
- (a) Immediately it becomes apparent that a possible archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease;
  - (b) The site supervisor shall immediately secure the area in a way that ensures that any artefacts or remains are untouched and notify the Project archaeologist;
  - (c) The Project archaeologist shall inspect the site to assess the relevance of the find, and then the Auckland Council shall be advised of the significance;
  - (d) If the site is confirmed to be an archaeological site by the Project archaeologist, the site supervisor shall then notify tangata whenua, the New Zealand Historic Places Trust, and the Auckland Council that an archaeological site has been exposed so that appropriate action can be taken;
  - (e) In the case of human remains, the NZ Police shall be notified.
- 34) C.2 Construction shall be undertaken in accordance with the construction methodology detailed in the application, specifically Technical Report G.23 *Coastal Works* and Technical Report G.22 *Erosion and Sediment Control Plan*. The construction methodology shall include:
- (a) The use of temporary coffer dams to create dry working areas;
  - (b) Realignment of sections of existing low-tide channels in Oakley inlet and Waterview Estuary that will be directly affected by the reclamation works;
  - (c) Removal of mangroves to provide construction and ground-treatment access, placement of temporary coffer dams and to facilitate natural channel migration in the Whau River side drainage channel (east of Rosebank Domain);
  - (d) Installation or removal works to be undertaken at the best practicable time to minimise potential sediment disturbance.
- 35) C.3 The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council in writing of the proposed commencement date of the reclamation, structures and/or channel realignment works at least 10 working days prior to the proposed start date.
- 36) C.6 The NZTA shall maintain the site in good order and shall remedy all damage and disturbance caused by vehicle traffic, plant and equipment to the foreshore during construction, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.
- 37) C.7 Removal or pruning of vegetation in the CMA shall be limited to the areas of permanent and temporary occupation as shown on the Waterview Connection Project Assessment of

Environmental Effects Plan Set F.12 and F.13 submitted with the application (ref Schedule A, rows 13 and 14). Removal of mangroves shall be implemented in accordance with the principles detailed in the Ecological Management Plan.

- 38) M.10 The NZTA shall maintain the coastal marine area free of any gross litter, rubbish and debris during construction.
- 39) M.11 Prior to excavation of sediment from the marine habitat remediation zone (MHRZ), mangrove vegetation will be removed from the sediment and disposed of at an appropriate offsite facility. The excavated sediment shall be stockpiled within an adjacent dry working area. When the sediment is returned to the MHRZ it will be levelled out to tie in with the existing mudflat. Where a routine marine benthic habitat monitoring site is within an area of MHRZ, additional monitoring of the depth of sediment overlying the improved ground/mudcrete will also be undertaken.

### **POST-CONSTRUCTION CONDITIONS**

- 40) C.4 The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council in writing within 10 working days of the completion of each discrete area of reclamation, structures and/or channel realignment works.
- 41) C.5 The NZTA shall supply to the Major Infrastructure Team Manager, Auckland Council and LINZ Hydrographic Services and LINZ Topographic Services Land Information New Zealand, PO Box 5501, Wellington 6145), a complete set of “as built” plans, final topographic and bathymetric data, and appropriate certification confirming that the new reclamations, structures and channel realignment works have been built in accordance with sound engineering practice, within three months of the completion of the reclamation works.
- 42) C.8 The NZTA shall ensure the removal of all equipment, erosion and sediment control measures, surplus sediment and construction materials from the CMA within 20 working days following the completion of the construction works, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.

### **MONITORING**

- 43) M.2 The NZTA shall engage a suitably qualified ecologist to undertake a marine habitat monitoring programme, as described in Conditions M.3 to M.6.
- 44) M.3 The marine benthic habitat monitoring programme shall be undertaken every 6 months:
- (a) At least 12 months prior to construction commencing, to allow for two baseline surveys to be undertaken;
  - (b) During construction; and
  - (c) For a maximum of 3 years following completion of the Project, or for a lesser time if the monitoring indicates no significant effects, as agreed with the Major Infrastructure Team Manager, Auckland Council.
- 45) M.4 The marine benthic habitat monitoring programme shall be undertaken in accordance with the details set out in the ECOMP and include:
- (a) Sampling of the marine invertebrate community composition (collection of sediment cores to a depth of approximately 15cm);
  - (b) Sampling of the sediment surface (top 2cm) for sediment grain size; and
  - (c) Sampling of the sediment surface (top 2cm) for sediment quality (analysis of the

concentration of copper, lead, zinc and polycyclic aromatic hydrocarbons).

- 46) M.5 The marine benthic habitat monitoring shall be undertaken within sampling grids (50m x 30m) broadly established at the following locations:
- (a) Two locations within Oakley Inlet;
  - (b) Four locations within Waterview Estuary; and
  - (c) Four locations north of the Causeway.
- Specific locations and experimental design shall be detailed in the ECOMP, and the design of the monitoring programme will be based on the *Estuarine Environmental Assessment and Monitoring: A National Protocol (Cawthron 2002)*.
- 47) M.6 The NZTA shall undertake additional marine habitat monitoring in the event of a 'trigger event' for marine ecology habitats. For the purposes of this consent, a 'trigger event' for marine ecology habitats is defined in the ECOMP.
- 48) M.7 The NZTA shall review the marine habitat monitoring results (pursuant to Conditions M.3 to M.6) and in the event that potential adverse effects are identified, the NZTA shall develop and implement appropriate contingency plans and/or remedial measures.

## **REPORTING**

- 49) M.8 The marine benthic habitat monitoring results shall be compiled by the NZTA, and a report provided to the Major Infrastructure Team Manager, Auckland Council every 6 months.

## **EPA 10/2.038 – (ARC: 38342)**

This document has been prepared in compliance with conditions of the “*Final Report and Decision of the Board of Inquiry into the New Zealand Transport Agency Waterview Connection Proposal, Volume 2, Conditions of Consent*”. Schedule B of Volume 2 identifies the Conditions relevant to this Consent by the code and number as referenced throughout this document. In the event of dispute, Schedule B of Volume 2 shall take precedence over this Consent.

**Type:** Coastal Consent

**Description:** **Reclamation in the CMA (Sector 4 (approx.. 4.5ha)):**

This consent relates to the reclamation for access and construction purposes and permanent reclamation associated with motorway widening in CPA 1, north and south of causeway and includes associated vegetation removal and diversion of estuarine channels (including sediment works associated with diversion) required for the mitigation of effects on the reclamation. The Plan states that any non-complying consent under 13.5.3 is a restricted coastal activity in specific conditions.

**Lapse Period:** 10 years

**Code:** RC = Standard Resource Consent Conditions

CEMP = Construction Environmental Management Plan Conditions

PI = Public Information Conditions

CNV = Noise and Vibration Conditions - Construction

V = Vegetation Conditions

A = Avian Conditions

E = Earthworks Conditions

C = Coastal Conditions

M = Marine Ecology Conditions

### **GENERAL CONDITIONS**

- 1) RC.1 Except as modified by the conditions below, the works shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency (NZTA), in the resource consent applications and the supporting documents (as detailed in Condition DC.1), and in the supplementary information provided in evidence by the NZTA.
- 2) RC.1A The NZTA shall implement the conditions of these consents in accordance with Schedule B, which sets out the Conditions that are to be applied to each consent including the duration of each consent.
- 3) RC.2 The Conditions of these consents may be reviewed by the Major Infrastructure Team Manager, Auckland Council, pursuant to Section 128 of the Resource Management Act 1991 (the Act), by the giving of notice pursuant to Section 129 of the Act, on the one year anniversary of the commencement of the consents and every year thereafter in order:

- (a) To deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
  - (b) To deal with any other adverse effect on the environment on which the exercise of the consent may have an influence.
- 4) RC.4 Any Management Plans submitted to the Major Infrastructure Team Manager, Auckland Council for approval or certification may be submitted in stages to reflect any proposed staging of the physical works. Plans submitted shall clearly show the integration with adjacent stages and interrelated activities.
- 5) RC.5 In the event of any dispute, disagreement or inaction arising as to any Auckland Council Manager certification/ approvals required by the consent conditions, or as to the implementation of or monitoring required by the conditions, matters shall be referred in the first instance to the NZTA Regional State Highway Manager and to the Resource Consents Manager, Auckland Council to determine a process of resolution.
- If a resolution cannot be agreed, then the matter may be referred to an independent appropriately qualified expert, agreeable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree.
- The independent appropriately qualified expert shall be appointed within 10 working days of the NZTA or Auckland Council giving notice of their intention to seek expert determination. The expert shall, as soon as possible, issue his or her decision on the matter. In making the decision, the expert shall be entitled to seek further information and hear from the parties as he or she sees fit.
- Advice note: The dispute resolution process provided for in this condition does not prejudice any party's right to take enforcement action in relation to the implementation of the designation conditions. However, the dispute resolution process will be applied before any formal enforcement action is taken by the Council except in urgent situations.
- 6) RC.6 Pursuant to Section 36(1)(d) of the RMA, the requiring authority is required to pay to Auckland Council any administrative charge for the carrying out by the local authority of its functions in relation to the administration, monitoring, and supervision of designation conditions.
- 7) RC.7 The servants of agents of Auckland Council shall be permitted to have access to relevant parts of the Project at all reasonable times for the purpose of carrying out inspections, investigations, tests, measurements and/or to take samples.
- 8) V.18 The NZTA shall implement the approved Traherne Island Weed and Pest Management Plan. Every 5 years, a suitably qualified and experienced ecologist engaged by NZTA shall review the plan in consultation with the Department of Conservation. The plan shall then be submitted to the Auckland Council for approval.
- 9) A.6 Animal pest control shall be undertaken by the NZTA on Traherne Island (northern and southern sides) and on the Coastal Marine Area (CMA) frontage of SH16 from Traherne Island North to Whau Creek, and on the southern side of SH16 from Traherne Island South to Whau River (in accordance with Condition V.17).

- 10) E.4 A detailed schedule of construction activities shall be prepared and forwarded to the Major Infrastructure Team Manager, Auckland Council prior to the commencement of works, and updated at 3 monthly intervals during the works. These schedule shall include details of:
- (a) The location, commencement date and expected duration of any major earthworks operations, including but not limited to, the portal excavations and the Great North Road cut and cover operation; and
  - (b) The proposed construction and methodology, including staging of earthworks.

#### **PRE-CONSTRUCTION CONDITIONS**

- 11) RC.3 Within 3 months of the resource consents commencing for the Project (or at least 1 month prior to any Auckland Council approvals or certifications required by these Conditions, whichever is the earlier), the NZTA shall update and finalise to the satisfaction of the Major Infrastructure Team Manager, Auckland Council all drawings and Plans cited in Schedule A, together with a full set of the information and documentation referred to in Condition DC.1 and provide these to the Major Infrastructure Team Manager, Auckland Council. At the same time the NZTA shall prepare to the satisfaction of Auckland Council, a document for each resource consent which sets out the resource consent and have attached to it in text format a comprehensive set of the conditions imposed by the Board of Inquiry in its Final Decision as summarised in Schedule B, inclusive of any standard conditions and advice notes.

In particular (but not limited to), the following Plans will need to be amended in light of the Final Conditions:

- (a) F.2 Operational Scheme Plans (refer Schedule A, Row 3) require amendment detailing the amended location of the ventilation stacks and southern ventilation buildings;
- (b) F.5 Construction Scheme Plans (refer Schedule A, Row 4) require amendment to detail changes to construction footprint for the amended location of ventilation stacks and southern ventilation buildings and reconfiguration of Construction Yard 1);
- (c) F.6 Construction Yard Plans 101 and 107 (refer Schedule A, Row 7), detailing amendments to the Construction Yard 1 in light of the reconfiguration of this Yard and for Construction Yard 7 in light of the relocation of the northern ventilation stack (refer Schedule A, Row 34);
- (d) F.8 Plans of Structures and Architectural Features (refer Schedule A, Row 9), detailing the amended location of the Northern Ventilation Stack and the design and location of the Southern Ventilation Building and Stack;
- (e) The CNVMP (including flow diagram and the supplementary evidence produced by Ms Wilkening) (refer Schedule A, Rows 36, 37 and 39);
- (f) Update to the areas of the Open Space Restoration Plans (Schedule A, Row 30) to:
  - (i) Extend these areas in geographic extent to provide for the works identified in the Management Plan notations identified in the OS Conditions (in particular OS.5 and OS.6). (e.g. these areas will (as relevant) include Eric Armishaw Park, Howlett Reserve and Waterview Esplanade Reserve); and
  - (ii) Exclude the operational area of designation required for the northern ventilation stack (as identified through the OPW process (refer Condition DC.8); and
- (g) Schedule A, Row 28 the Plan detailing proposed open space impacts and replacements needs to be updated to recolour the two land parcels on Hendon Avenue (which are excluded from the replacement calculations) to 'brown' to confirm they are part of the operational impact and will not be returned as open space.



- 12) CEMP.1 Except where provided for in Condition CEMP.1A below, the NZTA shall update and finalise the draft Construction Environmental Management Plan (CEMP) including all the Management Plans which form part of the CEMP and are included as appendices, submitted with this application to ensure compliance with the consent and designation conditions imposed by the Board of Inquiry. The CEMP shall be provided to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to the commencement of works to certify compliance and consistency with the conditions. Construction shall not commence until certification is obtained.
- Advice note: For clarity the CEMP will be updated and finalised in accordance with the conditions. Any amendments will be limited to reflecting the requirements of the conditions, specifying personnel, and completing the Environmental Risk Register.*
- Advice Note: Particular care must be taken with development and operation of Construction Yard 7. When the CEMP is being updated and finalised, consideration must be given to the contents of the draft SSCEMP prepared for Construction Yard 7 (Row 41, Schedule A) recognising changes required by inclusion of the ventilation stack in this yard.*
- 13) CEMP.1A In the case of the trial embankment, where works will commence well in advance of the main construction works for the Causeway, the NZTA will provide to the Major Infrastructure Team Manager, Auckland Council, a site-specific CEMP for review and approval at least 20 working days prior to commencement of the trial embankment works.
- 14) CEMP.1B For the purposes of staging works, as some works may commence well in advance of others, the NZTA may provide staged or site specific CEMPs for those works to the Major Infrastructure Team Manager, Auckland Council. The NZTA shall consult with the Team Manager about the need and timing for any other site-specific or staged CEMPs and shall provide any required site-specific or staged CEMPs to the Major Infrastructure Team Manager, Auckland Council for review at least 20 working days prior to commencement of such the specific stage (including enabling) or site works.
- 15) CEMP.2 The certification process of the CEMP (and its appendices) shall confirm that the CEMP gives effect to the relevant conditions, as well as those matters in CEMP.6, and that it includes details of:
- (a) Staff and contractors' responsibilities;
  - (b) Training requirements for employees, sub-contractors and visitors;
  - (c) Environmental incident and emergency management;
  - (d) Communication and interface procedures (in accordance with the Communication Plan required under Condition PI.2);
  - (e) Environmental complaints management (including the procedures required under Condition PI.4);
  - (f) Compliance monitoring;
  - (g) Reporting (including detail on the frequency of reporting to the Auckland Council);
  - (h) Environmental auditing; and
  - (i) Corrective action.
- 16) CEMP.3 The management of key environmental effects associated with the construction phase of the Project is detailed within environmental management plans that are included in the CEMP as appendices. This suite of management plans as shown on Figure CEMP.A comprises:
- (a) Construction Noise and Vibration Management Plan (CNVMP);
  - (b) Construction Air Quality Management Plan (CAQMP);

- (c) Erosion and Sediment Control Plan (ESCP);
  - (d) Temporary Stormwater Management Plan (TSMP);
  - (e) Ecological Management Plan (ECOMP);
  - (f) Groundwater Management Plan (GWMP);
  - (g) Settlement Effects Management Plan (SEMP);
  - (h) Contaminated Soils Management Plan (CSMP);
  - (i) Hazardous Substances Management Plan (HSMP);
  - (j) Archaeological Site Management Plan (ASMP);
  - (k) Construction Traffic Management Plan (CTMP);
  - (l) Concrete Batching and Crushing Plant Management Plan (CBCPMP);
  - (m) Electrical Infrastructure Site Development and Construction Management Plan (EISDCMP) (to be prepared in accordance with Condition CEMP.15);
  - (n) Waste Management Plan (to be prepared in accordance with Condition CEMP.10) ;  
and
  - (o) Temporary Construction Lighting Management Plan (to be prepared in accordance with Condition L.2).
- 17) CEMP.6 The finalised CEMP shall include specific details on demolition, construction and management of all works associated with the Project. The certification process of the CEMP shall confirm that the CEMP includes details of the following:
- (a) Details of the site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
  - (b) The location of large notice boards that clearly identify the NZTA and the Project name, together with the name, telephone, email address and address for service of the site or Project manager and the community liaison person;
  - (c) An outline construction programme of the work indicating in particular likely time periods for road closures and anticipated traffic diversion effects;
  - (d) The hours of work, which should reflect the need to ensure that residents enjoy reasonable freedom from noisy or intrusive construction activity in their neighbourhood at night, on Sundays and during public holidays;
  - (e) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/ storage of rubbish, storage and unloading of building materials and similar construction activities;
  - (f) Location of worker's offices and conveniences (e.g. portaloos);
  - (g) Procedures of controlling sediment run-off, dust and the removal of soil, debris and demolition and construction materials from public roads or places. Dust mitigation measures should include use of water sprays to control dust nuisance on dry or windy days;
  - (h) Methods to stabilise ingress and egress points to construction sites, to the standard required by ARC Technical Publication 90 (Nov 2007);
- 18) CEMP.10 The NZTA shall finalise and implement the Hazardous Substances Management Plan (HSMP), through the CEMP (as per Condition CEMP.1), submitted with this application, prior to works commencing on site. The certification process of the CEMP shall confirm that the HSMP clearly identifies the requirements for proper storage, handling, transport and disposal of hazardous substances during the construction phase of the Project and confirm that there shall be no storage of explosives on the Project site.
- 19) CEMP.11 The NZTA shall develop and implement a Waste Management Plan in accordance with the

waste management principles, controls and methods set out in the CEMP. The Plan shall be provided to the Major Infrastructure Team Manager, Auckland Council and be implemented throughout the entire construction period.

- 20) CEMP.15 The NZTA will be responsible for all service relocations required for construction of the Project. The NZTA shall liaise with the providers of infrastructure service networks (including, but not limited to water, gas, stormwater, wastewater, power and telecommunications), and private property owners with on-site services to develop methodologies and timing for necessary services relocation required for the Project, with the objective of minimising disruption to the operation of these service networks and on-site services.

*Advice note:*

- (a) *It is noted that if separate consents are required for relocations for any services of network utility operators or landowners, such consents will be obtained before construction commences in the relevant area, and any effects of those relocations would be considered at that time. The same applies to any alteration of consents if required.*
- (b) *Network infrastructure owned and operated by Watercare Services is located within the designations. An operating agreement will be developed by the NZTA and Watercare Services which will include appropriate notification and access protocols where works are to be undertaken by either network operator on or adjacent to Watercare Services infrastructure within the designations.*

- 21) PI.1 A community liaison person shall be appointed by the NZTA for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the Project. The liaison person's name and contact details shall be made available in the CEMP and on site signage by the NZTA. This person must be reasonably available for on-going consultation on all matters of concern to affected parties arising from the Project.

- 22) PI.2 The NZTA shall prepare and implement a Communications Plan that sets out procedures detailing how the public, Ministry of Social Development, Housing New Zealand Corporation and other organisations representing the particular demographic characteristics of the community (including but not limited to Primary Health Organisations, general practitioners, youth, education organisations, aged care groups and groups representing ethnic and migrant communities) will be communicated with throughout the construction and monitoring periods (as prescribed in the designation and consent conditions).

In preparing the Communications Plan, the NZTA will liaise with Auckland Council to access its community liaison databases. The Communications Plan will include details of:

- (a) The site or Project manager and the community liaison person, including their contact details (phone, facsimile, postal address, email address);
- (b) In accordance with these Conditions, the database of the key construction activities and monitoring requirements that are the subject of the Communications Plan;
- (c) The database of stakeholders and residents who will be communicated with;
- (d) Communication methods, an assessment of how these methods reach the different audience/stakeholder groups (including those methods set out in Condition CEMP.6), and detail on when each of these methods will be used (e.g. regular communication or event specific methods);
- (e) The appointed specialist in Environmental and Occupational Medicine, including contact details (as per Condition SO.13);
- (f) Any stakeholder specific communication plans required; and

(g) Monitoring and review procedures for the Communications Plan.

The Communications Plan shall be written in accordance with the external communication procedures set out in the CEMP and provided at least 20 working days prior to construction commencing, to the Major Infrastructure Team Manager, Auckland Council, Working Liaison Group and the Community Liaison Group(s) established by Condition PI.5. The structure of the communication groups set out in these conditions is attached as Figure PI.A.

23) PI.5 The NZTA shall establish Community Liaison Group(s) at least two months prior to construction commencing in each of the following key construction areas:

- (a) Te Atatu (including the SH16 Causeway)
- (b) Waterview (including works to St Lukes on SH16 and on the Waterview Estuary and Causeway Bridges)
- (c) Owairaka

and hold regular meetings (at least three monthly) throughout the construction period and up to 24 months following construction completion relevant to these areas (or less if the members of the Group agree), so that on-going monitoring information can continue to be disseminated.

The Community Liaison Group(s) shall be open to all interested parties within the Project area including, but not limited to the following groups:

- (a) Auckland Council and Auckland Transport;
- (b) Educational facilities within the Project area (including schools, kindergartens, childcare facilities and Unitec Institute of Technology);
- (c) Relevant community/ environmental groups (including but not limited to Friends of Oakley Creek, Star Mills Preservation Group, Cycle Action Auckland and representatives from those organisations identified in the Communications Plan (as required by Condition PI.2) and local residents;
- (d) Department of Conservation;
- (e) Local Boards;
- (f) Iwi groups with Mana Whenua;
- (g) Public transport providers; and
- (h) Housing New Zealand Corporation.

*Advice note: The purpose of the Community Liaison Group(s) is to provide a regular forum through which information about the Project can be provided to the community, and an opportunity for concerns or issues to be raised.*

24) CNV.1 The NZTA shall finalise and implement through the CEMP, a Construction Noise and Vibration Management Plan (CNVMP) throughout the entire construction period of the Project.

The CNVMP shall describe the measures adopted to meet:

- (a) the noise criteria set out in Conditions CNV.2 and 3 below;
- (b) the vibration criteria set out in Condition CNV.4 below; or
- (c) where (a) or (b) cannot be met, the process that will be followed to appropriately mitigate noise and vibration effects including methods that may be applied outside the designation.

The CNVMP shall be provided to the Major Infrastructure Team Manager, Auckland Council at least 20 working days prior to construction activities being undertaken for review and certification that the CNVMP, as a minimum, addresses the following:

- (i) Construction noise and vibration criteria (Conditions CNV.2, CNV.3, and CNV.4);

- (ii) Hours of operation, including times and days when noisy and/or vibration inducing construction activities would occur;
- (iii) Machinery and equipment to be used;
- (iv) Vibration testing of equipment to confirm safe distances to buildings prior to construction;
- (v) Preparation of building condition surveys of critical dwellings prior to, during and after completion of construction works;
- (vi) Roles and responsibilities of personnel on site;
- (vii) Construction operator training procedures;
- (viii) Methods for monitoring and reporting on construction noise and vibration;
- (ix) A hierarchy of mitigation options that will be assessed for the Project noise mitigation, including alternative strategies where full compliance with the relevant noise and/or vibration criteria cannot be achieved;
- (x) Management schedules containing site specific information;
- (xi) Measures for liaising with and notifying potentially affected receivers of proposed construction activities and the potential for noise and vibration effects, specifically:
  - PPFs located within a horizontal distance of 35 metres of underground excavation works, along the tunnel alignment shall receive prior notification not greater than 7 days (and not less than 24 hours) prior to the commencement of works.
  - Methods for ensuring residents affected by night works (within 100m of the construction site night works, as defined on the maps (refer Schedule A, Row 35) are notified of such works (i.e. any works during the hours of 20:00 to 06:30) at least 5 days prior to the commencement of any such work.
  - The maps showing PPFs to be notified of night works (refer Schedule A, Row 35, shall be reviewed and included within the CNVMP.
- (xii) Methods for receiving and handling complaints about construction noise and vibration;
- (xiii) Measures for preventing the occurrence of rogue fly rock, including management of charge weights and face loading procedures, stemming of charge holes and profiling of the face to maintain minimum burden (face cover);
- (xiv) Investigations on the practicability of implementing permanent noise mitigation works for construction mitigation (as per Condition CNV.7);
- (xv) Investigations of the practicability of implementing Building Modification mitigation, as required in accordance with Conditions ON.6 and ON.11, prior to commencement of construction within 100m of the relevant PPFs (including those on the Unitec site); and
- (xvi) The process for developing Site Specific Noise Management Plans (SSNMP), in accordance with the SSNMP Flow Chart (refer Schedule A, Row 36), including templates and a certification process for the Major Infrastructure Team Manager, Auckland Council (in accordance with Condition CNV.13) to confirm the process of SSNMP review of noise mitigation options where, the modelled/predicted levels or subsequent actual levels exceed the criteria in Conditions CNV.2 and/or CNV.4.

25) V.2 The NZTA shall employ a suitably experienced botanist ('nominated botanist') for the duration of the works to monitor, supervise and direct all works affecting or otherwise in

close proximity to the Significant Vegetation and Valued Vegetation identified in the ECOMP.

- 26) V.11 Prior to commencement of works adjacent to Traherne Island, the NZTA shall employ a suitably qualified and experienced plant translocation expert to uplift and protect all areas of *Mimulus repens* on Traherne Island that will be affected by the work. The *Mimulus repens* shall be relocated to suitable and safe habitat away from the works area, or otherwise held and protected for the duration of the works in the vicinity of their original location and be replanted back at that location (or in close proximity to it) upon completion of the works. The location of the recipient sites will be determined in consultation with the Department of Conservation and in general accordance with the Traherne Island Natural Heritage Restoration Plan (2009 – 2014). Trials shall be undertaken to identify appropriate recipient sites, with these trial sites being monitored for a period of no less than 5 years, or until their failure. Where possible, recipient sites shall be located in currently weed-free areas. Where recipient sites may potentially be affected by weeds, they shall be subject to an on-going weed management plan. Should translocation attempts fail at all trial sites then the NZTA, in consultation with DOC, shall determine an alternative appropriate form of mitigation.
- 27) V.17 Prior to commencement of works adjacent to or on Traherne Island, the NZTA shall employ a suitably qualified and experienced ecologist for the preparation of a Traherne Island Weed and Pest Management Plan. The Plan shall be prepared in consultation with the Department of Conservation and be submitted to the Auckland Council for approval at least 20 working days prior to construction commencing.
- 28) A.1 The NZTA shall finalise, and implement through the CEMP, ECOMP submitted with this application to include the matters set out in Conditions A.2 to A.6.
- 29) E.1 The NZTA shall inform the Major Infrastructure Team Manager, Auckland Council in writing at least 10 working days before the start date of the works authorised by this Consent.
- 30) E.2 Prior to commencement of works, in each period between October 1 and April 30 that this Consent is exercised, a pre-construction site meeting between Auckland Council and relevant parties, including the primary contractor, shall be conducted. The approved Contractors Erosion and Sediment Control Plan (CESCP) as per Condition E.5 of this Consent shall be made available and discussed at the pre-construction meeting.
- 31) E.5 Prior to the commencement of works for each specific area and/or activity, a “Contractors Erosion and Sediment Control Plan” (CESCP) shall be prepared. This document shall follow the principles and practices within Technical Report G.22 *Erosion and Sediment Control Plan* and shall detail any specific variations from that report. The CESCPs shall include, but not be limited to:
- (a) Contour information at suitable intervals;
  - (b) Erosion and sediment controls including specific pond design;
  - (c) Supporting calculations;
  - (d) Catchment boundaries for the sediment controls;
  - (e) Location of the works, and cut and fill operations;
  - (f) Details of construction methods to be employed, including timing and duration;
  - (g) A programme for managing exposed area, including progressive stabilisation considerations;
  - (h) The identification of appropriately qualified and experienced staff to manage the environmental issues onsite;
  - (i) The identification of staff who have clearly defined roles and responsibilities to monitor compliance with the Consent Conditions and CESCP;

- (j) Provision of details of a chain of responsibility for managing environmental issues and details of responsible personnel; and
  - (k) The establishment of a sediment control team (including representatives from the contractor, Auckland Council and the NZTA) to meet and review erosion and sediment control on a weekly basis.
- 32) E.6 For each specific area of works, a CЕССР shall be submitted a minimum of 20 working days prior to earthworks commencing, for the written approval of the Major Infrastructure Team Manager, Auckland Council, which shall be obtained prior to earthworks commencing. The approved CЕССР shall be implemented accordingly.
- 33) E.7 Any amendments to the CЕССРs must be approved by the Major Infrastructure Team Manager, Auckland Council in writing at least 10 working days prior to any amendment being implemented.
- 34) E.12 All perimeter controls shall be operational before earthworks begin.
- 35) E.16 Prior to the commissioning of chemical treatments for sediment management purposes (as per Condition E.17), the NZTA shall provide the Major Infrastructure Team Manager, Auckland Council with a Chemical Treatment Plan (CTP), for confirmation by the Major Infrastructure Team Manager, Auckland Council that it will achieve the standards set out in the CЕССР required under Condition E.6. The CTP shall follow the principles and chemical treatment details outlined within the Technical Report G.22 *Erosion and Sediment Control Plan* and shall include as a minimum:
- (a) Specific design details of the chemical treatment system;
  - (b) Monitoring, maintenance (including post-storm) and contingency programme (including a Record Sheet);
  - (c) Details of optimum dosage (including assumptions);
  - (d) Results of the initial flocculation trial which will build on the information within Technical Report G.22 *Erosion and Sediment Control Plan*;
  - (e) A spill contingency plan;
  - (f) Details of the person or bodies that will hold responsibility for long-term maintenance of the flocculation treatment system and the organisational structure which will support this structure.
- Any amendments to the CTP shall be approved by the Major Infrastructure Team Manager, Auckland Council, in writing, at least 10 working days prior to implementation.
- 36) C.1 The NZTA shall provide to the Major Infrastructure Team Manager, Auckland Council plans and drawings (including dimensioned, cross sections, elevations and site plans of all areas of proposed reclamation (including associated permanent and temporary CMA occupation), permanent structures and temporary structures) at least 20 working days before the proposed date of commencement of the construction of the reclamation, bridge piers or temporary structure.

- 37) M.1 The NZTA shall finalise and implement through the CEMP, the ECOMP submitted with this application. The ECOMP shall be revised to accurately reflect the conditions of this consent and changes to the details of construction processes prior to construction commencing. The ECOMP shall include, but not be limited to, details of:
- (a) Monitoring of marine habitats and ecological values;
  - (b) Trigger event criteria for undertaking additional monitoring;
  - (c) Procedures for responding to accidental discharges to the marine environment;
  - (d) Complaints investigation, monitoring and reporting; and
  - (e) The identification of staff and contractors' responsibilities.

#### **CONSTRUCTION CONDITIONS**

- 38) CEMP.4 The CEMP shall be implemented and maintained throughout the entire construction period.
- 39) CEMP.5 A copy of the CEMP shall be held on each construction site at all times and be available for inspection on request by the Auckland Council.
- 40) CEMP.8 All storage of material and equipment associated with the construction works shall take place within the boundaries of the designation.
- 41) CEMP.12 The CEMP shall be reviewed by the NZTA at least annually or as a result of a material change to the Project. The review shall take into consideration:
- (a) Compliance with designation and consent conditions;
  - (b) Any changes to construction methods;
  - (c) Key changes to roles and responsibilities within the Project;
  - (d) Changes in industry best practice standards;
  - (e) Changes in legal or other requirements;
  - (f) Results of inspections, monitoring, incidents, corrective actions, internal or external assessments; and
  - (g) Public complaints.
- A summary of the review process undertaken shall be kept by the NZTA, provided annually to the Major Infrastructure Team Manager, Auckland Council and made available (with any related data) to the Auckland Council upon request.
- 42) CEMP.13 Following the review process (as described in Condition CEMP.12), the CEMP may require updating. Any material change proposed to the CEMP (including appended Management Plans) shall be submitted for approval to the Major Infrastructure Team Manager, Auckland Council at least 10 working days prior to the proposed changes taking effect.'
- Advice Note: Material change will include amendment to any base information informing the CEMP or any process, procedure or method of the CEMP (such as the environmental constraints map, compliance monitoring process, complaints procedure or mitigation / remedial methods identified) which has the potential to increase adverse effects on a particular value. For clarity changes to personnel and contact schedules do not constitute a material change.*
- 43) PI.3 At least 15 working days prior to the commencement of construction, and at 15 working day intervals thereafter, or as required depending on the scale of works and effects on the community, advertisements will be placed in the relevant local newspapers and community noticeboards (as identified in Condition CEMP.6(b)) detailing the nature of the forthcoming works, the location of the forthcoming works and hours of operation. All advertisements will include reference to a 24 hour toll free complaints telephone number. Where relevant,



advertisements will also include but not be limited to details of:

- (a) Any traffic disruptions or controls or changes to property access, pedestrian/ cycle routes and bus stops; and
- (b) Any other construction activities, including night time works, blasting, and structure-borne noise, as identified in the conditions.

44) PI.4 The NZTA shall manage, investigate and resolve (as appropriate) all complaints for the duration of the construction works in accordance with the environmental complaints section of the CEMP. The implementation strategy for complaints includes:

- (a) A 24 hour toll free telephone number and email address, which shall be provided to all potentially affected residents and businesses. The number shall be available and answered at all times during the entire duration of the works for the receipt and management of any complaints. A sign containing the contact details shall be located at each site specific work activity;
- (b) The NZTA shall maintain a record of all complaints made to this number, email or any site office, including the full details of the complainant and the nature of the complaint;
- (c) Upon receiving a complaint, within 10 days of complaint receipt, a formal written response will be provided to the complainant and Auckland Council;
- (d) The NZTA shall undertake corrective action where necessary to resolve any problem identified. All action taken and relevant information shall be documented. For the avoidance of doubt, 'where necessary' refers to where the works are not being carried out in accordance with conditions of this designation;
- (e) Where issues and complaints about effects cannot be resolved through the CEMP complaints management process, a meeting shall be held between the NZTA, the complainant and the Auckland Council representative(s) to discuss the complaint and ways in which the issue may be resolved. If parties cannot agree on a resolution, an independent qualified mediator will be appointed, agreeable to all parties and at the shared cost of all parties, to undertake mediation of the dispute or concerns; and
- (f) All information collected in Conditions PI.4 (b), (c) and (d) shall be detailed in a Construction Compliance Report (including the means by which the complaint was addressed, whether resolution was reached and how the response was carried out) prepared by the NZTA. This Report shall be submitted to the Major Infrastructure Team Manager, Auckland Council on a quarterly basis commencing at the beginning of the works and for the entire duration of construction.

45) PI.6 The Community Liaison Group(s) shall be provided opportunities to review and comment on the following (amongst other things):

- (a) The Outline Plan of Works detailing designs for the northern and southern ventilation buildings and stacks (the outcomes of this consultation will be reported in accordance with the processes required in DC.8(n) and DC.9(k);
- (b) The Open Space Restoration Plans (as required by Condition OS.3);
- (c) Finalisation and amendment to Urban Design and Landscape Plans (UDL Plans) (as required by Condition LV.1);
- (d) The Oakley Inlet Heritage Plan (as required by Conditions OS.5(b)(i) and ARCH.6);
- (e) The detail of the Oakley Creek restoration (as required by Condition STW.20);
- (f) Publicly available results of environmental monitoring as required by the designation and/or these Consents (e.g. air quality monitoring); and
- (g) The finalisation of the STEM assessment required by CEMP.6(o) and a schedule of trees that are required to be removed for consideration of timber use in heritage

projects as required by Condition SO.7.

*Advice Note: Attention is drawn to the Vegetation conditions concerning identification and protection of Significant Vegetation and Valued Vegetation.*

(h) Detailed design features of the Te Atatu underpass (e.g. lighting and architectural treatment).

46) CNV.2 Except where certified by the Council through the SSNMP (in accordance with Condition CNV.13), construction noise (excluding noise from blasting Monday to Saturday inclusive) shall be measured and assessed in accordance with NZS 6803:1999 “Acoustics - Construction Noise” and shall comply with the following criteria:

Note: In Condition CNV.2 (T) means a duration between 15 minutes and 60 minutes, in accordance with NZS6803:1999.

(a) Project Construction Noise Criteria: Residential Receivers

Time of week	Time period	Project Construction Noise Criteria (Long Term Construction) dB		
		Sectors 1 to 7	Sectors 8 and 9	All Sectors
		$L_{Aeq(T)}$	$L_{Aeq(T)}$	$L_{AFmax}$
Monday - Saturday	0630-0730	60	45	75
	0730-1800	70	70	85
	1800-2000	65	65	80
	2000-0630	60	45	75
Sundays and Public Holidays	0630-0730	45	45	75
	0730-1800	60	45	85
	1800-2000	45	45	75
	2000-0630	45	45	75

(b) Project Construction Noise Criteria: Commercial and Industrial Receivers

Time period	Project Construction Noise Criteria (Long Term Construction) dB
	$L_{Aeq(T)}$
0730-1800	70
1800-0730	75

(c) Project Construction Noise Criteria: Internal Structure-borne Noise from tunnelling for Residential Receivers

Time period	Project Construction Noise Criteria Inside	
0600-2200	35 dB $L_{Aeq(T)}$	All habitable rooms
2200-0600	30 dB $L_{Aeq(T)}$	Bedrooms

(d) Project Construction Noise Criteria: Internal noise for Licensed Educational Facilities

Time period (School Days)	Project Construction Noise Criteria Inside	
Teaching Hours	45 dB $L_{Aeq(T)}$ or existing, whichever is the higher	Classrooms, library, offices, teaching, laboratories, manual arts, workshops
Teaching Hours	40 dB $L_{Aeq(T)}$ or existing, whichever is the higher	School hall, lecture theatres

*Note: In Condition CNV2(d) "Teaching hours" means:*

*Primary schools and Kindergartens: 9am to 3pm*

*Unitec: 8am to 9pm*

- 47) CNV.7 Where practicable, permanent (traffic) noise barriers, required in any Sector as Detailed Mitigation Options for operational noise following completion of the Project (in accordance with Conditions ON.3 to ON.5) shall be erected prior to noise generating construction works commencing. Where this is not practicable, temporary noise mitigation measures shall be implemented in accordance with the CNVMP, prior to noise generating construction works commencing.
- 48) CNV.8 Pile driving or pile removal shall not be undertaken at night (i.e. during the hours of 20:00 – 06:30).
- 49) CNV.9 The concrete batch plants, rock crushing plants and the loading bays and conveyors for such plants shall be fully enclosed.
- 50) CNV.13 SSNMPs (required by Condition CNV.1(xvi)) above, shall be submitted to Major Infrastructure Team Manager, Auckland Council for review and certification at least 7 working days prior to the proposed works commencing. A decision will be provided by the Council within 5 working days of receipt of the SSNMP.
- Works will not commence until certification is received from the Major Infrastructure Team Manager, Auckland Council. The Council may, at its discretion, waive the requirement for SSNMPs to be submitted to the Council where an SSNMP is required.
- If monitoring shows that levels specified in a SSNMP are being exceeded, work generating the exceedance will stop and not recommence until further mitigation is implemented in accordance with an amended SSNMP certified by Council.
- Advice note: It is accepted that the criteria of CNV.2 and CNV.4 may not be met at all times, but that the NZTA will take all practical steps to achieve compliance, taking into account the hierarchy of mitigation options outlined in Condition CNV.1 (ix).*
- 51) A.2 The NZTA shall provide temporary high tide roosting structure(s) adjacent to the Causeway during construction, in accordance with the ECOMP, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council. The temporary bird roosts shall be sized in accordance with the ECOMP, and located within the Waterview Estuary adjacent to the southern side of the causeway and in the vicinity of the existing Causeway bridge.
- 52) A.5 Vegetation clearance at Traherne Island shall occur outside the bird breeding season of September to December. Elsewhere, vegetation clearance shall occur outside the bird breeding season of September to December where practicable.
- 53) E.3 Erosion and sediment control shall be in general accordance with the plans and information submitted with the application, and in particular, Technical Report G.22 *Erosion and Sediment Control Plan*, subject to such amendments as may be required by the following

conditions of this Consent.

- 54) E.8 Erosion and sediment control measures shall be constructed and maintained in accordance with the ARC Technical Report 90 (TP90) (and any amendments to that document), except where a higher standard is detailed in the documents referred to in Conditions E.3 and E.5 above, in which case the higher standard shall apply.
- 55) E.11 All 'cleanwater' runoff from stabilised surfaces, including catchment areas above the site, shall be diverted away from earthwork areas via a stabilised system, so as to prevent surface erosion.
- 56) E.14 The NZTA shall ensure that procedures are adopted to prevent the deposition of slurry, clay or other materials on the roads by vehicles leaving the site. Should the exercise of this Consent result in material being deposited on the road, that material shall be removed immediately to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.
- 57) E.17 All sediment retention ponds and decanting earth bunds are to be chemically treated in accordance with the CTP required under Condition E.16 of this consent.
- 58) E.19 A copy of the "as-built(s)" and approved CESCPS shall be kept on site, and all erosion and sediment control measures (including staging boundaries and particularly the extent of exposed areas) shall be updated as soon as practicable as changes are made. As-built plans shall be accompanied by text detailing the relevant earthworks methodology, constraints and likely progressions, and shall be revised as required to enable clear interpretation as to the day to day operation and management of erosion and sediment controls.
- 59) E.21 The site shall be stabilised against erosion as soon as practicable, and in a progressive manner, as earthworks are finished over various areas of the site. Areas of bulk earthworks not actively worked for a period of two weeks shall be stabilised.
- 60) E.22 The NZTA shall ensure that the following earthworks shall be stabilised as soon as practicable after completion thereof, or within 5 working days of completion, whichever shall occur first:
- (a) Temporary erosion and sediment controls; and
  - (b) Construction yards.
- 61) E.23 No surface earthworks on the site shall be undertaken between 1 May and 30 September in any year, without the written approval of the Major Infrastructure Team Manager, Auckland Council. Earthworks in this regard refers to bulk earthworks (cut/fill/waste) associated with the site.
- 62) C.2 Construction shall be undertaken in accordance with the construction methodology detailed in the application, specifically Technical Report G.23 *Coastal Works* and Technical Report G.22 *Erosion and Sediment Control Plan*. The construction methodology shall include:
- (a) The use of temporary coffer dams to create dry working areas;
  - (b) Realignment of sections of existing low-tide channels in Oakley inlet and Waterview Estuary that will be directly affected by the reclamation works;
  - (c) Removal of mangroves to provide construction and ground-treatment access, placement of temporary coffer dams and to facilitate natural channel migration in the Whau River side drainage channel (east of Rosebank Domain);
  - (d) Installation or removal works to be undertaken at the best practicable time to minimise potential sediment disturbance.
- 63) C.3 The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council in writing

of the proposed commencement date of the reclamation, structures and/or channel realignment works at least 10 working days prior to the proposed start date.

- 64) C.6 The NZTA shall maintain the site in good order and shall remedy all damage and disturbance caused by vehicle traffic, plant and equipment to the foreshore during construction, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.
- 65) C.7 Removal or pruning of vegetation in the CMA shall be limited to the areas of permanent and temporary occupation as shown on the Waterview Connection Project Assessment of Environmental Effects Plan Set F.12 and F.13 submitted with the application (ref Schedule A, rows 13 and 14). Removal of mangroves shall be implemented in accordance with the principles detailed in the Ecological Management Plan.
- 66) C.9 All imported fill material to be used in the reclamations shall be in accordance with the Ministry for the Environment "cleanfill" definition, as detailed in Publication ME418 "A Guide to the Management of Cleanfills, 2002" or subsequent updates.
- 67) C.10 The NZTA shall maintain a log recording the source of fill material imported onto each reclamation site. This log shall be made available to the Major Infrastructure Team Manager, Auckland Council for inspection on request.
- 68) M.10 The NZTA shall maintain the coastal marine area free of any gross litter, rubbish and debris during construction.
- 69) M.11 Prior to excavation of sediment from the marine habitat remediation zone (MHRZ), mangrove vegetation will be removed from the sediment and disposed of at an appropriate offsite facility. The excavated sediment shall be stockpiled within an adjacent dry working area. When the sediment is returned to the MHRZ it will be levelled out to tie in with the existing mudflat. Where a routine marine benthic habitat monitoring site is within an area of MHRZ, additional monitoring of the depth of sediment overlying the improved ground/mudcrete will also be undertaken.
- 70) M.12 The NZTA shall minimise the extent of the Causeway footprint to the greatest extent possible.

#### **POST-CONSTRUCTION CONDITIONS**

- 71) E.15 Notice shall be given to the Major Infrastructure Team Manager, Auckland Council prior to any erosion and sediment control measures being removed and/or on completion of the works.
- 72) E.24 Revegetation/stabilisation shall be completed by 30 April in the year of bulk earthworks in accordance with measures detailed in the approved CЕСSCP, unless a later date is approved in writing by the Major Infrastructure Team Manager, Auckland Council at least two weeks before 30 April.
- 73) C.4 The NZTA shall notify the Major Infrastructure Team Manager, Auckland Council in writing within 10 working days of the completion of each discrete area of reclamation, structures and/or channel realignment works.
- 74) C.5 The NZTA shall supply to the Major Infrastructure Team Manager, Auckland Council and LINZ Hydrographic Services and LINZ Topographic Services Land Information New Zealand, PO Box 5501, Wellington 6145), a complete set of "as built" plans, final topographic and bathymetric data, and appropriate certification confirming that the new reclamations, structures and channel realignment works have been built in accordance with sound engineering practice, within three months of the completion of the reclamation works.

- 75) C.8 The NZTA shall ensure the removal of all equipment, erosion and sediment control measures, surplus sediment and construction materials from the CMA within 20 working days following the completion of the construction works, to the satisfaction of the Major Infrastructure Team Manager, Auckland Council.
- 76) M.9 The NZTA shall undertake planting within the rock revetment of the reclamation along the alignment of SH16 where practicable, in places where such plantings will be sheltered from erosion and in such a way that they will not undermine the structural integrity of the revetment. Any such planting will be in general accordance with the Urban Design and Landscape Plans (Plan Set F.16) submitted with this application (Refer Schedule A, Row 17).

## MONITORING

- 77) V.9 The nominated botanist shall undertake a monitoring programme throughout the construction period, including monitoring of:
- (a) The condition, repair and location of the temporary protective fencing or other forms of demarcation used to identify the Significant Vegetation;
  - (b) Any works within the vicinity of the Significant Vegetation and Valued Vegetation;
  - (c) The general health of the Significant Vegetation and Valued Vegetation (including any Significant or Valued Vegetation that has been relocated away from the works area); and
  - (d) Compliance with the vegetation conditions of designation by way of fortnightly inspections during the construction period.
- 78) A.3 The NZTA shall employ a suitably qualified ecologist to undertake monitoring of the roosting areas located at:
- (a) The existing high tide roost in Harbourview-Orangihina Park; and
  - (b) The temporary construction roosting structure(s) pursuant to Condition A.2.
- Monitoring shall be undertaken on a monthly basis, with a monitoring report prepared on a quarterly basis. The monitoring report shall be made available to the Major Infrastructure Team Manager, Auckland Council and Department of Conservation upon request.
- 79) A.4 Should the monitoring results indicate that the roosting sites have been abandoned, consultation shall be undertaken with the Department of Conservation and the Major Infrastructure Team Manager, Auckland Council to determine the need for and type of further management strategies (if any) required.
- 80) E.20 The NZTA shall carry out monitoring in accordance with the Technical Report G.22 *Erosion and Sediment Control Plan* and the approved CESC and shall maintain records detailing:
- (a) The monitoring undertaken;
  - (b) The erosion and sediment controls that required maintenance;
  - (c) The time when the maintenance was completed; and
  - (d) Areas of non-compliance with the erosion and sediment control monitoring plan (if any) and the reasons for the non-compliance.
- This information shall be made available to the Auckland Council upon request.
- 81) C.12 On completion of the relevant stage of reclamation, the NZTA shall ensure that stockpiled chenier shell deposits from the northern side of the existing Causeway are reinstated to suitable locations along the northern side of the newly reclaimed Causeway in consultation with the Department of Conservation and the Auckland Council. The placement of the shell

bank material shall be to the satisfaction of the Major Infrastructure Team Manager, Auckland Council. The movement of these reinstated shell deposits shall be monitored quarterly for the first year after placement to confirm they have been reworked by waves to form a contiguous shell bank by undertaking topographic survey transects at low tide and photographs to document the transition. The monitoring information shall be provided to the Auckland Council within 20 working days of completion of each phase of monitoring.

- 82) C.14 Following final excavation of each of the three (3) realigned sections of low-tide channels in Waterview Estuary and Oakley Inlet (two sites), these sites shall be monitored quarterly for one year after completion of the excavation, to confirm that the channel (thalweg and the transition sections with the unmodified channel) has reached a stable configuration. The monitoring can be achieved around low tide (average tide range) by an on-water visual reconnaissance, spot depth soundings and documented with photographs. The monitoring information shall be provided to the Auckland Council within 20 working days of completion of each phase of monitoring.
- 83) C.15 Within a month of the closure of the Rosebank culvert under SH16 (adjacent to the Rosebank Westbound Off-ramp), the NZTA shall undertake a single tidal salinity survey on a high spring tide (High Water at or above 3.4 m at Port of Auckland) without significant prior rainfall, to confirm and document that tidal flushing of brackish waters occurs in the boardwalk area presently serviced by the culvert. Salinity, water depth and the length of time either side of high water that the area is effectively inundated shall be monitored at one site near the eastern end of the boardwalk section of the shared cycleway [WGS-84 Map ref: -36.87057° N, 174.67408° E]. The monitoring information shall be made available to the Auckland Council.
- 84) C.16 On the northern side of the Causeway, from just before the commencement of construction in the CMA for each section of works, until 6 months after completion of each section, the NZTA shall undertake every two (2) months or after a severe wave-storm, intertidal beach profile surveys down to the spring low-tide mark along offshore-directed transects (one off the centre of the construction section and one either side at 20 m away from the ends of the construction site) and photographs documenting the physical state of the seabed around the perimeter of the cofferdam. The monitoring information shall be made available to the Auckland Council. If the monitoring identifies that excessive erosion or accretion has occurred from corner or end effects of the construction section, as confirmed by a coastal processes expert, further seabed erosion control measures or a sediment by-passing method (for accretion) to reduce localised effects seaward of the temporary occupation or permanent occupation designation (whichever applies) shall be implemented as soon as practicable. Details of the proposed measures or methods shall be made available to Auckland Council prior to implementation.
- 85) M.2 The NZTA shall engage a suitably qualified ecologist to undertake a marine habitat monitoring programme, as described in Conditions M.3 to M.6.
- 86) M.3 The marine benthic habitat monitoring programme shall be undertaken every 6 months:
- (a) At least 12 months prior to construction commencing, to allow for two baseline surveys to be undertaken;
  - (b) During construction; and
  - (c) For a maximum of 3 years following completion of the Project, or for a lesser time if the monitoring indicates no significant effects, as agreed with the Major Infrastructure Team Manager, Auckland Council.
- 87) M.4 The marine benthic habitat monitoring programme shall be undertaken in accordance with the details set out in the ECOMP and include:

- (a) Sampling of the marine invertebrate community composition (collection of sediment cores to a depth of approximately 15cm);
  - (b) Sampling of the sediment surface (top 2cm) for sediment grain size; and
  - (c) Sampling of the sediment surface (top 2cm) for sediment quality (analysis of the concentration of copper, lead, zinc and polycyclic aromatic hydrocarbons).
- 88) M.5 The marine benthic habitat monitoring shall be undertaken within sampling grids (50m x 30m) broadly established at the following locations:
- (a) Two locations within Oakley Inlet;
  - (b) Four locations within Waterview Estuary; and
  - (c) Four locations north of the Causeway.
- Specific locations and experimental design shall be detailed in the ECOMP, and the design of the monitoring programme will be based on the *Estuarine Environmental Assessment and Monitoring: A National Protocol (Cawthron 2002)*.
- 89) M.6 The NZTA shall undertake additional marine habitat monitoring in the event of a 'trigger event' for marine ecology habitats. For the purposes of this consent, a 'trigger event' for marine ecology habitats is defined in the ECOMP.
- 90) M.7 The NZTA shall review the marine habitat monitoring results (pursuant to Conditions M.3 to M.6) and in the event that potential adverse effects are identified, the NZTA shall develop and implement appropriate contingency plans and/or remedial measures.

#### **REPORTING**

- 91) M.8 The marine benthic habitat monitoring results shall be compiled by the NZTA, and a report provided to the Major Infrastructure Team Manager, Auckland Council every 6 months.



Project Name	Permit Number	Permit Activity	Type	Permit Status	Nb of cons	Compliance	Phase	Permit Granted	Permit Commence	Permit Lapse Date	Permit Expiry	Permit Grantor	Permit Territory	Permit Manager	Permit Purpose	Permit Area	Permit Location	Permit Manager	Permit Easting	Permit Northing	Status
WRR Embankment ^ Reporting Auckland and Northland	38339 TE	Coastal Structure	Current	134	Compliant	Post-Construction	29/06/2011	21/07/2011	21/07/2016	31/07/2021	Auckland Council	Auckland Council	Kevin Stevens	THIS CONSENT RELATES TO THE CONSTRUCTION OF PERMANENT (OPERATIONAL PHASE) STRUCTURES WITHIN THE CMA INCLUDING PIERS, RAMPS, STORMWATER DISCHARGE OUTFALLS AND OTHER CONSEQUENTIAL ACTIVITIES SUCH AS DISTURBANCE AND/OR VEGETATION REMOVAL IN CPA 1 WATERVIEW ESTUARY. (SECTORS 3 & 4)	Auckland Northland	SH16 St Lukes, Te Atatu	1748186	5919223	as permanent structures in CMA we need to renew / extend consent		
WRR ^ Reporting Marine Reserve and Authorisation Northland ^ WRR Causeway Alliance		Multiple Activities	Current	15	Compliant	Construction	8/08/2011		8/08/2016	8/08/2021	Department of Conservation	Auckland Council	Simon Paton	UNDERTAKE A PUBLIC WORK, COMPRISING RECLAMATION, DISCHARGES AND DISTURBANCE	Auckland and Northland	WITHIN THE MOTU MANAWA - POLLEN ISLAND MARINE RESERVE, BETWEEN WATERVIEW AND THE WHAU RIVER, TE ATATU.					
Reporting Auckland and Northland ^ WRR Embankment	38336 TE	Coastal Structure	Current	128	Compliant	Post-Construction	29/06/2011		29/06/2016	31/07/2021	Auckland Council	Auckland Council	Kevin Stevens	THE ERECTION OF PERMANENT (OPERATIONAL PHASE) STRUCTURES WITHIN THE CMA INCLUDING PIERS, RAMPS, and BRIDGES, STORMWATER DISCHARGE OUTFALLS AND OTHER CONSEQUENTIAL ACTIVITIES SUCH AS DISTURBANCE AND/OR VEGETATION REMOVAL IN GMA, CPA 2 AND MOORING MANAGEMENT AREA - HENDERSON CREEK, WHAU RIVER AND PT CHEVALIER.	Auckland Northland	SECTORS 1, 2, 4 & 5 - HENDERSON CREEK, WHAU RIVER & PT CHEVALIER.	1746301	5920185	as permanent structures in CMA we need to renew / extend consent		
Reporting Auckland and Northland ^ WRR Embankment	38341 TE	Coastal Structure	Current	208	Compliant	Post-Construction	29/06/2011		29/06/2016	31/07/2021	Auckland Council	Auckland Council	Kevin Stevens	THIS CONSENT RELATES TO THE ERECTION OF PERMANENT (OPERATIONAL PHASE) STRUCTURES WITHIN THE CMA INCLUDING PIERS, RAMPS, and STORMWATER DISCHARGE DEVICES, HERITAGE BRIDGE AND OTHER CONSEQUENTIAL ACTIVITIES SUCH AS DISTURBANCE AND/OR VEGETATION REMOVAL IN CPA 1 - OAKLEY CREEK INLET.	Auckland Northland	SECTOR 5	1751467	5918229	as permanent structures in CMA we need to renew / extend consent		
WRR ^ WRR St Lukes Auckland and Northland	38336 SL	Coastal Structure	Current	128	Compliant	Construction	29/06/2011		29/06/2016	31/07/2021	Auckland Council	Auckland Council	Ronnie Salunga	THIS CONSENT RELATES TO THE CONSTRUCTION OF PERMANENT (OPERATIONAL PHASE) STRUCTURES WITHIN THE CMA AND INCLUDING PIERS, RAMPS, BRIDGES, STORMWATER DISCHARGE OUTFALLS AND OTHER CONSEQUENTIAL ACTIVITIES SUCH AS DISTURBANCE AND/OR VEGETATION REMOVAL IN GMA, CPA 2 AND MOORING MANAGEMENT AREA - HENDERSON CREEK, WHAU RIVER AND PT CHEVALIER. (SECTORS 1, 2, 4 & 5)	Auckland Northland	SH16 ST LUKES, TE ATATU	1746301	5920185	St Lukes section not in CMA no need to renew / extend consent		
WRR ^ WRR St Lukes Auckland and Northland	38339 SL	Coastal Structure	Current	134	Compliant	Construction	29/06/2011		29/06/2016	31/07/2021	Auckland Council	Auckland Council	Ronnie Salunga	THIS CONSENT RELATES TO THE CONSTRUCTION OF PERMANENT (OPERATIONAL PHASE) STRUCTURES WITHIN THE CMA INCLUDING PIERS, RAMPS, STORMWATER DISCHARGE OUTFALLS AND OTHER CONSEQUENTIAL ACTIVITIES SUCH AS DISTURBANCE AND/OR VEGETATION REMOVAL IN CPA 1 WATERVIEW ESTUARY. (SECTORS 3 & 4)	Auckland Northland	SH16 St Lukes, Te Atatu	1748186	5919223	St Lukes section not in CMA no need to renew / extend consent		
WRR Te Atatu Interchange ^ Reporting Auckland and Northland	38336 TAI	Coastal Structure	Current	128	Non-Compliant	Construction	29/06/2011	21/07/2011	21/07/2016	31/07/2021	Auckland Council	Auckland Council	Kevin Stevens	THIS CONSENT RELATES TO THE ERECTION OF PERMANENT (OPERATIONAL PHASE) STRUCTURES WITHIN THE CMA AND INCLUDING PIERS, RAMPS, BRIDGES, STORMWATER DISCHARGE OUTFALLS AND OTHER CONSEQUENTIAL ACTIVITIES SUCH AS DISTURBANCE AND/OR VEGETATION REMOVAL IN GMA, CPA 2 AND MOORING MANAGEMENT AREA - HENDERSON CREEK, WHAU RIVER AND PT CHEVALIER. (SECTORS 1, 2, 4 & 5)	Auckland Northland	SH16 ST LUKES, TE ATATU	1746301	5920185	Te Atatu Interchange section in CMA need to renew / extend consent		
WRR Te Atatu Interchange ^ Reporting Auckland and Northland	38339 TAI	Coastal Structure	Current	134	Compliant	Construction	29/06/2011	21/07/2011	21/07/2016	31/07/2021	Auckland Council	Auckland Council	Kevin Stevens	THIS CONSENT RELATES TO THE CONSTRUCTION OF PERMANENT (OPERATIONAL PHASE) STRUCTURES WITHIN THE CMA INCLUDING PIERS, RAMPS, STORMWATER DISCHARGE OUTFALLS AND OTHER CONSEQUENTIAL ACTIVITIES SUCH AS DISTURBANCE AND/OR VEGETATION REMOVAL IN CPA 1 WATERVIEW ESTUARY. (SECTORS 3 & 4)	Auckland Northland	SH16 ST LUKES, TE ATATU	1748186	5919223	Te Atatu Interchange section not in CMA no need to renew / extend consent		
WRR Te Atatu Interchange ^ Reporting Auckland and Northland	38341 TAI	Coastal Structure	Current	208	Compliant	Construction	29/06/2011	21/07/2011	21/07/2016	31/07/2021	Auckland Council	Auckland Council	Kevin Stevens	THIS CONSENT RELATES TO THE ERECTION OF PERMANENT (OPERATIONAL PHASE) STRUCTURES WITHIN THE CMA AND INCLUDING PIERS, RAMPS, STORMWATER DISCHARGE DEVICES, HERITAGE BRIDGE AND OTHER CONSEQUENTIAL ACTIVITIES SUCH AS DISTURBANCE AND/OR VEGETATION REMOVAL IN CPA 1 - OAKLEY CREEK INLET. (SECTOR 5)	Auckland Northland	SH16 ST LUKES, TE ATATU	1751467	5918229	Te Atatu Interchange section not in CMA no need to renew / extend consent		
WRR Te Atatu Interchange ^ Reporting Auckland and Northland	38342 TAI	Reclamation	Current	188	Compliant	Construction	29/06/2011	21/07/2011	21/07/2016	31/07/2021	Auckland Council	Auckland Council	Kevin Stevens	THIS CONSENT RELATES TO RECLAMATION FOR ACCESS AND CONSTRUCTION PURPOSES AND PERMANENT RECLAMATION AND ASSOCIATED WITH MOTORWAY WIDENING IN CPA 1, NORTH AND SOUTH OF CAUSEWAY AND INCLUDES ASSOCIATED VEGETATION REMOVAL AND DIVERSION OF ESTUARINE CHANNELS INCLUDING SEDIMENT WORKS ASSOCIATED WITH DIVERSION) REQUIRED FOR THE MITIGATION OF EFFECTS ON THE RECLAMATION. THE PLAN STATES THAT ANY NON-COMPLYING CONSENT UNDER 13.5.3 IS A RESTRICTED COASTAL ACTIVITY IN SPECIFIC CONDITIONS. (SECTOR 4 (APPROX 4.5HA))	Auckland Northland	SH16 ST LUKES, TE ATATU	1748186	5919223	Te Atatu Interchange section not in CMA no need to renew / extend consent		



## Office of Hon Gerry Brownlee

MP for Ilam

Leader of the House

Minister of Transport

Minister for Canterbury Earthquake Recovery

Minister Responsible for the Earthquake Commission

16 MAY 2013

Mr Tommy Parker  
State Highways Manager for Auckland and Northland  
NZ Transport Agency  
Private Bag 106602  
**Auckland 1143**



Dear Mr Parker

### **Application by New Zealand Transport Agency to change condition 2 of the Authority to undertake a Public Work in the Motu Manawa-Pollen Island Marine Reserve — Waterview Connection Project**

We are required to make decisions under Section 4(3) of the Marine Reserves Act 1971 on whether to vary condition 2 of the Authority to undertake a Public Work in the Motu Manawa-Pollen Island Marine Reserve given by the Ministers of Conservation and Transport on 8 August 2011. The need to make this decision resulted from an application to vary condition 2 from the Causeway Alliance dated 15 February 2013.

We have considered the application and supporting information and have decided to authorise the requested variation to condition 2, subject to all other terms and conditions of that Authority remaining unchanged.

In making our decision we have taken into account a report prepared by the Department of Conservation's Hamilton Service Centre, in consultation with Ministry of Transport officials, together with the appendices and attachments to that report. We have also, where relevant, considered the provisions of the Marine Reserves Act 1971, the Hauraki Gulf Marine Park Act 2000, the Government Rounding Powers Act 1989 and the Land Transport Management Act 2003.

In making our decision we have put aside any comments or views we may have previously made or held about the application or any aspect of them and have not considered them any further. We have embarked upon a consideration of the application with an open mind on the basis of the documentation outlined above.

We consider that our authorisation of an amendment under Section 4(3) of the Marine Reserves Act is a joint one. As such, we have individually read the materials put forward for our consideration and have then met to discuss them. We consider that the primary objective of section 4(3) is to accommodate the policy goals of the Marine Reserves Act, the Hauraki Gulf Marine Park Act, the Government Rounding Powers Act, and the Land Transport Management Act. Accordingly we have undertaken a consideration of the materials and discussed those materials with that primary objective in mind.

We note that the policy goal of the Marine Reserves Act 1971 is that marine reserves will be managed to be maintained or restored to a natural state as far as possible. As the Motu Manawa-Pollen Island Marine Reserve is part of the Hauraki Gulf Marine Park we also note that a policy goal of the Hauraki Gulf Marine Park Act 2000 is to recognise the national significance of the Hauraki Gulf and to provide for the protection, maintenance and enhancement of its component parts. We further note that the policy goals of the Land Transport Management Act 2003 and the Government Rounding Powers Act 1989 are to improve State Highway 16 as a Road of National Significance which will reduce dependency on State Highway 1 and contribute to enabling economic growth.

In our view, accommodating the policy goals of each Act necessitates a balancing in which detriments impacting on the marine reserve must be weighed against any benefits arising from a better transport system that enables economic growth.

Our summary assessment of benefits in terms of the Land Transport Management Act 2003 and the Government Rounding Powers Act 1989 are the improvement of State Highway 16 as a Road of National Significance which will reduce dependency on State Highway 1 and thereby contribute to enabling economic growth. Other benefits include contributing to the region's critical transport infrastructure and its land use and transport strategies by connecting State Highway 16 and State Highway 20 thereby completing the Western Ring Route and by improving the capacity and resilience of State Highway 16. A further benefit is securing the State Highway 16 causeway against inundation.

Our summary assessment of the detriments in terms of the Marine Reserves Act 1971 and the Hauraki Gulf Marine Park Act 2000 is that because of the need to undertake reclamation of the foreshore and seabed, the Marine Reserve will be reduced by approximately 1.9 hectares. This loss cannot be replaced, but is less than the loss that would have resulted under the Authority if condition 2 was not varied as sought. The areas impacted by the proposed public works are predominantly intertidal mudflats. Shellbanks, saltmarsh and mangroves all exist within the Marine Reserve. Construction activities would have an impact. Disturbance to the intertidal animals would be temporary during the period the public work is undertaken.

In our view, part of the assessment of the detriments to the Marine Reserve is to consider the extent to which the NZ Transport Agency's proposed conditions may reduce those detriments.

Having considered, therefore, the policy goals of the relevant Acts and having considered all matters that we are statutorily required to we have decided to vary condition 2 of the Authority to carry out a public work dated 8 August 2011, as requested in the application (and supporting papers) dated 15 February 2013.

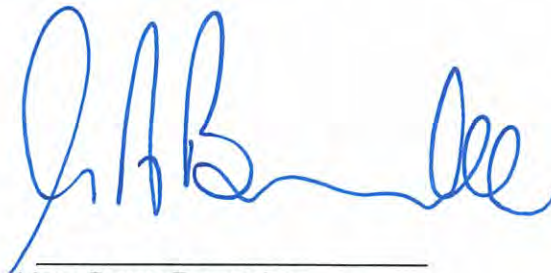
We now enclose a Variation of the Authority duly signed by both of us.

Yours sincerely



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Hon Nick Smith  
Minister of Conservation



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Hon Gerry Brownlee  
Minister of Transport

**VARIATION TO THE AUTHORITY TO CARRY OUT A PUBLIC WORK  
IN THE MOTU MANAWA- POLLEN ISLAND MARINE RESERVE DATED 8  
AUGUST 2011**

PURSUANT to Section 4(3) of the Marine Reserves Act 1971, we NICK SMITH, MINISTER OF CONSERVATION, and GERRY BROWNLEE, MINISTER OF TRANSPORT, hereby authorise the New Zealand Transport Agency (the applicant) to undertake a public work, comprising reclamation, discharges and disturbance within the Motu Manawa –Pollen Island Marine Reserve, between Waterview and the Whau River, Te Atatu, in accordance with the New Zealand Transport Agency's *Application to change Condition 2 of the Authority to carry out a public work in the Motu Manawa-Pollen Island Marine Reserve as issued 8 August 2011*, dated 15 February 2013 (the Application for a Variation) PROVIDED THAT:

1. The public work shall be undertaken in accordance with:
  - 1.1 the Application for a Variation together with accompanying information and plans; and
  - 1.2 the Authority dated 8 August 2011 as amended by this Variation.
2. Condition 2 of the Authority dated 8 August 2011 is replaced by the following Condition 2:

**“2. General**

- 2.1 The public work shall be undertaken in general accordance with the documentation submitted as identified below in 2.1.1-2.1.5:
  - 2.1.1 *Application to undertake a Public Work within the Motu Manawa Marine Reserve dated Apr-11* as amended by 2.1.2, 2.1.3, 2.1.4 and 2.1.5 below.
  - 2.1.2 SH16 Causeway Upgrade Project Application to the Minister of Conservation and the Minister of Transport to Change Condition 2 of the Authority to Carry Out a Public Work in the Motu Manawa Pollen Island Marine Reserve including use of an alternative ground improvement methodology based on pre-load and wick drain solution, as issued 8 August 2011, dated 20 March 2013.
  - 2.1.3 Habitat Loss Calculations contained in the Application to the Minister of Conservation and the Minister of Transport to Change Condition 2 of the Authority to Carry Out a Public Work in the Motu Manawa Pollen Island Marine Reserve as issued 8 August 2011 dated 20 March 2013 – Appendix G: SH16 Causeway Upgrade Project Change in Ecological Impacts.
  - 2.1.4 Updated plans (dated 22 January 2013) referenced as SH16 Works in the Motu Manawa Pollen Island Marine Reserve SH16-4-V-DG-7080-7085 Revision A.

2.1.5 Updated plans (dated 22 January 2013) referenced as Coastal Discharge in the Motu Manawa Pollen Island Marine Reserve SH16-4-V-DG-7070-7075 Revision A.”

3. The public work shall be undertaken in accordance with Conditions 1, 3, 4 and 5 of the Authority dated 8 August 2011.

Signature:



Hon Nick Smith  
Minister of Conservation

Date: 16/5/13

Signature:



Hon Gerry Brownlee  
Minister of Transport

Date: 16/5/13

## MEMORANDUM

**TO** Cath Heppelthwaite  
**FROM** Rachel Purdy  
**COPY** Michael Cassidy, Juliet Woodward  
**DATE** 7 March 2013  
**SUBJECT** Board of Inquiry Consents and Designations relevant to the Causeway Alliance SH16 Causeway Upgrade Project

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### **Introduction**

This memo outlines the Waterview Connection Project Board of Inquiry (BoI) Designation and Consents, along with the conditions, relevant to the SH16 Causeway Upgrade Project being undertaken by the Causeway Alliance.

### **Project Sectors**

The SH16 Causeway Upgrade Project comprises Sectors 2 (Whau River), 3 (Rosebank Road Terrestrial) and 4 (Reclamation) of the wider Waterview Connection Project (WCP).

A number of the consents relevant to several sectors of the WCP, including sectors that are outside the scope of the SH16 Causeway Upgrade Project.

Where the consents listed in Table 1 below relate to sectors outside the scope of the SH16 Causeway Upgrade Project, the sectors relevant to the SH16 Causeway Project are outlined in the 'relevant sectors' column.

### **Relevant Designation and Consents**

The BoI Designation and Consents, along with the conditions, relevant to the SH16 Causeway Upgrade Project are outlined in Table 1 below.

Auckland Council granted The New Zealand Transport Agency consent to change the wording of Condition RC.1 to insert a new Condition RC.1B to the conditions of coastal consents 38335, 38336, 38338, 38339, 38342, 38345, 38356, 35361, 38363, 38364, 38360, 36576, 38346, 38348, 38349, 38344, 38343, R/LUC/2010/3396 as it relates to the SH16 Causeway (Sectors 2, 3 and 4 of the Waterview Connection Project) only. The wording of Condition RC.1B follows Table 1.

The 'conditions' column for those consents subject to the insertion of Condition RC.1B is highlighted in orange; those that are not subject to the insert of Condition RC.1B are highlighted in green.

▪ **Table 1: Designation and Consents relevant to the SH16 Causeway Upgrade Project**

Consent No.	Purpose	Description	Conditions	Relevant Sectors (where applicable to wider WCP Sectors)
<b>Alteration to Designation</b>				
EPA 10/2.003 (ACC: Plan Modification 202)	<b>Alteration to designation</b> A07-01, SH16, causeway and Rosebank Peninsula – NOR2.	Alteration to existing designation at Rosebank Interchange and Patiki bridges, including part of Rosebank Park Domain; modifications to land on existing causeway, ancillary safety and operational services, and maintenance, relocation of services, pedestrian and cycleway, landscaping and planting etc	As per Schedule B of the Board of Inquiry Designation and Consent conditions	
<b>Land Use Consents</b>				
EPA 10/2.010 (ARC: 38313)	Land Use Consents – <b>Land Disturbance</b> (Sectors 1 – 9 inclusive)	Earthworks and roading/ tracking/ trenching during construction – within and outside the Sediment Control Protection Area (includes the associated discharge of sediment laden water as a discharge consent)	As per Schedule B of the Board of Inquiry Designation and Consent conditions	Sectors 2, 3 and 4 relevant to SH16 Causeway Upgrade
EPA 10/2.009 (ACC:R/LUC/ 2010/3396)	Land Use Consents – <b>Activity on reclaimed land</b> (Sectors 2 and 4)	Land Use Consent pursuant to Section 89(2) for the construction, operation and maintenance and ancillary activities of a State highway.	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	N/A
<b>Coastal Permits</b>				
EPA 10/2.030 (ARC: 38334)	<b>Activities</b> within the CMA	For ongoing use of CMA by the State highway for transport purposes and associated construction activities including conveyance of spoil. [Sectors 2 and 4]	As per Schedule B of the Board of Inquiry Designation and Consent conditions	N/A
EPA 10/2.031 (ARC: 38335)	Erection of <b>Temporary Structures</b> in the CMA (Sectors 1, 2, 4 & 5)	This consent relates to the erection of temporary (construction) structures within the CMA including piers, ramps, bridges, conveyor structures, temporary staging platforms, temporary bird roost, stormwater discharge outfalls and other consequential activities such as disturbance and/or vegetation removal. In GMA, CPA 2 and Mooring Management Area – Henderson Creek, Whau River and Pt Chevalier.	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	Sectors 2 and 4 relevant to SH16 Causeway Upgrade
EPA 10/2.032 (ARC: 38336)	Erection of <b>Permanent Structures</b> in the CMA	This consent relates to the construction of permanent (operational phase) structures within the CMA including piers, ramps,	As per Schedule B of the Board of Inquiry Designation and Consent conditions	Sectors 2 and 4 relevant to SH16 Causeway Upgrade



38336)	the CMA (Sectors 1, 2, 4 and 5)	bridges, stormwater discharge outfalls and other consequential activities such as disturbance and/or vegetation removal. In GMA, CPA 2 and Mooring Management Area – Henderson Creek, Whau River and Pt Chevalier.	and Consent conditions plus new Condition RC.1B	Upgrade
EPA 10/2.033 (ARC: 38338)	Erection of <b>Temporary Structures</b> in the CMA (Sectors 3 and 4)	This consent relates to the erection of temporary (construction) structures within the CMA including piers, ramps, bridges, conveyor structures, temporary staging platforms, stormwater discharge outfalls and other consequential activities such as disturbance and/or vegetation removal. In CPA 1 – Waterview Estuary.	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	N/A
EPA 10/2.034 (ARC: 38339)	Erection of <b>Permanent Structures</b> in the CMA (Sectors 3 and 4)	This consent relates to the construction of permanent (operational phase) structures within the CMA including piers, ramps, stormwater discharge outfalls and other consequential activities such as disturbance and/or vegetation removal. In CPA 1 – Waterview Estuary.	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	N/A
EPA 10/2.037 (ARC: 36576)	Reclamation in the CMA (Sectors 1 (0.11 ha) and 2 (approx 0.4ha))	This consent relates to the temporary reclamation for access and construction purposes and permanent reclamation associated with motorway widening in CPA 2.	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	Sector 2 relevant to the SH16 Causeway Upgrade Project
EPA 10/2.038 (ARC: 38342)	<b>Reclamation</b> in the CMA (Sector 4 (approx 4.5ha))	This consent relates to reclamation for access and construction purposes and permanent reclamation associated with motorway widening in CPA 1, north and south of causeway and includes associated vegetation removal and diversion of estuarine channels (including sediment works associated with diversion) required for the mitigation of effects on the reclamation. The Plan states that any non complying consent under 13.5.3 is a restricted coastal activity in specific conditions.	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	N/A
EPA 10/2.039 (ARC: 38343)	<b>Disturbance of Foreshore and Seabed</b> (Sectors 1, 2, 4 and 5)	Disturbance of the foreshore and seabed during construction including vegetation removal, use of motor vehicles, disturbance of sediment, temporary structures and erosion and sediment control measures including, in a GMA, CPA2 and Mooring Management Area for construction:  Sector 2 – Temporary staging platforms within Whau River; Piles for Whau River Bridges; Piles for new pedestrian/cycle facility; Rock lined channels.  Sectors 4 and 5 (north eastern side of causeway) – Temporary staging platforms	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	Sectors 2 and 4 relevant to SH16 Causeway Upgrade

		adjacent to Pt Chevalier; Piles for ramps adjacent to Pt Chevalier.		
EPA 10/2.040 (ARC: 38344)	<b>Disturbance of Foreshore and Seabed</b> (Sector 2)	Removal of vegetation, including mangrove removal, in any CPA 2. This includes the removal of mangroves to the west of Rosebank Park Domain.	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	N/A
EPA 10/2.041 (ARC: 38345)	<b>Disturbance of Foreshore and Seabed</b> (Sectors 4 and 5)	Disturbance of the foreshore and seabed during construction including vegetation removal and mangrove removal, use of motor vehicles, disturbance of sediment, temporary structures and erosion and sediment control measures including, in CPA1, to access existing lawful structures, but excluding the disturbance consequential to activities under which other consents are sought.  This includes disturbance for activities such as machinery access to temporary construction areas in the CMA (e.g. the estuary, Causeway Bridges, pedestrian/cycle way facility, coastal protection works, rock revetment / batters, and temporary staging platforms within Oakley Inlet etc).	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	Sector 4 relevant to SH16 Causeway Upgrade
EPA 10/2.042 (ARC: 38346)	<b>Disturbance of Foreshore and Seabed</b> (Sectors 4 and 5)	The use of motor vehicles in any CPA	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	Sectors 2 and 4 relevant to SH16 Causeway Upgrade
EPA 10/2.043 (ARC: 38347)	<b>Taking and use of inner coastal water</b> (Sectors 2 and 4)	The taking and use of inner coastal water for use in the proposed coffer dam (construction of the reclamation).	As per Schedule B of the Board of Inquiry Designation and Consent conditions	N/A
EPA 10/2.044 (ARC: 38348)	<b>Damming and impounding of inner coastal water</b> (Sectors 2 and 4)	The damming and impounding of inner coastal water in the coffer dam during construction – General Management Area	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	N/A
EPA 10/2.045 (ARC: 38349)	<b>Damming and impounding of inner coastal water</b> (Sectors 2 and 4)	The damming and impounding of inner coastal water in the coffer dam during construction – CPA1	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	N/A
EPA	<b>Discharge of</b>	This consent relates to the discharge of	As per Schedule B	Sectors 2, 3 and

10/2.046 (ARC: 38350)	Contaminants (Sectors 1 through 5)	contaminants during construction into the CMA and discharge of contaminants in stormwater flows during construction along Sectors 1 – 5, including point source and sheet flow discharges.	of the Board of Inquiry Designation and Consent conditions	4 relevant to SH16 Causeway Upgrade
EPA 10/2.047 (ARC: 38351)	<b>Discharge of Contaminants</b> (Sectors 1 through to 5)	This consent relates to the discharge of contaminants during construction into the CMA and discharge of stormwater during construction along Sectors 1 – 5, including point source and sheet flow discharges	As per Schedule B of the Board of Inquiry Designation and Consent conditions	Sectors 2, 3 and 4 relevant to SH16 Causeway Upgrade
EPA 10/2.049 (ARC: 38353)	<b>Discharge of Contaminants</b> (Sector 2)	This consent relates to the permanent discharge of stormwater to the CMA for the operation of the Project – Sector 2 (Whau River, CPA 2 and Mooring Management Area).	As per Schedule B of the Board of Inquiry Designation and Consent conditions	N/A
EPA 10/2.050 (ARC: 38354)	<b>Discharge of Contaminants</b> (Sector 4)	This consent relates to the permanent discharge of stormwater to the CMA for the operation of the Project in Sector 4 (Causeway and Interchange, CPA1).	As per Schedule B of the Board of Inquiry Designation and Consent conditions	N/A
EPA 10/2.052 (ARC: 38356)	<b>Occupation of CMA</b> (Sector 1 and 2)	Occupation of the CMA by permanent structures in, on and over the seabed and foreshore for general state highway widening including piles and piers for new and widened structures including, Sector 2- Whau River Bridge; Whau River pedestrian/cycle facility	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	Sector 2 relevant to SH16 Causeway Upgrade
EPA 10/2.054 (ARC: 38359)	<b>Occupation of CMA</b> (Sector 2)	This consent relates to the occupation of the stormwater outfalls for – Sector 2 (Whau River, CPA 2 and Mooring Management Area.	As per Schedule B of the Board of Inquiry Designation and Consent conditions	N/A
EPA 10/2.055 (ARC: 38360)	<b>Occupation of CMA</b> (Sector 4)	This consent relates to the occupation of the stormwater outfalls for – Sector 4 (Causeway Interchange (Waterview Inlet and surrounds, CPA 1).	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	N/A
EPA 10/2.056 (ARC: 38361)	<b>Occupation of CMA</b> (Sectors 4 and 5)	Occupation of the CMA for construction works in, on and over the seabed and foreshore for Project works including stormwater outfall and ancillary works in General Management Area.	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	Sector 4 relevant to SH16 Causeway Upgrade
EPA 10/2.057 (ARC: 38362)	<b>Occupation of CMA</b> (Sectors 1 and 2)	Occupation of the CMA for construction works in, on and over the seabed and foreshore for Project works including piles and piers construction, reclamation construction and ancillary works in CPA2.	As per Schedule B of the Board of Inquiry Designation and Consent conditions	Sector 2 relevant to SH16 Causeway Upgrade

EPA 10/2.058 (ARC: 38363)	<b>Occupation</b> of the CMA (Sectors 3 and 4)	Occupation of the CMA for construction works in, on and over the seabed and foreshore for Project works including piles and piers construction, reclamation construction and ancillary works in CPA1	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	N/A
EPA 10/2.059 (ARC: 38364)	<b>Occupation</b> of the CMA (Sector 4 and 5)	Occupation of the CMA by permanent structures in, on and over the seabed and foreshore for general motorway widening including piles and piers for new and widened structures including:  Sector 4- Causeway Bridges; Causeway pedestrian/cycle facility; Stormwater outfalls Sector 5- Great North Interchange Ramps; Heritage bridge (pedestrian); Stormwater outfalls	As per Schedule B of the Board of Inquiry Designation and Consent conditions plus new Condition RC.1B	Sector 4 relevant to SH16 Causeway Upgrade
EPA 10/2.060 (ARC: 38365)	<b>Activities</b> within the CMA (Sectors 1, 2, 4, 5)	This consent relates to the ongoing use, operation and maintenance of CMA by the State highway for transport purposes.	As per Schedule B of the Board of Inquiry Designation and Consent conditions	Sectors 2 and 4 relevant to SH16 Causeway Upgrade
EPA 10/2.061 (ARC: 38366)	<b>Activities</b> within the CMA (Sectors 1, 2, 4, 5)	This consent relates to the ongoing use, operation and maintenance of CMA by the State highway for transport (as an activity not provided for as a permitted, controlled or restricted discretionary activity, and is not prohibited by the Plan).	As per Schedule B of the Board of Inquiry Designation and Consent conditions	Sectors 2 and 4 relevant to SH16 Causeway Upgrade

### **New Condition RC.1B**

Auckland Council granted The New Zealand Transport Agency consent to change the wording of Condition RC.1 to insert a new Condition RC.1B to the conditions of coastal consents 38335, 38336, 38338, 38339, 38342, 38345, 38356, 35361, 38363, 38364, 38360, 36576, 38346, 38348, 38349, 38344, 38343, R/LUC/2010/3396 as it relates to the SH16 Causeway (Sectors 2, 3 and 4 of the Waterview Connection Project) only.

The wording of Condition RC.1B is as follows:

#### RC.1B

Except as modified by the conditions below, the SH16 Causeway Upgrade Project works (Sectors 2, 3 and 4 of the Waterview Connection Project) shall be undertaken in general accordance with the information provided by the New Zealand Transport Agency (NZTA), in the resource consent applications, the supporting documents (as detailed in Condition DC.1), and in the supplementary information provided in evidence by the NZTA to the BOI, except where as amended by the application material provided with the s 127 application referenced by Council as 41113, 41114, 41118, 41119, 41120, 41123, 41124, 41125, 41126, 41128, 41371, 41120, 41372, 41373, 41374, 41375, 41376, RNCC/2010/3396/1, as follows:

a) Application form, AEE, appendices and plans titled 'SH16 Causeway Upgrade Project Section 127 Application to Auckland Council to Change Condition RC.1 (by adding a new condition RC.1 B) on Resource Consent Number EPA 10/2.009 (ACC:R/LUC/2010/3396), EPA 10/2.031 (ARC: 38335), EPA 10/2.032 (ARC 38336), EPA 10/2.033 (ARC:38338), EPA 10/2.034 (ARC:38339), EPA 10/2.038 (ARC:38342), EPA 10/2.039 (ARC:38343), EPA 10/2.040 (ARC: 38344), EPA 10/2.041 (ARC:38345), EPA 10/2.052 (ARC: 38356), EPA 10/2.056 (ARC:38361), EPA 10/2.058 (ARC: 38363), EPA 10/2.059 (ARC: 38364)' prepared by the Causeway Alliance and dated 20 November 2012 (Revision 1), including:

- Addendum to Technical Report G.3 Assessment of Avian Ecological Effects
- Addendum to Technical Report G.4 Assessment of Coastal Processes
- Addendum to Technical Report G.5 Assessment of Construction Noise Effects
- Addendum to Technical Report G.11 Assessment of Marine Ecological Effects
- Addendum to Technical Report G.15 Assessment of Stormwater and Streamworks Effects
- Addendum to Technical Report G.16 Assessment of Temporary Traffic Effects
- Addendum to Technical Report G.17 Assessment of Terrestrial Vegetation Effects
- Addendum to Technical Report G.19 Assessment of Vibration Effects
- Addendum to Technical Report G.20 Assessment of Visual and Landscape Effects

b) Further information letter titled 'Section 127 Application to Auckland Council to Change Condition RC.1 (by Addition Condition RC.1 B)' prepared by Juliet Woodward - Causeway Alliance, dated 31 January 2013;

c) Further information letter and attachments (including indicative plans) titled 'Section 127 Application to Auckland Council to Change Condition RC.1 (by Addition Condition RC.1 B) - Request for Further Information Response', prepared by Juliet Woodward - Causeway Alliance, dated 21 December 2012.

Any minor changes to the design from that approved by this consent shall be submitted to the Major Infrastructure Team Manager, Auckland Council for approval at least 20 working days prior to any relevant construction being undertaken, and shall be supported by documentation of why the minor amendment is required and confirming any adverse effects are similar in nature to those approved.

Advice Notes:

Any design changes deemed to be more than minor by the Major Infrastructure Team Manager, Auckland Council may require a new consent or an application for change of conditions under s127 of the Resource Management Act.

It should be noted that the addendums to the technical reports provided with the s127 application should be referred to in relation to the following consent conditions as it relates to the SH16 Causeway Upgrade Project (Sectors 2-4 of the Waterview Connection Project):

S127 Consent No.	Consent Condition	Addendum to Technical Report
R/VCC/2010/3396/1	TT.10	Addendum to Technical Report G.16 Assessment of Temporary Traffic Effects
41124, 41371	SW.10, SW.16	Addendum to Technical Report G.15 Assessment of Stormwater and Streamworks Effects



## Office of Hon Steven Joyce

Minister of Transport  
Minister for Communications  
and Information Technology  
Minister for Tertiary Education

Associate Minister of Finance  
Associate Minister for Infrastructure

8 AUG 2011

Mr Tommy Parker  
State Highways Manager for Auckland and Northland  
NZ Transport Agency  
Private Bag 106602  
**AUCKLAND 1143**

Dear Tommy

**Application by the NZ Transport Agency (NZTA) to Undertake a Public Work under Section 4(3) of the Marine Reserves Act 1971 in the Motu Manawa-Pollen Island Marine Reserve-Waterview Connection Project**

We are required to make decisions under Section 4(3) of the Marine Reserves Act 1971 on whether to authorise the NZTA's application to undertake a public work in the Motu Manawa-Pollen Island Marine Reserve (the Marine Reserve) that you submitted to each of us on 26 April 2011 and subsequently updated with additional information on 26 May 2011.

We have considered the application and supporting information and have decided to authorise it, subject to a number of conditions which we believe are necessary to ensure the impacts on the natural state, marine life and on the natural habitat of the Marine Reserve are minimised to the extent practicable.

In making our decision we have taken into account a report prepared by the Department of Conservation's Auckland Conservancy, in consultation with Ministry of Transport officials, together with the appendices and attachments to that report. We have considered the provisions of the Marine Reserves Act 1971, the Hauraki Gulf Marine Park Act 2000, the Government Roading Powers Act 1989 and the Land Transport Management Act 2003.

In making our decision we have put aside any comments or views we may have previously made or held about the application or any aspect of them and have not considered them any further. We have embarked upon a consideration of the application with an open mind on the basis of the documentation outlined above.

We consider that our authorisation under Section 4(3) of the Marine Reserves Act is a joint one. As such, we have individually read the materials put forward for our consideration and have then met to discuss them.

We consider that the primary objective of section 4(3) is to accommodate the policy goals of the Marine Reserves Act, the Hauraki Gulf Marine Park Act, the Government Roothing Powers Act, and the Land Transport Management Act. Accordingly we have undertaken a consideration of the materials and discussed those materials with that primary objective in mind.

We note that the policy goal of the Marine Reserves Act 1971 is that marine reserves will be managed to be maintained or restored to a natural state as far as possible. As the Motu Manawa-Pollen Island Marine Reserve is part of the Hauraki Gulf Marine Park we also note that a policy goal of the Hauraki Marine Park Act 2000 is to recognise the national significance of the Hauraki Gulf and to provide for the protection, maintenance and enhancement of its component parts. We further note that the policy goals of the Land Transport Management Act 2003 and the Government Roothing Powers Act 1989 are to improve State Highway 16 as a Road of National Significance which will reduce dependency on State Highway 1 and contribute to enabling economic growth.

In our view, accommodating the policy goals of each Act necessitates a balancing in which detriments impacting on the marine reserve must be weighed against any benefits arising from a better transport system that enables economic growth.

Our summary assessment of benefits in terms of the Land Transport Management Act 2003 and the Government Roothing Powers Act 1989 are the improvement of SH16 as a Road of National Significance which will reduce dependency on SH1 and thereby contribute to enabling economic growth. Other benefits include contributing to the region's critical transport infrastructure and its land use and transport strategies by connecting SH16 and SH20 thereby completing the Western Ring Route and by improving the capacity and resilience of SH16. A further benefit is securing the SH16 causeway against inundation.

Our summary assessment of the detriments in terms of the Marine Reserves Act 1971 and the Hauraki Gulf Marine Park Act 2000 is that because of the need to undertake reclamation of the foreshore and seabed, the Marine Reserve will be reduced by approximately three hectares. This loss cannot be replaced. The areas impacted by the proposed public works are predominantly intertidal mudflats. Shellbanks, saltmarsh and mangroves all exist within the Marine Reserve. Construction activities would have an impact. Disturbance to the intertidal animals would be temporary during the period the works are undertaken.

In our view, part of the assessment of the detriments to the Marine Reserve is to consider the extent to which NZTA's proposed conditions may reduce those detriments.

Having considered, therefore, the policy goals of the relevant Acts and having carried out a weighting exercise between the potential benefits of completing the Western Ring Route with the potential detriments to the Marine Reserve

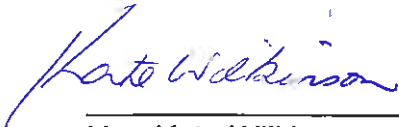




mitigated as far as possible by the proposed conditions, we have decided to grant NZTA an authorisation to carry out a public work under section 4 (3) of the Marine Reserves Act 1971.

We now enclose an authorisation duly signed by both of us.

Yours sincerely



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Hon Kate Wilkinson  
**Minister of Conservation**



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Hon Steven Joyce  
**Minister of Transport**

## **AUTHORITY TO CARRY OUT A PUBLIC WORK IN THE MOTU MANAWA- POLLEN ISLAND MARINE RESERVE**

PURSUANT to Section 4(3) of the Marine Reserves Act 1971, we KATE WILKINSON, MINISTER OF CONSERVATION, and STEVEN JOYCE, MINISTER OF TRANSPORT, hereby authorise the New Zealand Transport Agency (the applicant) to undertake a public work, comprising reclamation, discharges and disturbance within the Motu Manawa –Pollen Island Marine Reserve, between Waterview and the Whau River, Te Atatu, in accordance with the New Zealand Transport Agency's original application dated 26 April 2011, as updated on 26 May 2011 together with accompanying information and plans and subject to the following conditions:

### **1. Duration of Authorisation**

1.1 For construction purposes, unless sooner revoked or varied this authorisation is valid for ten (10) years from the date of issue.

1.2 For operational purposes, unless sooner varied or revoked this authorisation allowing the discharge of treated stormwater and any associated stormwater outfall structures and bridge piles shall have a duration of thirty five (35) years from the date of issue.

### **2. General**

2.1 The public work shall be undertaken in general accordance with the documentation submitted as identified below in 2.1.1-2.1.5:

2.1.1 *Application to Undertake Public Work within the Motu Manawa Marine Reserve dated Apr-11.*

2.1.2 Updated *Habitat Loss Calculations* received by an email dated 26 May 2011, in replacement of the *Habitat Loss Calculations* contained in the *Application to Undertake Public Work within the Motu Manawa Marine Reserve dated April 2011- Appendix 2-of Appendix F: Marine Ecology.*

2.1.3 Updated Erratum Sheet received by an email dated 26 May 2011, to correct errors in text and calculations in the *Application to Undertake Public Work within the Motu Manawa Marine Reserve dated Apr-11.*

2.1.4 Updated plans (received 26 May 2011) referenced as *SH16 WORKS IN THE MOTU MANAWA MARINE RESERVE*, comprising sheets: 20.1.11-3-D-N-946-100 (Revision B), 20.1.11-3-D-N-946-103 (Revision B), 20.1.11-3-D-N-946-104 (Revision B), 20.1.11-3-D-N-946-105 (Revision B), 20.1.11-3-D-N-946-106 (Revision B), 20.1.11-3-D-N-946-107 (Revision C), 20.1.11-3-D-N-946-108 (Revision B).

2.1.5 Updated plans referenced as *COASTAL DISCHARGES IN THE MARINE MOTU MANAWA MARINE RESERVE*, comprising sheets: 210155-D-N-946-103 (Revision B), 210155-D-N-946-104 (Revision B), 210155-D-N-946-105 (Revision B), 210155-D-N-946-106 (Revision B), 210155-D-N-946-107 (Revision B), 210155-D-N-946-108 (Revision B).

### 3. Baseline State of the Environment Surveys

3.1 The applicant shall carry out pre and post construction surveys in accordance with and as described in the document entitled *NZTA-SH16 Waterview Connection Proposed Baseline State of the Environment Surveys of Motu Manawa Pollen Island Marine Reserve (MMMR) and adjacent islands (v2, 26/05/11)* and shall include the following:

- a) Fish surveys in mangrove habitat, open mudflats and sand flats
- b) Analysis of contaminants contained in water, sediment and fish flesh
- c) Subtidal epifauna and macroalgae surveys

3.2 The survey design (sampling methods), number of sampling sites required, site selection in the immediate vicinity of the reclamations, sampling period (to be undertaken in the same months of the year) shall be capable of detecting short term, medium term and long term changes in fish diversity and abundance, changes in the level of contaminants in the water, sediment and fish flesh and changes in the diversity and abundance of epifauna and macroalgae.

3.3 The pre-construction surveys shall be undertaken three (3) months prior to commencement of the public work.

3.4 The post construction surveys shall be undertaken no earlier than one (1) year and no later than two (2) years after the completion of all public work within or affecting the Coastal Marine Area.

3.5 The surveys referred to in conditions 3.3 and 3.4 (including methodologies to be used) shall be designed and carried out by an appropriately qualified scientist approved by the Auckland Conservator.

3.6 The Reports of the pre and post construction surveys shall include statistically reliable data and analysis reported in standard scientific format with all raw data, analysis, text, maps, photographs and video presented in electronic format where ever possible as a spatial geodatabase.

3.7 The applicant shall provide Reports containing the results of each of the three (3) pre construction surveys (i.e. Fish, Contaminant Analyses and Subtidal Epifauna and Macroalgae) to the Auckland Conservator within three (3) months following completion of the sampling required for each of three surveys, or following acquisition of the resultant raw data, whichever is the latter.

3.8 The applicant shall provide Reports containing the results of each of the three (3) post construction surveys (Fish, Contaminant Analyses and Subtidal Epifauna and Macroalgae) to the Auckland Conservator within three (3) months following completion of the sampling required for each of three surveys, or following acquisition of the resultant raw data, whichever is the latter.

3.9 The applicant shall notify the Auckland Conservator two (2) days before the pre and post construction surveys commence.

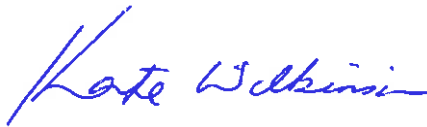
#### 4. Maintenance of Works

4.1 The applicant shall maintain all stormwater devices, outfalls, bridge piles and other structures subject of this approval such that they at all times meet the environmental standards detailed in the application. Such maintenance shall include any necessary remediation works.

#### 5. Marine Reserve Signs

5.1 Signs marking the Motu Manawa-Pollen Island Marine reserve shall be erected no later than three (3) months post construction. Location and design details shall be approved by the Auckland Area Manager.

Signature:



Hon Kate Wilkinson  
Minister of Conservation

Date: 8/8/11

Signature:



Hon Steven Joyce  
Minister of Transport

Date: 8/8/11