



EAST WEST LINK
**DRAFT
DESIGNATION AND
RESOURCE
CONSENT
CONDITIONS**

FEBRUARY 2017

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Index of Designation and Resource Consents

The following table sets out the condition references for the designations and resource consents

Ref	Notice of Requirement	General conditions	
NOR 1	Designation for construction, operation and maintenance of a State highway, being the East West Link between Onehunga and Ōtāhuhu, and associated works.	DC.1, DC.2 - DC.12, CS.1 - CS.6, ROS.1 - ROS.6, NU.1 - NU.4, MW.1 - MW.5, HH.1 - HH.7, LV.1 - LV.7, TR.1 – TR.3, ON.1 – ON.14, CNV.1 – CNV.6, CT.1 - CT.7.	
NOR 2	Alteration to SH1 Designation 6718 for maintenance, operation, use and improvement of the State Highway network.	DC.1, DC.1A, DC.2 – DC.10, DC.12, CS.1 – CS.6, ROS.3, ROS.4, NU.1 - NU.4, MW.1 - MW.5, HH.1 – HH.4, LV.1 – LV.7, TR.1 and TR.2 ON.1 – ON.14, CNV.1 – CNV.6, CT.1 - CT.7.	
Ref	Resource consents	General conditions	Specific conditions
RC1	Land use (s9) - NES Soil	RC.1 - RC.15, MW.1 – MW.5	CL.1 – CL.7
RC2	Land use (s9(2)) – Land disturbance activities	RC.1 - RC.15, MW.1 – MW.5	E.1 – E.14 EM.1 – EM.12
RC3	Land use (s9(2)) – Land disturbance activities	RC.1 - RC.15, MW.1 – MW.5	E.1 – E.14 EM.1 – EM.12
RC4	Land Use (s9(3)) - Vegetation alteration, removal	RC.1 - RC.15, MW.1 – MW.5	E.1 – E.14 EM.1 – EM.12
RC5	Coastal Permit (s12, s14 and s15) – Construction activities in the CMA and temporary occupation and associated discharge of contaminants	RC.1 - RC.15, MW.1 – MW.5	C.1 – C.14 D.1 – D.19 EM.1 – EM.12

Ref	Notice of Requirement	General conditions	
RC6	Coastal Permit (s12, s14 and s15) – Construction activities in the CMA and temporary occupation and associated discharge of contaminants	RC.1 - RC.15, MW.1 – MW.5	C.1 – C.14, EM.1 – EM.7
RC7	Water Permit (s13 and s14) - Works in watercourses and associated diversion activities	RC.1 - RC.15, MW.1 – MW.5	WW.1 – WW.10
RC8	Water Permit (s14) - Drilling of holes	RC.1 - RC.15, MW.1 – MW.5	N/A
RC9	Water Permit (s14) - Groundwater diversion and take	RC.1 - RC.15, MW.1 – MW.5	G.1 – G.7
RC10	Discharge Permit (s15) - Discharge of contaminants into air or into or onto land or water	RC.1 - RC.15, MW.1 – MW.5	AQ.1-AQ.4
RC11	Discharge Permit (s15) - Discharge of contaminants into air or into or onto land or water	RC.1 - RC.15, MW.1 – MW.5	CL.1 – CL.7 AQ.1 – AQ.4
RC12	Discharge Permit (s15) - Air Discharges	RC.1 - RC.15, MW.1 – MW.5	CB.1 - CB.7
RC13	Activities on new land to be created (s9 and s89)	RC.8	-
RC14	Coastal Permit (s12) – Occupation and associated use	RC.8	C.15
RC15	Coastal Permit (s12) – Occupation and associated use	RC.8	C.15
RC16	Water Permit (s13 and s14) - Works in watercourses and associated diversion activities	RC.1 - RC.15, MW.1 – MW.5	WW.1 - WW.10
RC17	Water Permit (s14) - Groundwater diversion and take	RC.8	G.1 - G.7
RC18	Water Permit (s14) - Permanent damming of surface water	RC.8	-
RC19	Discharge Permit (s15) - Discharge of contaminants into or onto land or water	RC.8	L.1 and L.2
RC20	Discharge permit (s15) – Discharge of stormwater	RC.8	SW.1 – SW.17
RC21	Land Use (s9(2)) – Impervious surfaces	RC.8	SW.1 – SW.17
M-RC1	Miami Stream: Land use (s9(3)) – land disturbance, and associated discharges	RC.1 - RC.15, MW.1 – MW.5	E.1 – E.14 EM.1 – EM.12
M-RC2	Miami Stream: Land use (s9(3)) – stormwater	RC.8	-

Designation Conditions

Guide to Reading the Designation Conditions

The proposed designation conditions are numbered as follows:

Set of proposed conditions	Numbering format
General Designation Conditions	DC
Communication and Social	CS
Recreation and Open Space	ROS
Network Utilities	NU
Mana Whenua Collaboration	MW
Historic Heritage	HH
Urban Design, Landscape and Visual	LV
Trees	TR
Traffic Noise (Operation)	ON
Construction Noise and Vibration	CNV
Construction Traffic	CT

Designation Conditions – Definitions

The table below defines the acronyms and terms used in the conditions.

Acronym/term	Definition
Application	The Notices of Requirement dated December 2016 and supporting information dated November and December 2016.
Enabling Works	Includes the following and similar activities: <ul style="list-style-type: none"> • Demolition and removal of buildings and structures, • Relocation of underground and overhead services ; and • The establishment of site entrances and fencing.
Construction Works	One or more of the various activities undertaken in relation to construction of the Project under this designation.
Commencement of Construction	The time when Construction Works (excluding Site Investigations and Enabling Works) commence.
Completion of Construction	When construction of the Project (or part of the Project) is complete and is available for use.
Council	Auckland Council

Acronym/term	Definition
HNZPT	Heritage New Zealand Pouhere Taonga
Manager	The Team Manager, Major Infrastructure Projects of the Auckland Council, or authorised delegate.
Mana Whenua Group	The group established under Condition MW.1.
NoR	Notice of Requirement
Operation/Operational	When construction of the Project is complete and the State highway is open to traffic.
Outline Plan	An outline plan prepared in accordance with section 176A of the RMA.
PPF	Protected Premises and Facilities.
Project	The construction, maintenance and operation of the East West Link Project and associated works.
Requiring Authority	The New Zealand Transport Agency.
RMA	Resource Management Act 1991.
Road Controlling Authority	Has the same meaning as under section 2 of the Land Transport Act 1998.
Site Investigations	Includes geotechnical investigations (outside the Auckland Unitary Plan (Operative in Part) Heritage Extent of Place), identifying service locations, surveys, monitoring activities, surveys and other similar activities.
Suitably qualified person	A person: <ul style="list-style-type: none"> • With a recognised qualification in the subject matter of the condition; or • With recognised experience in the subject matter of the condition; or • Is a member of relevant professional body for the subject matter of the condition.
Working Day	Has the same meaning as under section 2 of the Resource Management Act 1991.

Designation Conditions

Ref	Applies to:	Condition
General Designation Conditions (DC)		
DC.1	NoR 1 NoR 2	<p>Except as modified by the conditions below, and subject to final design, the Project shall be undertaken in general accordance with the information provided by the Requiring Authority in the Notice of Requirement dated December 2016, and in particular, the following supporting documents:</p> <p>(a) Part D: Description of the Project in Volume 1: Assessment of Effects on the Environment Report dated December 2016;</p> <p>(b) The following plan sets in Volume 2: Drawing Set:</p> <ul style="list-style-type: none"> i) Plan Set 3: Road Alignment ii) Plan Set 4: Landscape iii) Plan Set 6: Plan and Long Section iv) Plan Set 7: Typical Cross Section v) Plan Set 8: Structural vi) Plan Set 12: Utilities Relocation <p>(c) The Key Design Principles and Sector Outcomes of the Project's Urban and Landscape Design Framework dated November 2016 and Addendum dated December 2016.</p> <p>(d) The Draft Construction Traffic Management Plan Framework.</p>
DC.1A	NoR 2	These conditions only apply to works and land described in the Notice of Requirement to Alter Designation 6718 (NoR 2) dated December 2016.
DC.2	NoR 1 NoR 2	Except where explicitly provided for, the construction related conditions of this designation do not apply to works associated with on-going operation and maintenance of the State highway following construction, such as changes to street furniture or signage over time. The provisions of Section 176A of the RMA apply to on-going operation, maintenance or other works within the designation.
DC.3	NoR 1 NoR 2	The Project website shall include these conditions and the plans and reports referred to in these conditions prior to and throughout Construction Works, and a hard copy shall be available at the Project site office(s).

Ref	Applies to:	Condition
DC.4	NoR 1 NoR 2	Where there is inconsistency between: (a) The documents listed in Condition DC.1 above and the requirements of these conditions, these conditions shall prevail; (b) The information and plans lodged with the NoR and further information provided post lodgement, the most recent information and plans shall prevail; and (c) The draft management plans and/or management plan frameworks lodged with the NoR and the management plans required by the conditions of this designation and submitted through the Outline Plan process, the requirements of the management plans as set out in the relevant conditions shall prevail.
DC.5	NoR 1 NoR 2	As soon as practicable following Completion of Construction, the Requiring Authority shall: (a) Review the extent of the area designated for the Project; (b) Identify any areas of designated land that are no longer necessary for the on-going operation, maintenance or mitigation of effects of the Project; and (c) Give notice to the Council in accordance with section 182 of the RMA for the removal of those parts of the designation identified in (b) above.
DC.6	NoR 1 NoR 2	The designation shall lapse if not given effect to within 15 years from the date on which it is included in the Auckland Unitary Plan under section 175 of the RMA.
<i>Outline Plan(s)</i>		
DC.7	NoR 1 NoR 2	An Outline Plan or Plans shall be prepared in accordance with section 176A of the RMA.
DC.8	NoR 1 NoR 2	Any Outline Plan or Plans may be submitted in parts or in stages to address particular activities (e.g. design or construction aspects) or to reflect the staged implementation of the Project.
DC.9	NoR 1 NoR 2	The Outline Plan or Plans shall include the following plans for the relevant stage(s) of the Project: (a) Construction Noise and Vibration Management Plan (CNVMP) prepared in accordance with Condition CNV.1; (b) Construction Traffic Management Plan (CTMP) in accordance with Condition CT.1; (c) Heritage Management Plan (HMP) in accordance with Condition HH.3; and (d) Urban and Landscape Design Master Plan (ULDMP) in accordance with Condition LV.1.

Ref	Applies to:	Condition
DC.10	NoR 1 NoR 2	The CNVMP, CTMP, HMP and ULDMP may be amended following submission of the Outline Plan(s) if necessary to reflect any changes in design, construction methods or management of effects. Any amendments are to be discussed with and submitted to the Manager for information without the need for a further Outline Plan process, unless those amendments once implemented would result in a materially different outcome to that described in the original plan.
DC.11	NoR 1	<p>As part of the Outline Plan(s) prepared under section 176A of the RMA, the Requiring Authority shall demonstrate how the following outcomes will be achieved for the relevant stage of the Project for which the Outline Plan has been submitted:</p> <ul style="list-style-type: none"> (a) A local road connection linking Orpheus Drive and Onehunga Harbour Road including two traffic lanes (one in each direction), pedestrian access on both sides including a 3m (minimum) shared pedestrian and cycle path on one side; (b) A shared pedestrian and cycle path connection between Orpheus Drive and the proposed new Old Māngere Bridge; (c) Replacement of on-street carparks removed outside The Landing with the same number of carparks in reasonable proximity; (d) Operation of clearways, in the morning and evening peaks, to provide on-street parking on Captain Springs Road (south of Neilson Street) in off-peak times; (e) Provision for safe turning of large vehicles and parking at the southern end of Hugo Johnston Drive; and (f) Provision for safe right turn movement from Neilson Street into Onehunga Mall.
DC.12	NoR 1 NoR 2	Where local roads will be affected by Construction Works, the Requiring Authority shall consult with Auckland Transport during the preparation of the Outline Plan(s). The Requiring Authority shall consider any comments received from Auckland Transport, and shall include a summary of those comments and the responses in the Outline Plan(s).
Communication and Social (CS)		
<i>Liaison person</i>		
CS.1	NoR 1 NoR 2	A Project Liaison Person shall be appointed by the Requiring Authority for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by Construction Works. The Requiring Authority shall take appropriate steps to advise all affected parties of the liaison person's contact details. This person must be reasonably available for on-going consultation on matters of concern to affected persons arising from Construction Works. If the liaison person will not be available for any reason, an alternative contact shall be provided, to ensure that a Project contact person is available by telephone 24 hours per day/seven days per week during the construction phase of the Project.

Ref	Applies to:	Condition
		The Requiring Authority shall inform the Manager of the Project Liaison Person's contact details 20 working days prior to the Commencement of Construction and/or Enabling Works for the Project.
<i>Communications Plan</i>		
CS.2	NoR 1 NoR 2	<p>Prior to the Commencement of Construction and/or Enabling Works, the Requiring Authority shall prepare and implement a Communications Plan.</p> <p>The purpose of the plan is to set out procedures detailing how the public, stakeholders, businesses and residents will be communicated with throughout the pre-construction and construction phases of the Project.</p> <p>As a minimum, the Communications Plan shall include:</p> <ul style="list-style-type: none"> (a) Details of the Project Liaison Person (Condition CS.1). The contact details shall be on the Project website and prominently displayed at the entrance to the site(s) so that they are clearly visible to the public at all times; (b) A list of stakeholders, organisations, businesses and residents who will be communicated with; (c) Methods to consult on and to communicate the proposed hours of construction activities outside of normal working hours and on weekends and public holidays, to surrounding businesses and residential communities, and methods to deal with concerns raised about such hours; (d) Methods to record concerns raised about hours of construction activities and methods to avoid particular times of day which have been identified as being particularly sensitive for neighbours; (e) Any stakeholder specific communication plans required; (f) Details of communications activities proposed including: <ul style="list-style-type: none"> i) Publication of newsletters, or similar, and proposed delivery areas; ii) Newspaper advertising; iii) Notification and consultation with business owners and operators and individual property owners and occupiers with premises/dwellings within 100 metres of active construction; (g) Details of the Project website; (h) Linkages and cross-references to communication methods set out in other conditions and management plans where relevant; and (i) Details of when the Plan will be reviewed and amended. <p>The Communications Plan shall be provided to the Manager for information 20 working days prior to Commencement of Construction and following any material amendments of the Plan.</p>

Ref	Applies to:	Condition
<i>Community Liaison Groups</i>		
CS.3	NoR 1 NoR 2	<p>(a) The Requiring Authority shall establish and co-ordinate a Community Liaison Group (CLG) in each of the following areas at least 3 months prior to the Commencement of Construction in each of those areas:</p> <ul style="list-style-type: none"> i) Onehunga and Penrose including the Onehunga Harbour Road residential area; and ii) State Highway 1 including the Ōtāhuhu and Panama Road residential areas. <p>(b) The purpose of the CLG is to provide a means for:</p> <ul style="list-style-type: none"> i) Sharing information on design, construction works and programme; ii) Reporting and responding to concerns and issues raised in relation to construction Works; and iii) Monitoring the effects on the community arising from Construction Works in these areas. <p>(c) The Requiring Authority shall assist the CLG to hold regular meetings (at least once every three months) throughout the construction period in these areas. The CLG shall continue until six months after Completion of Construction so that on-going monitoring information can continue to be shared, discussed and responded to. The frequency and duration of the meetings can be reduced where the majority of the members of the group agree.</p> <p>(d) In addition to the Project Liaison Person and representative(s) of the Requiring Authority and its principal construction contractor, membership of the CLG shall be open to all interested parties within the Project area including, but not limited to representatives of the following groups:</p> <ul style="list-style-type: none"> i) Council, Auckland Transport and other Council Controlled Organisations; ii) Department of Conservation; iii) Mana Whenua; iv) Business groups; v) Community/environmental groups; vi) Local Boards; vii) Local residents and business owners/operators; and viii) Representatives from those organisations identified in the Communications Plan (as required by Condition CS.2). <p>(e) The Requiring Authority shall prepare an agenda for each meeting and prepare minutes recording actions. A copy of the minutes shall be provided to the meeting invitees within a reasonable time following the meeting.</p> <p>(f) The Requiring Authority shall be responsible for all reasonable costs associated with resourcing of the CLGs.</p>

Ref	Applies to:	Condition
<i>Business Forums</i>		
<p>CS.4</p>	<p>NoR 1 NoR 2</p>	<p>(a) The Requiring Authority shall establish and coordinate Business Forums in each of the following industrial/commercial areas, or a combined Business Forum in two or more of those areas, at least 3 months prior to Commencement of Construction in those areas:</p> <ul style="list-style-type: none"> i) Onehunga (including businesses on Neilson Street (east), Onehunga Mall, Onehunga Harbour Road, Galway Street and Gloucester Park Road); ii) Onehunga Industrial (including businesses on Neilson Street (west), Captain Springs Road, Miami Parade and Hugo Johnston Drive); iii) Sylvia Park Road (including Pacific Rise, Great South Road and Vestey Drive); and iv) SH1 (including Vestey Drive, Monahan Road and Clemow Drive). <p>(b) The purpose of the Business Forums is to provide a forum for:</p> <ul style="list-style-type: none"> i) Sharing information on the construction works and programme and planned business and community activities; ii) Reporting and responding to concerns and issues raised in relation to Construction Works; and iii) Monitoring the effects on the business community arising from Construction Works in these areas. <p>(c) The Requiring Authority shall assist the Business Forum(s) to hold regular meetings (at least once every three months) throughout the construction period in these areas. The Business Forum(s) shall continue until six months after Completion of Construction so that on-going monitoring information can continue to be shared, discussed and responded to. The frequency and duration of the forums can be reduced where the majority of the members of the group agree.</p> <p>(d) In addition to the general purpose set out in (b) above, the matters to be considered by the Business Forums may include, but are not limited to, the following matters:</p> <ul style="list-style-type: none"> i) The timing of construction activities; ii) Temporary traffic management including closures, detours, parking restrictions and signage; and iii) Alternative access during construction. <p>(e) The Requiring Authority shall prepare an agenda for each meeting and prepare minutes recording actions. A copy of the minutes shall be provided to the meeting invitees within a reasonable time following the meeting.</p> <p>(f) The Requiring Authority shall be responsible for all reasonable costs associated with the resourcing of the Business Forum.</p>

Ref	Applies to:	Condition
<i>Complaints Management</i>		
CS.5	NoR 1 NoR 2	<p>At all times during Construction Works, the Requiring Authority shall maintain a record of any complaints received in relation to the Construction Works.</p> <p>The record shall include:</p> <ul style="list-style-type: none"> (a) The name and address (as far as practicable) of the complainant; (b) Identification of the nature of the complaint; (c) Location, date and time of the complaint and of the alleged event; (d) The weather conditions at the time of the complaint (as far as practicable), and including wind direction and approximate wind speed if the complaint relates to air quality or noise. (e) The outcome of the Requiring Authority's investigation into the complaint; (f) Measures taken by the Requiring Authority to respond to the complaint or confirmation of no action if deemed appropriate; (g) Any other activities in the area, unrelated to the Project that may have contributed to the complaint, such as non-project construction, fires, traffic accidents or unusually dusty conditions generally; and (h) The response provided to the complainant. <p>The Requiring Authority shall also keep a record of any remedial actions undertaken.</p> <p>The complaints record shall be made available to the Manager upon request.</p>
CS.6	NoR 1 NoR 2	<p>The Requiring Authority shall respond to a complaint related to Construction Works as soon as reasonably practicable and as appropriate to the circumstances.</p>
Recreation and Open Space (ROS)		
<i>Aotea Sea Scouts Activities</i>		
ROS.1	NoR 1	<p>The Requiring Authority shall offer to temporarily relocate the Aotea Sea Scouts activities located at Onehunga Harbour Road for the duration of Construction Works adjacent to the Aotea Sea Scouts Hall.</p> <p>The offer shall be made no later than 3 months prior to Commencement of Construction on Onehunga Harbour Road adjacent to the Aotea Sea Scout Hall. The offer shall remain valid until 3 months after the Commencement of Construction on Onehunga Harbor Road adjacent to the existing Aotea Sea Scouts Hall. If the offer is not accepted within that timeframe, the Requiring Authority is not required to temporarily relocate the Aotea Sea Scouts activities.</p> <p>The offer shall include as a minimum:</p> <ul style="list-style-type: none"> (a) Relocation of the activities at least 20 working days prior to Commencement of Construction on Onehunga Harbour Road adjacent to the existing Aotea Sea Scouts Hall;

Ref	Applies to:	Condition
		<p>(b) Relocation of the activities until Completion of Construction affecting Onehunga Harbour Road adjacent to the Aotea Sea Scouts Hall.</p> <p>The offer of temporary relocation shall be developed in consultation with the Aotea Sea Scouts.</p>
<i>Waikaraka Park (temporary facilities during construction)</i>		
ROS.2	NoR 1	<p>(a) To address the loss of on leash dog walking and passive open space during Construction Works, the Requiring Authority shall, subject to agreement of the landowner, provide an alternative area of up to 6,000m² for those activities and temporary parking for a minimum of 4 cars on the northern portion of the Waikaraka Park future development site at 60 Captain Springs, Onehunga.</p> <p>(b) The recreation space shall be available for use prior to the permanent closure of any part of the Manukau Foreshore Walkway located between Onehunga Harbour Road and Hugo Johnston Drive. The recreation space shall consist of a space suitable for on leash dog walking or informal sports.</p> <p>(c) The temporary parking shall be available for use by the public on Saturdays, Sundays and Public Holidays for the period of construction requiring the removal of on road parking in Captain Springs Road. The temporary parking will be formed from metal or similar material reflecting its temporary use.</p> <p>(d) The recreation space shall be maintained by the Requiring Authority until such time as either:</p> <ol style="list-style-type: none"> i) The coastal walkway located along the coastal edge of the proposed reclamation is open to the public; or ii) The shared path on the road embankment is open to the public. <p>(e) The temporary parking shall be maintained until such time as the extension to Captain Springs Road is open to traffic.</p>
<i>Open Space Reinstatement Plans</i>		
ROS.3	NoR 1 NoR 2	Prior to any works that affect Auckland Council parks and open space, the Requiring Authority shall prepare a register of assets and a photographic record of the pre-construction state of the parks and open space. This shall be provided to the Manager prior to construction commencing.
ROS.4	NoR 1 NoR 2	<p>(a) The Requiring Authority shall prepare a Reinstatement Plan in consultation with the landowner for the following parks and reserves (or parts thereof) directly impacted by Construction Works:</p> <ol style="list-style-type: none"> i) Gloucester Park North and South; ii) Waikaraka Park; and iii) Bedingfield Memorial Park

Ref	Applies to:	Condition
		<p>(b) Where other areas of open space are affected by Construction Works, the reinstatement of those areas shall be based on a like-for-like reinstatement based on the record prepared under ROS.3.</p> <p>(c) The purpose of the Reinstatement Plans is to provide details of the reinstatement works in open space areas directly affected by construction works.</p> <p>(d) The Reinstatement Plans shall:</p> <ul style="list-style-type: none"> i) Be prepared in accordance with the ULDMP for the area prepared under Condition LV.1; ii) Include details for the reinstatement of land used for Construction Works including: <ul style="list-style-type: none"> • Removal of structures, plant and materials associated with construction (unless otherwise agreed with the landowner); • Replacement or reinstatement of boundary fences to the same or similar type to that removed (as recorded through Condition ROS.3); • Reinstatement of grassed areas to a similar condition as existed prior to construction; • Replacement of trees and other planting removed for Construction Works on a one-for-one basis (or as otherwise agreed with the landowner); • Details of way finding and interpretation signage within and adjacent to the open space. iii) Include record of consultation and agreement with the landowner; and iv) Take account of any Council management plans prepared for the park, reserve or area of open space. <p>(e) The Reinstatement Plan shall be provided to the Manager and implemented within 3 months of Completion of Construction, or at a later date as agreed with the landowner.</p>
<i>Gloucester Park Reinstatement Plan</i>		
ROS.5	NoR 1	<p>In addition to the matters set out in Condition ROS.4, the Gloucester Park Reinstatement Plan shall include:</p> <ul style="list-style-type: none"> (a) Details of proposed ecological enhancement to extend the existing saltmarsh area in Gloucester Park South; (b) Details of interpretive features for identifying geological heritage features; and (c) Details of fencing required to manage the safe interface of SH20 and Gloucester Park North for the current use of the park.

Ref	Applies to:	Condition
<i>Waikaraka Park Reinstatement Plan</i>		
ROS.6	NoR 1	In addition to the matters set out in Condition ROS.4, the Waikaraka Park Reinstatement Plan shall include: <ul style="list-style-type: none"> (a) Details of proposed landscaping along the southern boundary of Waikaraka Cemetery. The landscaping is to be developed in consultation with HNZPT; and (b) Details of proposed car parking accessible to the recreational walkway on the foreshore.
Network Utilities (NU)		
<i>Network Utilities Management Plan</i>		
NU.1	NoR 1 NoR 2	<p>The Requiring Authority shall prepare and implement a Network Utilities Management Plan (NUMP). The NUMP shall be prepared in consultation with the relevant infrastructure providers who have existing network utilities that are directly affected by the Project.</p> <p>The purpose of the NUMP is to ensure that the design and construction of the Project takes account of, and includes, measures to address the safety, integrity, protection and (where necessary) the relocation of existing network utilities.</p> <p>The NUMP shall include methods and measures to:</p> <ul style="list-style-type: none"> (a) Ensure that critical infrastructure can be accessed for maintenance at all reasonable times, or emergency works at all times, during and after construction activities; (b) 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; and (c) Ensure that no activity is undertaken during construction that would result in ground vibrations, ground instability and/or ground settlement likely to cause material damage to network utilities.
NU.2	NoR 1 NoR 2	A copy of the NUMP shall be provided to the Manager for information at least 20 working days prior to the commencement of any Enabling Works or Commencement of Construction where those enabling or Construction Works impact on network utilities.
NU.3	NoR 1 NoR 2	<ul style="list-style-type: none"> (a) In addition to the matters set out in Condition NU.1, the NUMP shall include procedures, methods and measures to manage effects of the construction works on the following transmission lines: <ul style="list-style-type: none"> i) Mangere-Mt Roskill 110 kV Line; ii) Penrose – Mt Roskill A 110 kV Line; and iii) Henderson – Ōtāhuhu 220 kV Line. (b) The NUMP shall include:

Ref	Applies to:	Condition
		<ul style="list-style-type: none"> i) Details of any dispensations and associated procedures, methods and measures agreed with Transpower for construction works that cannot meet <i>New Zealand Electrical Code of Practice for Electrical Safe Distances 2001</i> (NZECP 34:2001) or any subsequent revision of the code; ii) For all other works, procedures, methods and measures to demonstrate how construction works will meet the safe distances within the NZECP 34:2001 or any subsequent revision of the code and including measures and methods relating to: <ul style="list-style-type: none"> • Excavation and construction near towers; • Building to conductor clearances; • Ground to conductors clearances; • Mobile plant to conductor clearances; and • People to conductor clearances. iii) Details of areas within which additional management measures are required, such as fencing off, entry and exit hurdles and the minimum height for any hurdles; and iv) Details of contractor training for those working near transmission lines and other assets.
<p>Mana Whenua Collaboration (MW)</p> <p><i>[Note: The proposed Mana Whenua Collaboration Conditions below will also be contained in the resource consent conditions once the wording is finalised with any amendments agreed prior to a decision on the applications.]</i></p>		
<p><i>Mana Whenua Group</i></p>		
<p>MW.1</p>	<p>NoR 1 NoR 2</p>	<ul style="list-style-type: none"> (a) Six months prior to the Commencement of Construction, the Requiring Authority shall invite mandated representatives of Mana Whenua to participate in a Mana Whenua Group (MWG). (b) The purpose of the MWG is to facilitate engagement between the Requiring Authority and Mana Whenua in respect of the activities authorised by this designation. (c) The group will include invited representatives from: <ul style="list-style-type: none"> i) Ngāi Tai Ki Tāmaki; ii) Ngāti Maru; iii) Ngāti Paoa; iv) Ngāti Tamaoho; v) Ngāti Te Ata Waiohua; vi) Ngāti Whātua Ōrākei; vii) Te Ahiwaru;

Ref	Applies to:	Condition
		<ul style="list-style-type: none"> viii) Te Ākitai Waiohūa; ix) Te Kawerau ā Maki; and x) Te Rūnanga o Ngāti Whātua <p>(d) The MWG will hold regular meetings (at least three monthly) throughout the construction period. The MWG shall continue until six months after Completion of Construction. The frequency and duration of the meetings can be reduced where the majority of the members of the group agree.</p> <p>(e) The Requiring Authority shall record the main points arising from each meeting of the MWG, and shall provide a copy of that record to the meeting invitees within a reasonable time following the meeting.</p> <p>(f) The Requiring Authority shall be responsible for all reasonable costs associated with the resourcing of the MWG.</p>
MW.2	NoR 1 NoR 2	<p>The MWG will be provided opportunities to review and comment on the following (amongst other things):</p> <ul style="list-style-type: none"> (a) The ULDMP, with particular reference to design elements of the following features: <ul style="list-style-type: none"> i) Aesthetic design for works in the vicinity of Te Hōpua a Rangi including how Mana Whenua artworks or design themes are incorporated and delivered into that design; ii) Landscape treatment (including plant species, plant sources and planting methodology), alignment and design of the recreation walkway, interpretive signage and other amenities along the Māngere Inlet foreshore recreation walkway; iii) Aesthetic design through the Anns Creek area, including reflection of the Kāretu Portage in the design of the viaduct; iv) Aesthetic design associated with the Kāretu Portage Path (over Great South Road and along Sylvia Park Road), including reflection of the historic Kāretu Portage in design of this feature; v) Aesthetic design of structures in the vicinity of the waahi tapu at Mt Wellington Interchange; and vi) Aesthetic design of the Ōtāhuhu Creek bridges and in particular the treatment beneath these structures to reflect and respond to the Ōtāhuhu portage. (b) The Heritage Management Plan (as required by Condition HH.3) including details of Mana Whenua construction monitoring for sites identified as having significance to Mana Whenua (including but not limited to Te Hōpua a Rangi, Anns Creek and foreshore, Mt Wellington Interchange area, Ōtāhuhu Creek); (c) Accidental Discovery Protocol (as required by Condition HH.2); (d) The ECOMP (as required by Condition EM.1) including the detail of ecological restoration planting along the northern shoreline of the Māngere Inlet, Anns Creek and Ōtāhuhu Creek; (e) The CEMP (as required by Condition RC.10), including details on site inductions, training programme(s) and tikanga for construction works

Ref	Applies to:	Condition
		(particularly for works in sensitive areas such as Te Apunga o Tainui at Mt Wellington Interchange) to respond to matters of significance to Mana Whenua; and (f) Results of environmental monitoring as required by conditions of the designation and related resource consents (e.g. water quality monitoring), including information to support cultural monitoring requirements.
<i>Cultural Monitoring Plan</i>		
MW.3	NoR 1 NoR.2	Prior to the Commencement of Construction, a Cultural Monitoring Plan or plans shall be prepared by a suitably qualified person and endorsed by the Mana Whenua Group.
MW.4	NoR 1 NoR.2	The purpose of the Cultural Monitoring Plan is to set out the agreed cultural monitoring requirements and measures to be implemented during construction activities, to acknowledge the historic and living cultural values of the area to Mana Whenua and to minimise potential adverse effects on these values.
MW.5	NoR 1 NoR.2	The Cultural Monitoring Plan shall include (but not be limited to): (a) Requirements for formal dedication or cultural interpretation to be undertaken prior to works commencing in areas identified as having significance to Mana Whenua (including but not limited to Te Hōpua a Rangi, Anns Creek and foreshore, Mt Wellington Interchange area, Ōtāhuhu Creek); (b) Requirements and protocols for cultural inductions; (c) Identification of sites and areas where cultural monitoring is required during particular Construction Works; (d) Identification of any other specific activities requiring cultural monitoring (e.g. implementation of spill contingency measures or specific works in the CMA); (e) Identification of personnel nominated by Mana Whenua to undertake cultural monitoring, including any geographic definition of their responsibilities; (f) Details of personnel nominated by the Requiring Authority and Mana Whenua to assist with management of any issues identified during cultural monitoring, including implementation of the Accidental Discovery Protocol developed under Condition HH.2.
Historic Heritage (HH)		
<i>Archaeology</i>		
HH.1	NoR 1 NoR 2	Where the Requiring Authority holds an Archaeological Authority under the Heritage New Zealand Pouhere Taonga Act 2014, the designation conditions set out below shall not apply to the activities authorized by the Archaeological Authority.

Ref	Applies to:	Condition
HH.2	NoR 1 NoR 2	<p>For activities and areas of the Project not covered by an Archaeological Authority, the Requiring Authority shall prepare an Accidental Discovery Protocol for any accidental archaeological discoveries which occur during Construction Works.</p> <p>The Accidental Discovery Protocol shall be consistent with <i>Minimum Standard P45 – Accidental Archaeological Discovery Specification</i> contained in the <i>State Highway Professional Services Proforma Manual</i> and the Auckland Unitary Plan Accidental Discovery Rule in Standard E.11.6.1.</p> <p>The Accidental Discovery Protocol shall be prepared in consultation with the Mana Whenua Group and modified to reflect the site specific Project detail.</p> <p>The Accidental Discovery Protocol shall be implemented throughout the Construction Works.</p>
<i>Heritage Management Plan</i>		
HH.3	NoR 1 NoR 2	<p>(a) Prior to Commencement of Construction, the Requiring Authority shall prepare and implement a Heritage Management Plan (HMP).</p> <p>(b) The purpose of the HMP is to identify procedures and practices to be adopted to protect, as far as reasonably practicable, historic heritage and remedy and mitigate any residual effects.</p> <p>(c) The HMP will be prepared for the management of historic heritage, excluding any matters covered by an Archaeological Authority granted by HNZPT.</p> <p>(d) The HMP shall be provided to the Manager prior to Commencement of Construction.</p> <p>(e) The HMP shall be implemented throughout Construction Works, other than where the conditions of an Archaeological Authority obtained under the Heritage New Zealand Pouhere Taonga Act 2014, or the archaeological works plans or site instructions approved under that Authority, require otherwise.</p>
HH.4	NoR 1 NoR 2	<p>The HMP shall be prepared by a suitably qualified person(s) in consultation with Auckland Council, HNZPT and Mana Whenua, and shall identify:</p> <p>(a) Known historic heritage within the designation boundary;</p> <p>(b) Any pre-1900 archaeological sites in accordance with authorities under the Heritage New Zealand Pouhere Taonga Act 2014;</p> <p>(c) Roles and responsibilities of personnel involved with historic heritage matters including surveys, and monitoring of conditions;</p> <p>(d) Methods for avoiding and/or minimising effects on historic heritage during construction where practicable (for example the fencing off of archaeological sensitive areas to protect them from damage during construction);</p> <p>(e) Details for recording and salvage prior to removal of the historic concrete railway bridge and tunnel located adjacent to Onehunga Harbour Road. The recording and salvage shall be aligned, as appropriate, with the Salvage and Conservation Heritage Plan for the proposed removal of the</p>

Ref	Applies to:	Condition
		<p>Old Māngere Bridge (being part of a separate works project planned by the NZ Transport Agency).</p> <p>(f) Training requirements for contractors and subcontractors on historic heritage areas/features within the designation boundary and any accidental discovery protocols. The training shall be undertaken under the guidance of a suitably qualified person and representatives of the Mana Whenua Group;</p> <p>(g) Cultural inductions for site/places of importance to Mana Whenua; and</p> <p>(h) Proposed methodology for assessing the historic heritage, condition and means to mitigate any adverse effect (if any) on the built heritage features listed in Condition HH.5 and the timeframe for implementing the proposed methodology, in accordance with <i>Heritage New Zealand guideline AGS 1A: Investigation and Recording of Buildings and Standing Structures for assessing and recording built heritage</i> dated 4 July 2014 (or any subsequent revision).</p> <p>Advice note:</p> <p><i>The archaeological requirements of the Project shall be undertaken in compliance with any conditions of an archaeological authority issued by HNZPT under the Heritage New Zealand Pouhere Taonga Act 2014.</i></p> <p><i>The Requiring Authority shall seek advice from a suitably qualified person in advance of any Site Investigations or Enabling Works on the need for an Archaeological Authority under the Heritage New Zealand Pouhere Taonga Act 2014 for those works.</i></p>
Built Heritage Features – Condition Survey		
HH.5	NoR 1	<p>(a) Subject to receiving the owners written approval, a structural condition survey shall be undertaken by a suitably qualified person within 20 days prior to the Commencement of Construction for the following built heritage structures:</p> <ul style="list-style-type: none"> i) The Aotea Sea Scouts Hall at 1 Orpheus Drive including an inventory and photographic survey of the interior fittings; ii) The Landing at 2 Onehunga Harbour Road; iii) Onehunga Wharf at 55 Onehunga Harbour Road; iv) The Shaldrick Building at 50 Onehunga Road; v) The Waikaraka Park stone walls along the boundary between Waikaraka Park and the EWL Main Alignment; and vi) The Waikaraka Park stone caretakers cottages on Captain Springs Road. <p>(b) The purpose of the survey is to determine the pre-construction condition, context and physical features of the built heritage structures to form the basis of construction monitoring.</p> <p>(c) The outcome of the survey shall be provided to the landowner within 20 working days following completion of the survey.</p> <p>(d) A post-construction survey shall be undertaken within 3 months following Completion of Construction in the vicinity of the built heritage feature. The</p>

Ref	Applies to:	Condition
		<p>outcome of the survey shall be provided to the landowner within 1 month following completion of the survey.</p> <p>(e) If any damage occurs and is attributable to the Construction Works, the Requiring Authority shall (with the agreement of the building owner and subject to any additional approval required) make good the damage.</p>
HH.6	NoR 1	<p>The Requiring Authority is deemed to have complied with Condition HH.5 if:</p> <p>(a) The Requiring Authority has written to the built heritage structure owner offering the structural condition survey and the owner did not accept the Requiring Authority's offer within three months of the date of the Requiring Authority's written offer; or</p> <p>(b) The built heritage feature owner cannot, after reasonable enquiry, be found prior to Completion of Construction.</p>
<i>Aotea Sea Scout Hall – Conservation Plan</i>		
HH.7	NoR1	<p>The Requiring Authority shall update the Conservation Plan for the Aotea Sea Scout Hall contained in the document titled <i>Aotea Sea Scouts Building Conservation Plan, 19 February 2007, Revision: FINAL DRAFT, MHX REF:X025</i>.</p> <p>The update shall consider the following:</p> <p>(a) Any changes to history and narrative as a result of new information;</p> <p>(b) Statements of heritage value;</p> <p>(c) Review current condition including any changes, deterioration or loss of heritage fabric;</p> <p>(d) Document any maintenance or repairs undertaken; and</p> <p>(e) Review of policy regarding use of the building.</p> <p>The updated Conservation Plan shall be submitted to Auckland Council for information at the same time as the submission of the Heritage Management Plan prepared under Condition HH.3.</p>
Urban Design, Landscape and Visual (LV)		
LV.1	NoR 1 NoR 2	<p>The Requiring Authority shall prepare an Urban and Landscape Design Master Plan (ULDMP) for the Project. The ULDMP may be submitted in sectors or in parts.</p> <p>The ULDMP shall be included in the Outline Plan submitted prior to the Commencement of Construction of permanent works.</p> <p>A ULDMP is not required for Enabling Works and Site Investigations.</p>
LV.2	NoR 1 NoR 2	<p>The purpose of the ULDMP is to:</p> <p>(a) Integrate the Project's permanent works into the surrounding landscape and urban context and to illustrate the urban and landscape design elements of the Project.</p>

Ref	Applies to:	Condition
		<p>(b) Outline the requirements for the Project's permanent landscape mitigation works; and</p> <p>(c) Outline the maintenance and monitoring requirements for planting undertaken as part of the ULDMP.</p>
<p>LV.3</p>	<p>NoR 1 NoR 2</p>	<p>The ULDMP shall be prepared in consultation with:</p> <ul style="list-style-type: none"> i) Council for areas of the Project to become Council assets; ii) Auckland Transport for areas within and adjoining local roads; iii) the Mana Whenua Group; iv) HNZPT; v) Landowner agreements; and vi) Adjacent landowners for the detail of noise barriers on their boundary. <p>Any comments and inputs received from the parties listed above shall be summarised within the ULDMP or supporting document, along with explanation of where any comments or suggestions have not been incorporated and the reasons why.</p>
<p>LV.4</p>	<p>NoR 1 NoR 2</p>	<p>The ULDMP shall be prepared by a suitably qualified person and shall:</p> <ul style="list-style-type: none"> (a) Reflect the Key Design Principles and Sector Outcomes of the Project's <i>Urban and Landscape Design Framework</i> dated November 2016 and the Addendum dated December 2016 (hereafter referred to as the ULDF); and (b) Be prepared in general accordance with the following (or equivalent update): <ul style="list-style-type: none"> i) NZ Transport Agency's <i>Urban Design Guidelines: Bridging the Gap</i> (2013); and ii) NZ Transport Agency Landscape Guidelines (final draft dated 2014); and NZ Transport Agency's <i>P39 Standard Specification for Highway Landscape Treatments</i>, 2013.
<p>LV.5</p>	<p>NoR 1 NoR 2</p>	<p>The ULDMP shall demonstrate how the Sector-Specific Outcomes in Chapter 5 of the ULDF have been incorporated and shall include the following:</p> <ul style="list-style-type: none"> (a) Design that describes and illustrates the overall urban and landscape design concept, and explains the rationale for the landscape and urban design proposal if different from the ULDF concepts; (b) Developed design details for the urban and landscape design features. These shall cover the following: <ul style="list-style-type: none"> i) Roadside furniture – elements such as lighting, sign gantries and signage, guard rails, fences and median barriers; ii) Architecture and landscape treatment of all major structures, including bridges, underpasses and retaining walls; iii) Architecture and landscape treatment of acoustic barriers; iv) Land use re-instatement following construction;

Ref	Applies to:	Condition
		<ul style="list-style-type: none"> v) Landscape treatment of permanent stormwater management ponds, wetlands and swales; vi) Integration of passenger transport facilities; vii) Pedestrian and cycle facilities including paths, road crossings and dedicated pedestrian/ cycle bridges or underpasses; viii) Features (such as interpretive signage) for the purpose of identifying and interpreting cultural heritage, built heritage, archaeology, geological heritage and ecology in the Project area; ix) Proposed maintenance boundaries; x) Consideration of: <ul style="list-style-type: none"> • Crime Prevention Through Environmental Design (CPTED) principles; • Safety in Design (SID) requirements; • Maintenance requirements and anti-graffiti measures; and • Protected viewshafts, character areas and protected heritage sites, structures or features, as identified in the Auckland Unitary Plan. <p>The ULDM shall also describe how road design elements such as median width and treatment, roadside width and treatment, and earthworks contouring, have taken into account the Sector-Specific Outcomes in Chapter 5 of the ULDF.</p>
<p>LV.6</p>	<p>NoR 1 NoR 2</p>	<p>The ULDM shall also include the following planting details:</p> <ul style="list-style-type: none"> (a) Identification of vegetation to be retained (including trees identified in accordance with Condition TR.1), protection measures, and planting to be established along cleared edges; (b) Details of the sourcing of native plants. Any planting using 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; (c) Proposed planting including plant species, plant/grass mixes, spacing/densities, sizes (at the time of planting) and layout and planting methods including trials; (d) Planting programme – the staging of planting in relation to the construction programme which shall, as far as practicable, include provision for planting within each planting season following completion of Construction Works in each stage of the Project; (e) Detailed specifications for landscape planting relating to (but not limited to) the following: <ul style="list-style-type: none"> i) Weed control and clearance; ii) Pest animal management; iii) Ground preparation (topsoiling and decompaction); iv) Mulching; and v) Plant sourcing and planting, including hydroseeding and grassing;

Ref	Applies to:	Condition
		<p>(f) The detailed specifications above are to be consistent with the ECOMP required by Condition EM.1 and with planting plans for the stormwater treatment wetlands required by Condition SW.1.</p> <p>(g) For any landscape planting, a maintenance regime including monitoring and reporting requirements, which is to apply for the 2 years following that planting being undertaken; and</p> <p>(h) For any ecological restoration planting, a maintenance regime including monitoring and reporting requirements, which is to apply for the 5 years following that planting being undertaken.</p>
LV.7	NoR 1 NoR 2	<p>Planting shall be implemented:</p> <p>(a) Wherever practicable prior to Commencement of Construction; or</p> <p>(b) As soon as areas become available for planting due to the progress of the works and seasonal conditions; and/or</p> <p>(c) Within twelve months of Completion of Construction, unless the seasonal timing of works makes some planting impracticable, in which case such planting shall be completed no later than twenty four months after Completion of Construction.</p>
Trees (TR)		
TR.1	NoR 1 NoR 2	<p>Arboricultural assessments shall be carried out prior to Commencement of Construction to assess if any existing trees within the construction area are worthy of retention or relocation and if it is practicable to retain or relocate those trees.</p> <p>If retention is determined appropriate, specific tree protection measures shall be developed and implemented throughout the Construction Works so that health of the trees to be retained is not adversely affected.</p>
TR.2	NoR 1 NoR 2	<p>Trees over 4 metres in height or 400mm in girth (at Commencement of Construction) within parks, reserves and local roads that require removal for the Project shall be replaced with trees of suitable/comparable species and size in a location agreed with Council (for parks and reserves) or Auckland Transport (for local roads and paths). Details of the location, species and size of the replacement trees shall be included in the ULDMP prepared in accordance with Condition LV.1.</p>
TR.3	NoR 1 NoR 2	<p>Where any works occur within the dripline of a notable tree (as identified in the maps of the Auckland Unitary Plan (Operative in Part), those works shall be undertaken in accordance with best arboricultural practice.</p>
Traffic Noise (Operation) (ON)		
ON.1	NoR 1 NoR 2	<p>For the purposes of Conditions ON.2 to ON.14:</p> <p>(a) BPO – means the Best Practicable Option;</p> <p>(b) Building-Modification Mitigation – has the same meaning as in NZS 6806:2010 <i>Acoustics – Road-traffic noise – New and altered roads</i>;</p>

Ref	Applies to:	Condition
		<ul style="list-style-type: none"> (c) Habitable Space – has the same meaning as in NZS 6806; (d) Noise Assessment – Means the <i>Traffic Noise and Vibration Assessment Report</i> (Technical Report 7) submitted with the NoR; (e) Noise Criteria Categories – means the groups of preference for sound levels established in accordance with NZS 6806 when determining the BPO for noise mitigation (i.e. Categories A, B and C); (f) NZS 6806 – means New Zealand Standard NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads; (g) P40 – means NZ Transport Agency NZTA P40:2014 Specification for noise mitigation; (h) PPFs – means only the premises and facilities identified in green, orange or red in the <i>Noise Assessment</i>; and (i) Structural Mitigation – has the same meaning as in NZS 6806.
<i>Structural Mitigation</i>		
ON.2	NoR 1 NoR 2	The road-traffic noise mitigation measures identified as the ‘Recommended Traffic Noise Mitigation’ in the <i>Noise Assessment</i> must be implemented to achieve the Noise Criteria Categories indicated in the <i>Noise Assessment</i> (‘Identified Categories’), where practicable and subject to Conditions ON.3 to ON.14.
ON.3	NoR 1 NoR 2	<p>Prior to Commencement of Construction, a suitably qualified person must undertake the detailed design of the Structural Mitigation measures in the <i>Noise Assessment</i> (the ‘Detailed Mitigation Options’), which, subject to Condition ON.4, must include at least:</p> <ul style="list-style-type: none"> (a) Noise barriers with location, length and height in general accordance with the <i>Noise Assessment</i>; and (b) Low-noise road surfaces with location in general accordance with the <i>Noise Assessment</i>.
ON.4	NoR 1 NoR 2	<p>If it is not practicable to implement a particular Structural Mitigation measure in the location or of the length or height included in the <i>Noise Assessment</i>, a changed design can be included in the Detailed Mitigation Options if either:</p> <ul style="list-style-type: none"> (a) the changed design would result in the same Identified Category at all PPFs, and a suitably qualified person certifies to the Manager that the changed Structural Mitigation would be consistent with adopting the BPO in accordance with NZS 6806; or (b) the changed design would result in the Identified Category changing to a less stringent Category (e.g. from Category A to B or Category B to C at any PPF) and the Manager confirms that the changed Structural Mitigation would be consistent with adopting the BPO in accordance with NZS 6806.

Ref	Applies to:	Condition
<i>Noise Mitigation Design Report</i>		
ON.5	NoR 1 NoR 2	<p>Prior to Commencement of Construction, a Noise Mitigation Design Report written in accordance with NZ Transport Agency <i>P40 Specification for Noise Mitigation 2014</i> must be provided to the Manager.</p> <p>The purpose of the Noise Mitigation Design Report is to confirm that the Detailed Mitigation Options meet the requirements of ON.2-ON.4. The Noise Mitigation Design Report shall include confirmation that consultation has been undertaken with affected property owners for site specific design requirements and the implementation programme.</p> <p>Where a Noise Mitigation Design Report is required, it shall be included in the Outline Plan for the relevant stage(s) of the Project.</p>
ON.6	NoR 1 NoR 2	The Detailed Mitigation Options must be implemented prior to Completion of Construction, with the exception of any low-noise road surfaces, which must be implemented within twelve months of Completion of Construction.
ON.7	NoR 1 NoR 2	Within twelve months of Completion of Construction, a post-construction review report written in accordance with NZ Transport Agency <i>P40 Specification for Noise Mitigation 2014</i> must be provided to the Manager.
ON.8	NoR 1 NoR 2	The Detailed Mitigation Options must be maintained so they retain their noise reduction performance as far as practicable.
<i>Building-Modification Mitigation</i>		
ON.9	NoR 1 NoR 2	Prior to Commencement of Construction, a suitably qualified person must identify those PPFs which, following implementation of all the Detailed Mitigation Options, will not achieve Noise Criteria Category A or B and where Building-Modification Mitigation might be required to achieve 40 dB $L_{Aeq(24h)}$ inside habitable spaces ('Category C Buildings').
ON.10	NoR 1 NoR 2	Prior to Commencement of Construction in the vicinity of each Category C Building, the Requiring Authority must write to the owner of the Category C Building requesting entry to assess the noise reduction performance of the existing building envelope. If the building owner agrees to entry within twelve months of the date of the Requiring Authority's letter, the Requiring Authority must instruct a suitably qualified person to visit the building and assess the noise reduction performance of the existing building envelope.
ON.11	NoR 1 NoR 2	<p>For each Category C Building identified, the Requiring Authority is deemed to have complied with Condition ON.10 if:</p> <ul style="list-style-type: none"> (a) The Requiring Authority's acoustics specialist has visited the building; or (b) The building owner agreed to entry, but the Requiring Authority could not gain entry for some reason (such as entry denied by a tenant and the building owner has been notified of that denial); or

Ref	Applies to:	Condition
		<p>(c) The building owner did not agree to entry within twelve months of the date of the Requiring Authority's letter sent in accordance with Condition ON.10 (including where the owner did not respond within that period); or</p> <p>(d) The building owner cannot, after reasonable enquiry, be found prior to Completion of Construction.</p> <p>If any of (b) to (d) above apply to a Category C Building, the Requiring Authority is not required to implement Building-Modification Mitigation to that building.</p>
ON.12	NoR 1 NoR 2	<p>Subject to Condition ON.11, within six months of the assessment required by Condition ON.10, the Requiring Authority must write to the owner of each Category C Building advising:</p> <p>(a) If Building-Modification Mitigation is required to achieve 40 dB $L_{Aeq(24h)}$ inside habitable spaces; and</p> <p>(b) The options available for Building-Modification Mitigation to the building, if required; and</p> <p>(c) That the owner has three months to decide whether to accept Building-Modification Mitigation to the building and to advise which option for Building-Modification Mitigation the owner prefers, if the Requiring Authority has advised that more than one option is available.</p>
ON.13	NoR 1 NoR 2	<p>Once an agreement on Building-Modification Mitigation is reached between the Requiring Authority and the owner of a Category C Building, the mitigation must be implemented, including any third party authorisations required, in a reasonable and practical timeframe agreed between the Requiring Authority and the owner.</p>
ON.14	NoR 1 NoR 2	<p>Subject to Condition ON.11, where Building-Modification Mitigation is required, the Requiring Authority is deemed to have complied with Condition ON.13 if:</p> <p>(a) The Requiring Authority has completed Building-Modification Mitigation to the building; or</p> <p>(b) An alternative agreement for mitigation is reached between the Requiring Authority and the building owner; or</p> <p>(c) The building owner did not accept the Requiring Authority's offer to implement Building-Modification Mitigation within three months of the date of the Requiring Authority's letter sent in accordance with Condition ON.12 (including where the owner did not respond within that period); or</p> <p>(d) The building owner cannot, after reasonable enquiry, be found prior to Completion of Construction.</p>
Construction Noise and Vibration (CNV)		
CNV.1	NoR 1 NoR 2	<p>A Construction Noise and Vibration Management Plan (CNVMP) shall be prepared by a suitably qualified person, and shall be implemented and maintained throughout the entire construction period.</p> <p>The purpose of the CNVMP is to provide a framework for the development and implementation of measures to avoid, remedy or mitigate adverse construction</p>

Ref	Applies to:	Condition																																																										
		noise and vibration effects, and to minimise any exceedance of the criteria set out in Conditions CNV.5 and CNV.6.																																																										
CNV.2	NoR 1 NoR 2	The CNVMP shall be prepared in accordance with the NZ Transport Agency's <i>State highway construction and maintenance noise and vibration guide</i> (version 1.0, 2013).																																																										
CNV.3	NoR 1 NoR 2	The CNVMP shall identify which mitigation measures required by Conditions ON.1 to ON.5 would also attenuate construction noise. Where practicable, those measures identified in the CNVMP shall be implemented prior to commencing major construction works in the vicinity.																																																										
CNV.4	NoR 1 NoR 2	<p>Noise arising from construction activities shall be measured and assessed in accordance with NZS 6803:1999 <i>Acoustics - Construction Noise</i> and shall comply, as far as practicable, with the noise criteria set out in the following table:</p> <p>Table CNV1: Construction noise criteria</p> <table border="1"> <thead> <tr> <th>Day</th> <th>Time</th> <th>L_{Aeq}(15min)</th> <th>L_{AFmax}</th> </tr> </thead> <tbody> <tr> <td colspan="4">Residential buildings</td> </tr> <tr> <td rowspan="4">Sundays to Thursdays</td> <td>0630h - 0730h</td> <td>55 dB</td> <td>75 dB</td> </tr> <tr> <td>0730h - 1800h</td> <td>70 dB</td> <td>85 dB</td> </tr> <tr> <td>1800h - 2000h</td> <td>65 dB</td> <td>80 dB</td> </tr> <tr> <td>2000h - 0630h</td> <td>60 dB</td> <td>75 dB</td> </tr> <tr> <td rowspan="4">Fridays</td> <td>0630h - 0730h</td> <td>60 dB</td> <td>75 dB</td> </tr> <tr> <td>0730h - 1800h</td> <td>70 dB</td> <td>85 dB</td> </tr> <tr> <td>1800h - 2000h</td> <td>45 dB</td> <td>75 dB</td> </tr> <tr> <td>2000h - 0630h</td> <td>45 dB</td> <td>75 dB</td> </tr> <tr> <td rowspan="4">Saturdays and Public Holidays</td> <td>0630h - 0730h</td> <td>45 dB</td> <td>75 dB</td> </tr> <tr> <td>0730h - 1800h</td> <td>55 dB</td> <td>85 dB</td> </tr> <tr> <td>1800h - 2000h</td> <td>45 dB</td> <td>75 dB</td> </tr> <tr> <td>2000h - 0630h</td> <td>45 dB</td> <td>75 dB</td> </tr> <tr> <td colspan="4">Commercial and industrial receivers</td> </tr> <tr> <td rowspan="2">All</td> <td>0730h – 1800h</td> <td>70dB</td> <td></td> </tr> <tr> <td>1800h – 0730h</td> <td>75 dB</td> <td></td> </tr> </tbody> </table> <p>Advice Note:</p> <p><i>There may be occasions when it is not practicable for construction activity to achieve the guideline criteria in the standard. In such circumstances, mitigation that is consistent with the best practicable option shall be adopted in accordance with CNV.6.</i></p>	Day	Time	L _{Aeq} (15min)	L _{AFmax}	Residential buildings				Sundays to Thursdays	0630h - 0730h	55 dB	75 dB	0730h - 1800h	70 dB	85 dB	1800h - 2000h	65 dB	80 dB	2000h - 0630h	60 dB	75 dB	Fridays	0630h - 0730h	60 dB	75 dB	0730h - 1800h	70 dB	85 dB	1800h - 2000h	45 dB	75 dB	2000h - 0630h	45 dB	75 dB	Saturdays and Public Holidays	0630h - 0730h	45 dB	75 dB	0730h - 1800h	55 dB	85 dB	1800h - 2000h	45 dB	75 dB	2000h - 0630h	45 dB	75 dB	Commercial and industrial receivers				All	0730h – 1800h	70dB		1800h – 0730h	75 dB	
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CNV.5	NoR 1	Construction vibration shall be measured in accordance with ISO 4866:2010 <i>Mechanical vibration and shock – Vibration of fixed structures – Guidelines for</i>																																																										

Ref	Applies to:	Condition																					
	NoR 2	<p><i>the measurement of vibrations and evaluation of their effects on structures, and shall, as far as practicable, comply with the Category A construction vibration criteria in Table CNV2.</i></p> <p>(a) If measured or predicted vibration from construction activities exceeds the Category A criteria, a suitably qualified person must assess and manage construction vibration during those activities.</p> <p>(b) If measured or predicted vibration from construction activities exceeds the Category B criteria those activities must only proceed if vibration effects on affected buildings are assessed, monitored and mitigated by a suitably qualified person.</p> <p>Table CNV2 Construction Vibration Criteria</p> <table border="1"> <thead> <tr> <th>Receiver</th> <th>Details</th> <th>Category A</th> <th>Category B</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Occupied PPFs*</td> <td>Night-time 2000h - 0630h</td> <td>0.3mm/s ppv</td> <td>1mm/s ppv</td> </tr> <tr> <td>Daytime 0630h - 2000h</td> <td>1mm/s ppv</td> <td>5mm/s ppv</td> </tr> <tr> <td>Other occupied buildings</td> <td>Daytime 0630h - 2000h</td> <td>2mm/s ppv</td> <td>5mm/s ppv</td> </tr> <tr> <td rowspan="2">All other buildings</td> <td>Vibration - transient</td> <td rowspan="2">5mm/s ppv</td> <td>BS 5228-2* Table B2</td> </tr> <tr> <td>Vibration - continuous</td> <td>BS 5228-2* 50% of table B2 values</td> </tr> </tbody> </table> <p>* For vibration, protected premises and facilities (PPFs) are dwellings, educational facilities, boarding houses, homes for the elderly and retirement villages, marae, hospitals that contain in-house patient facilities and buildings used as temporary accommodation (e.g. motels and hotels).</p> <p>*BS 5228-2:2009 'Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration'.</p>	Receiver	Details	Category A	Category B	Occupied PPFs*	Night-time 2000h - 0630h	0.3mm/s ppv	1mm/s ppv	Daytime 0630h - 2000h	1mm/s ppv	5mm/s ppv	Other occupied buildings	Daytime 0630h - 2000h	2mm/s ppv	5mm/s ppv	All other buildings	Vibration - transient	5mm/s ppv	BS 5228-2* Table B2	Vibration - continuous	BS 5228-2* 50% of table B2 values
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CNV.6	NoR 1 NoR 2	<p>If measured or predicted noise and vibration from a construction activity exceed the criteria in Conditions CNV.4 or CNV.5, a Schedule to the CNVMP for that activity shall be prepared in accordance with the NZ Transport Agency <i>State highway construction and maintenance noise and vibration guide</i> (Version 1.0, 2013). A schedule must establish the best practicable option for noise mitigation to be implemented for the construction activity.</p> <p>The Schedule shall be provided to the Manager for certification at least five working days, where practicable, in advance of the activity commencing.</p>																					

Ref	Applies to:	Condition
Construction Traffic (CT)		
<i>Construction Traffic Management Plan</i>		
CT.1	NoR 1 NoR 2	<p>A Construction Traffic Management Plan (CTMP) shall be prepared by a suitably qualified person and in consultation with Auckland Transport.</p> <p>The purpose of the CTMP is to manage the various traffic management, safety and efficiency effects associated with Construction Works to:</p> <ul style="list-style-type: none"> (a) Protect public safety including the safe passage of pedestrians and cyclists; (b) Minimise delays to road users; (c) Minimise interruption to property access; and (d) Inform the public about any potential impacts on the road network.
CT.2	NoR 1 NoR 2	<p>The CTMP shall:</p> <ul style="list-style-type: none"> (a) Identify how Condition CT.1 will be met; (b) Be in general accordance with the Draft Construction Traffic Management Plan Framework listed in RC.1; (c) Where road capacity may be significantly affected by temporary traffic management, identify potential effects of the capacity reduction, and proposed measures to minimise delays; (d) Include measures to avoid road closures and restrictions on vehicle, bus, cycle and pedestrian movements; (e) Where road closures or restrictions cannot reasonably be avoided, the particular vulnerabilities and sensitivities of pedestrian diversions and reduced conditions shall be taken into account in the planning of any closures or restrictions; (f) Confirm that a safe alternative shared cycle/pedestrian path connection between Onehunga Harbour Road and Old Māngere Bridge or the New Old Māngere Bridge (if constructed) is available at all times during the Construction Works; and (g) Identify proposed measures to minimise the duration of closure of the existing shared path facility along the Māngere Inlet, and proposed measures to stage works and / or provide alternative facilities to minimise inconvenience.
CT.3	NoR 1 NoR 2	<p>At least 40 working days prior to commencement of Construction Works the Requiring Authority shall provide a draft of the CTMP to Auckland Transport for comment.</p> <p>The Requiring Authority shall consider any comments received from Auckland Transport in relation to local roads when finalising the CTMP.</p>

Ref	Applies to:	Condition
<i>Site/Activity Specific Traffic Management Plans</i>		
CT.4	NoR 1 NoR 2	<p>Site/activity specific Traffic Management Plans (TMPs) shall be prepared where any Project construction activity varies the normal traffic conditions of any public road.</p> <p>The purpose of the TMP is to identify specific construction methods to address the particular circumstances, local traffic and community travel demands within the area covered by the TMP. The TMP shall describe the measures that will be taken to manage the traffic effects associated with Construction Works within the area covered by the TMP.</p> <p>In particular the TMP shall describe:</p> <ul style="list-style-type: none"> (a) Temporary traffic management measures required to manage impacts on road users during proposed working hours; (b) Delay calculations associated with the proposed closure/s and detour routes; (c) The capacity of any proposed detour route(s) and their ability to carry the additional traffic volumes and any known safety issues associated with the detour route, including any mitigation measures the Requiring Authority proposes to put in place to address any identified safety issues; (d) Individual traffic management plans for intersections of the Project with arterial roads; (e) Measures to maintain, where practicable, existing vehicle access to adjacent properties and businesses; (f) Measures to maintain, where practicable, safe and clearly identified pedestrian and cyclist access on roads and footpaths adjacent to the Construction Works. Where detours are necessary to provide such access the Requiring Authority shall provide, as far as practicable, the shortest and most convenient detours; (g) Consideration of over dimension and overweight routes; (h) Any proposed temporary changes in speed limit; (i) Provision for safe and efficient access of construction vehicles to and from construction site(s); (j) The measures that will be undertaken by the Requiring Authority to communicate traffic management measures to affected road users, cyclists and pedestrian and other stakeholders; and (k) The consultation undertaken with CLGs, business forums and affected properties owners/occupiers in relation to proposed temporary traffic management and measures that will be undertaken to address issues raised.
CT.5	NoR 1 NoR 2	<p>The CTMP and TMP(s) shall be consistent with the version of the NZ Transport Agency <i>Code of Practice for Temporary Traffic Management</i> (COPTTM) or the Auckland Transport <i>Auckland Transport Code of Practice</i> (ATCOP) which applies at the time the CTMP or the relevant TMP is prepared.</p>

Ref	Applies to:	Condition
CT.6	NoR 1 NoR 2	<p>The TMP(s) shall be prepared following consultation with the following key stakeholders (as relevant):</p> <ul style="list-style-type: none"> (a) Auckland Transport (where local roads and paths will be affected); (b) National Road Carriers Incorporated and NZ Heavy Haulage Association; (c) Public transport providers (where public transport services will be affected); (d) Emergency services (police, fire and ambulance); and (e) Schools and childcare centres with frontage or access to roads within which works in relation to the relevant part of the Project will take place; and (f) Directly affected property and business owners and operators.
CT.7	NoR 1 NoR 2	<p>The Requiring Authority shall implement each TMP for the duration of the Construction Works to which the particular TMP applies.</p>
	NoR 1 NoR 2	<p>Advice Note:</p> <p><i>In addition to the RMA processes, there are other additional processes applying to any work or activity that affects the normal operation of a local road, footpath or berm. For such activities, a Corridor Access Request must be submitted to the Road Controlling Authority under the National Code of Practice for Utility Operators' Access to Transport Corridor to ensure that all work is done safely and complies with national regulations.</i></p>

Resource Consent Conditions

Guide to Reading the Resource Consent Conditions

The proposed resource consent conditions are numbered as follows:

Set of proposed conditions	Numbering format
General Resource Consent Conditions	RC
Mana Whenua Collaboration	MW
Contaminated Land	CL
Earthworks, Vegetation Alteration and Removal	E
Coastal Activities	C
Dredging	D
Ecological Management	EM
Dams – Stormwater Treatment Wetlands and Miami Stream	D
Works in Watercourses	WW
Groundwater and Settlement	G
Air Quality	AQ
Storage and Manufacture of Concrete	CB
Leachate	L
Stormwater and Impervious Surfaces	SW

Resource Consent Conditions – Definitions

The table below defines the acronyms and terms used in the conditions.

Acronym/term	Definition
Application	The Application for Resource Consents and supporting information dated December 2016.
As-Built Plans	A final set of drawings submitted upon completion of a project. They reflect all changes made in the specifications and working drawings during the construction process, and show the exact dimensions, geometry, and location of all elements of the completed work.
ARI	Annual Recurrence Interval
BPO	Best Practicable Option
CEMP	The Construction Environmental Management Plan.
CMA	Coastal Marine Area

Acronym/term	Definition
Commencement of Construction	The time when Construction Works (excluding Site Investigations and Enabling Works) commence.
Completion of Construction	When construction of the Project (or part of the Project) is complete and the State highway is available for use.
Construction Works	One or more of the various activities undertaken in relation to the Project under these resource consents.
Council	Auckland Council
Enabling Works	Includes the following and similar activities: <ul style="list-style-type: none"> • Demolition and removal of buildings and structures, • Relocation of underground and overhead services; and • The establishment of site entrances and fencing.
Organic flocculants	Flocculants that are derived from living matter and contain carbon, including but not limited to Polyamine and PolyDADMAC.
HNZPT	Heritage New Zealand Pouhere Taonga
Manager	The Team Manager, Major Infrastructure Projects of the Auckland Council, or authorised delegate.
Mana Whenua Group	The group established under Condition MW.1.
Operation/Operational	When construction of the Project is complete and the State highway is open to traffic.
Project	The construction, maintenance and operation of the East West Link Project and associated works.
Project Liaison Person	The person appointed by the Consent Holder 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 construction work.
Project stage	A separable part of the Project (e.g. by contract area or by geographical extent).
RMA	The Resource Management Act 1991.
Site Investigations	Includes geotechnical investigations (outside the Auckland Unitary Plan (Operative in Part) Heritage Extent of Place), identifying service locations, surveys, monitoring activities, surveys and other similar activities.
Suitably Qualified Environmental Practitioner	In relation to contaminated land, as set out in the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011.
Suitably qualified person	A person: <ul style="list-style-type: none"> • With a recognised qualification in the subject matter of the condition; or • With recognised experience in the subject matter of the condition; or

Acronym/term	Definition
	<ul style="list-style-type: none">• Is a member of relevant professional body for the subject matter of the condition.
Working day	Has the same meaning as under section 2 of the Resource Management Act 1991.

General Resource Consent Conditions (RC)

These general conditions apply to all resource consents unless specified otherwise. Additional conditions which apply to specific resource consents are set out in following pages.

Ref	Condition
<i>General and Administration</i>	
RC.1	<p>Except as modified by the conditions below, and subject to final design, the Project shall be undertaken in general accordance with information provided by the Consent Holder in the Application for Resource Consents dated December 2016, in particular, the following supporting documents:</p> <ul style="list-style-type: none"> (a) Part D: Description of the Project in Volume 1: Assessment of Effects on the Environment Report dated December 2016; (b) The following plan sets in Volume 2: Drawing Set: <ul style="list-style-type: none"> i) Plan Set 3: Road Alignment ii) Plan Set 4: Landscape iii) Plan Set 5: Coastal Occupation iv) Plan Set 6: Plan and Long Section v) Plan Set 7: Typical Cross Section vi) Plan Set 8: Structural vii) Plan Set 9: Stormwater viii) Plan Set 10: Erosion and Sediment Control (c) The Key Design Principles and Sector Outcomes of the Project's Urban and Landscape Design Framework dated November 2016 and Addendum dated December 2016. (d) The Draft Contaminated Land Management Plan. <p>These conditions shall apply to all that land identified in the schedule contained in the Application for Resource Consents dated December 2016 unless specified otherwise in a specific condition.</p>
RC.2	<p>The Project website shall include these conditions and the plans and reports referred to in these conditions prior to and throughout Construction Works, and a hard copy shall be available at the Project site office(s).</p>
RC.3	<p>Where there is inconsistency between:</p> <ul style="list-style-type: none"> (a) The documents listed in Condition RC.1 above and these conditions, these conditions shall prevail; (b) The information and plans lodged with the Application and further information provided post lodgement, the most recent information and plans shall prevail; and (c) The draft management plans and/or management plan frameworks lodged with the Application and the management plans required by the conditions of these resource consents, the requirements of the management plans as set out in the relevant conditions shall prevail.

Ref	Condition
RC.4	The Consent Holder shall provide regular updates on construction activities and programme to the Manager, and shall also include a summary of this information on the Project website.
<i>Pre-construction Administration</i>	
RC.5	The Consent Holder shall notify the Manager in writing of the proposed date of Commencement of Construction at least 20 working days prior to the proposed start date.
RC.6	<p>Within 15 working days prior to Commencement of Construction, the Consent Holder shall arrange and conduct a prestart meeting that:</p> <ul style="list-style-type: none"> (a) Is located on the subject site; (b) Is scheduled not less than five days before the anticipated Commencement of Construction; (c) Includes Council representatives; (d) Includes representation from the contractors who will undertake the works; and (e) Includes an invitation to Mana Whenua. <p>The pre-commencement meeting shall discuss the works methodology and shall ensure all relevant parties are aware of and are familiar with the conditions of the resource consents.</p> <p>In the case that any of the invited parties, other than the representative of the Consent Holder, does not attend this meeting, the Consent Holder will have been deemed to have complied with this condition, provided reasonable notice is given to the parties listed above.</p>
<i>Annual Monitoring Report</i>	
RC.7	<p>The Consent Holder shall provide to the Manager by either 30 June each year, or on an alternative date as otherwise agreed to by the Manager, an Annual Monitoring Report.</p> <p>The purpose of this report is to provide an overview of the monitoring and reporting work undertaken, and any environmental issues that have arisen during Construction Works.</p> <p>As a minimum this report shall include:</p> <ul style="list-style-type: none"> (a) All monitoring data required in accordance with the conditions of this consent; (b) Any reasons for non-compliance or difficulties in achieving compliance with the conditions of this resource consent; (c) Measure taken to address compliance issues; (d) Any works that have been undertaken to improve the environmental performance of the site or that are proposed to be undertaken in the coming year; (e) Recommendations on alterations to the monitoring required; and (f) Any other issues considered important by the Consent Holder.

Ref	Condition
<i>Consent Lapse</i>	
RC.8	Pursuant to section 125(1) of the Act, the consents shall lapse 15 years from the date of the commencement of the consent (in accordance with section 116 of the Act) unless they have been given effect, surrendered or been cancelled at an earlier date.
<i>Management Plan Approval Process</i>	
RC.9	<p>(a) Conditions (b) to (e) below shall apply to all management plans required by these conditions.</p> <p>(b) All management plans must be submitted to the Manager to certify compliance and consistency with the applicable requirements of these conditions at least 20 working days prior to Commencement of Construction (excluding Site Investigations and Enabling Works).</p> <p>(c) Any certified Management Plan may be amended if necessary to reflect any changes in design, construction methods or management of effects. Any amendments are to be discussed with and submitted to the Manager for information, unless those amendments once implemented would result in a materially different outcome to that described in the original plan.</p> <p>(d) Any material changes to a certified management plan shall be submitted to the Council for certification. Any material change must be consistent with the purpose of the relevant management plan and the requirements of the relevant conditions of these consents.</p> <p>(e) All works shall be carried out in accordance with the certified management plans.</p>
<i>Construction Environmental Management Plan (CEMP)</i>	
RC.10	<p>(a) The Consent Holder shall prepare a Construction Environmental Management Plan (CEMP) or Plans for the relevant Project stage (excluding Site Investigations and Enabling Works), and submit this to the Manager in accordance with the requirements of RC.9.</p> <p>(b) The purpose of the CEMP is to set out the management procedures and construction methods to be undertaken in order to avoid, remedy or mitigate potential adverse effects arising from construction activities.</p>
RC.11	<p>The CEMP shall be prepared in accordance with the <i>NZ Transport Agency's Guideline for preparing Environmental and Social Management Plans</i> (dated April 2014) and include:</p> <p>(a) Confirmation of the proposed staging and sequence of construction;</p> <p>(b) An outline construction programme;</p> <p>(c) Contact details of the site supervisor or project manager and the Consent Holder's Project Liaison Person (phone, postal address, email address);</p> <p>(d) Methods and systems to inform and train all persons working on the site of potential environmental issues and how to avoid remedy or mitigate any potential adverse effects;</p> <p>(e) The proposed hours of work;</p>

Ref	Condition
	<ul style="list-style-type: none"> (f) 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 construction materials and similar construction activities; (g) Location of construction site infrastructure including site offices, site amenities, contractors' yard access, equipment unloading and storage areas, contractor car parking and security; (h) Procedures for controlling sediment run-off, dust and the removal of soil, debris, demolition and construction materials (if any) from public roads or places adjacent to the work site; (i) Procedures for ensuring that residents, network utility operators, road users and businesses in the immediate vicinity of construction areas are given prior notice of the Commencement of Construction and are informed about the expected duration and effects of the work; (j) Means of providing for the health and safety of the general public; (k) Measures to manage the potential impacts of construction on Council trees and vegetation; (l) Methods and measures to avoid, remedy and mitigate adverse effects on landscape amenity during the construction phase of the Project; (m) Procedures for the refuelling of plant and equipment; (n) Measures to address the storage of fuels, lubricants, hazardous and/or dangerous materials, along with contingency procedures to address emergency spill response(s) and clean up; (o) Procedures for the maintenance of machinery to avoid discharges of fuels of lubricants to watercourses and/or the Coastal Marine Area (CMA); (p) Procedures for responding to complaints about construction activities; and (q) Procedures for incident management.
RC.12	<p>The CEMP shall incorporate or refer to the following management plans:</p> <ul style="list-style-type: none"> (a) Contaminated Land Management Plan (refer to Condition CL.1); (b) Coastal Work CEMP (refer to Condition C.4); (c) Groundwater and Settlement Management Plan (refer to Condition G.1); (d) Construction Air Quality Management Plan (refer to Condition AQ.2); (e) Ecological Management Plan (refer to Condition EM.2) including the Lizard Management Plan (refer to Condition EM.4); <p>The CEMP shall:</p> <ul style="list-style-type: none"> (i) Demonstrate how the incorporated or referenced management plans will be jointly implemented to achieve integrated management of construction effects; and (ii) Describe for information purposes how those plans integrate with management plans provided by the NZ Transport Agency as part of the Outline Plan process for Construction Works within the designation for the Project. <p>If a CEMP is submitted in part or for a Project stage, it shall only incorporate or refer to the management plans relevant to the part or stage.</p>

Ref	Condition
RC.13	<p>Where Enabling Works or Site Investigations are to be undertaken prior to commencement of the main construction works, a site-specific CEMP commensurate with the scale and effects of the proposed works, may be submitted for the certification of the Manager.</p> <p>In some cases, with the approval of the Manager, a site-specific CEMP may not be required.</p>
RC.14	<p>Any material changes to the management plans shall remain consistent with the overall intent of the relevant management plan and shall be consistent with the requirements of the relevant conditions of this consent. The Consent Holder shall advise the Council of any amendments made, and any material changes shall be submitted to the Council for approval in accordance with Condition RC.9 above.</p>
<i>Review of Conditions</i>	
RC.15	<p>The Council may review any or all conditions of this consent by giving notice of its intention to do so in accordance with section 128 of the RMA, at any time within six months of the first, third, fifth and tenth anniversaries of the date of Commencement of Construction to deal with any unforeseen adverse effects on the environment, which may arise from the exercise of this consent, and which it is appropriate to deal with at a later date.</p>

Mana Whenua Collaboration (MW)

Ref	Condition
MW.1 – MW.5	<i>The Mana Whenua conditions MW.1 to 5 will also apply to the resource consents and will be included here once the wording is finalised with any amendments agreed prior to a decision on the applications.]</i>

Contaminated Land (CL)

Ref	Condition
<i>Contaminated Land Management Plan</i>	
CL.1	<p>Prior to excavation and the Commencement of Construction in areas of known or potentially contaminated land, the Consent Holder shall engage a Suitably Qualified Environmental Practitioner (SQEP) to prepare a Contaminated Land Management Plan (CLMP).</p> <p>The purpose of the CLMP is to detail the measures to manage health, safety, and environmental risk associated with works in contaminated material at the site during construction.</p>
CL.2	<p>The CLMP shall be in general accordance with the draft Contaminated Land Management Plan listed in RC.1, and shall include information regarding:</p> <ul style="list-style-type: none"> (a) The measures to be undertaken in the handling, storage and disposal of all contaminated material excavated during Construction Works; (b) The soil validation testing that will be undertaken; (c) The soil verification testing that will be undertaken to determine the nature of any contamination in excavated spoil and the potential reuse or disposal options for that spoil; (d) Measures to be undertaken in the event of unexpected contamination being identified during construction activities, including measures to: <ul style="list-style-type: none"> i) Assist with identification of unknown contaminated material; ii) Stop work or isolate the area once any such material is identified; (e) The measures to be undertaken to: <ul style="list-style-type: none"> i) Protect the health and safety of workers and the public; ii) Control stormwater run-on and run-off; iii) Remove or manage any contaminated soil. (f) The measures to be undertaken to: <ul style="list-style-type: none"> i) Identify any suspected asbestos; ii) Identify the type of asbestos and confirm the appropriate means by which it shall be removed; iii) Handle asbestos containing material; iv) Implement appropriate health and safety measures to maintain the safety of workers and the public; and v) Remove the asbestos and dispose of it to an appropriately licensed facility.
CL.3	<p>The CLMP shall be submitted to the Manager for certification in accordance with Condition RC.9.</p>
CL.4	<p>All sampling and testing of contamination on the site shall be overseen by a suitably qualified person. All sampling shall be undertaken in accordance with <i>Contaminated Land Management Guidelines No. 5 Site Investigation and Analysis of Soils</i> (Revised 2011).</p>

Ref	Condition
CL.5	Excess soil or waste materials removed from the subject site shall be deposited at a disposal site that holds a resource consent to accept the relevant level of contamination.
CL.6	Where contaminants are identified that have not been anticipated by the CLMP, works in the area containing the unexpected contamination shall cease until the contingency measures outlined in the approved CLMP have been implemented, and the discovery and contingency measures undertaken have been notified to the Manager.
CL.7	To protect the health of workers on the site during excavations, works shall be managed to minimise the generation of dust on the site and be carried out in accordance with the approved CLMP.

Earthworks, Vegetation Alteration and Removal (E)

Ref	Condition
<i>Erosion and Sediment Control</i>	
E.1	During construction the Consent Holder shall take all practicable measures to minimise erosion and prevent the discharge of sediment beyond the boundaries of the site.
E.2	Erosion and sediment control measures shall be implemented throughout Construction Works. They shall be constructed and maintained so as to operate and perform in accordance with Auckland Council <i>GD2016/005: Erosion Sediment Control Guide for Land Disturbing Activities in the Auckland Region</i> and any amendments to this document, except where a higher standard is detailed in the conditions below in which case the higher standard shall apply.
<i>Site Specific Erosion and Sediment Control Plans – Design</i>	
E.3	<p>Prior to the Commencement of Construction for each specific area and/or activity, a Construction Erosion and Sediment Control Plan (CESCP) or plans shall be prepared by a suitably qualified person.</p> <p>The purpose of the CESCP is to set out the measures to be implemented during construction to minimise erosion and the discharge of sediment beyond the boundaries of the site.</p> <p>The CESCPs shall include, but not be limited to:</p> <ul style="list-style-type: none"> (a) Contour information at suitable intervals; (b) Erosion and sediment controls including specific design (location, dimensions, capacity); (c) Supporting calculations and design drawings; (d) Catchment boundaries for the sediment controls; (e) Location of the works, and cut and fill operations; (f) Details of measures for contaminated land as identified in the CLMP under Condition CL.1; (g) Details of construction methods to be employed, including timing and duration; (h) A programme for managing exposed area, including progressive stabilisation considerations; (i) Identification of the suitably qualified persons to manage the environmental issues on site; (j) Identification of the persons who have clearly defined roles and responsibilities to monitor compliance with the CESCP; (k) Details of the chain of responsibility for managing environmental issues and details of responsible personnel; and (l) Monitoring and maintenance requirements.

Ref	Condition
E.4	<p>The Consent Holder shall submit the CЕСCP to the Manager for certification at least 10 working days prior to Commencement of Construction.</p> <p>No earthworks activity on the subject site shall commence until written approval is received from the Manager.</p>
<i>Flocculation Treatment Plan</i>	
E.5	<p>Where flocculant treatment is proposed for use on site, the ESCP shall include a Flocculation Treatment Plan which shall include as a minimum:</p> <ul style="list-style-type: none"> (a) Specific design details of the flocculation treatment system based on a rainfall activated and manual batch dosing methodology for the site's Sediment Retention Ponds (SRPs), Decanting Earth Bunds (DEBs) and any other sediment detention or flow device systems as may be employed on site; (b) Monitoring, maintenance (including post storm) and contingency programme (including a record sheet) for the flocculation treatment system; (c) Consideration of the use of organic flocculants where practicable, provided that the most effective flocculent in terms of sediment removal shall be selected based on (e) below; (d) Details of optimum dosage (including assumptions); (e) Results of any initial treatment trials; (f) A spill contingency plan; (g) Details for the checking and calibration of dosing and monitoring equipment; and (h) Details of the person or bodies that will hold responsibility for the operation and maintenance of the flocculation treatment system. <p>The Flocculation Treatment Plan shall be submitted to the Manager for certification in accordance with the process set out in Condition E.4.</p>
<i>Erosion and Sediment Control Device Requirements</i>	
E.6	<p>Unless otherwise agreed with the Manager, the Consent Holder shall design, construct and maintain all erosion and sediment control devices to achieve compliance with the documents set out in Condition E.2 and also with the following design requirements (some of which do not form part of those documents):</p> <ul style="list-style-type: none"> (a) All erosion and sediment control devices shall be located outside the 20 year ARI flood level, unless no other viable location exists; (b) Clean and dirty water diversion channels, shall be sized to accommodate the flow from a 100 year ARI storm event where practicable, and at a minimum, the flow from a 20 year ARI storm event and an additional 300mm freeboard; (c) All temporary stream crossings and temporary culverts shall be sized to accommodate the flow from a 20 year ARI storm event and include a stabilised overland flow path for runoff exceeding the flow expected in a 20 year ARI storm event; (d) At all practical times, streamworks activities and associated works shall be undertaken with stream diversions in place to accommodate up to the 20 year ARI rain event. All stream flows above the 20 year ARI rain event shall be diverted, via systems (such as overland flow paths) capable of conveying the 100 year ARI rain event flow around the works area;

Ref	Condition
	<ul style="list-style-type: none"> (e) Pumping of all sediment laden runoff and groundwater during Construction Works shall be to SRPs, DEBs, grass buffer zones or temporary sediment retention devices such as container impoundment systems; (f) All DEBs and SRPs that serve a catchment area greater than 500m² shall be treated via a rainfall activated flocculation treatment system. SRPs shall each have two flocculation sheds (or equivalents) installed; (g) All DEB volumes are to be designed based on 2% of the contributing catchment area and all DEBs shall be fitted with floating decants that are designed to discharge at a rate of 3 litres/sec/ha; (h) All construction yard areas shall achieve the detention requirements as detailed within the NZ Transport Agency's <i>Erosion and Sediment Control Guidelines for State Highway Infrastructure</i> (2014); (i) All SRP volumes are to be designed based on 3% of the contributing catchment area and will contain reverse slopes in the base of ponds, baffles and decant pulley systems and a forebay with a volume of 10% of the pond volume; (j) All dirty water diversion channels shall be designed and constructed with sediment sumps at locations specified in the CЕСCP with a minimum volume of 2m³ per sump; and (k) The erosion and sediment control for the site shall include the installation of a last line of defense, which shall include protection of the freshwater receiving environments with additional bunding, silt fence, super silt fence or alternative as defined in the CЕСCP for that particular stage.
<i>As-Built Certification</i>	
E.7	<p>Prior to earthworks commencing (excluding the construction of the erosion and sediment controls), a certificate signed by an suitably qualified person shall be submitted to the Manager, to certify that the erosion and sediment controls have been constructed in accordance with Condition E.2.</p> <p>Certified controls shall include sediment retention ponds, flocculation treatment systems, decanting earth bunds, super silt fences, silt fences and diversion channels/bunds.</p>
E.8	<p>The operational effectiveness and efficiency of all erosion and sediment control measures specifically required as a condition of resource consent or by the CЕСCP referred to in Condition E.3 shall be maintained throughout the duration of earthworks activity, or until the site is permanently stabilised against erosion.</p>
<i>Inspection and Monitoring</i>	
E.9	<p>There shall be no deposition of earth, mud, dirt or other debris on any road or footpath beyond the boundary of the site resulting from earthworks activity on the subject site. In the event that such deposition does occur, it shall immediately be removed. In no instance shall roads or footpaths be washed down with water without appropriate erosion and sediment control measures in place to prevent contamination of the stormwater drainage system, watercourses or receiving waters.</p>

Ref	Condition
E.10	The sediment and erosion controls at the site of the works shall be inspected on a regular basis and within 24 hours of each rainstorm event that is likely to impair the function or performance of the erosion and sediment controls. A record shall be kept of the date, time and any maintenance undertaken in association with this condition, and shall be forward to the Manager on request.
E.11	<p>The Consent Holder shall carry out monitoring in accordance with the ESCP and shall keep records detailing:</p> <ul style="list-style-type: none"> (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. <p>This information shall be made available to the Manager upon request.</p>
<i>Stabilisation and Decommissioning</i>	
E.12	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 until such time as further earthworks occur in a specific area.
E.13	Upon completion or abandonment of earthworks on the Project site all areas of bare earth shall be permanently stabilised against erosion to the satisfaction of the Manager
E.14	Notices shall be given to the Manager prior to any erosion and sediment control measures being removed and/or on completion of the works.

Coastal Activities (C)

Ref	Condition
<i>Detailed Engineering Designs and Drawings - Coastal</i>	
C.1	<p>At least 20 working days prior to Commencement of Construction in the CMA (excluding Site Investigations and Enabling Works), the Consent Holder shall submit to the Manager for approval the following documentation to be prepared in general accordance with the documents listed in RC.1:</p> <ul style="list-style-type: none"> (a) Detailed engineering designs and drawings (including dimensioned cross sections, elevations, site plans of all areas of proposed reclamation, declamation, permanent and temporary structures); (b) A UDLMP for the areas of the Project within the CMA which reflects the Key Design Principles and Sector Outcomes of the Project's ULDF for those areas; and (c) Specifications for the works authorised by this consent.
<i>Temporary Occupation of the CMA and Reclamation</i>	
C.2	The right to temporarily occupy part of the CMA during construction is limited to the areas and structures identified in the documents listed in Condition RC.1.
C.3	The total reclamation area in the Māngere Inlet (the area above Mean High Water Springs) for the road embankment, stormwater treatment areas and landscape features is limited to the areas and structures identified in the documents listed in Condition RC.1.
<i>Coastal Works CEMP</i>	
C.4	<ul style="list-style-type: none"> (d) Prior to Commencement of Construction in the CMA (excluding Site Investigations and Enabling Works), the Consent Holder shall submit a Coastal Works CEMP to the Manager in accordance with Condition RC.9 to certify compliance and consistency with the conditions of this consent relating to works in the CMA. (e) The purpose of the Coastal Works CEMP is to confirm the proposed methodology for construction works within the CMA and to set out the specific management procedures and construction methods to be undertaken in order to avoid, remedy or mitigate potential adverse effects arising from those works. (f) In addition to the details required by Condition RC.11 the Coastal Works CEMP shall include the following information: <ul style="list-style-type: none"> i) Confirmation of the construction methodology, including: <ul style="list-style-type: none"> a. The nature of reclamation fill material and the method(s) by which these materials will be deposited; b. Finalised details of the temporary structures in the CMA (eg. silt fence) c. Methods to remedy disturbance resulting from the works. ii) Proposed staging of reclamation activities in the Māngere Inlet to minimise exposed areas; iii) Monitoring of sediment discharges from dredging, declamation and reclamation works;

Ref	Condition
	<ul style="list-style-type: none"> iv) Trigger event criteria for undertaking additional monitoring of sediment discharges; v) Contingency plans in case of unexpected sediment discharges to the CMA during works; vi) Site management, including details of: <ul style="list-style-type: none"> a. Site access; b. Methods to be used to minimise the need for refuelling, maintenance and storage of equipment or machinery in the CMA; c. Procedures for refuelling, maintenance and storage of equipment or machinery in any part of the CMA if this is required, and measures to avoid discharges of contaminants during cleaning, refuelling, and maintenance activities in the CMA; d. Plant and animal pest management during construction; e. Methods to achieve compliance with the construction noise and vibration standards; f. Site clean-up following works completion vii) Details of all temporary structures in the CMA and their associated construction methodology including the expected duration of occupation; viii) Identification of all construction access points to the CMA and along the foreshore; ix) Erosion and sediment control measures and perimeter controls for foreshore works and bridge construction; x) Details of the quantities, sources and physical (textural and geological) and chemical (bulk chemistry and leaching potential) characteristics of reclamation fill materials; and xi) Details of all other practicable steps to be taken to minimise disturbance of the seabed during the construction activities. <p>(g) The Coastal Works CEMP shall be consistent with the ECOMP prepared under Condition EM.1.</p>
C.5	Where mangrove removal is required, the vegetation shall be removed and disposed of at an approved facility as soon as practicable in order to avoid potential adverse effects arising from decaying vegetation on remaining habitat.
C.6	The Consent Holder shall notify the Manager in writing of the proposed date of Commencement of Construction in the CMA, at least 20 working days prior to the proposed start date.
C.7	Within 40 days following Completion of Construction in the CMA, the Consent Holder shall remove all erosion and sediment control measures, construction materials and temporary staging from the CMA in accordance with the approved Coastal Works CEMP under Condition C.4.

Ref	Condition
<i>Notification – Harbour Master</i>	
C.8	The Consent Holder shall notify the Auckland Harbour Master in writing of the proposed date of Commencement of Construction in the CMA, including dredging operations, at least 20 working days prior to the proposed start date.
C.9	The Consent Holder shall consult the Auckland Harbour Master in regard to any lighting or navigational aids required for the temporary and/or permanent structures in the CMA.
<i>Permanent Occupation of the Coastal Marine Area</i>	
C.10	The right to permanently occupy part of the coastal marine area is limited to the areas and structures identified in the documents listed in Condition RC.1.
<i>As-Built Plans and Survey – Coastal</i>	
C.11	Within three months of Completion of Construction in the CMA, the Consent Holder shall supply a complete set of As-Built Plans to the Manager. The As-Built Plans shall include a location plan, a plan which shows the area of occupation, structure dimensions, and a cross-sections.
C.12	The Consent Holder shall prepare a survey plan that shows and defines the areas reclaimed, including their location and the position of all boundaries in accordance with the requirements of section 245 of the RMA.
C.13	In accordance with section 245 of the RMA, the plan of survey shall be submitted to the Manager for approval as soon as reasonably practicable after completion of the reclamation. The plan of survey shall be prepared in accordance with regulations made under the Cadastral Survey Act 2002 relating to survey plans within the meaning of those Regulations.
C.14	The Consent Holder shall take all steps necessary to ensure the survey plan is deposited under the Land Transfer Act 1952 or with the Registrar General of Land as soon as reasonably practicable after the date the survey plan is approved by the Manager under section 245 of the RMA.
<i>Maintenance of Structures</i>	
C.15	The structures permitted to occupy part of the CMA by this consent shall be maintained in a good and sound condition, and any repairs that are necessary shall be made, subject to obtaining any necessary resource consents.

Dredging (D)

Ref	Condition
<i>Coastal Works CEMP – Dredging</i>	
D.1	<p>In addition to the matters in Condition C.4, the Coastal Works CEMP shall also include the following matters relating to dredging, filling of dredged channels and placement of dredged material in the CMA:</p> <ul style="list-style-type: none"> (a) Location of the activities; (b) Details of equipment and methods to be used; (c) Proposed staging of the reclamation to minimise exposed areas; (d) Details of proposed quantities of dredged material removed and placed in the CMA, and (e) Timing of activities.
<i>Monitoring - Water Quality Monitoring for Dredging</i>	
D.2	<p>The Consent Holder shall undertake one-off comprehensive water quality monitoring during the initial phase of the dredging operations. This shall comprise the monitoring of the release of suspended solids from dredging and placement of dredged material in the CMA in order to confirm the mixing zone and proposed trigger level.</p> <p>Water quality samples shall be collected:</p> <ul style="list-style-type: none"> (a) Prior to (i.e. baseline) and during the operations, for a spring tide and a neap tide. (b) At an updrift control site located approximately within the Māngere Inlet northern channel (for ebb tide) and at least 500 m beyond the operations (for flood tide). (c) At dilution gradient sites 10m, 20m and 50m downdrift of the operations aligned approximately along the centreline of the Māngere Inlet northern channel. (d) At a compliance site 200m downdrift of the operations aligned approximately along the centreline of the Māngere Inlet northern channel.
D.3	<p>The Consent Holder shall undertake water quality monitoring once per week whilst dredging and placement of dredged material in the CMA is underway.</p> <p>Water quality samples shall be collected:</p> <ul style="list-style-type: none"> (a) On a flood tide; (b) At an updrift control site located at least 500m beyond the operations; (c) At a dilution gradient site 50m downdrift of the operations aligned approximately along the centreline of the Māngere Inlet northern channel; and (d) At a compliance site 200m downdrift of the operations aligned approximately along the centreline of the Māngere Inlet northern channel.
D.4	<p>During each sampling run carried out in accordance with Conditions D.2 and D.3, records shall be kept of:</p> <ul style="list-style-type: none"> (a) Sampling date and time; (b) Weather conditions;

Ref	Condition
	<p>(c) Sea state;</p> <p>(d) Sampling location;</p> <p>(e) Water depth;</p> <p>(f) Time that dredging and placement of dredged material in the CMA commenced; and</p> <p>(g) Time of low and high tide on day of sampling.</p>
D.5	<p>Water samples collected in accordance with Conditions D.2 to D.4 shall be individual samples from the surface (approximately 0.5 m below surface) and at depth (approximately 0.5m above the seabed) at each site.</p> <p>With the exception of the baseline monitoring required by Condition D.2(a), water samples shall be collected on a day that dredging is occurring.</p> <p>Dilution gradient and compliance site samples shall be representative of the plume generated by the operations (i.e. not collected before the plume has had a chance to develop upon the start of the operations and not after the plume has had a chance to dissipate upon completion of the operations), and shall be collected as close as practicable to within 2 hours of high tide.</p>
D.6	<p>Samples shall be analysed for total suspended solid levels (TSS), pH, copper, zinc and arsenic for Condition D.2 and TSS and pH for Condition D.3.</p> <p>Unless amended in accordance with Condition D.8, the proposed trigger levels shall be 25g/m³ for TSS and a pH of 8.5.</p>
D.7	<p>Following three months of weekly sampling, and subject to written approval of the Manager, the monitoring programme may be amended, for example compositing of surface and depth samples, and reduction of the frequency (e.g. to fortnightly / monthly).</p>
<i>Monitoring - Trigger Levels and Contingency Plan for Dredging</i>	
D.8	<p>The Consent Holder shall review the proposed TSS trigger level of 25g/m³ and pH trigger level of 8.5 against the results of the one-off comprehensive monitoring, including comparison of the baseline TSS and pH levels against the TSS and pH levels during dredging .</p> <p>The Consent Holder shall provide a report to the Manager confirming the above trigger level(s) or proposing alternative trigger level(s) with the basis for the alternative(s). The report shall be provided within 20 working days of the receipt by the Consent Holder of the analytical results for the comprehensive water sampling.</p> <p>The alternative trigger level(s) may be used for regular monitoring subject to approval in writing by the Manager.</p>
D.9	<p>During regular monitoring, an exceedance shall be:</p> <p>(a) A TSS level in any sample collected at the compliance sites that exceeds the sum of the trigger level plus the TSS level measured in the updrift control sample collected during the same sampling run. The TSS levels shall be identified from the analytical results of the water quality samples in accordance with Conditions D.5 and D.6.</p>

Ref	Condition									
	(b) A pH in any sample collected at the compliance sites that exceeds the pH trigger level. The pH shall be identified from the analytical results of the water quality samples in accordance with Conditions D.5 and D.6.									
D.10	The Consent Holder shall prepare a Contingency Plan which sets out the actions to be undertaken in the event of an exceedance. These shall include further monitoring measures, in the first instance, and practical modifications to the relevant activities, where further monitoring identifies repeated exceedances. The Contingency Plan shall be provided to the Manager at least 20 working days prior to the commencement of dredging.									
<i>Aerial Photography for Dredging</i>										
D.11	The Consent Holder shall take aerial photographs of the extent of any plume during the one-off comprehensive water quality monitoring, at the same time as the sampling runs. Aerial photography sites shall be selected to correspond only to those areas where dredging and placement of dredged material in the CMA are occurring, to confirm sediment plume distribution and aid sampling.									
<i>Monitoring – Sediment Deposition during Dredging</i>										
D.12	<p>The Consent Holder shall undertake sediment deposition monitoring in the Māngere Inlet at the locations specified in Table D1.</p> <p style="text-align: center;">Table D1: Sediment Deposition Monitoring Locations</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="background-color: #d3d3d3;">Location Reference</th> <th style="background-color: #d3d3d3;">Latitude</th> <th style="background-color: #d3d3d3;">Longitude</th> </tr> </thead> <tbody> <tr> <td>A1</td> <td>36°55'56" S</td> <td>174°49'34"</td> </tr> <tr> <td>A2</td> <td>36°56'32" S</td> <td>174°49'28"</td> </tr> </tbody> </table>	Location Reference	Latitude	Longitude	A1	36°55'56" S	174°49'34"	A2	36°56'32" S	174°49'28"
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A2	36°56'32" S	174°49'28"								
D.13	<p>The Consent Holder shall deploy a square plate at least 1m by 1m in size at the monitoring locations specified in Table D1. The plate shall be deployed 6 months prior to the commencement of dredging and placement of dredged material in the CMA. Changes in bed levels shall be assessed by measuring sediment deposition relative to the plate at four evenly spaced points. Measurements shall be made at all four points and averaged to give a single measure for each location.</p> <p>Alternative monitoring techniques may be used subject to written approval by the Manager.</p>									
D.14	Baseline sediment deposition measurements shall be made at the monitoring locations specified in Table D1 at 3-monthly intervals, commencing 6 months prior to the commencement of dredging and placement of dredged material in the CMA.									
D.15	Routine sediment deposition measurements shall be made at the monitoring locations specified in Table D1 at 3-monthly intervals, for the duration of dredging and placement of dredged material in the CMA and starting at the commencement of those operations.									
D.16	For post-project monitoring, the sediment deposition measurements shall be repeated as a one-off event 5 years after completion of dredging. The results of this monitoring shall be provided to the Manager.									

Ref	Condition
D.17	<p>The results of the 5 year sediment deposition monitoring shall be compared with the change in levels of the Māngere Inlet intertidal flats measured using LIDAR. The LIDAR measurements shall be obtained at the commencement of dredging and placement of dredged material in the CMA and 5 years after completion of the Project.</p> <p>The timing of the LIDAR data collection shall coincide with data collected by Auckland Council as far as practicable.</p>
<i>Monitoring – Reporting for Dredging</i>	
D.18	<p>The Consent Holder shall provide monitoring reports to the Manager as follows:</p> <ul style="list-style-type: none"> (a) At completion of the one-off comprehensive water quality monitoring as required by Condition D.8; and (b) Every six months for the duration of dredging and placement of dredged material in the CMA for routine water quality monitoring and sediment deposition monitoring.
<i>Notification of completion</i>	
D.19	<p>The Consent Holder shall notify the Manager in writing of the date of completion of dredging and placement of dredged material in the CMA within 10 working days of completion of the last activity.</p> <p>On completion, the Consent Holder shall provide the Manager with the best available estimate of the in-situ volume of material dredged and the in-situ volume placed in the CMA.</p>

Ecological Management (EM)

Ref	Condition
<i>Ecological Management Plan</i>	
EM.1	<ul style="list-style-type: none"> (a) The Consent Holder shall submit an Ecological Management Plan (ECOMP) to the Manager in accordance with Condition RC.9. (b) The purpose of the ECOMP is to set out the specific management procedures, construction methods, mitigation and monitoring to be undertaken in order to: <ul style="list-style-type: none"> (i) Avoid or minimise the extent of effect on valued ecological and geological areas within the Project site as far as practicable; (ii) Ensure that the valued ecological and geological areas, or parts of those areas, which are to be avoided are clearly delineated (e.g. by secure fencing) to protect them during construction; (iii) For those valued ecological and geological areas which cannot be avoided, but where complete loss of the geological feature, ecosystem, vegetation, habitat, or geological feature is not required, reduce the impact on those areas as far as practicable (e.g. minimising the construction footprint within those areas and placement of construction material outside of those areas); and (iv) To avoid, remedy or mitigate potential adverse effects arising from construction activities on terrestrial ecology (including Herpetofauna), freshwater ecology, marine ecology and avifauna. (c) The ECOMP shall be prepared by a suitably qualified person and in collaboration with the development of the Urban Landscape and Design Management Plan to be prepared for the Project by the NZ Transport Agency. (d) The ECOMP shall be prepared in consultation with: <ul style="list-style-type: none"> i) Council; ii) Department of Conservation; iii) The Mana Whenua Group; and iv) Owners of land in which any ecological mitigation works are proposed to be undertaken.
EM.2	<p>In addition to the details required by Condition RC.11, the ECOMP shall include the following information:</p> <ul style="list-style-type: none"> (a) Measures to be undertaken by the Consent Holder to minimise potential adverse effects on the lava shrubland in Anns Creek East including: <ul style="list-style-type: none"> i) Confirmation of the pier exclusion area and construction exclusion area in Anns Creek East; ii) Measures to clearly delineate the pier exclusion area and the construction exclusion area on site including protective fencing and signage; iii) Construction procedures and practices that apply to the areas of Anns Creek East that are not within the pier exclusion area or the construction exclusion area, in order to minimise to the extent practicable the removal or alteration of vegetation; and

Ref	Condition
	<ul style="list-style-type: none"> <li data-bbox="416 282 1390 344">iv) Specific education of staff and contractors to assist their understanding of the ecological and geological sensitivity of the area. <li data-bbox="360 360 1374 454">(b) Measures to be undertaken by the Consent Holder to minimise potential adverse effects on native fish including the capture and relocation of native fish where present prior to Commencement of Construction. <li data-bbox="360 470 1315 533">(c) Measures proposed to minimise potential adverse effects of construction on Banded rail and Bitten including: <ul style="list-style-type: none"> <li data-bbox="416 548 1406 710">i) Monitoring of nesting activity prior to Commencement of Construction. This information shall be used to inform the construction programme for works in the vicinity of nesting areas including, where required, any recommended seasonal restrictions for certain construction activities to minimise the effect on nesting birds; <li data-bbox="416 725 1402 853">ii) If the area is confirmed as a nesting activity area, monitoring of nesting activity for two years following Completion of Construction to determine whether the works have adversely affected nesting activity and inform future assessments of effects for other projects; <li data-bbox="416 869 1369 902">iii) Specific mechanisms to manage effects on birds during construction works; <li data-bbox="360 918 1219 952">(d) Details of restoration and habitat enhancement measures including: <ul style="list-style-type: none"> <li data-bbox="416 967 1369 1028">i) Pest plant and animal management across the Project area covering a total area of approximately 10ha; <li data-bbox="416 1043 1326 1137">ii) Subject to landowner approval, approximately 1.1ha of salt marsh enhancement/recreation and pest plant control at the existing saltmarsh wetland in Gloucester Park South; <li data-bbox="416 1153 1289 1187">iii) Restoration and recreation of salt marsh along the coastal foreshore; <li data-bbox="416 1202 1358 1263">iv) Pest plant control for the remaining basalt lava flows and lava shrubland at Victoria Street and Pikes Point; <li data-bbox="416 1279 1402 1373">v) Transplanting indigenous coastal species (e.g. saltmarsh) and vegetation from lava outcrops where reasonably practicable into coastal restoration areas on the Māngere foreshore; <li data-bbox="416 1388 1362 1516">vi) Identification of any areas in Anns Creek East where fill can be practicably removed from edges of the lava flow and restoration planting undertaken in these areas using eco-sourced local genetic stock and threatened coastal species; <li data-bbox="416 1532 1390 1592">vii) Removal of rubbish from Anns Creek East for the duration of the construction works; <li data-bbox="416 1608 1385 1702">viii) Planting along the foreshore using eco-sourced local genetic stock and threatened coastal species consistent with the Urban Design and Landscape Framework; <li data-bbox="416 1718 1402 1778">ix) Planting of stormwater wetlands and along the coastal foreshore using coastal plant species; <li data-bbox="416 1794 1362 1877">x) Pest plant management and protection of threatened plant habitats in Anns Creek East and Anns Creek Estuary; <li data-bbox="416 1892 1270 1924">xi) Restoration of saltmarsh and riparian vegetation at Ōtāhuhu Creek; <li data-bbox="416 1939 1110 1971">xii) Planting of inanga spawning areas along Anns Creek;

Ref	Condition
	<ul style="list-style-type: none"> xiii) Subject to landowner approval, riparian planting along an 80 metre length of Southdown Stream in Southdown Reserve and 140 metre length of Southdown Stream to the north of Hugo Johnston Drive and along a 90 metre length of Clemow Stream; xiv) Subject to landowner approval, creating 280m² of additional raupo wetland within Anns Creek Reserve; and xv) At Ngarango Otainui Island, habitat enhancement including pest plant and animal control, planting for bird roosting and erosion stabilisation with a preference for soft engineering solutions; <p>(e) Details of integration with proposed planting in stormwater management devices (e.g. treatment / conveyance swales) to be undertaken in accordance with Conditions SW.10 to SW.12.</p> <p>(f) Details of freshwater habitat improvement and riparian planting.</p> <p>(g) Details of how ecological planting will be maintained following initial planting.</p> <p>(h) Details of a salt marsh trial within Anns Creek Estuary including:</p> <ul style="list-style-type: none"> i) The methodology, location, area, monitoring and duration of the trial; and ii) The process to reinstate the area should the trial be unsuccessful; <p>(i) Details of research scholarships (or similar) investigating opportunities to increase food sources for foraging birds in the Māngere Inlet.</p> <p>(j) Procedures for implementing, monitoring and review of the ECOMP.</p>
EM.3	<p>The Consent Holder shall engage a suitably qualified person during Construction Works to advise on day-to-day measures to achieve the outcomes in Condition EM.1(b) and to oversee ecological restoration planting in the areas below to ensure that this is implemented in accordance with best practice:</p> <ul style="list-style-type: none"> (a) Ecological planting in Gloucester Park South; (b) Planting along the Northern Māngere Inlet; (c) Restoration planting in Anns Creek Estuary; (d) Restoration planting Anns Creek East; (e) Riparian planting at Hill Street Stream, Miami Stream, Clemow Stream; and (f) Restoration planting at Ōtāhuhu Creek.
<i>Herpetofauna (Lizards)</i>	
EM.4	<p>Prior to the commencement of vegetation removal for Construction Works in areas identified as potential high and moderate quality habitat in <i>Technical Report 16: Ecological Impact Assessment</i> (dated November 2016), the Consent Holder shall provide to the Manager, information from a suitably qualified person that identifies whether there are sufficient numbers of native lizards present within the area to trigger a requirement for a Lizard Management Plan (LMP).</p> <p>The information submitted shall include the results of a lizard survey undertaken to confirm the presence, or otherwise, of native lizards. The lizard survey shall be based on industry best practice survey methods and shall include all areas identified as potential</p>

Ref	Condition
	high and moderate quality habitat within the Project footprint and shall be overseen by a suitably qualified person.
EM.5	<p>A LMP is required if the lizard survey results in the detection of:</p> <p>(a) 1 or more individuals of a threatened or at-risk native lizard species within the survey area; or</p> <p>(b) 3 or more individuals of a not threatened native lizard species within a survey area as per the New Zealand Threat Classification series 17 'Conservation Status of New Zealand Reptiles', dated 2015.</p>
EM.6	<p>The purpose of the LMP is to achieve the following objectives:</p> <p>(a) The population of each species of native lizard present on the site at which vegetation clearance is to occur is maintained or enhanced, either on the same site or at an appropriate alternative site; and</p> <p>(b) The habitat(s) that lizards are transferred to (either on site or at an alternative site, as the case may be) will support viable native lizard populations for all species present pre-development.</p> <p>The LMP shall be prepared by a suitably qualified person and shall address the following (where relevant):</p> <p>(i) Timing of implementation of the LMP;</p> <p>(ii) A description of methodology for survey, trapping and relocation of lizards rescued including but not limited to: salvage protocols, relocation protocols (including method used to identify suitable relocation site(s)), nocturnal and diurnal capture protocols, supervised habitat clearance/transfer protocols, artificial cover object protocols, and opportunistic relocation protocols;</p> <p>(iii) A description of the relocation site(s); including discussion of:</p> <ul style="list-style-type: none"> • provision for additional refugia, if required e.g. depositing salvaged logs, wood or debris for newly released native skinks that have been rescued; • any protection mechanisms (if required) to ensure the relocation site is maintained (e.g.) covenants, consent notices etc.; and • any pest plant and animal management to ensure the relocation site is maintained as appropriate habitat. <p>(iv) Monitoring methods, including but not limited to: baseline lizard surveys within the affected site (pre-translocation survey), surveys to identify potential translocation release sites, monitoring to evaluate translocation success (post-translocation monitoring), and monitoring of any pest control; and</p> <p>(v) A post-vegetation clearance search for remaining lizards.</p>
EM.7	If a LMP is required under Condition EM.4, this shall be submitted to the Manager for certification in accordance with Condition RC.9 prior to the commencement of any vegetation removal in areas of potential high and moderate quality.
	<p>Advice note:</p> <p><i>The capture, handling and relocation of native lizards may require a Wildlife Permit under the Wildlife Act 1953.</i></p>

Ref	Condition
<i>Anns Creek Replacement Salt Marsh</i>	
EM.8	<p>At completion of the salt marsh trial undertaken in accordance with Condition EM.2(h) the Consent Holder shall provide a report to the Manager setting out the outcomes of the trial.</p> <p>If the salt marsh trial is successful, the Consent Holder shall:</p> <ul style="list-style-type: none"> (a) Provide the Manager with a confirmed methodology and location of the recreated saltmarsh covering an area of approximately 10,000m² (or as otherwise agreed with the Council); and (b) Monitor and maintain the recreated saltmarsh (including weed control and planting) for a period of 5 years from planting of the saltmarsh.
<i>Anns Creek East Management Plan</i>	
EM.9	<p>The Consent Holder shall use its best endeavours to establish and facilitate a working group to identify proposed measures for long term integrated environmental management of the Anns Creek East area, being the area in the immediate vicinity of Section 1 SO 69440 at Anns Creek East.</p>
EM.10	<p>The following parties shall be invited to participate in the working group:</p> <ul style="list-style-type: none"> (a) The owners of land in the Anns Creek East area; (b) Department of Conservation; (c) Auckland Council; (d) Auckland Transport; (e) KiwiRail; and (f) The Mana Whenua Group.
EM.11	<p>The purpose of the Anns Creek Working Group is, in relation to the Anns Creek East area, to:</p> <ul style="list-style-type: none"> (a) Identify opportunities to integrate mitigation works associated with the Project with any other environmental enhancement activities being undertaken on land or in the CMA adjoining the boundary of the Project site; (b) Identify opportunities to provide long term integrated environmental management and legal protection of mitigation works associated with the Project and adjacent high value habitat including plant habitats and the mosaic of lava, saltmarsh and freshwater ecosystems; and (c) Identify the mechanisms to deliver the opportunities identified in (b) above.
EM.12	<p>The Consent Holder shall provide a report to the Manager on the activities and outcomes of the working group, including any agreed measures for long term integrated environmental management, within 12 months of Commencement of Works, and a further progress report on the implementation of those measures within 24 months of Commencement of Works.</p>

Works in Watercourses (W)

Ref	Condition
<i>Construction Design Approval</i>	
WW.1	<p>At least 20 working days prior to commencement of streamworks within Hill Street Stream, Southdown Stream, Anns Creek, Clemow Stream and Miami Stream, the Consent Holder shall submit construction design details for stream realignment and installation of culverts or other structures within watercourses to the Manager for approval. The details shall include, but not be limited to:</p> <ul style="list-style-type: none"> (a) Detailed design of the proposed streamworks including long sections and cross sections, proposed riparian planting, and any other proposed freshwater habitat improvements; and (b) Erosion and sediment control in accordance with WW.5.
<i>Construction of Streamworks</i>	
WW.2	<p>The Consent Holder shall forward a detailed streamworks construction programme and methodology to the Manager for approval at least 10 working days prior to the commencement of those streamworks, and shall provide regular updates during the streamworks. The information provided shall include details of:</p> <ul style="list-style-type: none"> (a) The commencement date and expected duration of the streamworks; (b) The location of any works and structures in relation to the streamworks; (c) Procedures for the capture and relocation of fish associated with temporary and permanent stream diversions; and (d) Dates for the implementation of erosion and sediment controls.
WW.3	<p>Once approved under Condition WW.2, any material amendments to the streamworks construction programme and methodology shall be submitted to the Manager for approval prior to any amendment being implemented.</p>
WW.4	<p>Streamworks shall be carried out only during periods when all flows, up to the 24 hour 20 year return period storm event, can be diverted around the area of works. During periods of flow greater than the capacity of the diversion, up to the 100 year flood event, a stabilised flowpath shall be provided to ensure no scour or erosion occurs and so that flows can pass safely around or through the area of works with minimum nuisance, damage and sediment generation or discharge.</p>
WW.5	<p>All erosion and sediment controls associated with the streamworks shall be constructed and installed in accordance with Auckland Council's GD2016/005: Erosion Sediment Control Guide for Land Disturbing Activities in the Auckland Region.</p>
WW.6	<p>The Consent Holder shall ensure that any temporary dam structure built within the stream shall be constructed from non-erodible material (such as sandbags or sheet piles).</p>

Ref	Condition
WW.7	The Consent Holder 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 Auckland Council's GD2016/005: Erosion Sediment Control Guide for Land Disturbing Activities in the Auckland Region.
WW.8	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.
WW.9	Within three months of completion of the works, the Consent Holder shall submit to the Manager As-Built Plans certified by an suitably qualified person to confirm that the works have been carried out in accordance with the approved design under Condition WW.1.
WW.10	The Consent Holder shall implement the riparian planting approved under Condition WW.1 within 12 months of Completion of Construction.

Groundwater and Settlement (G)

Ref	Condition
<i>Groundwater and Settlement Management Plan</i>	
<p>G.1</p>	<p>A Groundwater and Settlement Management Plan (GSMP) shall be prepared by a suitably qualified person and submitted to the Manager for certification in accordance with Condition RC.9 prior to Commencement of Construction with potential groundwater and settlement effects.</p> <p>The purpose of the GSMP is to outline the measures to be adopted to monitor and respond to any changes in groundwater beyond the boundary of the Project site arising from construction activities.</p> <p>The GSMP shall incorporate the matters in Conditions G.2 to G.7 including:</p> <p>(a) Details of groundwater monitoring including:</p> <ul style="list-style-type: none"> i) A schedule of groundwater monitoring bores identifying piezometer depth and geological unit; ii) Details of final bore construction and piezometer installation; iii) The location of the groundwater monitoring bores and monitoring cross sections; iv) The methods and frequency of groundwater level and groundwater quality monitoring; v) The groundwater trigger levels (level and quality); and vi) Procedures to follow in the event of trigger levels being exceeded. <p>(b) Details for ground settlement monitoring including:</p> <ul style="list-style-type: none"> i) The predicted total estimated settlement and building damage categories; ii) A schedule of ground settlement monitoring markers confirmed in Condition G.5; iii) The methods and frequency of ground settlement monitoring; iv) Alert and alarm levels where Alert = 75% of the theoretical or agreed level and Alarm = 100% of the theoretical or agreed value with due consideration of the seasonal range of ground movement and tidal influence of groundwater identified by pre-construction monitoring; and v) Procedures to follow in the event of trigger levels being exceeded. <p>(c) Reporting requirements.</p>
<p>G.2</p>	<p>The Consent Holder shall monitor groundwater levels and quality in the groundwater monitoring bores confirmed in Condition G.1 and keep records of the water level measurement and corresponding date. Where exceedances occur these shall be reported to the Manager within 3 working days.</p>
<p>G.3</p>	<p>All monitoring data obtained in accordance with Condition G.2 shall be compared to the predicted groundwater level for each borehole. Where groundwater levels are exceeded, the appropriate actions as set out in the GSMP shall be undertaken and the Manager shall be notified advising of the exceedance and details of the action taken.</p>

Ref	Condition
<i>Groundwater Level Monitoring</i>	
G.4	<p>(a) The Consent Holder shall install and maintain groundwater level monitoring boreholes for a period starting at least 6 months prior to Commencement of Construction and concluding 6 months following Completion of Construction.</p> <p>(b) As a minimum the groundwater monitoring boreholes shall include sites:</p> <ul style="list-style-type: none"> i) Upgradient and down gradient of the EWL Trench adjacent to Onehunga Harbour Road; ii) Upgradient of the EWL embankment at the Galway Street closed landfill; and iii) Within the Waikaraka Cemetery.
<i>Settlement Monitoring</i>	
G.5	<p>The Consent Holder shall establish a series of ground settlement monitoring markers to monitor potential settlement in relation to the construction of the EWL Trench. The survey markers shall be located generally as follows subject to agreement of the owners of land in which the survey markers are proposed to be located:</p> <ul style="list-style-type: none"> (a) Along the EWL Trench out to a maximum of 40m either side of the trench from the centreline; (b) On or around the following buildings or features: <ul style="list-style-type: none"> i) The Landing at 2 Onehunga Harbour Road; ii) The residential building(s) at 2 Onehunga Harbour Road; and iii) The building at 6 Onehunga Harbour Road (c) The location of the markers shall be confirmed in the GSMP. (d) The location of markers may be updated to reflect detailed analysis and interpretation of monitoring results as construction works progress. Any changes shall be included in the GSMP.
G.6	<p>The Consent Holder shall survey the settlement monitoring markers at the following frequency:</p> <ul style="list-style-type: none"> (a) At monthly intervals starting at least 12 months prior to excavation of the EWL Trench; (b) At 3 monthly intervals following completion of excavation of the EWL Trench for a period of 6 months. <p>For the purpose of this condition, excavation of the EWL Trench is complete when the permanent wall supports are in place.</p>
G.7	<p>If the ground settlement alert or alarm levels in Condition G.1(b)(iv) are exceeded, the trigger marker shall be resurveyed within 24 hours. If the resurvey indicates that a building has increased its damage category from that confirmed in the GSMP, then this shall be considered to be an Alert Level and additional specific assessment of the building shall be carried out by the Consent Holder to confirm this resurvey within 72 hours.</p> <p>If the additional assessment following resurvey confirms the increase in damage category, this shall be considered to be an Alarm Level and the property owner and occupier(s) will be notified within 48 hours. Following consultation with the property</p>

Ref	Condition
	owner and occupier(s); subsequent actions may include increased frequency and/or extent of monitoring, modification to the construction methodology or mitigation works to the affected building (subject to building owner approval and any additional statutory approvals required).

Air Quality (AQ)

Ref	Condition
AQ.1	The Consent Holder shall avoid, as far as practicable, dust, offensive or objectionable odour and fumes arising from construction activities at any point beyond the boundary of the Project site that borders a highly sensitive receiver.
<i>Construction Air Quality Management Plan</i>	
AQ.2	<p>As part of the CEMP prepared in accordance with Condition RC.10, the Consent Holder shall prepare a Construction Air Quality Management Plan (CAQMP) to meet Condition AQ.1.</p> <p>The CAQMP shall outline the measures to be adopted to avoid, as far as practicable, dust, offensive or objectionable odour and fumes arising from construction activities beyond the boundary of the Project site that borders a highly sensitive receiver.</p> <p>The CAQMP shall, as a minimum, address the following:</p> <ul style="list-style-type: none"> (a) Description of the works, anticipated equipment/ processes and durations; (b) Periods of time when emissions of odour, dust or fumes might arise from construction activities; (c) Identification of air pollution sensitive land uses likely to be adversely affected by emissions of odour, dust or fumes from construction activities; (d) Methods for mitigating dust that may arise from construction site exits used by trucks, potentially including the use of vacuum sweeping, water sprays or wheel washes for trucks; (e) Methods for mitigating odour that may arise from ground disturbing construction activities; (f) Methods for maintaining and operating construction equipment and vehicles in order to manage visual emissions of smoke from exhaust tailpipes (g) Methods for undertaking and reporting on the results of daily inspections of construction activities that might give rise to odour, dust or fumes; (h) Methods for monitoring and reporting on the state of air quality during construction, including Total Suspended Particulate, wind speed, wind direction, air temperature and rainfall; (i) Procedures for maintaining contact with stakeholders, notifying of proposed construction activities and handling complaints about odour, dust or fumes; (j) Construction operator training procedures; and (k) Contact numbers for key construction staff, staff responsible for managing air quality during construction and Council officers.
AQ.3	The CAQMP shall be prepared in general accordance with the guidance contained in the <i>Good Practice Guide for Assessing and Managing Dust, Ministry for Environment, 2016</i> and the <i>Good Practice Guide for Assessing and Managing Odour, Ministry for Environment, 2016</i> and shall be implemented throughout the entire construction period of the Project.
AQ.4	The Consent Holder shall undertake all works in accordance with the CAQMP for the duration of Construction Works.

Storage and Manufacture of Concrete (CB)

Ref	Condition
CB.1	The Consent Holder shall ensure that beyond the boundary of the Project site there shall be no discharges, including hazardous air pollutants, dust or visible emissions, caused by the operation of the concrete batching plant that, in the opinion of the Manager, are noxious, dangerous, offensive or objectionable or does or could cause adverse effects on human health, the environment or property.
CB.2	Air displaced from the Concrete Batching Plant during silo filling or concrete batching shall be vented to atmosphere via filter units designed to have a maximum particulate discharge concentration of no greater than 30 mg/m ³ . Supplier information regarding the filters shall be kept on site to confirm compliance with this specification.
CB.3	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.
CB.4	The Concrete Batching Plant shall be operated with the associated emission control equipment being fully operational and functioning correctly.
CB.5	All ducting and emission control equipment shall be maintained in good condition and as far as practicable be free from leaks in order to prevent the escape of fugitive emissions.
CB.6	The Consent Holder shall undertake visual assessments of the filter units and dust emissions at least once per operating day while the Concrete Batching Plant is in use.
CB.7	The Consent Holder shall record information regarding air discharges and the filter units, including: <ul style="list-style-type: none"> (a) Any maintenance or repairs; (b) Bag replacement details; (c) Any malfunction or breakdown of the plant leading to abnormal air discharges; and (d) Daily visual assessments of the filter units and dust emissions.

Leachate (L)

Ref	Condition
L.1	<p>The Consent Holder shall monitor leachate from the replacement Pikes Point Closed Landfill interception drain at the location where collected leachate is discharged via the piped network to the stormwater system.</p> <p>The monitoring shall include:</p> <ul style="list-style-type: none"> (a) Continuous monitoring of leachate flow for a period of 24 months following commissioning; (b) Monthly sampling of leachate for a period of 24 months following commissioning of the stormwater system. The samples shall be analysed for total ammoniacal nitrogen (NH₄N) and the result compared with a trigger level; (c) The trigger level NH₄N concentration will be derived from the Australian and New Zealand Environmental Conservation Council, <i>Australian Guidelines for Fresh and Marine Waters</i>, 2000 (ANZECC 2000) marine water quality guideline, 90% level of protection (1.2 mg/L) allowing for reasonable mixing in the receiving water and treatment in the stormwater wetland/biofiltration system; (d) If the trigger level is exceeded on two consecutive monitoring events, then the leachate flow will be redirected to trade waste until further monitoring for at least two monthly monitoring events measures NH₄N concentrations below the trigger level; (e) If there are no trigger level exceedances over the 24 month period then leachate quality monitoring shall be discontinued; and (f) In the event of trigger level exceedance(s), the monthly monitoring shall be extended for no less than 6 months from the date of the last exceedance. <p>The results of the leachate monitoring shall be provided to the Manager in an annual report submitted by February of each year, or an alternative date as agreed with the Manager.</p>
L.2	<p>Where the Construction Works require the removal of existing Auckland Council closed landfill groundwater monitoring bores, the Consent Holder shall relocate the monitoring bores in consultation with Council.</p> <p>Access to Council closed landfill groundwater monitoring bores shall be provided for the duration of Construction Works.</p>

Stormwater and Impervious Surfaces (SW)

Ref	Condition																																											
<i>Stormwater Design</i>																																												
SW.1	<p>The Consent Holder shall design the stormwater management devices and systems in general accordance with the stormwater drawings referred to in Condition RC.1.</p> <p>The Consent Holder may make modifications to the stormwater management devices and systems shown on those drawings, including the use of alternative Council approved stormwater management devices, provided that the equivalent performance and compliance as set out in Table SW.1 is achieved.</p>																																											
SW.2	<p>The stormwater management devices shall be designed and constructed to achieve the design requirements as set out in Table SW1:</p> <p>Table SW1: Design requirements</p> <table border="1"> <thead> <tr> <th rowspan="2">Project Catchment</th> <th rowspan="2">Receiving Environment</th> <th colspan="3">Design Requirements</th> </tr> <tr> <th>Total Project Road Area (upgraded and new) to be treated (ha)</th> <th>Total Out-of-Project catchment area to be treated (ha)</th> <th>Peak flow attenuation to pre-development flow rates at the receiving environment (with climate change adjustment to 2121)</th> </tr> </thead> <tbody> <tr> <td>Wharangi Street to Galway Street</td> <td>Mankauau Harbour</td> <td>9.4ha to 75% TSS removal</td> <td>1.7ha to 75% TSS removal</td> <td>Not required</td> </tr> <tr> <td>Galway Street to Anns Creek Viaducts</td> <td>Māngere Inlet</td> <td>12.2ha to 75% TSS removal</td> <td>611ha to 75% TSS removal or BPO</td> <td>Not required</td> </tr> <tr> <td>Anns Creek Viaducts to Hugo Johnston Drive</td> <td>Southdown Wetland Reserve</td> <td>1.9ha to 75% TSS removal</td> <td>0.6ha to 75% TSS removal</td> <td>2 year ARI 10 year ARI 100 year ARI</td> </tr> <tr> <td>Hugo Johnston Drive to SH1 Mt Wellington</td> <td>Anns Creek</td> <td>8.3ha to 75% TSS removal</td> <td>8.7ha to 75% TSS removal</td> <td>Not required</td> </tr> <tr> <td>SH1 Mt Wellington to Panama Road</td> <td>Clemow Stream</td> <td>7.0ha to 75% TSS removal</td> <td>2.7ha to 75% TSS removal</td> <td>Not required</td> </tr> <tr> <td>Panama Road to Princes Street</td> <td>Ōtāhuhu Creek</td> <td>4.9ha to 75% TSS removal</td> <td>6.5ha to 75% TSS removal</td> <td>Not required</td> </tr> <tr> <td>Princes Street to southern extent of Project</td> <td>Tributary of the Tamaki River</td> <td>3.8ha to 75% TSS removal</td> <td>2.1ha to 75% TSS removal</td> <td>2 year ARI 10 year ARI 100 year ARI</td> </tr> </tbody> </table>	Project Catchment	Receiving Environment	Design Requirements			Total Project Road Area (upgraded and new) to be treated (ha)	Total Out-of-Project catchment area to be treated (ha)	Peak flow attenuation to pre-development flow rates at the receiving environment (with climate change adjustment to 2121)	Wharangi Street to Galway Street	Mankauau Harbour	9.4ha to 75% TSS removal	1.7ha to 75% TSS removal	Not required	Galway Street to Anns Creek Viaducts	Māngere Inlet	12.2ha to 75% TSS removal	611ha to 75% TSS removal or BPO	Not required	Anns Creek Viaducts to Hugo Johnston Drive	Southdown Wetland Reserve	1.9ha to 75% TSS removal	0.6ha to 75% TSS removal	2 year ARI 10 year ARI 100 year ARI	Hugo Johnston Drive to SH1 Mt Wellington	Anns Creek	8.3ha to 75% TSS removal	8.7ha to 75% TSS removal	Not required	SH1 Mt Wellington to Panama Road	Clemow Stream	7.0ha to 75% TSS removal	2.7ha to 75% TSS removal	Not required	Panama Road to Princes Street	Ōtāhuhu Creek	4.9ha to 75% TSS removal	6.5ha to 75% TSS removal	Not required	Princes Street to southern extent of Project	Tributary of the Tamaki River	3.8ha to 75% TSS removal	2.1ha to 75% TSS removal	2 year ARI 10 year ARI 100 year ARI
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SW.3	<p>The Consent Holder shall ensure that the design of stormwater management devices does not result in any increase of flooding levels greater than 50mm within areas immediately adjacent to the Project or the downstream receiving environment.</p>																																											

Ref	Condition
SW.4	The design of stormwater outfalls shall include erosion prevention devices to minimise the occurrence of bed scour and bank erosion in receiving environments.
SW.5	Where existing stormwater management devices are proposed to be removed, the equivalent treatment, detention and attenuation shall be provided in the proposed stormwater management devices.
<i>Design approval – permanent stormwater system</i>	
SW.6	<p>At least 20 working days prior to construction of the proposed stormwater management devices for impervious surfaces of the State highway and local roads, the Consent Holder shall submit a design report, including detailed engineering drawings, specifications, and calculations for the stormwater management devices. The details shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> (a) Confirmation that the design achieves the requirements of SW.1 and SW.2; (b) Contributing catchment size and impervious percentage; (c) Specific design and location of stormwater systems, including pond spillways; (d) Specific outlet erosion protection design; (e) Supporting calculations, including sizing capacity of stormwater system(s) suspended solid removal efficiency calculations, flow attenuation calculations and identified overland flow paths for the 1% Annual (AEP); (f) Catchment boundaries for the stormwater treatment devices; (g) Details of construction method of stormwater system(s) including timing and duration; (h) Proposed planting within stormwater management devices; and (i) Monitoring and maintenance schedules.
SW.7	The design report prepared under Condition SW.6 shall be submitted to the Manager, and written approval from the Manager shall be obtained prior to the construction of the stormwater management devices.
SW.8	Any amendments that may affect the performance of the stormwater systems approved under Condition SW.6 shall be approved by the Manager prior to the planned implementation of the amendments.
SW.9	Stormwater management devices or systems must be fully operational prior to the discharge of water from the impervious area.
<i>Planting</i>	
SW.10	<p>The Consent Holder shall submit planting plan(s) for the all planted stormwater management devices (including treatment / conveyance swales) to the Manager for approval at least 20 working days prior to construction of the stormwater devices.</p> <p>The planting plans shall be consistent with the UDLMP prepared in accordance with LV.1.</p>

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SW.11	<p>The planting plan(s) required by Condition SW.6 shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> (a) Location, planting methodology and maintenance details; (b) Details of plant species, plant numbers, density and distribution; and (c) Details of proposed pest plant management.
SW.12	<p>All planting of stormwater management devices (including treatment / conveyance swales) shall be undertaken in accordance with the approved planting plan(s).</p>
<i>As-Built Plans – Stormwater System</i>	
SW.13	<p>The Consent Holder shall supply As-Built Plans for the stormwater management devices to the Manager within 30 working days of the practical completion of the stormwater management devices.</p>
SW.14	<p>The As-Built Plans shall be signed off by a Chartered Engineer and include but not be limited to:-</p> <ul style="list-style-type: none"> (a) The surveyed locations and elevations of all stormwater structures, which shall be measured to the nearest 0.1 metre with co-ordinates expressed in terms of the New Zealand Transverse Mercator Projection and DOSLI datum; (b) Stormwater management device details including locations, dimensions, volumes, flood levels, sections, treatment efficiencies, inlet, discharge rates and outlet structures; (c) Photographs at all stormwater systems outfall locations; and (d) Documentation of any discrepancies between the approved design plans under Condition SW.6 and the As-Built Plans.
<i>Stormwater Operation and Maintenance Plan</i>	
SW.15	<p>A Stormwater Operation and Maintenance Plan shall be submitted to the Manager for certification 20 working days prior to commencement of the operation of the stormwater management system.</p> <p>The Stormwater Operation and Maintenance Plan shall include, but not be limited to:</p> <ul style="list-style-type: none"> (a) Details of the person or organisation that will hold responsibility for long-term maintenance of the stormwater management system; (b) A programme for regular maintenance and inspection of the stormwater management system; (c) A programme for the collection and disposal of debris and sediment collected by the stormwater management devices or practices; (d) Procedures for post storm inspection and maintenance; (e) A programme for inspection and maintenance of the outfalls; (f) General inspection checklists for all aspects of the stormwater management system, including visual checks;

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	(g) A programme for inspection and maintenance of vegetation associated with the stormwater management devices; and (h) A requirement to retain records of all inspections and maintenance for the stormwater management system, for the preceding three years.
SW.16	The Consent Holder shall ensure that the stormwater systems are managed in accordance with the Stormwater Operation and Maintenance Plan.
SW.17	Any material amendments or alterations to the approved Stormwater Operation and Maintenance Plan shall be submitted to the Manager in writing for certification at least 20 working days prior to implementation.