

# Central Interceptor Scheme



## Central Interceptor Main Project Works Notice of Requirement 2

Manukau District Plan



**NOTICE OF A REQUIREMENT BY WATERCARE SERVICES LIMITED FOR A DESIGNATION UNDER SECTION 168 OF THE RESOURCE MANAGEMENT ACT 1991**

**TO:** Auckland Council  
Private Bag 92300  
AUCKLAND 1142

**FROM:** Watercare Services Limited  
Private Bag 92 521  
Wellesley Street  
AUCKLAND 1141

**Central Interceptor Notice of Requirement 2 (Manukau)**

**WATERCARE SERVICES LIMITED (“Watercare”) gives notice of a requirement for a designation of land for the construction, operation and maintenance of wastewater infrastructure.**

**1. THE SITE TO WHICH THE REQUIREMENT APPLIES IS AS FOLLOWS:**

The extent of the proposed designation is shown on the Designation Plan Drawing MAIN-NOR2-1 included as **Attachment 1**.

The Requirement applies to land owned by Auckland Council. A schedule of the land to be designated and the legal description of that land is included as **Attachment 2**.

The Requirement is for the designation of land required for temporary construction activities and for the long term operation, access, inspection and maintenance of wastewater infrastructure in the area covered by the Auckland Council District Plan (Manukau Section).

Watercare requires that the designation be included on the relevant planning maps and schedules in the Auckland Council District Plan (Manukau Section) and any subsequent proposed District Plan applying to the land subject to the designation.

**2. THE NATURE OF THE PROPOSED WORK IS AS FOLLOWS:**

**Project Summary and Background**

Watercare is the water and wastewater service provider for Auckland. Watercare was approved as a requiring authority by notice in the New Zealand Gazette No. 69 on 21 June 2012. A copy of the relevant Gazette notice is included as **Attachment 3**. Watercare is planning to construct a new wastewater interceptor, referred to as the “Central Interceptor”. The Central Interceptor comprises a tunnelled wastewater interceptor extending from Western Springs to the Mangere Wastewater Treatment Plant, with connections to Watercare’s existing wastewater network which will divert flow into the new interceptor.

The Central Interceptor will provide capacity for population growth, help provide for asset security through the duplication of part of the regionally critical Western Interceptor, and reduce combined sewer overflows to the environment.

The main tunnel will extend from Western Springs to the Mangere WWTP with a new pump station to pump wastewater from the tunnel to the plant. Three link sewer tunnels will extend from the main tunnel westward with a smaller link sewer to connect the main tunnel to the Western Interceptor at Witla Court, in Mangere Bridge.

## **Proposed Works**

This Notice of Requirement applies to works at the Kiwi Esplanade site (as shown on MAIN-NOR2-1).

The proposed works involve the construction, operation and maintenance of a wastewater interceptor and all associated tunnels, pipes, structures, and activities.

This will involve the construction and commissioning of the new interceptor and all of the associated connection works, hydraulic features and supporting infrastructure; and the ongoing operation and maintenance of the interceptor and associated works in the long term.

The physical features and works will occur both above and below ground level. In summary, the physical features of the proposed works within the area covered by this Notice include:

- A main tunnel, comprising a large diameter, gravity fed pipe;
- Connections to the existing sewer network;
- Demolition of existing toilet block structure and construction of a new facility; and
- Associated structures at the connection points, including an access shaft, a drop shaft, grit traps, air vents and air treatment facilities.

Construction activities associated with the proposed works include removal of vegetation, earthworks, relocation of services, establishment of site access, construction yards and lay down areas, traffic management, works in watercourses, construction of the physical works, commissioning, site reinstatement and any other works necessary for the project and for the long term operation and maintenance of wastewater infrastructure.

### **3. THE NATURE OF THE PROPOSED RESTRICTIONS THAT WOULD APPLY ARE AS FOLLOWS:**

The specific restrictions and conditions that would apply are as follows:

- Restrictions on works undertaken by any person or organisation in the vicinity of the Central Interceptor (and other existing Watercare facilities associated with the Central Interceptor and within the spatial extent of the designation); and
- Conditions which will apply to Watercare when undertaking works authorised by the designation.

In addition, the requirements of Section 9(4) and 176(1) (b) of the Resource Management Act 1991 (RMA) will apply. That is, no person may, without the prior written consent of Watercare, do anything in relation to the land that is subject to the designation that would prevent or hinder the work authorised by the designation.

#### **Works proposed in the vicinity of the designation**

It is important that the Watercare infrastructure is protected from damage and that access to the network is preserved at all times.

Under s75 of the Local Government (Auckland Council) Act 2009 any person who carries out works on, or in relation to, the network assets of Watercare must first notify and obtain written consent from Watercare. As a matter of practice, Watercare reviews all civil and building

works within 10 metres of wastewater pipes and all blasting within 15 metres of wastewater pipes so as to prevent damage to Watercare's assets.

This legislative restriction will also apply to the Central Interceptor and associated works by virtue of it being a Watercare network asset, rather than directly due to this designation.

#### **Proposed designation conditions**

It is proposed that works authorised by the designation will be subject to the conditions included in **Attachment 4** of this notice.

#### **4. THE EFFECTS THAT THE PROPOSED WORK WILL HAVE ON THE ENVIRONMENT AND THE WAYS IN WHICH ANY ADVERSE EFFECTS WILL BE MITIGATED ARE:**

An assessment of the potential effects and a summary of the proposed measures to avoid, remedy or mitigate any potential adverse effects are set out in Part A Sections 11-13 and Part B of the accompanying report titled "Central Interceptor Main Project Works – Assessment of Effects on the Environment" (hereafter referred to as "the accompanying AEE").

##### *Positive effects*

The Central Interceptor main project works present an integrated and cost effective solution for the network, addressing capacity, asset duplication and overflow mitigation needs, and providing a framework for the ongoing operation of the network for the next 50 years and beyond.

In summary, once completed, the proposed works will provide the following positive effects:

- Positive effects on public health and the environment as an integral part of the public wastewater network.
- Provide capacity in the wastewater network for future growth and development on the Auckland Isthmus for the next 50 years and beyond.
- Asset security through the duplication of the lower section of the ageing Western Interceptor.
- Significant reduction of the major wastewater overflows into the Meola Creek catchment.
- The opportunity to further reduce existing wastewater overflows from the combined sewer system into urban streams and the Waitemata Harbour.

These significant positive effects of the project will enable people and communities to provide for their social, economic and cultural well being and for their health and safety, consistent with Section 5 of the RMA.

##### *Potential adverse effects*

During construction, there will be a range of potential adverse effects within the immediate vicinity of the works area, but in most cases these will be temporary and can be mitigated with appropriate construction management.

In summary, the potential adverse effects arising during construction include:

- Visual and landscape effects;

- Recreation and public access effects;
- Vegetation effects;
- Ecological effects;
- Archaeological effects;
- Cultural heritage effects;
- Traffic effects;
- Noise effects;
- Vibration effects;
- Odour effects;
- Effects due to disturbance of contaminated sites;
- Erosion and sediment effects;
- Effects on services; and
- Hydrogeology and ground settlement effects (tunnels and shafts).

Once completed, the Central Interceptor and associated works will be predominantly underground, and work areas will be reinstated. Site reinstatement details will be developed in consultation with the relevant landowner.

The conditions proposed to avoid, remedy, or mitigate any potential adverse effects are set out in **Attachment 4** of this Notice.

**5. ALTERNATIVE SITES, ROUTES AND METHODS HAVE BEEN CONSIDERED TO THE FOLLOWING EXTENT:**

An evaluation of the alternative sites, routes and methods considered for the proposed works has been undertaken and is set out in Section 7 of the accompanying AEE. It concludes that the proposed work is not only a suitable alternative but is in fact the best alternative when considering the environmental, social, cultural and economic parameters, i.e. it is the alternative with the best overall outcome and which is able to be managed in a way which avoids, remedies or mitigates potential adverse effects.

The concept for the Central Interceptor arose out of the Three Waters Strategic Plan, 2008. This plan sought a solution for meeting Auckland's future wastewater network needs including providing capacity for future growth, asset duplication, and mitigating combined sewer overflows. Different alternatives for addressing these matters were also considered with the Central Interceptor being selected as the most appropriate.

Watercare has completed a detailed evaluation of alternatives for undertaking the Central Interceptor, including considering alternative alignments, alternative configurations at construction and connection sites, alternative construction methods, alternative permanent works facilities and operational provisions for managing discharges from the wastewater network.

Multiple alignments for the main tunnel and link sewers have been considered and assessed, taking into account network functionality, operational factors, and environmental, social, cultural and economic considerations. The Central Interceptor alignment reflects the outcome of this process.

Alternative sites for the surface construction works and layouts for each of the sites have been considered, with the design process aiming to minimise impacts of the construction activities on neighbours and site features, uses and values.

Alternative construction methods have been considered and will continue to be considered as part of the detailed design process and development of the construction methodology.

**6. THE PROPOSED WORK AND DESIGNATION ARE REASONABLY NECESSARY FOR ACHIEVING THE OBJECTIVES OF THE REQUIRING AUTHORITY BECAUSE:**

Watercare's statutory objective (obligation) under the Local Government (Auckland Council) Act 2009 is (amongst other things) to:

*“Manage its operations efficiently with a view to keeping the overall costs of water supply and wastewater service to its customers (collectively) at the minimum levels consistent with the effective conduct of its undertakings and the maintenance of the long-term integrity of its assets.”*

The specific objectives for the proposed works are as follows:

- To provide additional sewer network capacity for growth and development across the Auckland Isthmus.
- To duplicate the lower section of the regionally critical Western Interceptor, particularly the Hillsborough Tunnel and Manukau Siphon which are ageing and at risk of failure.
- To reduce wastewater overflows into the Meola Creek catchment and provide the opportunity to further reduce existing wastewater overflows from the combined sewer system into urban streams and the Waitemata Harbour, improving public health and environmental conditions.

A further objective is to minimise construction and operating costs, whilst having regard to the sustainable management of resources.

The proposed work and designation are reasonably necessary for achieving these objectives because:

- a. The proposed work is the most effective and efficient way in which to meet the objectives set out above.
- b. The proposed work will enable Watercare to provide wastewater services that are economically viable, environmentally sound, socially responsible and responsive to customer needs.
- c. The proposed work will provide increased capacity in the network to meet current demands and projected growth to 2062.
- d. The proposed work will increase security of the network though duplicating the lower section of the Western Interceptor. This will reduce the risk of asset failure and provide additional operational flexibility.
- e. The proposed work will enable Watercare to comply with the statutory purpose of the RMA to promote the sustainable management of natural and physical resources.

- f. The designation allows Watercare and/or its authorised agents to undertake works in accordance with the designation.
- g. The designation enables the proposed works to be undertaken in a comprehensive and integrated manner.
- h. The designation protects the sites from future incompatible development which may preclude or put at risk the construction and/or operation of the proposed works.

**7. THE FOLLOWING RESOURCE CONSENTS ARE NEEDED FOR THE PROPOSED ACTIVITY AND HAVE BEEN APPLIED FOR:**

- Earthworks.
- Groundwater take and diversion.
- Discharge of contaminants to land or water from works in contaminated or potentially contaminated land.
- Discharges to water.
- Discharges to air.
- Discharges of stormwater.

**8. THE FOLLOWING CONSULTATION HAS BEEN UNDERTAKEN WITH PARTIES THAT ARE LIKELY TO BE AFFECTED:**

Watercare has consulted with the following groups and individuals considered to have a particular interest in the project and its effects on the environment:

- Local Boards (Waitemata, Whau, Albert-Eden, Puketapapa, Mangere-Otahuhu);
- Auckland Council staff;
- Tangata whenua;
- Transport Authorities (NZTA, Auckland Transport, KiwiRail);
- Network Utility Operators;
- Other agencies – Historic Places Trust, Department of Conservation;
- Directly affected landowners and landowners adjacent to construction sites;
- Resident and environmental interest groups; and
- Wider community (via newsletters and open days);
- Watercare Advisory Groups.

The consultation undertaken and the outcomes of that consultation are described in Section 8 of the accompanying AEE. Consultation is ongoing.

**9. WATERCARE ATTACHES THE FOLLOWING INFORMATION REQUIRED TO BE INCLUDED IN THIS NOTICE BY THE DISTRICT PLAN, REGIONAL PLAN, OR ANY REGULATIONS MADE UNDER THE RESOURCE MANAGEMENT ACT 1991:**



The following additional information is attached to this Notice:

- Attachment 1: Designation plan
- Attachment 2: Schedule of land included in the designation
- Attachment 3: Gazette notice approving Watercare as a Requiring Authority
- Attachment 4: Proposed designation conditions

Supporting information is also included in the accompanying AEE. The AEE comprises:

<b>Central Interceptor Main Project Works – Assessment of Effects on the Environment</b>		
<b>Part A</b>	Assessment of Effects on the Environment	
<b>Part B</b>	Site Specific Assessments	
<b>Part C</b>	Drawing Set	
<b>Part D</b>	Technical Reports	
	Technical Report A	Landscape and Visual Assessment
	Technical Report B	Arboricultural Assessment
	Technical Report C	Assessment of Ecological Effects
	Technical Report D	Archaeological Assessment
	Technical Report E	Traffic Impact Assessment
	Technical Report F	Noise Impact Assessment
	Technical Report G	Vibration Assessment
	Technical Report H	Odour Assessment
	Technical Report I	Ground Contamination Assessment
	Technical Report J	Groundwater and Surface Settlement Assessment
	Technical Report K	Erosion and Sediment Control Plans

The information required by the Auckland Council District Plan (Manukau Section) to be included with a Notice of Requirement is set out in Section 5.12.2 of that District Plan. The requirements of Section 5.12.2 are addressed below.

<b><i>Information required by Section 5.12.2 of the District Plan</i></b>	<b><i>Response</i></b>
Reasons why the designation is needed	Refer to Section 6 of this Notice of Requirement.
Description of the site and the nature of the work and proposed restrictions	Refer to Section 2 of this Notice of Requirement and to AEE Part A, Sections 5 and 6, and Part B for description of the work.  Refer to Section 3 of this Notice of Requirement for proposed restrictions.
Effects on the environment and the extent to which alternative sites, routes and methods have been considered.	Refer to Section 4 of this Notice of Requirement and to AEE Part A, Sections 10 to 12 for effects on the environment.  Refer to Section 5 of this Notice of Requirement and to AEE Part A, Section 7 for alternatives.

<b>Information required by Section 5.12.2 of the District Plan</b>	<b>Response</b>
Consultation undertaken	Refer to Section 8 of this Notice of Requirement and to AEE Section 8.
Other resource consents required	Refer to Section 7 of this Notice of Requirement and to AEE Part A Section 2.

**10. EXTENDED LAPSE PERIOD SOUGHT:**

Under section 184(1) of the RMA "a designation lapses on the expiry of 5 years after the date on which it is included in the district plan unless -

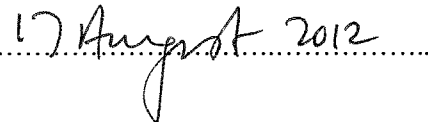
- (a) it is given effect to before the end of that period; or
- (b) the territorial authority determines, on an application made within 3 months before the expiry of that period, that substantial progress or effort has been made towards giving effect to the designation and it continuing to be made and fixes a longer period for the purposes of this subsection; or
- (c) the designation specified a different period when incorporated in the plan."

Pursuant to Section 184(1) (c) of the RMA, Watercare proposes an extended lapse period of fifteen [15] years for the implementation of the proposed designation.

It is expected that construction works authorised by this designation will commence around 2017 and be complete in 2023. However, the project is large and complex and flexibility is required.

Signed for Watercare Services Limited by its General Counsel

Signature:  (R.A. FISHER)

Date:  17 August 2012

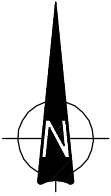
Address for Service:

Watercare Services Limited  
Private Bag 92 521  
Wellesley Street  
AUCKLAND 1141

Attention: Belinda Petersen

Ph: 09 539 7477  
Fax: 09 539 7400  
Email: bpetersen@water.co.nz

**ATTACHMENT 1  
DESIGNATION PLAN**




MANUKAU HARBOUR



**LEGEND**

 PROPOSED DESIGNATION BOUNDARY

		<b>CENTRAL INTERCEPTOR PROPOSED DESIGNATION OF LAND KIWI ESPLANADE</b>	 <small>COPYRIGHT - This drawing, the design and concept, remain the exclusive property of Watercare Services Limited and may not be used without approval. Copyright reserved.</small>	CAD FILE MAIN-NOR2-1	DATE 26-Jul-12
				ORIGINAL SCALE A4	CONTRACT No.
A	17/08/12	<b>NOR AUGUST 2012</b>	<small>DRAWING No.</small> <b>MAIN-NOR2-1</b>	1:2500 A4	0538
ISSUE	DATE			<b>A</b>	

**ATTACHMENT 2**  
**SCHEDULE OF LAND INCLUDED IN THE DESIGNATION**

**SCHEDULE OF LAND INCLUDED IN THE DESIGNATION**

Map ID	Site name	Address	Legal description	Certificate of Title	Owner (23.05.12)
1	AS7 - Kiwi Esplanade site	86R Kiwi Esplanade	Lot 2 DP 77585	NA33D/1224	Auckland Council
2	AS7 - Kiwi Esplanade site	84R Kiwi Esplanade	Lot 1 DP 77585	NA33D/1223	Auckland Council

**ATTACHMENT 3**  
**GAZETTE NOTICE APPROVING WATERCARE AS A REQUIRING AUTHORITY**

## Environment

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### Resource Management Act 1991

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#### The Resource Management (Approval of Watercare Services Limited as a Requiring Authority) Notice 2012

Pursuant to section 167 of the Resource Management Act 1991, the Minister for the Environment hereby gives the following notice.

#### Notice

**1. Title and commencement**—(1) This notice may be cited as the Resource Management (Approval of Watercare Services Limited as Requiring Authority) Notice 2012.

(2) This notice shall come into force on **1 July 2012**.

**2. Approval as a requiring authority**—Watercare Service Limited is hereby approved as a requiring authority, under section 167 of the Resource Management Act 1991, for its network utility operations of:

- (a) undertaking the distribution of water for supply; and
- (b) undertaking a drainage and sewerage system;

including the operation, maintenance, replacement, upgrading and improvement of infrastructure related to these operations, in the Auckland region and in the Waikato Region, for the purposes of providing services to Auckland.

**3. Interpretation**—This approval includes infrastructure relating to the abstraction, storage, supply and treatment of water and the collection, treatment and disposal of wastewater.

**4. Revocations**—This notice revokes the following:

- (a) Resource Management (Approval of Watercare Services Limited as Requiring Authority) Order 1992 (SR 1992/351) (*New Zealand Gazette*, 10 December 1992, No. 201, page 4459).

- (b) Resource Management (Approval of Watercare Services Limited as Requiring Authority) Notice 1993 (*New Zealand Gazette*, 5 August 1993, No. 119, page 2286).
- (c) Resource Management (Approval of Watercare Services Limited as Requiring Authority) Notice 1994 (*New Zealand Gazette*, 7 April 1994, No. 31, page 1278).
- (d) Resource Management (Approval of Watercare Services Limited as Requiring Authority) Notice (No. 2) 1994 (*New Zealand Gazette*, 7 April 1994, No. 31, page 1278).
- (e) Resource Management (Approval of Watercare Services Limited as Requiring Authority) Notice 1996 (*New Zealand Gazette*, 15 February 1996, No. 13 page 450).
- (f) Resource Management (Approval of Watercare Services Limited as Requiring Authority) Notice 1996 (*New Zealand Gazette*, 26 April 1996, No. 39 page 1120).
- (g) Resource Management (Approval of Watercare Services Limited as Requiring Authority) Notice 1999 (*New Zealand Gazette*, 22 July 1999, No. 85 page 2005).
- (h) Resource Management (Approval of Metro Water Limited as Requiring Authority) Notice (No. 1) 1998 (*New Zealand Gazette*, 20 August 1998, No. 120 page 2899).
- (i) Resource Management (Approval of Metro Water Limited as Requiring Authority) Notice (No. 2) 1998 (*New Zealand Gazette*, 20 August 1998, No. 120 page 2899).
- (j) Resource Management (Approval of Manukau Water Limited as Requiring Authority) Notice 2006 (*New Zealand Gazette*, 22 June 2006, No.63, page 1504).

Dated at Wellington this 11th day of June 2012.

HON AMY ADAMS, Minister for the Environment.

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## Health

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### Health Practitioners Competence Assurance Act 2003

#### Health Practitioners Competence Assurance (Election of Members of Medical Council of New Zealand) Regulations 2009

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#### Reappointments/appointment to the Medical Council of New Zealand

Pursuant to section 120 of the Health Practitioners Competence Assurance Act 2003, and the Health Practitioners Competence Assurance (Election of Members of Medical Council of New Zealand) Regulations 2009, the Minister of Health reappoints

Dr Richard Acland

Dr Jonathan Fox

Dr Richard Sainsbury

and appoints

Dr Peter Robinson

as health practitioner members (as elected by the medical profession) to the Medical Council of New Zealand for three-year terms of office commencing on 25 June 2012.

Dated at Wellington this 13th day of June 2012.

HON TONY RYALL, Minister of Health.

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**ATTACHMENT 4**  
**PROPOSED DESIGNATION CONDITIONS**

## **ATTACHMENT 4 PROPOSED DESIGNATION CONDITIONS**

### **Definitions**

“Council” means the Auckland Council’s Chief Executive Officer or nominee.

“Designated land” means all areas of land included in the proposed designation as shown on THE Drawing MAIN-NOR2-01 included as Attachment 1 of the Notice of Requirement.

“OPW” means an Outline Plan of Works prepared in accordance with Section 176A of the RMA.

“Project” means the Central Interceptor project and associated activities.

“Project stage” means a separable part of the Project, e.g. by Contract area or by geographical extent.

“Requiring Authority” means Watercare Services Limited.

“RMA” means the Resource Management Act 1991.

### **General Conditions**

- 1 Except as modified by the conditions below and subject to final design, the works shall be undertaken in general accordance with the information provided by the Requiring Authority in the Notice of Requirement dated August 2012 and supporting documents being “Central Interceptor Main Project Works – Assessment of Effects on the Environment”, Parts A, B, C, and D, dated August 2012.
- 2 As soon as practicable following completion of commissioning of the Project, the Requiring Authority shall, in consultation with the Council:
  - 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 ongoing operation, maintenance, renewal and protection of the wastewater interceptor and associated structures and activities;
  - 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, which are not required for the long term operation and maintenance of the Project; and
  - d) provide as-built plans to the Council’s Team Leader, Compliance and Monitoring, Resource Consents.
- 3 A 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 the designation and construction work. The liaison person’s name and contact details shall be advised to affected parties by the Requiring Authority. This person must be reasonably available for on-going consultation on all matters of concern to affected persons arising from the Project. If a liaison person will not be available for any reason, an alternative contact person shall be nominated to ensure that a Project contact person is available by telephone 24 hours per day seven days per week during the construction phase.
- 4 The designation shall lapse on the expiry of a period of 15 years after the date it is included in the District Plan in accordance with Section 184(1)(c) of the RMA, unless:
  - a) it is given effect to before the end of that period; or

- b) the Council determines, on an application made within 3 months before the expiry of that period, that substantial progress or effort has been made towards giving effect to the designation and is continuing to be made, and fixes a longer period for the purposes of this subsection.

### **Outline Plan of Works**

- 5 Except as provided for in Condition 6 below, the Requiring Authority shall submit an Outline Plan of Works (OPW) for the Project or for each Project stage in accordance with Section 176A of the RMA.
- 6 An OPW need not be submitted if the Council has waived the requirement for an OPW in accordance with Section 176A (2) (c) of the RMA.
- 7 The OPW shall include the following Management Plans for the relevant stage(s) of the Project:
  - Construction Management Plan (CMP); and
  - Construction Noise and Vibration Management Plan (CNVMP).

### **Construction**

- 8 The Requiring Authority shall prepare a Construction Management Plan or Plans for the Project overall or for each of the relevant Project stages. The purpose of the CMP(s) is to set out the detailed management procedures and construction methods to be undertaken in order to avoid, remedy or mitigate potential adverse effects arising from construction activities. The CMP(s) shall be provided to the Council with the relevant OPW for the stage that they relate to.
- 9 The CMP(s) required by Condition 8 above shall include specific details relating to the management of all construction activities associated with the Project or relevant Project stage, including:
  - a) Details of the site or project manager and the construction liaison person identified in Condition 3, including their contact details (phone, facsimile, postal address, email address);
  - b) An outline construction programme, including an indication of when traffic management measures may be required;
  - c) The proposed hours of work;
  - d) 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;
  - e) Location of site infrastructure including site offices, site amenities, contractors yards site access, equipment unloading and storage areas, contractor car parking, and security;
  - f) 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;
  - g) Procedures for ensuring that residents, road users and businesses in the immediate vicinity of construction areas are given prior notice of the commencement of

construction activities and are informed about the expected duration and effects of the works;

- h) Means of providing for the health and safety of the general public;
  - i) Procedures for the management of works which directly affect or are located in close proximity to existing network utility services;
  - j) Procedures for responding to complaints about construction activities;
  - k) Procedures for the refuelling of plant and equipment;
  - l) A Construction Noise and Vibration Management Plan(s) (CNVMP) containing measures to address the management of noise and vibration as identified in condition 11;
  - m) A Traffic Management Plan(s) (TMP) containing measures to address traffic management as identified in condition 17-19; and
  - n) Measures for the protection of trees as identified in condition 25.
- 10 The CMP shall be implemented and maintained throughout the entire construction period for the Project or relevant Project stage to manage potential adverse effects arising from construction activities to the greatest practicable extent.

### **Construction Noise and Vibration**

- 11 A Construction Noise and Vibration Management Plan (CNVMP) shall be prepared for the Project or relevant Project stage, either as part of the CMP, or as a standalone plan, and shall be prepared by a suitably qualified expert.
- 12 The CNVMP shall include specific details relating to the control of noise and vibration associated with all Project works. The CNVMP shall be formulated and the works implemented to achieve, as far as practicable, compliance with the requirements of:
- a) NZS6803:1999 Acoustics — Construction Noise; and
  - b) German Standard DIN 4150-3:1999 Structural Vibration – Effects of Vibration on Structures.
- 13 The CNVMP shall, as a minimum, address the following aspects with regard to construction noise:
- a) noise sources, including machinery, equipment and construction techniques to be used;
  - b) predicted construction noise levels;
  - c) hours of operation, including times and days when noisy construction work and blasting would occur;
  - d) construction noise criteria for any specific areas and sensitive receivers such as schools, child care centres, medical or aged care facilities;
  - e) the identification of activities and locations that will require the design of noise mitigation measures such as temporary barriers or enclosures and the details of such measures where the Project noise criteria are predicted to be exceeded;

- f) the measures that will be undertaken by the Requiring Authority to communicate noise management measures to affected stakeholders;
  - g) development of alternative management strategies where full compliance with NZS6803:1999 cannot be achieved.
  - h) methods for monitoring and reporting on construction noise;
  - i) methods for receiving and responding to complaints about construction noise; and
  - j) construction operator training procedures.
- 14 The CNVMP shall also describe measures adopted to meet the requirements of German Standard DIN4150-3:1999, and as a minimum shall address the following aspects with regard to construction vibration:
- a) vibration sources, including machinery, equipment and construction techniques to be used;
  - b) hours of operation;
  - c) provision for the determination of buildings that require pre-condition surveys to be re-evaluated following test blasts at the commencement of blasting;
  - d) preparation of building condition reports on ‘at risk’ buildings prior to, during and after completion of works, where for the purposes of this condition an ‘at risk’ building is one at which the levels in the German Standard DIN4150-3: 1999 are likely to be approached or exceeded;
  - e) provision for the use of building condition surveys to determine the sensitivity of the building(s) on the adjacent sites to ground movement in terms of the Line 1-3 criteria of the DIN standard;
  - f) identification of any particularly sensitive activities in the vicinity of the proposed works (e.g. commercial activity using sensitive equipment such as radiography or mass-spectrometry);
  - g) alternative management and mitigation strategies where compliance with German Standard DIN4150-3: 1999 cannot be achieved.
  - h) the measures that will be undertaken by the Requiring Authority to communicate vibration management measures to affected stakeholders;
  - i) methods for monitoring and reporting on construction vibration; and
  - j) methods for receiving and responding to complaints about construction vibration.
- 15 The CNVMP shall be implemented and maintained throughout the entire construction period and shall be updated when necessary.

### **Operational Noise**

- 16 The noise arising from any operational activities undertaken on the designated land, shall not exceed the following noise limits when measured at the boundary of any site zoned as follows:

Residential		
Day	Time	Noise Limit
Any day	0700-2200 hours	50 dB $L_{Aeq}$
Any day	2200-0700 hours	40 dB $L_{Aeq}$ 75 dB $L_{Amax}$
Business		
Day	Time	Noise Limit
Any day	At all times	60 dB $L_{Aeq}$

### **Traffic Management**

- 17 A detailed Traffic Management Plan (TMP) or plans shall be prepared for the Project or relevant Project stage, either as part of the CMP or as a standalone plan, and shall be prepared by a suitably qualified person.
- 18 The TMP(s) shall describe the measures that will be taken to avoid, remedy or mitigate the traffic effects associated with construction of the Project or Project stage. In particular, the TMP(s) shall describe:
- a. Traffic management measures to maintain or minimise impact on traffic capacity at peak hours during weekdays and weekends;
  - b. Any road closures that will be required and the nature and duration of any traffic management measures that will result, including any temporary restrictions, detours or diversions for general traffic and buses;
  - c. Methods to manage the effects of the delivery of construction material, plant and machinery;
  - d. Measures to maintain, where practicable, existing vehicle access to property or to provide alternative access arrangements;
  - e. Measures to maintain, where practicable, pedestrian access on roads and footpaths adjacent to the construction works. Such access shall be safe, clearly identifiable and seek to minimise significant detours; and
  - f. Proposed monitoring to measure the impact of the works on traffic and the impact of the traffic management measures.
- 19 The TMP(s) shall be consistent with the New Zealand Transport Agency *Code of Practice for Temporary Traffic Management* which applies at the time of construction.

### **Pedestrian management**

- 20 Where works in parks or reserves impact on existing pedestrian or cycle ways, alternative temporary accessways shall be provided. Any temporary accessways shall be designed as far as practicable in accordance with CPTED (Crime Prevention Through Environmental Design) principles and provide appropriate lighting and signage where necessary.

## **Construction hours**

- 21 Construction hours shall be generally as follows, except where work is necessary outside the specified days or hours for the purposes specified in Condition 23 below.
- Tunnelling activities – 24 hours a day, 7 days a week operations for all tunnelling activities, including the main tunnel works and the link tunnels.
  - General site activities – 7 am to 6pm, Monday to Friday, 8 am to 6 pm Saturday, and with hours extended during summer daylight saving periods as required.
  - Truck movements – 7 am to 6pm, Monday to Friday, 8 am to 6 pm Saturday. Special deliveries – as required to address traffic management measures.
- 22 Purposes for which work may occur outside of the specified days or hours are:
- a) where it is necessary to complete an activity that has commenced;
  - b) where work is specifically required to be planned to be carried out at certain times e.g. to tie into the existing network during periods of low flow, or to tie into tidal cycles for works in the CMA.
  - c) for delivery of large equipment or special deliveries required outside of normal hours due to traffic management requirements;
  - d) in cases of emergency;
  - e) for the securing of the site or the removal of a traffic hazard; and/or
  - f) for any other reason specified in the CMP or TMP.

## **Community information and liaison**

- 23 The Requiring Authority shall prepare a Communications Plan (CP) setting out:
- a) the method(s) of consultation and liaison with key stakeholders and the owners/occupiers of neighbouring properties regarding the likely timing, duration and effects of works.
  - b) details of prior consultation or community liaison undertaken with the parties referred to in (a) above, including outlining any measures developed with such persons or groups to manage or to mitigate any adverse effects or inconvenience that may arise; and
  - c) full contact details for the person appointed to manage the public information system and be the point of contact for related enquiries.
- 24 The Requiring Authority shall submit the CP to the Council at least one (1) month prior to construction commencing on any defined stage.

## **Tree management**

- 25 The following matters shall be included when providing details in the CMP as to how the potential impacts of construction on trees and vegetation will be managed (as required by condition 9):
- a. Identification of trees to be protected, pruned, removed, or transplanted and procedures for marking these out on site.
  - b. Procedures for identifying and protecting significant trees to be retained where works occur in the dripline of such trees as identified by a suitably qualified professional.

## **Archaeology and Heritage**

- 26 Detailed protocols for the management of archaeological and waahi tapu discoveries shall be developed by the Requiring Authority in consultation with tangata whenua and the New Zealand Historic Places Trust prior to construction. These detailed protocols shall confirm the names and contact details for both tangata whenua and the New Zealand Historic Places Trust to be contacted in accordance with Condition 27 below.
- 27 Subject to Condition 28 below, if any archaeological sites, including human remains are exposed during site works then the following procedures shall apply:
- a. Immediately after it becomes apparent that an archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease.
  - b. The Requiring Authority shall immediately secure the area so that any artefacts or remains are untouched.
  - c. The Requiring Authority shall notify tangata whenua, the New Zealand Historic Places Trust and the Council (and in the case of human remains, the New Zealand Police) as soon as practicable, and advise those parties that an archaeological site has been exposed so that appropriate action can be taken. Works shall not recommence in the immediate vicinity of the archaeological site until approval is obtained from the New Zealand Historic Places Trust.
- 28 Condition 27 above shall not apply where the Requiring Authority holds all relevant approvals under the Historic Places Act 1993, apart from the requirement to contact the New Zealand Police in the case of discovery of human remains.

## **Site Reinstatement**

- 29 Prior to commencement of works at construction sites, the Requiring Authority shall prepare a reinstatement plan for the site, in consultation with the landowner(s). The plan shall include:
- Any existing structures or features on the site to be protected during works or reinstated on completion of works.
  - The location and design of permanent wastewater infrastructure to remain at the site.
  - The location and design of permanent access to the wastewater infrastructure.
  - Details of proposed landscaping and planting.
- 30 When contractors' yards or other temporary works areas are no longer required for any construction or operational purpose, site works, including site offices, storage and equipment sheds, fencing and hard stand areas shall be removed and the area reinstated in accordance with condition 29 above.