

# PART I: STATUTORY ASSESSMENT

### 28. STATUTORY ASSESSMENT

#### Overview

The objectives and policies that are relevant to the Project span national, regional and district planning documents. An analysis of these is provided in this chapter, the conclusions of which are as follows:

- the Project will enable the Government's national policies for transportation: the Project will upgrade the Canterbury Motorways RoNS, the Project will provide better access to and from the south of Christchurch, the City Centre and Lyttelton, by improving the capacity, safety and alignment of the Christchurch Southern Corridor;
- overall, the Project is generally consistent with the objectives and policies of the relevant national, regional and district statutory planning documents;
- the Project directly contributes to the transport related policies in the Regional Policy Statement, Proposed Regional Policy Statement, the Regional Land Transport Strategy, and the Selwyn District and Christchurch City District Plans;
- the Project will enable communities at a local, regional and national level to provide for their social, economic and cultural wellbeing. The Project will meet the growing transportation needs of the Region, including freight, and does not preclude future opportunities for other land transport development, such as public transport; and
- as set out in Chapter 27 of this AEE, the adverse effects of the Project on the environment will be adequately avoided, remedied or mitigated to sustain the potential of natural and physical resources for future generations and safeguard the life supporting capacity of air, soils, water and ecosystems.

Consequently, the Project is consistent with statutory planning documents, particularly when the benefits of the proposal are considered alongside the proposed measures to avoid, remedy and mitigate any actual or potential adverse effects.

#### 28.1. Introduction

The assessment of the Project against relevant statutory documents generally follows the hierarchy of applicable planning documents shown in Figure 56 below. An assessment of the Project against Part 2 of the RMA is discussed in the following chapter. Further detail regarding the specific provisions within the statutory documents relevant to the Project is contained in Technical Report 20 – Statutory Provisions Report appended in Volume 3.



Figure 56: Hierarchy of relevant planning documents

National	
National Policy Statements	National Environmental Standards
<ul> <li>National Policy Statement for Freshwater Management (NPS FM)</li> <li>National Policy Statement for Electricity Transmission (NPS ET)</li> </ul>	<ul> <li>National Environmental Standards for Air Quality 2004 (NES AQ)</li> <li>National Environmental Standard for Sources of Human Drinking Water 2008</li> <li>National Environmental Standards for Electricity Transmission 2010 Activities (NES ETA)</li> <li>National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011</li> </ul>
Canterbury Regional Council	
Regional Policy Statements	Regional Plans
<ul> <li>Canterbury Regional Policy Statement         (1998)</li> <li>Proposed Change 1 to the Regional Policy         Statement 1998</li> <li>Proposed Canterbury Regional Policy         Statement (2011)</li> </ul>	<ul> <li>Canterbury Natural Resources Regional Plan (NRRP)</li> <li>Proposed Land and Water Regional Plan (PLWRP)</li> </ul>

# **Territorial Authorities**

- Selwyn District Plan
- Christchurch City Plan

In addition to the statutory planning documents set out in the above table, the "Recovery Strategy for Greater Christchurch" came into effect on 1 June 2012. Under the Canterbury Earthquake Recovery Act, the Recovery Strategy is to be read together with, and forms part of, the statutory RMA documents. The statutory part of the Recovery Strategy (sections 3-8) are therefore part of the RPS, NRRP, PLWRP, the Selwyn District Plan and the Christchurch City Plan and must be given regard in considering the NoR and resource consent applications.

# 28.2. National Policy Statement for Freshwater Management

The National Policy Statement for Freshwater Management (NPS FM) is relevant to the Project. The NPS FM is primarily relevant in developing regional plans but is a matter to be given regard in the consideration of regional resource consents involving water takes and discharges, and is



relevant to the consideration of the proposed water takes and diversions and stormwater discharges.

The NPS FM contains policies and objectives grouped into the following topics:

- water quality;
- water quantity;
- integrated management; and
- Tangata whenua roles and interests.

# 28.2.1. Water quality

Of particular relevance to the Project are the following provisions concerning water quality.

Objective A1: To safeguard the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of fresh water, in sustainably managing the use and development of land, and of discharges of contaminants.

Objective A2: The overall quality of fresh water within a region is maintained or improved while:

- (a) protecting the quality of outstanding freshwater bodies
- (b) protecting the significant values of wetlands and
- (c) improving the quality of fresh water in water bodies that have been degraded by human activities to the point of being over-allocated.

The NPS FM provides for a staged implementation programme over which time councils are required to include objectives and policies in their plans to reflect the stated objectives. The NPS FM also requires immediate inclusion of the stated transitional policy into regional plans (no further RMA Schedule 1 process is required, they are deemed to be automatically included from 1st July 2011). This policy is:

Policy A4 and direction (under section 55) to regional councils ...

- (1) When considering any application for a discharge the consent authority must have regard to the following matters:
  - (a) the extent to which the discharge would avoid contamination that will have an adverse effect on the life-supporting capacity of fresh water including on any ecosystem associated with fresh water and
  - (b) the extent to which it is feasible and dependable that any more than minor adverse effect on fresh water, and on any ecosystem associated with fresh water, resulting from the discharge would be avoided.



- (2) This policy applies to the following discharges (including a diffuse discharge by any person or animal):
  - (a) a new discharge or
  - (b) a change or increase in any discharge
    - of any contaminant into fresh water, or onto or into land in circumstances that may result in that contaminant (or, as a result of any natural process from the discharge of that contaminant, any other contaminant) entering fresh water.
- (3) This policy does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management takes effect on 1 July 2011.

The Project involves the discharges of stormwater to land and to land where it may enter water both during construction of the Project and during Project operation. Chapter 19 outlines the methods available to treat stormwater prior to discharge, which will be achieved primarily by sheet flow over the grassed verge and treatment swales. In addition, first flush basins and treatment ponds are included where required. The CEMP will include provisions for management of stormwater during construction. With these mitigation measures in place, adverse effects of the Project on water quality will be adequately avoided, remedied and mitigated to ensure effects are no more than minor (Technical Report 3).

Overall, it is considered that the Project will be consistent with Policy A4 and with the overall intent of the NPS FM in relation to water quality.

# 28.2.2. Water quantity

The NPS FM sets out objectives for water quantity, the relevant ones are aimed at:

- sustainably managing the taking, using, damming, or diverting of fresh water to safeguard the life-supporting capacity, ecosystem processes and indigenous species (Objective B1); and
- improving and maximising the efficient allocation and efficient use of water (Objective B3);

The NPS FM policy that is most relevant to the Project is the stated transitional Policy B7 which is deemed to be a policy in the regional plan:

- 1. When considering any application the consent authority must have regard to the following matters:
  - (a) the extent to which the change would adversely affect safeguarding the lifesupporting capacity of fresh water and of any associated ecosystem and



(b) the extent to which it is feasible and dependable that any adverse effect on the life supporting capacity of fresh water and of any associated ecosystem resulting from the change would be avoided.

# 2. This policy applies to:

- a) any new activity and
- b) any change in the character, intensity or scale of any established activity –

that involves any taking, using, damming or diverting of fresh water or draining of any wetland which is likely to result in any more than minor adverse change in the natural variability of flows or level of any fresh water, compared to that which immediately preceded the commencement of the new activity or the change in the established activity (or in the case of a change in an intermittent or seasonal activity, compared to that on the last occasion on which the activity was carried out).

The Project will necessitate both temporary and permanent diversion of water from water races used for stockwater supply. It will also necessitate the removal of water for site dewatering.

While the Project will result in the piping and diversion of 2.1km of stormwater race adjacent to Main South Road, in the longer term, the Project will result in an improvement of the area's ecology as it provides an opportunity to integrate landscaping and ecological enhancement through appropriate mixed indigenous and exotic plantings along the motorway margins and seeks to avoid highway runoff entering the races. As outlined in Chapter 19 and Technical Report 3, the Project proposes a range of measures to safeguard the life-supporting capacity of fresh water and of the associated ecosystem during water diversion and taking of water, including the provision for fish passage when stockwater races are piped.

Overall, it is considered that the Project is consistent with the Policy B7 and the overall intent of the NPS FM in relation to water quantity.

# 28.2.3. Integrated management

Part C of the NPS FM emphasises the importance of integrated management. Objective C1 is:

1. To improve integrated management of fresh water and the use and development of land in whole catchments, including the interactions between fresh water, land, associated ecosystems and the coastal environment.

While this objective and corresponding policies C1 and C2 are particularly relevant for local authority policy development, this Objective is to be given regard to in considering resource consent applications and Notices of Requirement. The development of the Project followed an integrated process, by which the interrelationships of various aspects of the proposed Project and its effects were assessed and considered in the alignment and design of the Project.



Overall, it is considered that the Project achieves the objective of improving integrated land use and development with freshwater management.

# 28.2.4. Tangata Whenua roles and interests

Part D of the NPS FM has the following Objective:

To provide for the involvement of iwi and hapu, and to ensure that tangata whenua values and interests are identified and reflected in the management of fresh water including associated ecosystems, and decision-making regarding freshwater planning, including on how all other objectives of this national policy statement are given effect to. (Objective D1)

Part D requires local authorities to take reasonable steps to work with iwi and hapu and to reflect tangata whenua interests (Policy D1). Whilst the NPS FM requires actions to be taken by councils to develop policies (rather than requiring actions by requiring authorities and applicants for consents and approvals), it is relevant to highlight that this Project has been developed in consultation with tangata whenua, including in terms of how the Project may affect freshwater systems and ecology.

# 28.3. National Policy Statement on Electricity Transmission

The National Policy Statement on Electricity Transmission (NPS ET) sets out one objective and a number of policies for managing the electricity transmission network under the RMA. Local authorities are required to, within 4 years of the gazetting of the NPS ET, to give effect to its provisions. The NPS ET gives guidance to the drafting of plan rules and decision-making on resource consents.

There is one objective in the NPS ET:

To recognise the national significance of the electricity transmission network by facilitating the operation, maintenance and upgrade of the existing transmission network and the establishment of new transmission resources to meet the needs of present and future generations, while:

- managing the adverse environmental effects of the network; and
- managing the adverse effects of other activities on the network.

Policy 1 seeks to have the national benefits of sustainable, secure and efficient electricity transmission recognised. Policies 2 – 9 manage the environmental issues generated by transmission infrastructure. Policies 10 and 11 manage the adverse effects of third party activities on the transmission network.

The alignment of the Project crosses under the Islington to Springston (ISL-SPN A) 50/66 kV transmission line to the southwest of the Shands Road and Marshs Road intersection. Any



changes that may be required to the line in this section to ensure the continued safety and capacity of the line are anticipated to be minor (for example, raising the height of conductors through increasing tower height/ tower relocation), and will occur prior to the construction of the Project. In addition, one of the towers on the Bromley to Islington (BRY-ISL A) 220 kV transmission line adjacent to the proposed roadway is located in close proximity and may require a protection barrier. This work would be undertaken in liaison with, and with the agreement of Transpower. Accordingly, it is considered that the Project is consistent with the NPS ET.

### 28.4. National Environmental Standards for Air Quality

The relevant regulation of the National Environmental Standards for Air Quality (NES AQ) includes Regulation 13 which sets the ambient air quality standards and the requirements for management of air quality within identified air sheds. It is the responsibility of Regional Councils to manage air quality and to comply with the Regional Air Quality targets for their airshed(s).

No consents relating to this NES are required as the operational pollutant concentration is below the NES AQ standards, but the relevant regulations in the NES have informed the assessment of construction and operational air quality effects and proposed mitigation measures outlined in Chapter 18 and Technical Report 10. The assessment concluded that adherence to dust management measures during construction will ensure adverse air quality effects would be suitably avoided or mitigated. Therefore, the Project complies with the NES AQ.

# 28.5. National Environmental Standard for Sources of Human Drinking Water

This NES requires regional councils to ensure that effects on drinking water sources are considered in decisions on resource consents and regional plans.

No consents relating to this NES are required for this Project. The potential effects of the Project on the District's groundwater resources that are used for water supply are addressed in Chapter 19 and Technical Report 3. Stormwater discharge points are not located within any Community Water Supply Protection Zone. In addition, closing of any potentially affected wells adjacent to the Project area is proposed to minimise any potential effects on domestic water supplies, for example should a large oil/chemical spill enter the groundwater system via a disposal point. Therefore, the Project will be consistent with this NES.

# 28.6. National Environmental Standards for Electricity Transmission Activities

The National Environmental Standards for Electricity Transmission Activities (NES ETA) contains regulations relating to the operation, maintenance, upgrade, relocation or removal of existing transmission lines and permits or controls these activities. The NES ETA applies within one section of the Project where the proposed CSM2 alignment passes beneath the ISL-SPN 50/66 kV transmission line to the southwest of the Shands Road and Marshs Road intersection. Minor work on the transmission line is likely to be required to ensure safety standards are met, in particular



achieving clearance distances. Depending on the proposed modifications, consents relating to this NES may be required and will be sought. Any work on the transmission line would be undertaken in liaison with Transpower with reference to the provisions of the NES ETA. Accordingly, the Project will achieve consistency with the NES ETA.

# 28.7. National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health

This NES provides a mix of permitted activities and resource consent requirements for certain activities on land affected or potentially affected by contaminants in soil. The Contaminated Land Assessment (Technical Report 16) has had regard to the relevant standards in the Soil NES.

Several locations within the vicinity of the MSRFL and CSM2 route are identified as HAIL sites. Soil contamination (arsenic and lead) was identified in one sample from the former Southbridge Branch Railway Line and one sample from a soil stockpile in the former quarry (Springs Road) contained a concentration of hydrocarbons above the background guideline values. Both of these locations fall outside the Project designation boundaries. Soil contamination above guideline values was not identified in any of the other HAIL site samples analysed. Soil disturbance within the Project designation boundaries will be a controlled activity in accordance with Clause 9 of the Soil NES given the soil contamination recorded within the HAIL sites does not exceed the applicable standard (the SCSs<sub>(health)</sub>) of Clause 7.

As a controlled activity, the activity must be managed under a site management plan, monitored and reported on, including the transport, disposal and tracking of materials taken away in the course of the activity. The construction of the Project is not a restricted discretionary activity under Regulation 10, and does not require remedial action.

Measures to mitigate against the effects of accidental discovery of contaminated soil on human health will be addressed in the CEMP. The CEMP will also contain all information relevant for a site management plan. It is considered the Project is consistent with the outcomes sought by the Soil NES.

# 28.8. Canterbury Regional Policy Statement (RPS)

The objectives and policies of the Operative RPS are broad and reflect the purpose and principles of the RMA. The RPS identifies the regionally significant issues around the management of the Region's natural and physical resources and sets out objectives for Canterbury and the way in which they are sought to be achieved (policies and methods). The RPS is a key statutory instrument that regional and district plans are required to give effect to. A full assessment of the Project has been undertaken against the relevant objectives and policies of the RPS and is provided below.



#### 28.8.1. Tangata whenua

Chapter 6 of the RPS recognises the need for Tangata Whenua to exercise their cultural and traditional relationship, which includes kaitiakitanga and rangatiratanga, with their ancestral lands, water, sites, wahi tapu and other taonga. Objective 1 recognises the need to take into account the Treaty principles of partnership and active protection of Tangata Whenua in the use of their lands and waters to the fullest extent practicable. Policy 3 outlines the relationship of Tangata Whenua, their culture and their traditions with their ancestral lands, water, sites, wahi tapu and other taonga should be recognised and provided for through resource management and planning including provisions in plans, decisions on resource consents and monitoring the state of the environment.

Prior to undertaking Project-specific iwi consultation, the Project team prepared a Statement of Identified Maori Interest (SIMI) as an initial appraisal of iwi consultation carried out through previous studies and investigations relating to the Project based on existing written reports and documentation.

The NZTA has sought to engage with Te Runanga o Ngai Tahu, as the predominant iwi group with Mana whenua over the area so as to inform and update iwi on the Project. As the Project alignment lies within the boundaries of the Taumutu Runanga and Ngai Tuahuriri Runanga, engagement has also been sought with these Runanga via Mahaanui Kurataiao Ltd (MKT). In addition to this consultation, a draft Cultural Impact Assessment (CIA) has been prepared (and is currently being finalised) to inform matters important to Tangata Whenua. The outcomes of the assessment to date were presented in Chapter 23.

Policy 4 also promotes the protection of any site or activity that yields evidence of koiwi tangata (human bones) or artefacts (taonga) from violation or desecration. It is proposed that an accidental discovery protocol is established to address circumstances pertaining to protection of sites that are discovered during the course of the construction works.

# 28.8.2. Soils and land use

Objective 2 of Chapter 7 of the RPS seeks to minimise the irreversible effect of land use activities on land comprising versatile soils with the corresponding Policy 6 protecting such land from irreversible effects that may foreclose some future land use options that benefit from being located on such land. Technical Report 18 confirms the Project is on well drained and imperfectly drained soils of high fertility. The Project will take land which might otherwise be used for farming purposes, which will be irreversible. It is considered that the Project is not inconsistent with the RPS objective and associated policy, in that the proposal has minimised the amount of land required, consistent with Objective 2. Furthermore, there is no practicable non-versatile land alternative available on which to site the Project, which would enable the proposed activity to better achieve the purpose of the RMA.



# 28.8.3. Landscape, ecology and heritage

### Landscape

Objective 2 and Policy 3 of Chapter 8 of the RPS promote the 'protection or enhancement of the natural features and landscapes that contribute to Canterbury's distinctive character and sense of identity, including their associated ecological, cultural, recreational and amenity values'. Chapter 15 and Technical Report 4 have summarised that overall, the potential landscape and visual changes brought about by the proposed Project range from slight through to substantial. The potential visual effects would result from changes to the local rural landscape due to modification to the existing pastoral land uses, introduction of manmade structures (road and bridges), increase in traffic movement, and glare from car lights and street lights. These changes will affect aspects of rural amenity, particularly for local residents.

Potential landscape mitigation measures are recommended where the adverse visual effects would be noticeable from dwellings and road users in the viewing catchment of the motorway alignment. Landscape mitigation is also proposed around overbridges and interchanges to assist in anchoring these structures into the landscape. Where it is deemed practicable, trees will be retained either side of the proposed motorway alignment, in order to retain the character of the rural landscape. There are also identified positive effects including panoramic views from overbridges obtained from the viewshaft of the road users, that are likely to heighten travel experience on the motorway and local roads.

It is considered that with the proposed mitigation in place the Project can be implemented in a manner that is not inconsistent with the relevant objective and associated policy.

# **Ecology**

Objective 3 and Policy 4 of Chapter 8 of the RPS address the 'protection and enhancement of indigenous biodiversity'. Terrestrial and aquatic ecology assessments have been undertaken for the Project (Technical Reports 17 and 18). The assessments conclude that with very limited areas of naturally occurring indigenous vegetation and lack of natural waterways within the Project area and the nearby presence of habitat for commonly occurring indigenous birds with wide habitat preference, the effect of vegetation removal on indigenous fauna arising from the loss of those habitats is considered to be no more than minor. In the longer term, the Project will result in an improvement of the area's ecology as the Project provides an opportunity to integrate landscaping and ecological enhancement measures through appropriate mixed indigenous and exotic plantings along the motorway and water race margins. As such, it is considered that the Project is entirely consistent with this objective and the associated policy.

# Heritage

An Assessment of Archaeological Effects (Technical Report 12) was undertaken to ascertain whether the Project would affect archaeological or built heritage sites which Objective 4 and



Policy 5 of Chapter 8 of the RPS seek to protect and enhance. In particular, Policy 5 seeks to protect regionally significant sites from adverse effects of use and development.

Chapter 24 outlines that there are no known archaeological or built heritage sites within or adjacent to the alignment. Accordingly, it has been assessed that the Project will result in no adverse effects on heritage.

It has been recommended that appropriate accidental discovery protocols be implemented should sites be exposed during the construction of the new roadway. As there are no effects on any historic sites, it is considered that the Project is consistent with this objective and the associated policy.

# 28.8.4. Water

Objective 3 of Chapter 9 of the RPS seeks to 'enable present and future generations to gain cultural, social, recreational, economic, health and other benefits from the water quality in Canterbury's water bodies and coastal waters, while:

- (a) safeguarding the existing value of water bodies for efficiently providing sources of drinking water for people;
- (b) safeguarding the life-supporting capacity of the water...

Policies 9 and 11 address this objective through the management of discharges to ensure that adverse effects on water quality are avoided, remedied or mitigated and through the promotion of land use practices which maintain and enhance water quality.

The majority of the catchment crossed by the proposed Project alignment is not considered by ECan or SDC to directly contribute to any natural watercourse. Chapter 19 and Technical Report 3 outline the potential effects on water quality associated with the Project as a result of contaminants discharged from stormwater and from the realignment of the water races within the Project area. In addition, earthworks undertaken adjacent to stockwater races during the course of constructing the Project may result in the temporary discharge of "contaminants" such as sediments to water. Stormwater is proposed to be discharged to ground during both the construction and operational phases of this Project, so potential effects on groundwater quality are relevant as well.

The overall stormwater philosophy is to separate the road drainage system from the surrounding surface water and stockwater systems both during the construction phase and in the long term. This limits the size of the disposal system and reduces the effect of the runoff on the environment. It is proposed that the conveyance, treatment and disposal for the main carriageway run-off will be through the use of grass filter strips (verge edge and swale batter), swales, first flush basins (where required under the NRRP) and infiltration devices. As part of its regular maintenance regime, the NZTA or its approved contractor will need to ensure that the



treatment devices are regularly cleaned, to remove any build-up of organic material, sediment and other debris. In addition, the CEMP will include provisions for management and treatment of stormwater during construction.

It has been assessed in Chapter 19 that any actual or potential effects of discharge of sediments to water during earthworks is likely to be no more than minor, on the basis that activities are temporary, therefore any discharge of sediments associated with the activities are likely to be short term and temporary in nature. In addition, the on-going stormwater discharge will be adequately avoided or mitigated through stormwater treatment prior to discharge and designing soakage which is above the groundwater table. Overall the treatment proposed is beyond that sought in the NRRP and is considered best practice. The effects of the quality of road runoff are considered to be minor.

It is considered that the effects of discharges on water quality associated with the Project construction and operation will be appropriately avoided, remedied or mitigated in a way that is consistent with the objective and the associated policies.

#### 28.8.5. Settlement and the built environment

Objective 1 of Chapter 12 of the RPS seeks to enable urban development and the physical expansion of settlements and the use and provision of network utilities to occur while avoiding, remedying or mitigating adverse effects on the environment. The specific parts of the environment that the Objective focuses on include water quality, air quality, ancestral land and heritage values.

The RPS recognises that the pattern of urban development and settlement in the region has a strong influence on the demand for transport and that this is an essential resource. Policy 1 under this Objective promotes 'settlement and transport patterns and built environments that will minimise the adverse effects of emissions into the atmosphere resulting from the use of motor vehicles and building heating.'

The growing populations of Hornby, Prebbleton, Rolleston, Lincoln and West Melton will benefit from improved inter-connections as a result of this Project. In addition, it has been concluded that discharges of air pollutants caused by vehicles are unlikely to cause more than minor adverse impacts on human health or the environment in the surrounding area. As such, it is considered the Project is consistent with this objective and the associated policy.

# 28.8.6. Development of Greater Christchurch

In October 2011, the RPS was amended by the Minister for Earthquake Recovery (the Minister) using his powers under the Canterbury Earthquake Recovery Act to include Chapter 12A (Development of Greater Christchurch). This is consistent with the intention of the earlier Proposed Change 1 (PC1) to the RPS but updated as a result of the Canterbury earthquakes. The Minister's decision was successfully challenged by judicial review and the updated Chapter 12A



has been set aside. Accordingly, the earlier version of PC1 is now relevant (at the time of lodging this application). The Canterbury Regional Council's decision on PC1 was released in December 2009 and was subject to a number of appeals. As a result of the judicial review, those appeals are still to be resolved by the Environment Court.

PC1 provides direction for future growth within greater Christchurch by setting out land use distribution, in particular identifying areas available for urban development including specifying residential densities and provision for businesses. Although PC1 promotes intensification of land use within existing urban areas it also identifies appropriate areas for greenfield developments to accommodate projected growth and population relocation. The associated objectives promote the efficient use of network infrastructure to support this development and promote integration of infrastructure with development and settlement patterns.

Of particular relevance to this Project is the Urban Limits boundary along Marshs Road (between Meadowlands Road and the Hornby industrial rail line west of Springs Road) and the inclusion of undeveloped land to the immediate north of the boundary as a greenfield business area.

Policy 9 seeks to ensure that 'Canterbury Regional Council, territorial councils and transport infrastructure providers ensure that the transport networks within Greater Christchurch provide for the safe, sustainable, integrated movement of goods and people both within the sub-region, and to and from locations outside the sub-region'.

The identified benefits of the Project include:

- improved traffic flows will reduce journey times and enhance travelling efficiency reducing congestion;
- improved access to and from Lyttelton Port, in particular for freight, the City Centre and industrial areas in the south of Christchurch;
- reduced traffic on many local roads will make access easier and safer;
- the growing populations of Rolleston, Lincoln and West Melton will benefit from improved inter-connections;
- reduced vehicles on local roads around Templeton, Hornby and Prebbleton, making these roads safer for local residents, particularly school children and the elderly;
- local roads through Templeton and into Christchurch will be safer for cyclists due to reduced traffic volumes;
- introducing a raised median and safety barrier on MSRFL will improve safety by separating oncoming traffic;
- restricting right-hand turns across MSRFL will also improve safety;
- with additional lanes on Main South Road north of CSM2 connection and less traffic through Templeton, Hornby and Prebbleton, there will be increased opportunities for bus priority;



- less traffic travelling through the Templeton, Hornby and Prebbleton communities is expected to reduce noise, vibration, air pollution and other effects of high volumes of traffic, resulting in a more pleasant environment for residents; and
- retaining connections for pedestrian and cyclists along local roads, and enhancing access to the Little River Rail Trail by providing a connection to CSM1 shared path pedestrian/cycleway.

These benefits are considered to contribute to the safe, sustainable and integrated movement of goods and people so it is considered the Project is consistent with this policy.

# **28.8.7.** Air quality

The life-sustaining capacity of air depends on it being safe to breathe. Objective 1 of Chapter 13 of the RPS seeks to encourage ambient air quality such that it is not unpleasant to live with through the nuisance effects created by low ambient air quality. Emissions from motor vehicle exhaust systems include carbon monoxide, carbon dioxide, oxides of nitrogen, lead compounds, hydrocarbons, sulphur dioxide, suspended particulate and products of incomplete combustion contributing to an increasing source of suspended particulate in ambient air in Christchurch. Policy 2 promotes measures that reduce emissions from the use of carbon based fuels.

The results of dispersion modelling for the Project, outlined in detail in Technical Report 10, have indicated that discharges of air pollutants caused by vehicles are unlikely to cause exceedances of any standards in the NES AQ or the New Zealand Ambient Air Quality Guidelines (NZAAQG) at any nearby receptor. However, the results do indicate that concentrations of PM10 may slightly exceed the 'acceptable' category (33  $\mu g/m^3$ ) in the Canterbury Regional Ambient Air Quality Targets (RAAQT) at residential receptors at two locations. Notwithstanding the potential exceedance of the 'acceptable' category in the Canterbury RAAQT, given current background and the small additional emissions, the air quality assessment concludes that discharges of air pollutants caused by vehicles are unlikely to cause more than minor adverse impacts on human health or the environment in the surrounding area.

The Project has the potential to affect air quality during construction where sources of dust and other air contaminant discharges are able to cause nuisance beyond the site boundary during adverse weather conditions if adequate controls and mitigation measures are not adopted.

Objective 2 seeks to 'avoid, remedy or mitigate the adverse effects on people, flora and fauna, and other natural and physical resources resulting from discharges of contaminants into the air'. Chapter 18 outlines a range of mitigation measures to ensure dust effects are not significant. These will be included in the CEMP. In addition, an air quality monitoring programme will be implemented to assist control and management of dust discharges.

Overall, it is considered that the proposal will be consistent with the relevant objectives and policies that relate to air quality.



# 28.8.8. Transport

The transport objectives set out in the RPS (Chapter 15) are:

- enable a safe, efficient and cost-effective transport system to meet regional, interregional and national needs for transport; and
- avoid, remedy or mitigate the adverse effects of transport use and provision.

The associated policies are outlined in the Statutory Provisions Report (Technical Report 20) and promote the protection of Canterbury's existing transport infrastructure and land transport corridors necessary for future strategic transport requirements by avoiding, remedying, or mitigating the adverse effects of the use, development or protection of land and associated natural and physical resources on the transport infrastructure; while ensuring that in the provision of transport infrastructure, adverse effects on natural resources of regional significance are avoided, remedied or mitigated.

The Project is part of the Christchurch Motorways RoNS Project, one of seven sections of the roading network that are linked to New Zealand's economic prosperity in the Government Policy Statement on Land Transport Funding. The Project will improve access to Christchurch City, the International Airport and the Lyttelton Port of Christchurch (Lyttelton Port). Therefore the Project is important both nationally and regionally as it serves the South Island's largest economic centre.

As discussed in Chapter 11 and Technical Report 2 the Project will reduce congestion, improve safety and support economic growth ensuring Christchurch remains a great place to live and do business. Greater connectivity, increased road safety and a more reliable and resilient transport network would promote and facilitate positive economic growth and prosperity, as concluded within Chapter 25 and Technical Report 14, within the Canterbury region.

The benefits achieved by the Project need to be balanced alongside adverse effects. The relatively localised adverse effects of the proposal are outweighed by the positive effects it would have well beyond the immediate area and nationally. A number of the lesser effects on the environment would either be limited to the construction phase of the Project or mitigated through design, construction and remediation methods outlined. Recommended mitigation measures have been identified throughout this assessment and in the technical reports. Chapter 27 provides a summary of these measures. It is considered that the Project is consistent with the Transport objectives and associated policies.

#### 28.8.9. Natural Hazards

The RPS recognises the importance of ensuring effects of natural hazards are addressed. Policy 3 of Chapter 16 of the RPS recommends taking a 'precautionary approach to the potential for a natural hazard to be created or increased as it relates to the applicant or any other person or property. This may be achieved by giving priority to the principle of avoidance'.



Chapter 21 summarises the effects of geological hazards, including seismicity and liquefaction in the Project area. Technical Report 11 outlines the geotechnical design philosophy of the Project where it was identified that mitigation of risks associated with ground conditions and geological hazards will be largely addressed through detailed and commensurate investigation for the detailed design of the structures and implementation of the appropriate geotechnical parameters which will ensure the risk is 'designed out'.

Chapters 19 and 21 address the effects associated with climatic hazards such as stormwater and flooding. There is little anecdotal evidence of flooding in the vicinity of the proposed alignment. The design standard for the highway drainage system is the 100 year ARI rainfall event including an allowance for climate change. Stopping overland flows from entering the road drainage system is essential to preventing flooding of the road. In addition, bunds running outside of the swales along low points in the existing topography will protect the roadside swales and disposal points. It was assessed that the design of stormwater systems will provide sufficient conveyance to pass flood flows. Furthermore, the disposal to land has the potential to reduce downstream flooding having a positive effect on reducing flooding in the environment.

Due to the Project design and the above mitigation measures it is considered that the effects of natural hazards will be avoided or mitigated in a manner that is consistent with the objective and the associated policies.

# 28.8.10. Hazardous substances

Chapter 17 of the RPS outlines objectives and policies addressing the prevention or mitigation of adverse effects on the environment from the storage, use, disposal and transportation of hazardous substances. Hazardous substances such as diesel, petrol or oil may be stored temporarily during construction. These substances will be managed in such a way as to seek to prevent their unintended release and associated effects on the environment, such as not locating substances on known faults or within flood areas or near bores. Hazardous substances will be addressed in the CEMP. It is considered that the activity will be consistent with objective and the associated policies for hazardous substances.

# 28.9. Proposed Canterbury Regional Policy Statement (PRPS)

The PRPS was notified on 18 June 2011. Submissions and further submissions have been received and hearings completed. The Independent Commissioners' decision was released on 20 July 2012. Four appeals have been received. The following objectives and policies as listed in the PRPS, as per the decisions version, are of particular relevance to the Project.

# 28.9.1. Land use and infrastructure

The likely medium to long term return to continued growth of the region as a whole will result in an on-going need for more houses, jobs, regionally significant infrastructure, transport facilities,



and other services, with cumulative effects on the land and water resources of the region, and on its air quality. The need for flexible, yet formative provisions to manage land use and infrastructure integration is important given the uneven spatial growth patterns within the Region as a whole. In Chapter 5 of the PRPS, the objectives and policies mainly relate to the 'Wider Region', which excludes the Greater Christchurch area. The Project falls entirely within the 'Greater Christchurch' area. The achievement and implementation of the objectives and policies in Chapter 6 – Development of Greater Christchurch, take precedence within Greater Christchurch. As such, the only relevant objective within this chapter that is relevant to Project is Objective 5.2.1.

Objective 5.2.1 seeks to ensure that development is designed and located in a manner which achieves consolidated, well designed and sustainable growth and enables people to provide for their social, economic and cultural wellbeing and health and safety while avoiding adverse effects and maintaining and enhancing the quality of the natural environment of the Canterbury Region. It is considered that the Project is consistent with the urban growth aim and avoids impacts such as community severance, and mitigating against localised amenity effects.

Therefore, it is considered that the Project is consistent with the relevant objective in Chapter 5 of the PRPS.

# 28.9.2. Development of Greater Christchurch

PC1 will be incorporated into the PRPS as Chapter 6 at the time PC1 becomes operative after the Environment Court appeals are resolved. See section 28.8.6 above for an assessment of the Project against these objectives and policies.

#### 28.9.3. Freshwater

Chapter 7 of the PRPS addresses adverse effects of activities on freshwater, the need for high quality fresh water for drinking and efficient use of water.

Objective 7.2.1 promotes the sustainable management of freshwater to safeguard its life-supporting capacity, to provide drinking water, to enable the exercise of customary uses and to preserve the mauri and natural character values of fresh water. Objective 7.2.3 sets further goals for how water will be sustainably managed in an integrated way to provide for these values, in particular and of relevance to this Project with respect to the effects of land uses on demand for water and on water quality.

Policy 7.3.5 seeks to avoid, remedy or mitigate adverse effects of land uses on the flow of water in surface water bodies or the recharge of groundwater while Policy 7.3.7 seeks to avoid, remedy or mitigate adverse effects of changes in land uses on the quality of fresh water.

As has been discussed above, the majority of the catchment crossed by the Project does not directly contribute to any natural watercourse. Potential effects on water quality will arise as a



result of temporary discharge of sediment during earthworks and realignment of water races and contaminants discharged from stormwater during the operation of the Project. It is considered that any actual or potential effects of discharge of sediments to water during construction will be no more than minor as the works are temporary. In addition the effects of the operational stormwater discharges will be no more than minor as a result of the proposed treatment.

The temporary and permanent diversion of water from water races and the water takes during construction will be managed in a way so that the life supporting capacity of freshwater is sustained.

It is considered that the Project will be consistent with the objectives and associated policies of Chapter 7 of the PRPS.

# 28.9.4. Ecosystems and indigenous biodiversity

Chapter 9 of the PRPS addresses issues associated with the on-going loss and degradation of ecosystems and indigenous biodiversity. Objective 9.2.1 is to halt the decline in the quality and quantity of Canterbury's ecosystems and indigenous biodiversity and their life-supporting capacity and mauri is safeguarded.

The Project does not fall within any significant natural areas and is located within pastoral farmland in an area of the Canterbury Plains that has been largely cleared of indigenous vegetation cover. The ecological assessment in Technical Report 18 concludes that with very limited areas of naturally occurring indigenous vegetation and presence of habitat for commonly occurring indigenous birds with wide habitat preference, the effect of vegetation removal on indigenous fauna is considered to be no more than minor. In addition, the Project is likely to result in an improvement of the area's ecology as the Project integrates landscaping and ecological enhancement measures through appropriate mixed indigenous and exotic plantings. As such, it is considered that the Project is consistent with Policy 9.3.4 which promotes ecological enhancement where appropriate.

#### 28.9.5. Natural hazards

The hierarchy approach that Chapter 11 of the PRPS sets out for dealing with natural hazards is threefold in the following order of priority: avoidance, mitigation, and response and recovery. The relevant objectives are to avoid new subdivision, use and development of land that increases risks associated with natural hazards (Objective 11.2.1) and recognise and provide for the effects of climate change and its influence on the frequency and severity of natural hazards (Objective 11.2.3).

Policy 11.3.3 seeks to ensure that new subdivision, use and development of land on or close to an active fault trace or in areas susceptible to liquefaction shall be managed in order to avoid or mitigate the adverse effects of fault rupture, liquefaction and lateral spreading. The design



approach for the Project requires mitigation against risks associated with geological hazards, such as earthquakes and liquefaction, which will be largely avoided or mitigated by being designed out.

Policy 11.3.4 provides for new critical infrastructure to be located outside high hazard areas unless there is no reasonable alternative. In addition, it requires critical infrastructure to be designed to maintain, as far as practicable, its integrity and function during natural hazard events. There is little anecdotal evidence of flooding in the vicinity of the proposed alignment. The design standard for the highway drainage system is the 100 year ARI rainfall event including an allowance for climate change. Stopping overland flows from entering the road drainage system is essential to preventing flooding of the road. In addition, bunds running outside of the swales along low points in the existing topography will protect the roadside swales and disposal points. The design disposal to land has the potential to reduce downstream flooding having a positive effect on reducing flooding in the environment. Therefore, the Project is consistent with the objectives and the associated policies of Chapter 11 of the PRPS.

# 28.9.6. Landscape

Chapter 12 of the PRPS recognises that protection of landscapes is important at a local, district or regional level and Objective 12.2.2 is to identify and manage the landscapes that are not identified as outstanding natural landscapes. Policy 12.3.3 under this objective recognises that landscape management is not limited to outstanding natural features or landscapes. Rather, other matters are also important including preservation of natural character, cultural historic heritage or other purposes.

The landscape and visual assessment (Technical Report 4) summarises the potential landscape and visual changes resulting from the Project as ranging from slight through to substantial. The introduction of new landforms along the new road alignment in the shape of raised interchanges into a predominantly flat landscape will form a significant and immediately recognisable new element into a landscape which is more open and rural in nature. Landscape mitigation measures are proposed where the adverse visual effects would be noticeable from dwellings. It is considered that the Project is not inconsistent with the objective and associated policy in Chapter 12 of the PRPS.

# 28.9.7. Historic heritage

The historic heritage provisions in Chapter 13 of the PRPS address the protection of significant historic heritage from inappropriate subdivision, use and development (Objective 13.2.1 and Policy 13.3.1) and recognition of cultural and heritage values of landscapes and the protection of these from inappropriate development (Objective 13.2.2 and Policy 13.3.2). There are no known archaeological or built heritage sites within or adjacent to the proposed road corridor. The relationship between tangata whenua (Ngāi Tahu) and South-West Christchurch is culturally and historically significant. Although there are two recorded midden sites within the wider vicinity of the proposed Project, these have been deemed as being unlikely to be affected by the proposal as



they are located outside the road alignment and outside the construction area. As there is a known Māori historical presence around the Project area, there is the potential for unidentified archaeological sites to be exposed during earthworks for the new alignment. Appropriate protocols will be undertaken in the event of the accidental discovery of potential archaeological material. As such, it is considered that the Project is entirely consistent with the objectives and associated policies in Chapter 13 of the PRPS.

### 28.9.8. Air quality

One of the key air quality issues addressed in Chapter 14 of the PRPS is that of health and nuisance effects of low ambient air quality. Objective 14.2.1 is to 'Maintain or improve ambient air quality so that it is not a danger to people's health and safety, and reduce the nuisance effects of low ambient air quality'. Objective 14.2.2 addresses localised adverse effects of discharges on air quality.

Policy 14.3.2 is of particular relevance to the Project as it addresses emissions from the use of solid and liquid based fuels which includes emissions from motor vehicles. This Policy seeks to promote measures that reduce the adverse effect on ambient air quality from these activities. It is concluded in the air quality assessment (Technical Report 10) that given current background and the small additional emissions from vehicles using the Project, offset by lower vehicle numbers on SH1, the discharge of air pollutants caused by vehicles are unlikely to cause more than minor adverse effects on human health.

Policy 14.3.3 seeks to avoid, remedy or mitigate localised adverse effects on air quality. This is relevant to the Project during construction when dust discharges have a potential to affect air quality. A range of methods have been proposed to mitigate against dust effects and these will be included in the CEMP.

Overall, it is considered that the proposal will be consistent with the relevant objectives and policies of the PRPS that relate to air quality.

#### 28.9.9. Soils

Objective 15.2.1 of Chapter 15 is the maintenance and improvement of the quality of Canterbury's soil to safeguard their mauri, life-supporting capacity, their health and their productive capacity, while the underlying policy 15.3.1 seeks to avoid, remedy or mitigate their degradation. The Project will take land for CSM2 which will limit opportunity to use the soil for primary productive purposes in the long-term (farming). The foundation for the long term supply of food for domestic and export markets requires the productive capacity of soils to be maintained. The objective and policy recognises that protection of soil quality is not absolute. There will be situations where soil will be degraded as a result of land-uses and where it is not necessarily appropriate to foreclose a development option purely for soil conservation or soil quality reasons. This Project will remove an area of productive soils in the long term, but the Project has identified



significant benefits, including to the local and regional economy. It is considered that the Project is not inconsistent with the objective and associated policy.

### 28.9.10. Contaminated land

Objective 17.2.1 of Chapter 17 of the PRPS provides for the 'Protection of people and the environment from both on-site and off-site adverse effects of contaminated land'. The relevant policies under this objective seek to:

- avoid, remedy or mitigate adverse effects associated with contaminated land, including discharges from contaminated land, and require site investigations in relation to actually or potentially contaminated land (Policy 17.3.2); and
- where effects will not result in significant risk to human health or the environment that contaminants be allowed to remain in the ground (Policy 17.3.3).

The Contaminated Land Assessment (Technical Report 16) identified several locations within the Project area as HAIL sites, with two of these sites contaminated beyond background guideline values. However, contamination at these sites did not exceed the applicable health standard in the NES for Assessing and Managing Contaminants in Soil to Protect Human Health. Consent is sought under the NES in relation to the management of soil at these sites. In addition, mitigation measures will be implemented on site through the CEMP to manage and dispose of accidentally discovered contaminated soil in a manner consistent with the objective and associated policies of Chapter 17 of the PRPS.

# 28.9.11. Hazardous substances

Objective 18.2.1 and Policy 18.3.2 of Chapter 18 of the PRPS seek to avoid, remedy or mitigate adverse effects on the environment from the storage, use, disposal and transportation of hazardous substances. In addition, Policy 18.3.1 focuses on the protection of sensitive areas, such as areas of unconfined or semi-confined aquifers where depth to groundwater is such that there could be a risk of contamination.

Hazardous substances will be stored temporarily during construction of the Project. These substances will be managed in such a way as to seek to prevent their unintended release and associated effects on the environment. There are no known faults in the area and they will not be stored within flood areas. Closing of potentially affected wells adjacent to the Project area is proposed to minimise any potential effects from a large oil/chemical spill entering the groundwater system via a disposal point. It is considered that the Project is consistent with the objective and associated policies of Chapter 18 of the PRPS.

# 28.10. Recovery Strategy for Greater Christchurch 2012

The Recovery Strategy for Greater Christchurch (the Recovery Strategy) came into effect on 1 June 2012. Under the Canterbury Earthquake Recovery Act, the Recovery Strategy is to be read



together with, and forms part of, the RMA documents. The statutory part of the Recovery Strategy (sections 3-8) are therefore part of the RPS, NRRP, PLWRP, the Selwyn District Plan and the Christchurch City Plan and must be given regard in considering the NoR and resource consent applications.

The Recovery Strategy is outlined in Technical Report 20 and provides a vision, goals and a road map for ensuring the success of Greater Christchurch for recovery and future leadership in earthquake resilience.

The most relevant goals in the Recovery Strategy are in the Built Environment Recovery components:

- coordinating and prioritising infrastructure investment that effectively contributes to the economy and community during recovery and into the future;
- supporting innovative urban design, buildings, technology and infrastructure to redefine Greater Christchurch as a safe place built for the future;
- rebuilding infrastructure and buildings in a resilient, cost-effective and energy-efficient manner;
- developing an integrated transport system that meets the changed needs of people and businesses and enables accessible, sustainable, affordable and safe travel choices;
- zoning sufficient land for recovery needs within settlement patterns consistent with an urban form that provides for the future development of Greater Christchurch;
- having a range of affordable housing options connected to community and strategic infrastructure that provides for residents participation in social, cultural and economic activities; and
- drawing on sound information about on-going seismic activity and environmental constraints including other natural hazards and climate change.

The Project will contribute to the economy and community during recovery and into the future. It is a transport system that will serve the heightened needs for greater accessibility to south-west Christchurch and Rolleston including greenfield areas identified for development in PC1. The Project will provide a strategic transport route connecting people to the city, and it has been designed drawing on sound information about seismicity and natural hazards. The Project is also considered to be consistent with the goals for Built Environment Recovery.

### 28.11. Canterbury Natural Resources Regional Plan (NRRP)

The NRRP consists of 8 chapters which address sustainable management of natural resources in the Canterbury Region. Chapter 1 and Chapter 3 were made partly-operative from 27 October 2009. Chapter 2 was operative from 27 October 2009. The balance of Chapters 1 and 3, and all of Chapters 4 to 8 were made operative on 11 June 2011.



# 28.11.1. Ngai Tahu and the management of natural resources

Chapter 2 of the NRRP provides for Ngāi Tahu and their relationship with resources by setting out the tools and processes that ECan will use to engage with Ngāi Tahu (as tangata whenua) in the management of natural and physical resources. Of particular relevance to the Project is the recognition that, on a case-by-case basis, ECan can seek a cultural impact assessment or cultural value assessment as part of an assessment of environmental effects under Schedule 4 of the RMA, where an application is likely to impact on a significant resource management issue for Ngāi Tahu. Iwi management plans can be used as a tool to guide consideration of a need for a cultural impact assessment or cultural value assessment as part of an assessment of environmental effects.

The relationship between tangata whenua and south-west Christchurch is culturally and historically significant. There are two recorded midden sites within the wider vicinity of the proposed Project area. These have been deemed as being unlikely to be affected by the proposal as they are located outside the road alignment.

A draft CIA has been produced as part of a consultation method, whereby the NZTA consultant has drafted the report, which MKT is currently peer reviewing on behalf of Te Ngāi Tuahuriri Runanga, as mana whenua. As a result of the initial draft CIA findings, recommendations have been made to seek to avoid, remedy or mitigate adverse effects on tangata whenua values. Chapter 23 provides the assessment sought in Chapter 2.

# 28.11.2. Air Quality

Chapter 3 of the NRRP provides for discharges to air in the Canterbury Region and sets out objectives and policies to manage these discharges.

Objective AQL1 is to maintain localised air quality and ensure discharges do not on their own or in combination with other discharges cause significant adverse effects. Policy AQL3 aims to promote measures to address motor vehicle exhaust emissions.

A small section of the Project area (between Springs Road and Halswell Junction Road) is within Clean Air Zone 2 and in this Zone Objective AQL3 contains objectives for ambient air quality in Christchurch and Policy AQL20 aims to promote measures to address discharges to air from motor vehicles.

An evaluation of the impact of the Project on air quality is included in Technical Report 10. Based on this assessment the Project is considered to be consistent with the relevant objectives and policies of Chapter 3 of the NRRP for the following reasons:

- existing air quality: overall, the existing ambient air quality close to the Project area reflects the typical characteristics of rural - urban fringe environments;
- sensitive receptors: there are no specific sensitive receptors (i.e. schools, pre-schools, residential healthcare or retirement accommodation) within 200 m of the proposed



motorway, although there are a number of residential dwellings within 100 m of some sections of the alignment;

- effects from construction: the construction of the motorway has the potential to generate dust from earthworks and road construction, odour and vehicle exhaust emissions which has the potential to have an adverse effect on air quality. This effect is mitigated to an acceptable level through dust management measures detailed in the CEMP (Policy AQL6);
- effects from operation: the results of the dispersion modelling indicate that once the motorway is in use, discharges of air pollutants caused by vehicles are unlikely to cause exceedances of any NES AQ or NZAAQG at any nearby receptor (Policies AQL3 and AQL20); and
- cumulative effects: regional scale impacts on the wider airshed will be insignificant, despite a slight increase in vehicle kilometres travelled overall. This is due to improvements in traffic flow through the Project area, combined with the continuing improvements in vehicle emissions generally, as a result of better fuel efficiency and improving emission standards for vehicles (policies AQL3 and AQL20).

### 28.11.3. Water quality

Chapter 4 of the NRRP provides a framework that enables appropriate use of the region's water resources while ensuring that taking of, or discharges to water (direct or indirect) do not significantly diminish the quality of those resources. The Chapter addresses the effects of activities on surface and groundwater quality such as industrial discharges, stormwater discharges, storage of hazardous substances, point and non-point source discharges to land and irrigation.

Objective WQL1.1 is to manage the quality of water for rivers to achieve water quality outcomes stated in the NRRP. There are no rivers or lakes directly impacted by the Project. Policy WQL4 refers to minor point source discharges that may enter surface water. Technical Report 3 refers to two main scenarios for discharges to surface water from the highway drainage system:

- overflows from the Maize Maze Pond and the Ramp Pond during events greater than a 100 year ARI (or combinations of extreme groundwater and lesser rainfall events); and
- drawing down of the pond during extreme groundwater events.

Both scenarios will discharge into Montgomery's Drain and/or Upper Knights Stream. The discharges will be treated prior to discharge as outlined in the bullet points below.

The Project is considered to be consistent with the Objective WQL1.1 and Policy WQL4 of Chapter 4 of the NRRP in respect of surface water quality for the following reasons:

given that the discharges will be significantly diluted (by post-first flush runoff in the overflow scenario and potentially groundwater in the drawdown scenario) and from



the downstream end of a treatment system, the water quality standards can be met without difficulty;

- with the CEMP and discharge to land (except extreme events into Montgomery's Drain), it is not considered that there will be any adverse effects on water quality or ecosystems during construction. Over time it is anticipated that there will be a positive effect on water quality and hence instream habitat as a result;
- opportunities have also been identified along the alignment to enhance the riparian
  margins with plantings with the aim to improve water quality within the water race
  network and downstream receiving environment of some new and existing sections of
  water race. This will also reduce the risk of erosion of the banks of the races; and
- as part of the CEMP, the position of the refuelling, machinery storage and
  construction are not in close proximity to surface water bodies. As a precaution, the
  CEMP also requires contractors to have an agreed accidental spill management
  process in case an event should happen, to ensure that contractors will be able to
  minimise the impact of any event.

Objective WQL2.1 aims to maintain water quality outcomes for groundwater within certain parameter limits. In addition, Objective WQL4 is a specific objective to maintain or enhance the quality of Christchurch groundwater as far as practicable. A number of associated policies set out how the objectives will be achieved in respect of specific activities and potential effects on groundwater. Water quality of community drinking water sources is addressed by Objective WQL3. Technical Report 3 outlines a treatment train approach incorporating sheet flow across grass, water quality swales, first flush basins (where required) and controlled percolation rates (where required). The NRRP allows untreated road runoff to be disposed to land for much of the proposed alignment. Almost the entire Project will receive some treatment in the swale system prior to discharge to land (excluding some very limited kerb and channelled sections and the base of the Robinsons Road overpass).

The Project is considered to be consistent with Objective WQL2.1, WQL3, WQL4 and associated policies of Chapter 4 of the NRRP for the following reasons:

- the NRRP rules are prescriptive with regards to water quality effects. As such compliance with the rules infers adequate treatment and effects being less than minor. Soakage design on the Project is generally above the water table as per NRRP conditions ensuring that water quality objectives will easily be met for much of the alignment. Where water quality treatment is required first flush basins will be constructed with organic filter media included in the road drainage system prior to disposal. As such the discharges to land will have minor or negligible impacts on the waterway and effects on instream values and are considered to be minor (Policy WQL8);
- the existing bores and wells form an essential element in supplying water to adjacent properties. This Project has a potential to affect existing bores. To ensure that contamination of groundwater via bores is avoided it is recommended to move any shallow, close proximity wells (i.e. wells within 30 m plan distance) of disposal points and also move any wells beneath the footprint of the Project (Policy WQL8);



- hazardous substances such as diesel, petrol or oil stored in temporary construction management areas will be stored on site outside of the Christchurch Groundwater Protection Zones. It is expected that there will be less than 5000 litres on site at any one time during construction. Storage will not be within 20 m of a bore, not within a flood area or within 100 m of an active fault. Hazardous substance design, containment, management and certification are part of the CEMP. There will be no entry of hazardous contaminants to groundwater as a result of the Project (Policy WQL9);
- clean, safe drinking water is an essential requirement for human health and it is
  important to maintain the quality of this source. There are no community supply
  bores within the Project area and the protection zones identified around these bores
  are also outside the Project area and as such the potential for contamination of
  community drinking water sources will be avoided (Policy WQL13);
- the discharge of water associated with the operation of the motorway (for example general run off, washing, maintenance) will be carried out in a way that appropriately manages the quality of the discharge. The proposal design incorporates swales, soak pits and treatment ponds along the alignment to capture stormwater discharge and treat this water as it moves to ground. Policies WQL14, WQL15 and WQL19 encourage the treatment of stormwater discharge and the Project is consistent with this approach; and
- contaminant generation modelling has been undertaken for this Project, notwithstanding that general compliance with the NRRP provides evidence of acceptable effects. The distance between the level of disposal and the typical groundwater level provides treatment of any residual contaminants which may not be captured in the treatment system (Policies WQL15 and WQL19).

Overall, it is considered that the Project will be consistent with the Water Quality objectives and policies in Chapter 4 of the NRRP.

# 28.11.4. Water quantity

Chapter 5 of the NRRP deals with water quantity management topics. Of relevance to the Project are surface and ground water management and the allocation of water.

Objective WQN1 is for surface water management to enable future generations to access the region's surface water. The Project is consistent with this Objective as follows:

• flows in the stockwater race network will pass beneath the Project in siphon arrangements similar to the overland flow siphons (albeit continuously wet and of smaller diameter). Some modifications (temporary and permanent diversions, realignments and some race closures) to the network are proposed to rationalise the number of crossings but the function of the network will remain. There will be no reduction in the capacity of the race network to cope with run off in high rain events. Some of this run off is proposed to be directed to the stormwater swales, pits, ponds, and not into the races, thus retaining the capacity available in the races;



- in order to prevent sedimentation of the siphon a small diameter pipe with higher velocities is preferred. However, the proposed pipe diameters will not have sufficient capacity to pass flood flows. A second parallel pipe has been proposed to maintain the land drainage function of the races and to prevent flooding immediately upstream of the crossing points;
- water will still be available for stock drinking and sustaining the life-supporting capacity of the water, including the aquatic ecosystems. Any impact of the proposed works for the diversions and realignments will be low in the short term and neutral to positive following completion of the proposed mitigation works;
- culvert and pipe design will ensure that fish passage can be maintained through the
  new diverted sections or alternative routes will be available along other sections of
  the network. Proposed riparian planting (refer Technical Report 7 and 17) will
  enhance the available instream habitat over time. It will also maintain and enhance
  amenity values; and
- stormwater disposal to land has the potential to reduce downstream flooding due to the reduction in the area draining to the motorway drainage system. This will have a positive effect and diminish the flooding of the existing environment.

Groundwater quantity management is covered by this chapter of the NRRP. A design objective of the Project is to ensure the effective disposal of stormwater runoff whilst achieving the 1m clearance between the disposal system and the design groundwater level as specified in the NRRP (Objective WQN3, Policies WQN10 and WQN12).

Some site dewatering may be required, depending on seasonal groundwater levels, in order to construct the foundations for the road and operate the stormwater pond land drainage system. The discharges are likely to be to Montgomery's Drain, an artificial watercourse (Policy WQN12) and Upper Knights Stream. This would only be required in extreme weather events when groundwater levels were high.

At the southern end of the Project the chance of encountering high groundwater is low. Adverse effects on the groundwater disposal system due to changes in groundwater level resulting from the CPWES are avoided by the elevation of the disposal system, with the exception of the Robinsons Road overpass. Specific mitigation measures and groundwater monitoring measures are proposed at this site. Construction of the required below ground infrastructure is proposed permitting the installation of the electrical and mechanical equipment for pumping at a later date (Policy WQN12).

Piping sections of the race network could result in water savings by reducing leakage from the systems in the piped areas (Objective WQN5 Policy WQN16)

Overall, it is considered that the Project will be consistent with the Water Quantity objectives and policies.



#### 28.11.5. Beds of Lakes and Rivers

Chapter 6 of the NRRP covers the land use aspects of works within the beds of lakes and rivers. The objectives and policies in this chapter do not apply to the artificial watercourses (stockwater races) however, they apply to the activities occurring within Upper Knights Stream.

Objective BLR1 allow activities to be undertaken provided that the works protect the flood carrying capacity of the river, protect the stability of lawfully established structures and the banks of rivers, minimizing spread of pest plant species, preserve natural character, protect outstanding natural features and landscapes, protect areas of significant indigenous vegetation and habitat of indigenous fauna, promote maintenance and enhancement of amenity values, provide for the relationship of Ngai Tahu, avoid, remedy or mitigate sediment reduction to the coast, protect significant habitat of trout and salmon and protect historic heritage.

The associated Policy BLR1 outlines controls for activities within the bed of a river. This Project requires the placement of an outlet pipe within the bed of the Upper Knights Stream and the reclamation of former stream bed during the realignment of John Paterson Drive. The controls require that the activities do not restrict the passage or dynamics of water flow, cause localised scouring or erosion to the bed or banks of the river, create undesirable pest plant infestation and include planting of crack willow.

The realignment activity will take place in a location which is marked as stream on the planning maps, but where there is no stream bed evident on site, as the water has been diverted into a nearby stockwater race and the land is flat farmland. As such, the activity will not result in the restriction of water flow or cause scouring. Furthermore, controls will be in place to ensure that there is no spread of weed species during construction works.

The outlet pipe will be to a formed (but dry) streambed and will require works within 7.5 metres of the bed of the stream. The proposed works will be undertaken during dry conditions and erosion and sediment control measures will be implemented in accordance with the ESCP. Scour protection will be installed in a way that does not restrict the passage of water flow. At this location the stream is typically a dry semi-vegetated channel and it will be reinstated to this upon completion of the stream bed works.

The bed reclamation and outlet pipe will have less than minor effects on amenity, flooding, and erosion and water quality, so it is considered to be consistent with the objective and the associated policy.

# 28.11.6. Wetlands

Chapter 7 of the NRRP covers the wetland issues for Canterbury and objective, policies and rules for their management. This chapter is not relevant as there are no wetlands within or in close proximity to the Project area.



#### 28.11.7. Soil conservation

Chapter 8 of the NRRP focuses on the prevention of soil erosion that is induced or accelerated by the activities of people and/or the animals they have introduced. It also addresses soil quality, particularly with regard to accumulation of contaminants in soil.

As part of the CEMP, soil erosion and land rehabilitation practices are proposed. These include measures to minimise sediment deposition to water bodies, proposed plantings, measures to contain any sediment runoff from the Project area and other measures consistent with the NZTA and ECan sediment and erosion control guidance on these matters. It is also noted that the Project area is outside the priority areas identified for management (Policy SCN5). The Project involves discharges of stormwater containing contaminants to land. Measures are in place to manage soil contamination, including stormwater treatment and first flush basins to remove contaminants prior to disposal to land and soil monitoring will be undertaken at disposal points (Policy SCN9).

# 28.12. Proposed Land and Water Regional Plan

ECan has notified the Proposed Land and Water Regional Plan that will replace Chapters 4 to 8 of the NRRP along with embedding throughout the Plan the provisions currently found in Chapter 2. The Proposed Land and Water Regional Plan was publicly notified 11 August 2012 and submissions called.

The objectives in this Plan identify the resource management outcomes or goals for land and water resources in Canterbury region, to achieve the purpose of the RMA. The objectives form a comprehensive suite of outcomes to be attained.

The Project is considered to be consistent with these objectives firstly as the Project is assessed as infrastructure of national and regional significance, which will be to be resilient and will positively contribute to economic, cultural and social wellbeing. Furthermore, the design of the stormwater disposal system has taken into consideration the integration of land, groundwater and surface water. The stormwater disposal system has been designed so that stormwater runoff is treated prior to discharge to land via swales, soak pits and where required, first flush basins to ensure the quality of groundwater in the aquifer below is maintained. Stormwater discharge to water has been minimised through the Project design. Upon discharging into surface water the discharge will be significantly diluted as it will have been treated through stormwater detention ponds so that surface water quality and the life supporting capacity of surface water will be maintained. While dewatering will take water from an over-allocated area this is for non-consumptive purposes and will be discharged to a disposal field and returned to the aquifer. Furthermore, it has been assessed that activities within the beds or margins of rivers will have less than minor effects on the health of ecosystems, natural processes of the stream, and values of local iwi.



The PLWRP contains two forms of policies. The PLWRP first lists strategic policies, which apply to all activities. These key policies provide an overall direction for the integrated management of land and water. The strategic policies are followed by more specific policies which apply to activities. These policies are 'outcome-based' policies, identifying the outcomes sought from the management of land and water resources.

The Project is considered to be consistent with these strategic policies for the reasons outlined above. The Project is considered to be consistent with the policies associated with discharges to land and water and protection of sources of human drinking water for the following reasons:

- the discharges resulting from the Project will be the discharge of treated stormwater runoff (to land or water); the discharge of overland flow which has been diverted beneath the Project; and the discharge of site dewatering water. There will be no discharges of untreated sewage, wastewater or bio-solids; solid or hazardous waste or solid animal waste; animal effluent from an effluent storage facility or a stock holding area; organic waste or leachate from storage of organic material; and untreated industrial or trade waste (Policy 4.9);
- stormwater runoff from the Project will be treated as it flows through the grass verge and along the treatment swale, prior to soakage to land (soak pits), in addition where water quality treatment is required first flush basins will be constructed with organic filter media. Therefore, stormwater will be treated prior to discharge (Policy 4.10);
- design of the stormwater drainage systems is for the 100 year ARI event, the discharge of
  stormwater will not exceed the available water storage capacity of the soil and will not
  raise groundwater levels as soakage devices have been designed so that stormwater does
  not result in ponding for more than 48 hours (other than in the stormwater treatment
  ponds which will be specifically designed for this). In addition it will not cause inundation
  erosion or damage to property or infrastructure downstream (Policy 4.11 and 4.14);
- sources of human drinking water will be protected as there are no community supply bores or protection zones within the Project area. Furthermore, shallow bores within close proximity (i.e. wells within 30 m plan distance) of disposal points and wells beneath the Project footprint will be relocated (Policy 4.20); and
- where practicable, discharges will be to land (Policy 4.10).

The Project is considered to be consistent with the policies associated with the management of stormwater systems for the following reasons:

• the Project has been designed so that stormwater flows to discharge points and treatment areas which have been designed to capture a 100 year ARI. Furthermore, the design has taken into consideration overland flows. During the design of the Project discussions have been held with CCC and ECan where the stormwater will be to systems associated with the SWAP (Policy 4.13).



The Project is considered to be consistent with the policies associated with earthworks, land excavation and deposition of material into land over aquifers and soil stability for the following reasons:

- all stormwater run-off during construction will be managed through the CEMP and ESCP which will manage the capture and treatment of stormwater run-off prior to discharge (Policy 4.15, Policy 4.16); and
- construction works will be undertaken in a manner which minimises the exposure of soil to erosion through re-vegetation as soon as practicable (Policy 4.17).

The Project is considered to be consistent with the policies associated with hazardous substances for the following reasons:

• as part of the CEMP, the position of the refuelling, machinery storage, and construction are not in close proximity to sensitive receiving bodies (surface water bodies). As a precaution, the CEMP also requires contractors to have an agreed accidental spill management process in case an event should happen, to ensure that contractors will be able to minimise the impact of any event. It is expected that less than 5,000 L will be stored on site and storage will not be located within 20 m of a bore, not within a flood area or within 100 m of an active fault. As a precaution, the CEMP also requires contractors to have an agreed accidental spill management process in case an event should happen, to ensure that contractors will be able to minimise the impact of any event (Policy 4.22).

The Project is considered to be consistent with the policies associated with the damming and diversion of water bodies for the following reason:

• the Project will not involve the diversion of water within the beds of lakes, rivers or wetlands, however it will require the diversion of water within artificial watercourses used for the storage of water (stockwater races). There will be temporary or permanent small scale diversions for the purpose of establishing infrastructure (highway). The diversions will appropriately manage fish passage and floodwaters (Policy 4.45).

The Project is considered to be consistent with the policies associated with abstraction of water, in particular site de-watering for the following reasons:

- the Project may involve the intermittent pumping of groundwater at Robinsons Road, this
  will be pumped to an adjacent stockwater race. This is a water take for a nonconsumptive use and the water will be returned to the same water catchment when
  groundwater levels are high and it will be protected from contamination (Policy 4.55);
- the use and construction of bores and water infiltration galleries associated with the
   Project will not result in the contamination of surface water or groundwater (Policy 4.56);



- the direct cumulative interference effect from the new groundwater takes on existing groundwater takes will be minimised by relocation of existing water takes (where necessary) and drawdown within 2 km radius will not be more than 20% (Policy 4.58); and
- it is not expected that significant de-watering will be required during the construction of the Project which has been designed at grade. There may be intermittent pumping at Robinsons Road however, it is not expected that this will cause localised subsidence or lowering of groundwater levels (Policy 4.65).

The Project is considered to be consistent with the policy associated with groundwater quality and quantity in the Christchurch Groundwater Protection Zone in the Christchurch-West Melton Subregional area (Policy 9.4.1) for the following reasons:

- a consumptive abstraction of groundwater is not proposed;
- the best practicable option will be used for the treatment and disposal of stormwater where it may enter groundwater, which will include first flush basins above the Christchurch Groundwater Protection zone.;
- hazardous substances will not be stored above the Christchurch Groundwater Protection zone; and
- where practicable, excavation will be undertaken in a way which maintains at least 1 m
  between the base of excavation and the aquifer, and where this is not possible (it is
  reduced) measures will be implemented to mitigate the risk of contaminants from land
  uses entering groundwater (such as lining ponds). In addition, a management plan will be
  in place as part of the CEMP to manage the effects of accidentally penetrating the
  confined layer.

The Project is considered to be consistent with the policies associated with the activities in the beds of lakes and rivers for the following reasons:

- The works will not take place in an area of recognised significant indigenous biodiversity
  or cultural significance and will not preclude any existing lawful access to the bed of the
  river (Policy 4.84);
- Controls will be in place to ensure that there is no spread of weed species during construction works (Policy 4.85);
- The earthworks and placement of the pipe outlet will not occur in flowing or standing water as the riverbed is notionally dry and the works will be undertaken in dry conditions with erosion and sediment control measures in place (Policy 4.86); and
- The activities will be undertaken in a manner which does not restrict flood flows and scour protection will be installed so that there is no exacerbation of the beds or banks of the stream (Policy 4.87).



#### 28.13. Selwyn District Plan

The list of considerations for Notices of Requirement, as set out in Section 171 of the RMA, include, amongst other things, having particular regard to any relevant provisions of a district plan or proposed plan. All of the Main South Road four-laning and part of the new CSM2 alignment from Main South Road to Marshs Road is located within the Selwyn District. Therefore, the NoRs (NoR1 for the alteration of designation TR1 and NoR2 for the new designation) relate to land managed under the provisions of the Selwyn District Plan (SDP). Plan notations and existing designations were identified in Chapter 6.

### 28.13.1. Zoning

From Park Lane, Rolleston the SDP zoning of the land subject to the NoRs is Inner Plains (Rural) until the territorial authority boundary at Marshs Road. The properties fronting Park Lane have Living 1 zoning of the properties fronting Park Lane Rolleston, near the southern end of the Project alignment. Other relevant notations and designations were outlined in Chapter 6 of this AEE.

The proposed alignment is also located within the Christchurch International Airport noise contours noted on the Selwyn District Plan maps. Noise contours discourage noise sensitive development from occurring in these areas. The Project is not a noise sensitive development.

# 28.13.2. Assessment of objectives and policies

The "relevant provisions" of the SDP are matters to which particular regard is to be given when considering the NoR, and the land use consent application being sought under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011.

The SDP provides a framework to promote sustainable management of the Selwyn District's land resources with specific methods developed to address the significant resource management issues the community has identified.

There are a number of objectives and policies contained in the Rural section of the SDP which are relevant to the Project. These are identified in Technical Report 20 and are assessed below. In addition, where operative or proposed plan changes are of relevance to the Project they are also assessed below.

• Land and soil: Objectives and policies of the Rural volume of the SDP seek to ensure activities do not create unstable land or locate activities on unstable land (Rural Objective B1.1.2, Policy B1.1.5). They also seek to address adverse effects on people through exposure to contaminated land and encouraging management of these sites so that effects on people's health or the environment are avoided (Rural Objective B1.1.2 and Policies B1.1.1, B1.1.2 and B1.1.3). Furthermore, they seek to avoid, remedy or mitigate adverse effects on soil resources and to encourage residential



development around existing townships (Objective B1.1.1 and Policy B1.1.8). The Project has been designed to mitigate against the risk of seismicity and liquefaction as well as being designed to accommodate the 100 year ARI rainfall event (including an allowance for climate change). In addition, HAIL sites in the vicinity of the Project area have been tested for contamination, with no site exceeding background health standards. Management of any undiscovered contaminated land will occur through the implementation of the CEMP. This Project will remove an area of productive soils in the long term, but has minimised the amount of land required, and there is no practicable non-versatile land alternative available on which to site the Project. Further, the Project has identified significant benefits, including to the local and regional economy;

- Water: The rural volume contains relevant objectives and policies seeking to minimise any potential risk of adverse effects on water quality (surface water and ground water) from earthworks, structures and hazardous substances in close proximity to water bodies, or activities on land which may result in surface run-off of contaminants or leaching of contaminants into groundwater (Rural Objective B1.3.6 and Policy B1.3.4). As outlined above in respect of similar objectives and policies in the RPS and NRRP, the design and mitigation measures will seek to ensure any construction or operational effects on water quality (in stockwater races and groundwater) are mitigated;
- *Ecosystems:* The rural volume contains objectives and policies recognising and protecting areas of significant indigenous vegetation, significant habitats of indigenous fauna and indigenous biodiversity by avoiding, remedying or mitigating adverse effects (Rural Objective B1.2.4 and Policy B1.2.6). It has been assessed that effects on indigenous vegetation and habitats on indigenous fauna will be no more than minor with proposed mitigation measures in place;
- Transport networks: The rural volume of the SDP contains objectives and policies to manage adverse effects of land transport networks, including constructing and maintaining roads, effects on natural or physical resources and effects on amenity values (Rural Objective B2.1.2 and Policy B2.1.14). Policy B2.1.3 of this volume seeks to manage roads classified as Strategic Roads in Appendix 9. This includes the Main South Road. The adverse effects associated with the Project can be avoided or mitigated. Plan Change 12 to the SDP amends these objectives and policies to provide for a more sustainable land transport system, better urban form and to cater for future transport networks. The plan change aims to allow for a variety of living environments to be created and integrated design of transport and land development. The Project is consistent with PC12 as an integrated approach to transport planning has been undertaken to enable the safe and efficient transport of people and goods while managing adverse effects;
- Natural hazards: The relevant objectives and policies seek to ensure activities do not cause or exacerbate the effects of natural hazards with the associated policies requiring the mitigation of risks if activities are located in vulnerable areas (Rural Objective B3.1.1 and Policies B3.2.1, B3.1.5, and B3.1.8). As discussed above, the Project has been designed to minimise risks associated with seismicity, liquefaction and flooding. It has been assessed that due to design and stormwater mitigation



measures, the Project is unlikely to lead to or intensify the effects of these natural hazards;

- Hazardous substances: The objectives and policies associated with hazardous substances seek to ensure that adequate measures will be taken to avoid, remedy or mitigate any adverse effects to human health, to amenity of townships, the rural environment and to the natural environment arising from the manufacture, storage, transport and disposal of hazardous substances (Rural Objectives B3.2.1 and B3.2.2). Rural Policy B3.2.1(b) seeks to ensure hazardous substances are used and stored under conditions which reduce the risk of any leaks or spills contaminating land or water. Hazardous substances stored temporarily during the construction works will be managed in such a way as to prevent their unintended release and associated environmental effects and these measures will be addressed in the CEMP;
- Culture and historic heritage: Objectives in the rural volume seek to protect sites of
  wahi tapu, wahi taonga, mahinga kai and other sites importance to tangata whenua
  (Rural Objective B3.3.1). In addition, they seek to recognise and value protection of
  sites and buildings with heritage values (Rural Objective B3.3.2 and Policy B3.3.9). It
  has been assessed that there are no sites of heritage value which will be affected by
  the proposed works. In addition, no significant values have been raised regarding the
  cultural heritage values of the Project area; and
- Quality of the environment: The objectives and policies allow for a variety of activities in the rural environment while maintaining the character and amenity values of the zone, and seek to manage effects such as noise, glare, dust, vibration and traffic (Rural Objective B3.4.1 and Policies B3.4.9, B3.4.11, B3.4.13 and B3.4.14. The CEMP outlines methods in which nuisance effects such as noise, dust, vibration will be managed during construction of the Project. Once operational it has been assessed that the effects of noise, lighting and traffic will be minimal or can be mitigated. In the rural volume, Objective 3.4.2 is to recognise the rural zone as an area where a variety of activities occur but where environmental standards should be maintained. In this respect the policies seek to avoid, remedy or mitigate significant adverse effects of activities on the amenity values of the rural area and new development is sensitive to surrounding properties (Policy B3.4.1 and B3.4.3). With respect to rural amenity, the landscape and visual assessment concludes that although effects on amenity values may be moderate, the proposed mitigation measures will ensure effects are 'acceptable' within the overall scale of the Project.

Overall, it is considered that the Project will be consistent with the objectives and the policies of the SDP.

#### 28.14. Christchurch City Plan

The part of the Project from Marshs Road through to CSM1 is within Christchurch City. The boundary between CCC and SDC lies along Marshs Road. Therefore, NoR3 relates to land managed under the provisions of the Christchurch City Plan ("CCP"). Plan notations and existing designations were identified in Chapter 6 of this AEE.



#### 28.14.1. Zoning

The zoning in the CCP, from the south-eastern end of the proposed alignment towards the northeast, is Rural 2 (Templeton - Halswell), Business 5 (General Industrial), Rural 2 (Templeton -Halswell) and Business 7 (Wilmers Road – subject to special provisions) to the connection with CSM1.

# 28.14.2. Assessment of objectives and policies

The "relevant provisions" of the CCP are matters to which particular regard is to be given when considering the NoR, and the land use consent application being sought under the Soil NES.

The CCP provides a framework to promote sustainable management of Christchurch City's land resources, with specific methods developed to address the significant resource management issues the community has identified.

There are a number of objectives and policies contained in the CCP which are relevant to the Project. These are identified in Technical Report 20 and are assessed below. In addition, where operative or proposed plan changes are of relevance to the Project they are also assessed below.

- Land and soil: Objective 2.1 is to maintain and enhance land and soils and the ecosystems they contain with policies protecting versatile soils and avoiding degradation of their value including through the management of hazardous substances (Policies 2.1.1 and 2.1.3). The Project will foreclose some future land use options that may have benefited from being located on this land, as it will take land which might otherwise be used for farming purposes. However, the Project will contribute to the purpose of the RMA by managing development in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety. Furthermore, the area to be taken for roading within the rural zone is only a length of approximately 1.5 km from Marshs Road to Halswell Junction Road, with a proportion of this set to be rezoned through PC54. The CEMP will contain measures to avoid, and where required remedy effects from the storage of hazardous substances;
- Water: Objective 2.2 is the maintenance and enhancement of the quality and availability of water while the underlying policies (Policy 2.2.1, 2.2.3 and 2.2.4) manage effects of land use activities and stormwater disposal on groundwater quality, flooding, surface water quality and aquatic habitats. The assessment of adverse effects on water quality arising from the Project concluded that the effects would be appropriately avoided, remedied or mitigated so that they will be no more than minor;
- Air: Objective 2.3 is the improvement of air quality standards over the city where influenced by location and nature of land use activities, with Policy 2.3.1 managing transport emissions. The air quality assessment concludes that discharges of air pollutants caused by vehicles using the Project are unlikely to cause more than minor adverse impacts on human health or the environment in the surrounding area;



- Natural features and habitats: Objective 2.4 is the protection and enhancement of key areas of the City's natural environment with policies 2.4.4 and 2.4.6 seeking to conserve biological diversity and promoting environmental enhancement. The terrestrial and aquatic ecology assessment concludes that with minimal indigenous vegetation or habitat for commonly occurring indigenous fauna it is considered that any associated effects would be no more than minor with mitigation measures and with design landscaping in place would provide an enhancement. In addition, the Project integrates landscaping with ecological enhancement through plantings along the motorway margins;
- Natural hazards: Objective 2.5 is to avoid or mitigate the actual or potential adverse
  effects from natural hazards with policies 2.5.1 and 2.5.2 limiting scale and density of
  development in areas subject to risk. The design of the Project requires the
  management of risks associated with seismicity, liquefaction and flooding to ensure
  that where possible, the risk is designed out. With this design approach in mind and
  mitigation measures in place to manage flooding, the natural hazard risks, the Project
  will be consistent with the Objective and the associated policies;
- Amenity: This chapter contains Objective 4.2 to manage amenity values to achieve a pleasant and attractive city environment with policies relating to managing adverse effects associated with noise, hazardous substances, airborne contamination and glare (Policies 4.2.9, 4.2.12, 4.2.13 and 4.2.14). The CEMP will ensure that any adverse effects associated with noise, lighting, hazardous substances and dust will be appropriately managed during construction of the Project so that effects are no more than minor. In addition, the lighting assessment concluded that glare for residents would be minimal as road lighting will be carried out to the requirements of Standard AS/NZS 1158. Furthermore, sky glow effects were assessed as negligible. Operational noise levels were assessed and will be appropriately mitigated to ensure effects are no more than minor, and will generally be less than minor. Significant noise effects can be avoided, remedied or mitigated by utilising the best practicable option approach, through the use of low noise road surfacing and acoustic fences, and the achievement of compliance with the relevant criteria of NZS 6806:2010;
- Heritage protection: Objective 4.3 requires the conservation of heritage items and values with policies requiring identification of heritage items (Policy 4.3.1) and sites of significance to tangata whenua (policy 4.3.2) and avoiding, remedying or mitigating any adverse effects on their values. The heritage assessment concludes that there are no known archaeological sites or built heritage items in the Project area. As the area has been used in the past by Europeans and Maori accidental discovery protocols will be in place during the works;
- Tangata Whenua: Objective 5.1 is to recognise the importance of the relationship of Maori, their culture and traditions with ancestral lands, waters, sites and other taonga. The associated policy 5.1.4 addresses water and places of special significance and avoiding, remedying or mitigating adverse effects upon their values. Iwi consultation has been undertaken during investigation of the Project and a CIA is being undertaken. In addition, as it has been assessed that the area has been occupied by Maori in the past, accidental discovery protocols will be established to address circumstances pertaining to protection of sites discovered during the course of the construction works;



- Sustainable transport system: Objective 7.1 is to provide an efficient, safe and sustainable transport system with policies 7.1.2, 7.1.3, 7.1.7 and 7.1.8 seeking to remedy, mitigate or avoid adverse effects of its use and promoting integration of transport and land use planning while taking into consideration amenity values of the area. The Project will enable greater connectivity, increased road safety and a more reliable and resilient transport network improving land use integration in the Project area. Mitigation measures will be implemented to ensure adverse effects are avoided or mitigated including effects on amenity values;
- *Road network*: Objective 7.2 is an efficient and effective road network taking into account roading hierarchy, environmental impacts as well as economic benefits while encouraging public participation in planning for roading improvements (Policies 7.2.1, 7.2.4 and 7.2.6). The Project will form part of the roading hierarchy and its benefits include improving economic growth and productivity. In addition, consultation has taken place with the public regarding the alignment and design of the Project and adverse effects on the environment will be avoided or mitigated;
- *Transport safety*: Objective 7.7 is to maintain and improve transport safety throughout the City with policies focusing on traffic improvements. The Project will improve safety in areas where high crash rates have been recorded as well as improve access for emergency services;
- Access to City: Objective 7.8 is recognition of the need for regional, national, and international links with the City and provision for those links including the importance of high quality transport links between road, rail, port and airport facilities (Policy 7.8.5). The Project will provide an important link to the city CBD as well as improve access to the Christchurch International Airport, and Lyttelton Port; and
- Rural amenity values: Objective 13.4 is to maintain rural amenity values and control adverse effects with policies addressing activities in rural areas so they do not give rise to adverse effects without mitigation (Policies 13.4.2 and 13.4.3). The visual and landscape assessment concludes that although effects on amenity values may be moderate, the proposed mitigation measures will ensure effects are 'acceptable' within the overall scale of the Project.

Overall, it is considered that the Project will be consistent with the relevant objectives and the associated policies of the CCP.

## 28.15. Other relevant matters

Other relevant documents in terms of section 104(1)(c) and 171(1)(d) include both statutory documents (for example, those required to be prepared under other legislation such as the Land Transport Management Act 2003 or Conservation Act 1987) and those non-statutory documents that, whilst not having a regulatory function under the RMA, have been through a public process and/or are important policy documents that set national or regional direction on key resource or environmental matters. Those identified as having some relevance to the Project are as follows:

- Land Transport Management Act 2003;
- Canterbury Earthquake Recovery Act 2011;



- Connecting New Zealand;
- Government Policy Statement on Land Transport Funding;
- National Infrastructure Plan 2011;
- National State Highway Strategy 2007;
- Canterbury Regional Land Transport Strategy 2012-2042;
- Canterbury Regional Land Transport Programme;
- Draft Christchurch Transport Plan 2012-2042;
- NZTA Environmental Plan 2008;
- New Zealand Cycling and Walking Strategy Getting there On Foot By Cycle 2005;
- Proposed NPS on Indigenous Biodiversity;
- Wildlife Act 1953;
- New Zealand Urban Design Protocol 2005;
- Greater Christchurch Urban Development Strategy 2007;
- South-West Christchurch Area Plan 2009;
- Selwyn District Council Water Race Bylaw 2008; and
- The Future of Prebbleton, Prebbleton Structure Plan 2010.

### 28.15.1. Land Transport Management Act 2003

The LTMA is the main statute for New Zealand's land transport planning and funding system. The purpose of the LTMA is to contribute to the aim of achieving an affordable, integrated, safe, responsive and sustainable land transport system. It also sets out five key transport objectives:

- assisting economic development (improving trip reliability and reducing journey times on critical routes);
- assisting safety and personal security (reducing deaths and serious injuries as a result of road crashes);
- improving access and mobility (increasing mode share of public transport, walking and cycling and other active modes);
- protecting and promoting public health (reducing the number of people exposed to health endangering levels of noise and air pollution); and
- ensuring environmental sustainability (reducing the use of non-renewable resources and carbon emissions).

The Project will be generally consistent with all these objectives for the following reasons:

- it will assist economic growth and productivity by improving access to Christchurch City, Christchurch International Airport and the Lyttelton Port;
- it is anticipated that there will be a reduction in road crashes and a significant improvement in overall traffic safety through reduction in through traffic on some local roads, designing a new route and improving access for emergency services;



- it is predicted to significantly improve journey times around the Region and improve journey time reliability;
- it will not preclude opportunities for improved development of public transport, and provides some new opportunities for recreational walking, cycling and riding; and
- noise effects will be appropriately avoided or mitigated. Properties potentially
  exposed to higher levels of noise than anticipated under the relevant standard will be
  protected by noise mitigation measures, including noise barriers.

However, the Project is likely to increase the use of non-renewable resources and carbon emissions.

### 28.15.2. Canterbury Earthquake Recovery Act 2011 (CER Act)

The purpose of the CER Act is outlined in Technical Report 20. The CER Act requires that the Minister prepare a Recovery Strategy (section 11(1) of the CER Act). While the Project is not specifically a recovery project in response to the Canterbury earthquakes, it is timely in its contribution to recovery, particularly in facilitating strategic transport connections for the changed settlement patterns.

## 28.15.3. Connecting New Zealand

Connecting New Zealand is the primary long-term government transport strategy. It was issued by the current Government in 2011 as a current summary of the Government's intentions for the entire transport sector.

Connecting New Zealand is a non-statutory document but establishes the context for developing the GPS on land transport funding. Connecting New Zealand sets out the direction for the transport sector for the 10 year period to 2021. It is based around the Government's three key themes of economic growth and productivity, value for money and road safety. It confirms as a key action, the completion of the current RoNS programme.

The Project will upgrade part of the Christchurch Motorways RoNS so is consistent with Connecting New Zealand as it will assist with the completion of the RoNS programme.

# 28.15.4. Government Policy Statement on Land Transport Funding

The Government Policy Statement on Land Transport Funding (GPS) was outlined in detail in Chapter 2. The NZTA must ensure that the National Land Transport Programme gives effect to the GPS and must take into account the GPS when deciding whether or not to approve activities for funding from the national land transport fund. Regional transport committees preparing a Regional Land Transport Strategy must take into account the GPS and Regional Land Transport Programmes must be consistent with the GPS.



The GPS identifies and recognises the RoNS as New Zealand's most essential routes, and that they require significant development in order to reduce congestion, improve safety and support economic growth. The purpose of listing roads as nationally significant in the GPS is to ensure that they are taken fully into account when the NZTA develops the National Land Transport Programme.

This Project will upgrade part of the Christchurch Motorways RoNS, which is considered an essential route, so it is consistent with the GPS.

### 28.15.5. National Infrastructure Plan 2011 (NIP)

The NIP was outlined in Chapter 2 and further detailed in Technical Report 20. A transport chapter is contained within the NIP. The chapter assesses the current situation, current work programme and key issues for transport infrastructure. The vision for transport is outlined as "a transport sector that supports economic growth by achieving efficient and safe movement of freight and people".

The relevant goals for transport are as follows:

- maximising the potential synergies between regional planning and central government strategies;
- a flexible and resilient transport system offering greater accessibility that can respond to changing patterns in demand;
- a network of priority roads to improve journey time and reliability, and ease severe congestion, boosting the growth potential of key economic areas and improving transport efficiency, road safety and access to markets; and
- a continued reduction in the number of accidents, deaths and serious injuries that occur on the network.

The Project is consistent with all of these goals, as highlighted by the benefits of the Project, as summarised in Chapter 2.

## 28.15.6. National State Highway Strategy 2007

The National State Highway Strategy (NSHS) sets out how the NZTA will develop and manage the State Highway as an integral part of a multimodal transport system over the next 30 years. It provides a link between the NZTS, the Land Transport Management Act 2003 (and other legislation) and the NZTA's plans and policies. The goals of the strategy are to:

- ensure State highway corridors make the optimum contribution to an integrated multimodal land transport system;
- provide safe State highway corridors for all users and affected communities;
- ensure State highways enable improved and more reliable access and mobility for people and freight;



- improve the contribution of State highways to economic development; and
- improve the contribution of State highways to the environmental and social wellbeing of New Zealand, including energy efficiency and public health.

The Project is consistent with these goals for the same reasons outlined in section 28.15.1.

### 28.15.7. Canterbury Regional Land Transport Strategy 2012-2042

The vision of the RLTS is that "Canterbury has an accessible, affordable, integrated, safe, resilient and sustainable transport system."

The vision is supported by objectives to:

- ensure a resilient, environmentally sustainable and integrated transport system;
- increase transport safety for all users;
- protect and promote public health;
- assist economic development; and
- improve levels of accessibility for all.

The Project will be consistent with all these objectives as per the stated benefits of the Project in section 28.8.6.

## 28.15.8. Canterbury Regional Land Transport Programme

The RLTP includes the design of the Project as one of the approved activities that will not be fully completed prior to 1 July 2012. It also lists the Project as one of the regionally significant activities that are expected to commence in the three years following the term of this RLTP i.e. 2015 to 2018.

# 28.15.9. Draft Christchurch Transport Plan 2012-2042

The Draft Christchurch Transport Plan (DCTP) was released by the CCC in July 2012 for public consultation. It details the transport actions for Christchurch City over the next 30 years. The DCTP seeks improvements to the strategic road and freight network and confirms that new infrastructure is essential, particularly the upgrading road infrastructure, including some longawaited improvements to key strategic routes. The DCTP notes that these road improvements are reflected in the NZTA's RoNS programme.

The Project is consistent with the DCTP as it will contribute to improvements to the road and freight network, as outlined in the Project benefits in Chapter 2 (Section 2.2) and as discussed in Chapter 11. Furthermore, the Project is one of the roading improvements outlined in the RoNS programme.



#### 28.15.10. NZTA Environmental Plan 2008

The NZTA Environmental Plan outlines the NZTA's environmental policies and provides guidance on a wide range of environmental considerations including:

- noise (operation and construction);
- air quality;
- water management (runoff, stormwater, use);
- erosion and sediment control;
- social responsibility;
- cultural and heritage;
- ecological;
- spill response and contamination;
- resource efficiency;
- climate change;
- visual quality; and
- vibration.

The Project is consistent with these policies. In particular, they have influenced and shaped the proposed alignment and Project design, and have also informed relevant technical assessments, such as the Assessments of Operational Noise and Construction Noise and Vibration (Technical Reports 8 and 9), the Assessment of Air Quality Effects (Technical Report 10), Aquatic and Terrestrial Ecological Assessments (Technical Reports 17 and 18), the Assessment of Landscape and Visual Effects (Technical Report 4), the Social Impact Assessment (Technical Report 13), the Assessment of Archaeological Effects (Technical Report 12), the Assessment of Stormwater Disposal and Water Quality Environmental Effects (Technical report 3) and the Cultural Impact Assessment (Technical Report 15).

# 28.15.11. New Zealand Cycling and Walking Strategy – Getting there On Foot By Cycle 2005

The New Zealand Cycling and Walking Strategy sets out a strategy to advance walking and cycling in New Zealand transport. It is a high level strategic document with a vision of "A New Zealand where people from all sectors of the community walk and cycle for transport and enjoyment". This vision is supported by the following goals:

- community environments and transport systems that support walking and cycling;
- more people choosing to walk and cycle, more often; and
- improved safety for pedestrians and cyclists.

The integration of cycling and walking opportunities into the Project was a consideration throughout the initial investigations, the alternative route assessment and also the Project design



process. However, if the Project becomes a motorway, cyclists and pedestrians will not be able to use the road.

Cycling and walking connectivity will be significantly enhanced by the Project. Provisions have been included in the proposal in the connections and bridges. All underpasses will provide access and connectivity for walkers and cyclists on the bridges. This is discussed further in Chapter 4 (Description of the Project).

A complementary shared use pedestrian/cycle route is proposed to follow part of the CSM2 alignment to link the Little River Rail Trail with the CSM1 cycle way at Marshs Road. Cyclists will have a choice of heading into Hornby or along CSM1 cycleway to southern Christchurch.

## 28.15.12. Proposed National Policy Statement on Indigenous Biodiversity

The proposed NPS on Indigenous Biodiversity is intended to provide clearer direction to local authorities on their responsibilities for managing and enhancing indigenous biodiversity under the RMA. The proposed NPS, which does not apply to public conservation land, contains a list of criteria to identify areas of indigenous vegetation and habitats of indigenous animals that are considered to be rare and/or threatened at a national level. Under the proposed NPS, local authorities would be required to identify significant areas of biodiversity within five years after it takes effect. It would also require a "no net loss" approach to be applied to resource consents.

Although the NPS is not yet gazetted it provides guidance on possible national direction. Regardless, the effects of the Project on indigenous biodiversity have been given regard to in the selection of the proposed Project alignment and design and in developing appropriate measures to avoid, remedy and mitigate adverse ecological effects arising from the Project. Chapter 20 and Technical Reports 17 and 18 conclude that there is no significant naturally occurring indigenous vegetation and no natural waterways within the Project area. With the exotic nature of the surrounding farmland, similarity of nearby habitats and the wide tolerance of and adaptability of affected indigenous freshwater bird, lizard and invertebrate species, the effect of vegetation removal on indigenous fauna arising from the loss of those habitats is considered to be no more than minor. In addition, the design includes measures to provide for fish passage and manage effects on lizards. It is considered the Project is consistent with the intent of the proposed NPS.

### 28.15.13. Wildlife Act 1953

The Wildlife Act deals with the protection and control of wild animals and birds and the management of game. Permits are necessary to deal with certain wildlife. Most species of wildlife (including mammals, birds, reptiles and amphibians), native or introduced, are absolutely protected under the Act. No-one may kill or have in their possession any such bird or animal, unless they have a permit.

All native lizard species are protected by the Wildlife Act 1953. Lizards cannot be disturbed, injured or killed without a Wildlife Permit from the Department of Conservation. A wildlife permit



will need to be obtained from the Department of Conservation to disturb (capture and relocate) lizards and for any unintentional killing or injury of lizards as a result of the earthworks associated with construction of the Project.

## 28.15.14. New Zealand Urban Design Protocol 2005

The New Zealand Urban Design Protocol (the Protocol) provides a platform to make New Zealand towns and cities more successful through quality urban design. The Protocol is a voluntary commitment by central and local government, property developers and investors, design professionals, educational institutes and other groups to promote better design and to undertake specific urban design initiatives. The NZTA is a signatory to the Protocol.

Consistent with the intent of the Protocol, an Urban and Landscape Design Framework (ULDF) has been developed for the Project. The ULDF has helped to inform the nature and extent of investigations into the urban and landscape design matters relating to the Project, and also sets out the underlying design principles to guide Project development and implementation.

### 28.15.15. Greater Christchurch Urban Development Strategy 2007 (UDS)

The UDS was outlined in Chapter 2. Transport is one of the key aspects underpinning the UDS, and it highlights the importance of integrating land use development with the transport system.

The 'Key Approaches' section of the UDS (Section 6.21) includes a number of goals to secure the Transport Vision. These include:

- the principles of sustainability, integration, safety, responsiveness and targeted investment underpin all activities in the transport system;
- protect and secure the future strategic transport corridors for the continued efficient operation of road and rail transport;
- develop and manage key inter and intra-regional corridors to manage the transport network;
- provide transport infrastructure and services to ensure a multi-modal transport system that enable a range of transport mode choices; and
- develop transport modes based on their ability to meet functional objectives to meet levels of demand and travel patterns in an affordable and sustainable manner.

The city centre, Lyttelton Port and Christchurch International Airport are noted as key economic hubs for the region and it is outlined that there is a need to provide efficient transport access to these destinations. Lyttelton Port and Christchurch International Airport are also cited as key import and export hubs for the area, region and the South Island. There is a need to ensure that efficient transport access to, from and between these two facilities is maintained and enhanced through improved road and rail networks. The Project is essential transport infrastructure to facilitate this development. One means of implementing the UDS is through Proposed Change 1 (PC1) to the RPS. Also important is that CRETS was developed concurrently with the UDS showing



a strong integration between strategic land use planning and transport planning for South west Christchurch and towards Rolleston.

### 28.15.16. South-West Christchurch Area Plan 2009

The SWAP was outlined in Chapter 2. The SWAP establishes the following vision for the area:

"South-West Christchurch is a unique and prosperous environment, where nature and people interact and thrive".

The SWAP sets out goals and objectives to meet this vision and in so doing, integrates land-use planning with key infrastructure projects, such as the major sewer upgrade, strategic roading projects and community facilities.

Goal 11 seeks to provide a transportation system that gives priority to active and energy-efficient ways of travel and minimises its effects on the environment. Objective 11.1 is to:

- establish direct connections between business centres, neighbourhoods and major public open spaces; and
- provide a legible and connected road hierarchy that supports the movement of people and goods within and across the area.

The Project will be consistent with the direction of this objective and supports the vision of the SWAP as assessed in Chapters 11, 14 and 26 of the AEE.

## 28.15.17. Selwyn District Council Water Race Bylaw 2008

The activities governed by the Selwyn District Council Water Race Bylaw (the Bylaw) include the taking, use, damming and diversion of water. This Bylaw applies throughout the Selwyn District and includes properties that are rated for stockwater outside of the Selwyn District boundary. This is relevant to the Project as it involves diversion of stockwater races. The Project will be undertaken in accordance with the requirements of the Bylaw.

# 28.15.18. Prebbleton Structure Plan

The purpose of the Prebbleton Structure Plan is to provide a framework for coordinating development and other changes in Prebbleton in order to achieve a high standard of planning and urban design. It guides the preparation of outline development plans, the processing of resource consents and review of the Selwyn District Plan. The Structure Plan acknowledges the proposed CSM2 in the vicinity of Prebbleton and identifies a potential issue being a reduction in the rural-urban 'gap' which provides the sense of leaving Christchurch City and arriving in Prebbleton.

The CSM2 alignment is located in the 'rural gap' on the Shands Road and Springs Road routes into Prebbleton. The two overbridges will be the most visible elements of CSM2 in the rural vicinity of Prebbleton. The landscape design includes extensive planting along the southern edge of CSM2



and the abutments to the Shands Road overbridge to maintain the parkway concept. This will also maintain the rural amenity. The assessment of effects on urban design has considered the issue identified in the Prebbleton Structure Plan.

# 28.16. Assessment of Section 105 RMA matters

As some of the resource consent applications relating to the Project are for permits to discharge contaminants onto land where it may enter water, section 105 of the RMA is therefore relevant. The assessment is provided in Table 42.

Table 42: Section 105 assessment

Section 105(1)	Comments
Nature of the discharge and sensitivity of the receiving environment to adverse effects	Construction of the Project involves a high volume of earthworks, with the resultant effect being that stormwater discharge will contain higher levels of sediment than normal during the construction period and will potentially increase the volume of sediment run-off.
	A detailed description of these receiving environments and the nature of the corresponding discharges proposed are included in Part G and relevant Technical Reports, in Volume 3 of the AEE.
The applicant's reasons for the proposed choice	The design process to date has, as far as practicable, avoided creating adverse effects on sensitive receiving environments.



Section 105(1)	Comments
Any possible alternative methods of discharge, including discharge into any other receiving environment	In circumstances where this has not been achievable the best practicable option is to be employed to remedy, mitigate or offset any actual and potential effects on these areas as no other feasible alternative method of discharge is available.
	The selection of a best practicable option will be informed by the following principles regarding the control of erosion and sediment:
	<ul> <li>control of stormwater and isolating runoff from the stockwater network;</li> </ul>
	separating clean from dirty water;
	<ul> <li>protecting adjacent landowners from surface flows;</li> </ul>
	<ul> <li>minimise sediment leaving the site; and</li> </ul>
	disposal to land.
	The construction of the Project will involve all discharge being appropriately managed to ensure that any effects on surface water or groundwater receiving environments are negligible to minor.
	These effects and their associated mitigation measures are discussed in detail in the relevant Technical Reports in Volume 3, Part G of this AEE and the preceding sections of this chapter in relation to statutory provisions.

# 28.17. Conclusion

The Project is consistent or not inconsistent with the relevant statutory planning documents, particularly when the benefits of the proposal are considered alongside the proposed measures to avoid, remedy and mitigate any actual or potential adverse effects, which are set out in Chapter 27 of the AEE. Furthermore, the Project meets the tests outlined in Section 105 of the RMA.