





Christchurch Southern Motorway Stage 2 and Main South Road Four Laning

**Assessment of Environmental Effects** 



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Quality Assurance Statement					
GHD III Beca	Prepared by:	Mary O'Callahan, Stewart McKenzie, Katie Crosbie, Kimberley Rolton, Melissa Anthony, Irene Clarke, Dana Bambery			
	Reviewed by:	Lindsay Daysh, Incite Andrea Rickard, Beca Chris Gregory, GHD Ltd			
	Legal Counsel for the NZTA	Jo Appleyard, Chapman Tripp			
	Approved by:	Gary Payne, GHD Ltd	November 2012		

## With additional technical reviews by:

Technical area	Technical Reviewer
Traffic and transport	Mark Weeds
Urban form and development	Kevin Brewer
Landscape and visual	Tony Milne
Lighting	Steve Muir
Noise and vibration	Jon Farren
Air quality	Camilla Borger
Water	Tony Miller
Terrestrial and freshwater ecology	Melissa Anthony
Natural Hazards	Peter Forrest and Tony Miller
Contamination	Wijnand Udema
Cultural impacts	Anthony Olsen
Archaeology and built heritage	Katharine Watson
Economic	Geoff Butcher
Social	Nick Taylor

# **Table of Contents**

PART A	A: INTRODUCTION AND BACKGROUND TO THE PROJECT	1
1.	INTRODUCTION	1
2.	STRATEGIC CONTEXT TO THE PROJECT	11
PART B	: DESCRIPTION OF THE ENVIRONMENT	30
3.	EXISTING ENVIRONMENT	30
PART C	: DESCRIPTION OF THE PROJECT	57
4.	PROJECT DESCRIPTION	57
5.	CONSTRUCTION OF THE PROJECT	93
PART D	D: STATUTORY CONTEXT	118
6.	STATUTORY CONTEXT	118
PART E	: CONSIDERATION OF ALTERNATIVES	175
7.	CONSIDERATION OF ALTERNATIVES	175
PART F	: CONSULTATION	212
8.	CONSULTATION & ENGAGEMENT	212
PART G	: ASSESSMENT OF EFFECTS	229
9.	SUMMARY OF ENVIRONMENTAL EFFECTS	229
10.	ASSESSMENT METHODOLOGY	238
11.	TRAFFIC & TRANSPORT	243
12.	PROPERTY & LAND USE	275
13.	NETWORK UTILITIES	282
14.	URBAN FORM & FUNCTION	289
15.	LANDSCAPE & VISUAL	294
16.	LIGHTING	308
17.	NOISE & VIBRATION	314
18.	AIR QUALITY	337
19.	STORMWATER & GROUNDWATER	347
20.	TERRESTRIAL & FRESHWATER ECOLOGY	378
21.	NATURAL HAZARDS	394
22.	CONTAMINATION	402
23.	CULTURAL IMPACTS	409
24.	ARCHAEOLOGY & BUILT HERITAGE	413
25.	ECONOMIC	419
26.	SOCIAL	428
PART H	I: MITIGATION AND MONITORING	442
27.	MITIGATION & MONITORING	442
PART I:	STATUTORY ASSESSMENT	483
28.	STATUTORY ASSESSMENT	483
29.	RMA PART 2 ASSESSMENT	531
PART J	: PROPOSED CONDITIONS	535
30.	PROPOSED DESIGNATION CONDITIONS	535
31.	PROPOSED RESOURCE CONSENT CONDITIONS	557

**Assessment of Environmental Effects report** 

## TABLES

Table 1: Regional consents summary table	7
Table 2: Known active faults in the north South Island	33
Table 3: Assessed 2011 traffic volumes and growth rates – Main South Road	47
Table 4: Local roads intersecting with Main South Road	
Table 5: Main South Road existing utility services	52
Table 6: CSM2 existing utility services	53
Table 7: Social context	54
Table 8: Community facilities	56
Table 9: Land parcels where works are required to pipe and realign water races	89
Table 10: Plant and machinery involved in construction activities	101
Table 11: Regional consents summary table	169
Table 12: CRETS Project options	179
Table 13: Potential for stockwater race retention	208
Table 14: Summary of actual and potential environmental effects	230
Table 15: Relevant technical reports	241
Table 16: Baseline "Without Project" Daily Traffic Volumes on SH1 and Halswell Junction Road	245
Table 17: State highway traffic volume changes	251
Table 18: Local road traffic volume changes	252
Table 19: Access to property – Main South Road – western side	261
Table 20: Access to property – Main South Road – eastern side	262
Table 21: Access to property – CSM2 alignment	264
Table 22: Summary of Project construction traffic effects	270
Table 23: Main South Road existing utility services	282
Table 24: CSM2 existing utility services	283
Table 25: Landscape considerations for acoustic fences	304
Table 26: Noise criteria NZS6806:2010	315
Table 27: Description of assessment areas with each section	318
Table 28: Summary of Preferred Mitigation Options	323
Table 29: Predicted construction noise by assessment sector	326
Table 30: Noise mitigation summary	332
Table 31: Summary of background concentrations of PM <sub>10</sub> , NO <sub>2</sub> and CO	339
Table 32: Description and frequency of discharges shown in Figure 50	353
Table 33: Proposed stormwater discharge rates	355
Table 34: Contaminant removal estimates for proposed swales	359
Table 35: Design criteria for swales	360
Table 36: Mitigation recommended in Technical Report 3	374
Table 37: Potential Sources of contamination – HAIL sites identified within the study area	403
Table 38: Sampled sites	404
Table 39: UDS household projected growth	420
Table 40: Value of Lyttelton Port and Christchurch International Airport Imports and Exports - 2011	421
Table 41: Proposed mitigation and monitoring	446



able 42: Section 105 assessment 529
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# **FIGURES**

Figure 1: Proposed location map	3
Figure 2: Christchurch motorways RoNS map	14
Figure 3: Indicative UDS settlement pattern	
Figure 4: Key aspects in the development of the Project	29
Figure 5: River alluvium beneath Canterbury Plains	
Figure 6: Current GNS Mapping of the Greendale Fault	34
Figure 7: Study area, showing the existing water races and downstream receiving environment	35
Figure 8: Overland flowpaths and depressions	36
Figure 9: Marshs Road water race	37
Figure 10: Stormwater channel, SH1 Main South Road	38
Figure 11: Identified groundwater features	39
Figure 12: State Highway Average Annual Daily Traffic (AADT) volumes	47
Figure 13: Industrial zoned land along RoNS southern corridor route	
Figure 14: Typical Cross Section	59
Figure 15: Weedons Road interchange photo simulation	65
Figure 16: MSRFL rear access roads (shown in blue)	67
Figure 17: MSRFL / CSM2 connection - Robinsons Road overpass photo simulation	68
Figure 18: Waterholes Road underpass photo simulation	70
Figure 19: Trents Road underpass photo simulation	72
Figure 20: Shands Road interchange and Marshs Road underpass photo simulation	
Figure 21: Springs Road underpass photo simulation	75
Figure 22: Halswell Junction Road underpass photo simulation	77
Figure 23: Desire lines	80
Figure 24: Proposed alignment of shared use path and locations of potential changes	
Figure 25: Proposed diversions of stockwater races	
Figure 26: MSRFL available main site compound location	
Figure 27: CSM2 available main site compound locations	96
Figure 28: Indicative main site compound arrangement	97
Figure 29: Indicative construction programme	. 103
Figure 30: Extent of Sector 1	. 106
Figure 31: Extent of Sector 2	. 108
Figure 32: Extent of Sector 3	. 111
Figure 33: Extent of Sector 4	. 113
Figure 34: Extent of Sector 5	. 116
Figure 35: CRETS Southern Motorway Extension options considered	. 180
Figure 36: CSM2 Strategic Study options considered	. 185
Figure 37: CSM2 study corridor	. 187
Figure 38: CSM2 'best fit' alignment (Option A)	. 189



Figure 39: CSM2 alternative northerly alignments (Option B and C)	190
Figure 40: Weedons interchange diagrams	193
Figure 41: John Paterson Drive options	196
Figure 42: Sketch of alternative layout at Springs Road/ Halswell - main alignment at-grade	199
Figure 43: Sketch of alternative layout at Springs Road/ Halswell - main alignment elevated	200
Figure 44: The alignment options presented in the Phase 1 (October 2010) consultation newsletter	216
Figure 45: CSM2 & MSRFL network average daily traffic volumes – 2041	249
Figure 46: Traffic Difference Plot – 2041 ADT (Project vs. Baseline)	250
Figure 47: Time vs distance plots of travel times between Rolleston and Brougham Street – 2041	255
Figure 48: Area of Evaluation for Safety Analysis	259
Figure 49: Potentially adversely affected dwellings	324
Figure 50: Modelled wind speed and direction for Project area	338
Figure 51: Stormwater discharge to surface water locations	353
Figure 52: Location of heritage sites and traditional sites of significance in proximity to CSM2	410
Figure 53: The runs taken up in the immediate vicinity of Christchurch	414
Figure 54: Recorded archaeological sites with an overlay of road corridor	416
Figure 55: Management plan framework	445
Figure 56: Hierarchy of relevant planning documents	484

APPENDIX A Resource Management (Approval of Transit New Zealand as Requiring Authority) Notice 1994

- APPENDIX B Land Requirement Schedule
- APPENDIX C List of Potentially Affected Wells

## **EXECUTIVE SUMMARY**

## Introduction

The NZ Transport Agency ("the NZTA") is lodging Notices of Requirement ("NoR") and resource consent applications to widen and upgrade Main South Road to provide for a four-lane median separated expressway from Rolleston in the Selwyn District to Robinsons Road ("MSRFL"). The Project also includes the construction, operation and maintenance of a motorway<sup>1</sup> between Robinsons Road to the end of the Christchurch Southern Motorway Stage 1 ("CSM1") at Halswell Junction Road in Christchurch ("CSM2"). The proposed MSRFL and CSM2, together with the ancillary local road improvements are referred to hereafter as 'the Project'.

The Project is part of the Southern Corridor of the Christchurch Motorways 'Roads of National Significance' ("RoNS"), one of three state highway 'corridors' around Christchurch which are identified as RoNS in terms of both the 2009 and 2012 Government Policy Statements on Land Transport Funding ("GPS"). This Project will provide more efficient and safer access between the Port of Lyttelton, the city centre and the south of Christchurch for people and freight.

The NZTA's Requiring Authority objectives for the Project are:

- to contribute to the region's critical transport infrastructure and it's land use and transport strategies<sup>2</sup> by providing more predictable travel times and connections between the first stage of the CSM and Rolleston for people and freight;
- to improve accessibility from Christchurch and the Port of Lyttelton to the south and west for individuals and businesses while improving local access to work, shops and social amenity in Templeton and Hornby;
- to align traffic types and movements with the most appropriate routes by separating through traffic from local traffic to the south west of Christchurch and promoting other routes for passenger transport;
- to improve network resilience and safety by providing a route with enhanced safety standards and capacity; and
- to manage the social, cultural, land use and other environmental impacts of the Project in the Project area and its communities by so far as practicable avoiding, remedying or mitigating any such effects through route and alignment selection, design and conditions.

This Assessment of Environmental Effects ("AEE") assesses the potential effects of the construction, operation and maintenance of the Project, as required, to support the Notices of Requirement and resource consent applications for this Project being lodged with the Environmental Protection Authority ("EPA").

<sup>&</sup>lt;sup>1</sup> CSM2 will not become a motorway until the Governor-General declares it to be a motorway upon request from the NZTA under section 71 of the Government Roading Powers Act 1989 (GRPA). However, for the purposes of this report, the term "motorway" may be used to describe the CSM2 section of the Project.

<sup>&</sup>lt;sup>2</sup> Land Use and Transport Strategies include the Greater Christchurch Urban Development Strategy, the Canterbury Regional Land Transport Strategy, the Christchurch to Rolleston and Environs Transportation Study and other strategies and plans prepared by relevant statutory agencies for future land use and transport development and management within Canterbury.

#### Strategic context

The Project is proposed within the context of a national, regional and local policy framework comprising the:

- Government Policy Statement on Land Transport Funding 2012/13 2018/19 ("GPS");
- National Infrastructure Plan 2011 ("NIP");
- Connecting New Zealand 2011 (the primary long-term government transport strategy);
- Canterbury Regional Land Transport Strategy 2012 2042 ("RLTS");
- Canterbury Regional Policy Statement 1998 ("RPS") and Proposed RPS 2011;
- Recovery Strategy for Greater Christchurch 2012;
- Greater Christchurch Urban Development Strategy and Action Plan 2007 ("UDS");
- Selwyn District Plan ("SDP");
- Christchurch City Plan ("CCP");
- Draft Christchurch Transport Plan 2012-2042;
- Christchurch Rolleston and Environs Transportation Study 2007 (CRETS); and
- South-West Christchurch Area Plan 2009 ("SWAP").

Other strategic considerations include the impact of the Canterbury earthquakes on land use in the Greater Christchurch area and the need to integrate the transport network with current and planned land development.

#### Existing environment

The Project is located south west of Christchurch within the Canterbury Region. The Project area is predominantly flat and highly modified from its natural state and features a diverse range of land uses including farmland, rural lifestyle blocks, rural industries, and urban (industrial) areas. There are no natural watercourses or prominent stands of indigenous vegetation within the Project area. The Project extends from the town of Rolleston through predominantly farmland to south west Christchurch where Hornby is the dominant commercial centre where the area is largely urban. The towns of Templeton and Prebbleton are in close proximity. The new CSM2 alignment is situated within the rural locality known as Weedons and near the recent residential subdivisions at Aberdeen and Claremont.

## Description of the Project

Main South Road will be four-laned from just north of the intersection of SH1 and Park Lane, in Rolleston. This section of the Project continues north on Main South Road for approximately 4.5km to the connection with CSM2 located between Robinsons and Waterholes road. MSRFL will consist of a four lane expressway with two lanes in each direction, separated by a median strip and barrier. An interchange at Weedons Road will provide access to Main South Road and will feed into the Rolleston Izone industrial area. On the west side of Main South Road a new local road running to the immediate east of the rail corridor between Weedons Ross Road and Curraghs

Road and a short road north of Curraghs Road will be constructed. These through roads will provide rear access for properties fronting onto Main South Road, to enable the removal of private property access onto Main South Road in this location. A rear access road for private access is also included for properties on the east side of Main South Road.

The CSM2 part of the Project will leave Main South Road near Robinsons Road and extend for 8.4km linking to the end of CSM1 (which is currently under construction) at Halswell Junction Road. The road will comprise a four lane motorway with two lanes in each direction, separated by a median strip and barrier. Access to CSM2 from the surrounding area will be via two interchanges. Three underpasses and one overpass will also be constructed to ensure the connectivity of the local road network is maintained. Several local roads will be realigned for safety and to minimise impacts on private property and access. This includes the realignment of John Paterson Drive to connect with the CSM2 westbound off-ramp and Halswell Junction Road roundabout (east of CSM2).

The local road changes have a combined length of approximately 16 km.

## Construction of the Project

Construction of the Project has the potential to cause adverse environmental effects, and information about key construction activities has been provided as a basis for the AEE. A number of construction and staging strategies have been identified to minimise the disruption caused during construction.

The construction effects requiring mitigation relate to earthworks, stormwater discharge, traffic management and circulation, the continued operation of SH1, noise, the operational impact on existing farms and businesses and general amenity effects on nearby residents (noise, dust and access).

#### Statutory context

The key statutory matters under the Resource Management Act 1991 ("RMA") relevant to the Project are:

- the purpose and principles of the RMA;
- the RMA provisions relating to proposals of national significance and the national consenting process;
- Part 8 concerning Designations; and
- the Canterbury Regional Policy Statements (Operative and Proposed), along with the regional plans applying within the Canterbury Region, and the district plans of Selwyn District and Christchurch City.

Two new designations and one alteration to a designation are sought for the Project. The documentation provided in support of the NoRs for the designations contains all the information that would be required to be provided with an outline plan under section 176A RMA, therefore

that information has been incorporated into the designations for the purposes of section 176A(2)(b) RMA. An outline plan will therefore not be required.

A series of regional resource consents are also sought for the Project, along with land use consents under the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011.

The consenting authority (which may be a Board of Inquiry pursuant to the national consenting process) who considers the NoRs and applications for resource consent must have regard to various matters, including the relevant provisions of national, regional and district level planning documents, consideration of the Project alternatives, reasonable necessity, as well as other matters identified as being relevant to the Project and its effects.

## Consideration of alternatives

Under the RMA, the NZTA needs to consider alternative sites, routes and methods for undertaking a work. The alternatives that were identified and assessed to determine the selected alignment and design for the Project have occurred over a number of years. Consultation has been integral in determining the selected alignment. The assessment of alternative options has considered:

- alternative routes (as appropriate);
- alternative alignments and interchanges/connections to the transport network;
- alternative designs and measures to avoid, remedy and mitigate identified actual or potential adverse effects on the environment; and
- the wishes of the community through regular consultation.

The assessment process applied was iterative, and involved on-going refinement of the Project on the basis of information derived from desk top studies, field work, community and stakeholder consultation and detailed technical investigations. The process was also informed by the requirements of Part 2 of the RMA, the objectives of the Project and relevant national and regional policy directives.

#### Consultation and engagement

Consultation and engagement has been undertaken in accordance with recognised good practice as well as statutory requirements, and has involved engagement with local, regional and national stakeholders. Consultation was undertaken during the initial and scoping investigations and more recently as part of the Scheme Assessment phase. For the Scheme Assessment phase, a number of consultation methods were used including one-on-one meetings, group meetings, public open days, newsletters and online material. On-going consultation and communication with the relevant regulatory agencies has also been undertaken.

#### Assessment methodology

The environmental assessment undertaken for the Project involved the collaborative input of a broad range of engineering, environmental, social and cultural specialists. The Project team worked together to identify the potential adverse and positive environmental effects of the construction, operation and maintenance of the Project. This included developing measures to ensure that any adverse effects are appropriately avoided, remedied or mitigated. RMA, regional and district plan considerations have also been a fundamental consideration in the assessment methodology.

#### Traffic and transport

The transportation assessment has found that the Project achieves the stated Project objectives well. It will have significant positive traffic effects (i.e. benefits) for the region including:

- reduced travel times the Project is predicted to result in travel time savings of up to 12 minutes along the Southern Corridor;
- improvement in reliability of these travel times the improved level of service provided by the Project and the routing away from at-grade intersections will reduce the likelihood of unexpected delays;
- safety improvements the Project will be significantly safer than the current route with a predicted 40% reduction in fatal and serious injury crashes;
- provision of additional road capacity between Christchurch and the Port of Lyttelton to the south and west;
- the re-routing of traffic onto the new motorway is expected to reduce traffic volumes through Templeton and Hornby by over 17,000 vehicles per day, with over 2,000 fewer trucks travelling through Templeton daily; and
- improvement in level of service on the State highway is expected to lead to a decrease in traffic on Jones Road and Springs Road, which carry passenger transport between Selwyn and Christchurch. This will benefit public transport.

There are some potential adverse traffic effects relating to restrictions in access to properties, primarily along Main South Road, which will be mitigated by the provision of alternative rear access routes on both sides of Main South Road.

#### Property and land use

The main property effects of the Project are:

- properties with land that is required for the proposed State highway works; and
- land that is required to implement rear access roads or ancillary local road improvements.

Affected land holdings range from land already acquired by the Crown, Council owned land, including roads and private land holdings. Private land is by far the largest land requirement, with outright purchase of some properties required and partial acquisition of others. All property

owners whose land is directly affected have been consulted and are aware of the property required.

Specific site mitigation measures are proposed for some properties within close proximity to the Project that will potentially be subject to adverse effects, as identified through the technical studies.

Actual and potential effects (including perceived) on property values are not considered to be a relevant consideration under the RMA. Effects on amenity values are a relevant consideration. These relate primarily to noise, landscape, visual and access, and a range of mitigation measures are proposed.

The Project will permanently take high fertility soils that might otherwise be available for farming purposes. The amount of land to be taken has been minimised as far as possible, and topsoil will be re-used within the Project area.

#### Network utilities

The Project directly affects a number of network utilities, including electricity transmission and distribution lines, telecommunications, water supply, wastewater and stormwater disposal utilities, stockwater races and also the rail network. The NZTA has consulted with network utility operators to identify network utilities that will be directly affected and how they can be protected and / or how relocation can be appropriately undertaken. The outcomes of these initial discussions concluded that all adverse effects on network utilities directly affected by the Project will be able to be appropriately avoided, remedied or mitigated.

## Urban form and function

Key urban form and urban design considerations for the Project have been set out, along with the way in which the design has responded to its context, and how the detailed design for the Project seeks to secure an appropriate urban form and urban design outcome. An Urban and Landscape Design Framework has been prepared for the Project.

The process of assessing the effects on urban form and function was carried out during the development of the Project and has influenced decisions on design. The assessment was also informed by the feedback from consultation undertaken by the NZTA on urban planning and design issues.

## Landscape and visual

The scale of the landscape and visual effects of the Project ranges from slight through to substantial, depending on the viewing audience and position. The potential landscape and visual effects will result from changes to the local rural landscape due to removal of existing pastoral land use and vegetation, the introduction of manmade structures (roads and bridges) and an increase in traffic movement. For local residents, the landscape and visual amenity concerns may be perceived as adverse depending on individual perspectives. In comparison, road users are

more likely to show a high degree of acceptance and will experience positive effects including panoramic views obtained from interchanges and overbridges that are likely to contribute to a positive travel experience by increasing awareness of the Canterbury Plain landscape and distant landforms of Banks Peninsula and the Canterbury foothills.

Effects on landscape and visual amenity will be mitigated through Project design. The landscape design approach includes a range of measures to limit effects and integrate the Project into the surrounding environment. This is achieved by constructing the motorway at grade, limiting the bridge structures to those local roads which cross the alignment, limiting vegetation removal where practicable, providing significant areas of additional planting along the route, minimising the extent of earthworks and designing structures that can be more easily integrated into the landscape. In addition, a Landscape Management Plan will be developed for the Project to ensure these effects are managed.

## Lighting

Some lighting is required for the Project to provide for the safety of road users. Since the Project is located within a rural and semi-rural environment it is not necessary to fully illuminate the alignment. Rather, it is proposed to install carefully designed lighting at intersections, interchanges and on/off ramps to meet compliance with the relevant New Zealand lighting standard ("AS/NZS 1158"). The overall level of illumination will be similar to predicted levels for CSM1, in terms of effects on nearby property owners.

There will be some visual differences to nearby residents as a result of increased light levels. The lighting has been designed to balance the need to ensure road safety, as well as effective mitigation of light pollution in the immediate surrounds.

Construction lighting effects will be temporary in nature and mitigated through measures outlined in the Construction Environmental Management Plan ("CEMP").

#### Noise and vibration

An assessment of predicted traffic noise level generation has been conducted in accordance with the requirements of the relevant New Zealand Standard NZS 6806:2010 Acoustics – Road Traffic Noise – New and Altered Roads ("NZS 6806") which requires that the Project design and mitigation measures results in reasonable noise levels for all affected residents in the vicinity of the Project. A number of noise mitigation measures have been considered for this Project in line with the best practicable option ("BPO") approach outlined in the RMA. This assessment process has resulted in proposed mitigation options, including the provision of relatively small sections of acoustic barriers and extending the use of low noise road surface (Open Graded Porous Asphalt – "OGPA") to the southern approach to the local road overbridge at Springs Road. OGPA will be used across the majority of the mainline (State highway) carriageway for maintenance purposes. Comprehensive design of these noise control measures will be completed during the detailed design phase of the Project.

General construction noise management and mitigation measures are proposed to be implemented throughout the construction period as a BPO, in that they have to be effective in noise attenuation while being the best fit for local environment insofar as being practicable, and will be outlined within the Construction Noise and Vibration Management Plan ("CNVMP"). Construction noise is generally to be within the limits of the construction noise standard (NZS 6803:1999). Where there is a risk that construction noise standards will be exceeded, management schedules outlining site specific noise mitigation and management will be prepared.

Predictions of construction vibration levels indicate there is a degree of risk for dwellings within 20m of Main South Road however it is unlikely for there to be any buildings along the CSM2 alignment with a high vibration risk. The effects of construction vibration will require active management through the implementation of the CNVMP.

## Air quality

Construction of the Project has the potential to generate dust, particularly as a result of earthworks, which could have an adverse effect on air quality for sensitive receptors (mainly residential dwellings) within close proximity to the Project area. This will be managed through the Air Quality Management Plan which identifies management measures during construction to ensure that adverse air quality effects will be avoided or mitigated.

Once the Project is operational, there is the potential for adverse air quality impacts from vehicle exhaust pollutants. Results of the dispersion modelling indicate that pollutant concentrations are unlikely to exceed the relevant National Environmental Standards for Air Quality ("NES AQ") and New Zealand Ambient Air Quality Guidelines ("NZAAQG") thresholds.

#### Stormwater and groundwater

Existing groundwater levels have been a key influence in the design of the Project, as it has dictated the vertical level for the road and prevented the placement of the Project into a cutting. Designing the road at grade allows the disposal of stormwater to ground, above normal groundwater levels.

The proposed collection and disposal systems typically consist of roadside swales and stormwater disposal points to land at regular intervals along the Project. Additional first flush basins and detention ponds are proposed in the Halswell Junction Road area, which is identified as requiring treatment in the Canterbury Natural Resources Regional Plan ("NRRP"). The design standard for the Project drainage system is the 100 year Annual Recurrence Interval ("ARI") rainfall event including an allowance for climate change. Minimal discharge of stormwater to water is envisaged, only when this design standard is exceeded.

The proposal to dispose of stormwater to land has the potential to reduce downstream flooding due to the improved management and control of drainage in the contributing area, which currently overflows to the stockwater races in heavy rain. This will have a positive effect by

diminishing the potential for flooding the surrounding area. The proposed stormwater treatment process is also expected to improve the receiving environment water quality.

It is noted that the design includes groundwater intervention in two specific locations. For the Robinsons Road overpass (where the local road passes under the highway), pumping of groundwater from the local road is proposed in some groundwater conditions. Also, where the Project connects with CSM1, in extreme groundwater and/or rainfall events (i.e. greater than a 1 in 100 year rain event) dewatering may be required in future years depending on future predicted changes to groundwater levels. The design allows for these dewatering requirements.

Stockwater races will be diverted beneath the Project. The design of these diversions will ensure that the functions of the stockwater races in relation to water supply for stock and irrigation and as land drainage during extreme weather conditions will be maintained.

Stormwater discharges throughout the construction of the Project will be managed by a comprehensive Erosion and Sediment Control Plan ("ESCP") which will detail measures to avoid, remedy and mitigate the effects of stormwater discharge during construction. The ESCP will be prepared in accordance with Environment Canterbury's Erosion and Sediment Control Guideline 2007.

The proposed stormwater treatment measures and implementation of the proposed CEMP and ESCP will avoid contamination of the Christchurch Groundwater Protection Zone<sup>3</sup>.

# Terrestrial and freshwater ecology

Within the Project area, there are limited areas of naturally occurring indigenous vegetation reflecting the highly modified environment and extensive tracts of pasture within the Project area. Pasture, shelterbelts, woodlots, orchards and gardens within the Project area associated with rural-residential dwellings provide feeding, nesting and shelter habitat for commonly occurring indigenous and exotic birds with wide habitat preferences. Grassland verges, especially along shelterbelt and road margins, provide suitable habitat for lizards such as the common skink and McCann's skink. The study area contains no natural waterways or wetlands but does contain a number of manmade water races of limited ecological value. There are no sites of conservation significance such as ecological heritage sites, recommended areas of protection ("RAPs") or significant natural areas within the Project area.

The effect of vegetation removal required to allow for the construction of the Project on indigenous fauna arising from the loss of those habitats is considered to be no more than minor, given the similarity of nearby habitats and wide ecological tolerances and adaptability of the affected indigenous bird species. The proposed planting in combination with suitable ground surfacing measures will enhance habitat quality for indigenous birds, lizards, invertebrates, fish and aquatic life and assist in mitigating the loss of habitat.

<sup>&</sup>lt;sup>3</sup> As mapped in the Canterbury Natural Resources Regional Plan (NRRP) and Proposed Canterbury Land and Water Regional Plan (PLWRP).

Potential adverse effects on aquatic ecology during construction relate to potential sedimentation and contamination of water races and habitat disturbance. Long term effects on aquatic ecology are minor and include habitat modification associated with the closure, piping and realignment of water races. There is the potential for long term positive effects to be realised through riparian enhancement of realigned and other existing water races within the Project area and improved water quality through stormwater treatment. In addition, culverts will be designed to ensure the provision of fish passage or where the proposal involves long sections of piping, inclusion of light wells, resting areas and baffles to assist with fish passage.

## Natural hazards

Seismic activity, including ground shaking and liquefaction is a significant geological hazard in the Christchurch area. Ground movement associated with the recent earthquake events commencing in September 2010 have recorded horizontal movement up to 900 mm and vertical movement of up to 320 mm in the Project area. No liquefaction was recorded within the Project area during any of the recent earthquake events, however, geological investigations have proven that liquefiable soils do exist at depth. While seismic risk exists, this will be satisfactorily addressed through the adoption of suitable design standards for embankments, bridges and foundations.

In relation to flood risk, the design standard for the highway drainage system is the 100 year ARI rainfall event including an allowance for climate change. It has been assessed that disposal to land has the potential to reduce downstream flooding due to the reduction in contributing area (i.e. the area draining to the highway drainage system). This has the potential to have a positive effect in terms of reducing the risk of flooding.

Utilisation of total stormwater detention in the 100 year 24 hour rainfall event will ensure that spilling to Upper Knights Stream in the Halswell River catchment via Montgomery's Drain will only occur in extreme rainfall and/or groundwater events in a staged manner, after flood peaks, where flood risk can be appropriately managed.

#### Contamination

Several locations along the Project route are identified as Hazardous Activities and Industries List ("HAIL") sites. Concentrations of contaminants in all soil samples collected within the designated route were less than the Rural Residential SCSs<sub>(health)</sub> of the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011. Therefore, contaminations arising from historic land use activities along the Project designated route are not likely to have a measurable effect on human health or the environment. Disturbance of HAIL sites will be managed through the implementation of the CEMP.

## Cultural impacts

The relationship between tangata whenua (Ngāi Tahu) and South-West Christchurch is culturally and historically significant.

The NZTA has sought to engage with Te Runanga o Ngāi Tahu, the principal iwi group with mana whenua over the South-West area of Christchurch. As the Project area lies within the boundaries of the Taumutu Runanga and Ngāi Tuahuriri Runanga, engagement has also been sought with these Runanga via Mahaanui Kurataiao Ltd ("MKT").

A draft Cultural Impact Assessment ("CIA") has been prepared and is currently being reviewed by MKT on behalf of Ngāi Tuahuriri as mana whenua. This has been informed by the process of engagement with iwi.

## Archaeology and built heritage

The Project area is known to have been occupied by both Māori and Pākehā prior to 1900. There are several archaeological sites (including two recorded middens, three historic houses, a religious institution and an agricultural/pastoral site of undefined type) located within the wider area. Trents Chicory Kiln is also located in the wider area. This is a New Zealand Historic Places Trust Category II historic place (Reg. No. 1793) and listed as a heritage item in the Selwyn District Plan. However, as these sites are not located within the designation boundaries (and all construction works will be taking place within the designation) these sites will not be affected by the Project. An accidental discovery protocol will be in place to provide guidance on the steps to be taken if an archaeological site is found during earthworks. As a precaution, an archaeological authority to destroy, damage or modify an archaeological site will be sought from NZ Historic Places Trust prior to earthworks.

#### Economic

The Project will have potentially far reaching economic benefits in terms of providing for the efficient movement of goods and people, and will help facilitate economic growth. The Project will also have local economic impacts and these are assessed as being broadly positive, recognising that there will be some individual adverse economic impacts, specifically businesses which have frontage to Main South Road that will be either bypassed by CSM2 or have their highway frontage access relocated.

It has been assessed that although there may be some adverse impact on individual businesses, the overall economic benefits to the region outweigh these individual business impacts.

#### Social

From a social perspective, the communities within and surrounding the Project area are experiencing population growth which is being increased as a result of the post-earthquake displacement of residents from Christchurch City. This has led to increased demand for housing in nearby towns and allotments in rural and peri-urban areas. The Project will reflect and facilitate this peri-urban growth in Templeton, Prebbleton, Lincoln and more particularly Rolleston. The growth of these peri-urban areas is promoted through the regional and local RMA planning documents.

The Project is likely to bring significant social benefits to surrounding communities, including reduced congestion, improved travel times, improved access to services, and greatly enhanced road safety along Main South Road (where it will be four laned).

The Project design sought to mitigate a number of potentially negative social effects including property access and displacement effects on individuals. Adverse social effects are likely to occur during construction and involve temporary disruption and amenity effects such as noise and vibration and dust emissions and these will be managed through the CEMP.

Social severance has been carefully considered and it was found that even in the short term (postconstruction), community severance is unlikely to be a significant issue for any of the existing rural communities and town-based communities in the Project area. In addition, in the long term it is anticipated that the Project will reinforce the identity of Rolleston as a focus of urban development.

Active transport, considered an important component of social wellbeing, will be enhanced through proposed links through the Project area and the Little River Rail Trail, which has been achieved through design features. There is likely to be an increase in commuter cycling to Lincoln and there is the opportunity for territorial authorities to develop a new cycling commuter route on local roads between Rolleston and Hornby, separately from this Project.

## **Overall positive effects**

Once operational the Project will have a number of positive effects including:

- large reductions in traffic along the bypassed sections of Main South Road (17,000 vpd and 2400 fewer trucks) and Halswell Junction Road (10,000 vpd);
- significantly improved amenity and accessibility for Templeton and Hornby through the diversion of traffic away from the existing Main South Road route;
- significant travel time improvements between Rolleston and Brougham Street of around 40% or up to 12 minutes during weekday peak periods by 2041 for all traffic (people and freight);
- improved reliability of travel times throughout the Project area and in the connecting local networks;
- significant improvements in accessibility from the city and the Port of Lyttelton to the growing south west area of Christchurch and to points further south on SH1;
- safety improvements for all road users arising from the provision of a high standard, median separated, limited access highway with a predicted 40% reduction in fatal and serious crashes;
- facilitation of growth and further urban development in Templeton, Prebbleton, Lincoln and more particularly Rolleston as promoted through regional and local RMA planning documents. The route provides relief around and directly services the development of Rolleston and its Izone industrial area;
- enhancement of active transport by providing links for cyclists and pedestrians;

- economic growth as a result of the provision of the efficient movement of goods and people;
- improvement of flood risk and downstream water quality as a result of the design of the stormwater treatment devices; and
- enhancement of terrestrial and ecological habitat through the proposed plantings.

#### Statutory assessment

A wide range of objectives and policies in national, regional and local policy and other planning instruments are relevant to the Project. The Project was assessed against these provisions and the RMA with the main conclusions being:

- overall, the Project is consistent with, and will give effect to the relevant objectives and policies of the statutory planning documents, including recent plan changes;
- as a nationally significant infrastructure project there will be significant positive effects from its construction and operation. The route alignment and design, in conjunction with appropriate management and mitigation measures, are considered to adequately avoid, remedy or mitigate the actual or potential adverse effects of the Project in the context of the purpose and principles of the RMA;
- the Project is consistent with the Urban Development Strategy for Greater Christchurch, will facilitate access to areas identified for urban growth South-West of Christchurch and contributes to land use and transport integration;
- the Project is a key part of the Southern Corridor RoNS programme which will provide significant safety improvements and travel time savings between Christchurch and areas to the south, and facilitate more efficient movement of freight and people into and out of Christchurch and the Port of Lyttelton. This is consistent with regional transport policy;
- the Project will promote the sustainable management of natural and physical resources. It is intended to meet the growing transportation needs of Christchurch City, Selwyn District and the Canterbury Region, and includes elements that will support walking, cycling and local connectivity. In turn, these outcomes will enhance the social, economic and cultural well-being of people and communities;
- the Project will sustain the potential of natural and physical resources to meet the reasonable foreseeable needs of future generations and satisfactorily safeguard the life-supporting capacity of air, soils, water and ecosystems;
- the Project provides for, and has appropriately responded to, the matters in sections 6, 7 and 8 of the RMA; and
- the statutory assessment concludes that the Project meets the statutory tests of the RMA.