PART G: ASSESSMENT OF ENVIRONMENTAL EFFECTS

11 Assessment methodology

Overview

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 collaborated to identify potential adverse environmental effects of the Project along with associated measures to ensure that any such effects are appropriately avoided, remedied or mitigated and relevant Part 2 considerations addressed.

11.1 Introduction

The purpose of this Chapter is to outline how the Assessment of Environmental Effects (AEE) was undertaken for the Project and how previous environmental assessment work has been used. The structure for the remainder of Part G is also set out.

11.2 Purpose of the assessment

Under the RMA an assessment of the environmental effects of the proposed Project is required.

In addition to the requirements under the RMA, it is also part of the NZTA's environmental policy and its operating principles under section 96(1)(a) of the LTMA to:

"exhibit a sense of social and environmental responsibility, which includes -

(i) avoiding, to the extent reasonable in the circumstances, adverse effects on the environment; ..."

The requirements of the RMA and the LTMA formed the basis for the assessment of effects undertaken for the Project.

11.3 Environmental assessment undertaken

11.3.1 Environmental assessment undertaken for the Project

Environmental assessment undertaken included the following inter-related processes:

- The identification and mapping of constraints;
- A multi-criteria assessment (MCA) of alternative route and alignment and associated interchange options;
- Expert technical analysis across a range of disciplines.

The constraints analysis included a detailed examination of the existing environment in the wider Project area that highlighted a number of environmental factors relevant to the development and consideration of Project options.

The MCA involved the application of non-cost and cost related criteria⁹⁹ to the Project options identified in order to comparatively assess their relative impacts, including environmental. The outcome of this process was the confirmation of a preferred alignment along with a preliminary indication of its potential environmental impact. These potential environmental impacts, in turn, were subsequently assessed in more detail by various experts through the AEE process, the results of which are reported in various Technical Reports and presented in Part G of the AEE.

11.3.2 Previous environmental assessments

A number of previous environmental assessments have been undertaken on the Kāpiti Coast that are also of relevance to the Project. These are:

- The AEE in support of the NoR lodged in 1997 by KCDC for the WLR; and
- Strategic studies undertaken in 2005 to inform the development of the Western Corridor Plan.¹⁰⁰

In addition, the Project team drew on information and findings from a number of site specific environmental assessments, including those undertaken for Kāpiti Coast District Plan Change 80 (Ngarara).

In preparing this AEE, information from these assessments was considered and utilised where it remained relevant.

⁹⁹ Non-cost related criteria include movement, built environment, cultural/heritage, natural environment, social/community and economic, while the cost related criteria include actual costs and the benefit/cost ratio.

¹⁰⁰ Particularly the Planning Balance Sheet Assessment completed as part of the Western Corridor Transportation Study.

11.4 Assessment methodology

11.4.1 Alliance project team involvement¹⁰¹

The close working relationship between the Project designers (i.e. engineering teams) and the environmental assessment teams for the Project has resulted in a high level of integration between the design and mitigation processes.

In general terms, the approach has been:

- To modify the design of the Project to avoid, or reduce to the extent practicable, potential adverse effects;
- Where avoidance of adverse effects was not possible, to develop measures to adequately remedy and/or mitigate potential adverse effects; and
- Where mitigation and/or remediation is required, to co-ordinate development of measures between specialists as much as possible to promote optimal environmental outcomes.

Specific details about how particular potential adverse environmental effects are proposed to be managed are provided in Chapters of Part G and in Part H outlined in section 11.5.

11.4.2 KCDC involvement

In its role as a member of the Alliance, KCDC has been closely involved in contributing to Project shaping and providing input on options and mitigation measures identified. This has been particularly relevant to the Project as the Council acts in the following capacity:

- It is the relevant territorial regulatory authority;
- It is the owner of some of the land required for the Project;
- It is the designating authority for the existing WLR designation; and
- It is the owner and controlling authority for local roads that will connect to, or affected by, the proposed Expressway.

¹⁰¹ Further information regarding the Alliance is included in section 1.3 of Chapter 1.

11.4.3 Stakeholder involvement

A wide range of stakeholders¹⁰² were involved in the AEE development process in a number of different capacities. A description of the methods used to engage stakeholders is set out in Part F.

In general terms, stakeholders and individuals provided feedback on how they believed the Project would affect their interests. The engagement undertaken with the various stakeholders is discussed throughout the topic Chapters in Part G as relevant.

11.5 Structure of the assessment

Chapters in Part G describe the assessments undertaken for each topic. For convenience, each assessment topic is described in a separate Chapter, although interactions between topic areas are recognised and discussed where relevant. The topic Chapters, and the relevant technical reports (found in Volume 3 of the AEE), are shown in Table 11.1.

AEE Report Chapter	Торіс	Relevant Technical Report No.
12	Traffic and Transport	32, 33 & 34
13	Archaeology and Built Heritage	9 & 10
14	Tangata Whenua/Cultural Heritage	11 & 12
15	Network Utilities	-
16	Urban Form and Function	5&6
17	Landscape and Visual	7
18	Lighting	8
19	Noise and Vibration	15, 16, 17, 18 & 19
20	Air Quality	13 & 14
21	Terrestrial Ecology	26, 27, 28 & 29
22	Freshwater Ecology	26 & 30
23	Marine Ecology	26 & 31
24	Hydrology and Stormwater	22
25	Groundwater	21
26	Settlement	35& 36
27	Contamination	23 & 25
28	Water Quality	24
29	Economic	-
30	Social	5, 7, 11, 12, 13, 14, 15, 16, 18, 32 & 33

Table 11.1: Environmental effects assessment topics

¹⁰² These included affected property owners, Te Āti Awa ki Whakarongotai, the Takamore Trust and representatives from such organisations as Kapiti Cycling Inc, NZ Automobile Association, Coastlands, Kapiti Coast Chamber of Commerce, GWR Council, Raumati South Residents Association, Waikanae on One, Kapiti Riding Club, Southward Museum Trust, NZHPT, Friends of Queen Elizabeth Regional Park (Kapiti) Trust and Alliance for Sustainable Kapiti Inc. A detailed outline of the parties consulted is included in Chapter 10.

Each Chapter provides a summary of the key potential effects and the topic related mitigation proposed. In some instances the NZTA is offering to undertake measures to create positive benefits which are additional to mitigation of the adverse effects of the Project.

Further information about the assessment, including the assessment methodology used, is contained in the relevant technical report.

The basic structure for each assessment topic is:

- A description of the existing environment (in greater detail than that provided in Chapter 6, as relevant to the assessment matter);
- A description of the potential effects (both positive and adverse) resulting from the Project;
- A description of what measures have been undertaken, or are proposed to be undertaken, to avoid, remedy or mitigate potential adverse effects that have been identified; and
- A description of any measures that the NZTA is offering as part of the Project which create positive benefits relevant to that topic.

Part H sets out the framework by which effects (as identified throughout Part G) will be managed, including through conditions of the designation and resource consents. It also outlines the relationships between the recommended mitigation and proposed management plans.