

SECTION 1

1 INTRODUCTION

1.1 Preamble

1.1.1 On 16 January 1997, the Territory Development Department of the Hong Kong Government commissioned Maunsell Consultants Asia Ltd as the lead consultant for the Feasibility Study on the Alternative Alignment for the Western Coast Road, Tseung Kwan O (hereafter referred to as the Assignment) under Agreement No. CE 46/96. The purpose of the Assignment was to identify alternative alignment options for the Western Coast Road (WCR) and recommend the preferred alignment option for which Preliminary Design will be developed (hereafter referred to as the Project).

1.1.2 As part of this Assignment, Environmental Resources Management (ERM) Hong Kong, Ltd. were commissioned to undertake the Environmental Impact Assessment (EIA) to provide input during the alignment option selection and to assess the environmental feasibility of the preferred alignment to ensure compliance with Government standards and guidelines. Hassell were commissioned to undertake the cultural heritage and landscape/visual impact studies which are included as part of this EIA.

1.1.3 Various deliverables have been produced during the Assignment for consideration by the Environmental Study Management Group which include the following:

- EIA - Initial Assessment Report (EIA-IAR). The purpose of this report was to review existing data and highlight key issues and constraints of the Project. The findings of this report were used to provide initial input into the selection of alignment options. Further issues to be studied in the Key Issues Working Paper were also identified;
- Key Issues Working Paper (KIWP). This report assessed, in more detail, the key issues that were identified in the EIA-IAR, based on the short listed alignment options selected, to provide a more detailed evaluation of the options;
- EIA Report. The purpose of this report is to consolidate all the findings of the environmental assessment based on the preferred alignment option. The findings and recommendations of this report will be incorporated into the preliminary design of the alignment;
- Environmental Monitoring and Audit (EM&A Manual). The purpose of the manual is to design and specify the EM&A requirements necessary to ensure the implementation and the effectiveness of the environmental protection and pollution control measures recommended in the EIA Report.
- Executive Summary. The Purpose of the Executive Summary is to provide a nontechnical summary of all the findings in the EIA Study.

1.1.4 The EIA Study has also provided valuable input to the Assignment, at various stages, for consideration by the Project Steering Group which included:

- Selected Options Report. This Report provided environmental input on the evaluation of 30 alignment options which recommended 4 options for further investigation in the Alignment Option Report; and
- Alignment Option Report. This Report provided environmental input to the evaluation of the 4 options identified in the Selected Options Report and recommendation of preferred alignment for the preliminary engineering design.

1.2 Objective of the EIA

1.2.1 The objectives of the EIA Study as identified in the Study Brief, Clause 3.2, are as follows:

- to describe the Project and associated works together with the requirements for carrying out the Project;
- to identify and describe the elements of the community and environment likely to be affected by the Project, and/or likely to cause adverse impacts upon the Project, including both the natural and manmade environment;
- to identify and quantify emission sources where appropriate and determine the significance of impacts on sensitive receivers;
- to identify and quantify any potential losses or damage to flora, fauna and natural habitats, where possible;
- to propose the provision of infrastructure or mitigation measures so as to minimize pollution, environmental disturbance and nuisance during construction and operation of the Project;
- to identify, predict and evaluate the residual (i.e. after practicable mitigation) environmental impacts and cumulative effects expected to arise during the construction and operation phases of the Project in relation to the sensitive receivers;
- to identify, assess and specify methods, measures and standards to be included in the preliminary design, construction and operation of the Project which are necessary to mitigate these impacts and reduce them to acceptable levels;
- to design and specify the EM&A requirements necessary to ensure the implementation and the effectiveness of the environmental protection and pollution control measures adopted;
- to investigate the extent of side effects of proposed mitigation measures that may lead to other forms of impacts;

- to identify constraints associated with the mitigation measures recommended in the Study; and
- to identify any additional studies necessary to fulfill the objectives of the requirements of this EIA.

1.2.2 The objectives of this EIA Report are:

- to review the findings of the EIA-IAR and KIWP and to consolidate all the findings of the environmental assessment based on the preferred alignment option;
- to undertake detailed assessment of the preferred alignment option (*Option 2D2*) to ensure that it complies with relevant Government standards and guidelines and to recommend further mitigation measures, as required, to be incorporated into the preliminary design of the alignment; and
- to recommend specific environmental control measures to be incorporated into the EM&A Manual.

1.2.3 This EIA Study has been undertaken, based on the Study Brief (Agreement No 46/96) which has been registered with the EPD (Reference SB005/BC) under Section 15(1) (b) of the Environmental Impact Assessment Ordinance (EIAO) (Part I List: Brief issued prior to commencement of Ordinance). The enforcement of the EIAO on 1 April 1998 has resulted in the Project being subject to additional requirements to the Study Brief as part of the approval process.

1.3 Study Area

1.3.1 The boundary of the "Study Area" for the purpose of this EIA is 300 m either side and along the full length of the proposed alignment, with exception of the assessment of landscape impacts and air pollution impacts where the Study Area is defined by a distance of 500 m from the proposed alignment. All visual sensitive receivers have been assessed, where necessary, regardless of the distance from the proposed alignment as part of visual impact assessment.

1.3.2 With respect to the noise impact assessment, the Study Area, has been reduced accordingly where the first layer of Noise Sensitive Receivers (NSRs) that are closer than 300 m from the road provide adequate acoustic shielding to those NSRs located further behind. *Figure 1.3a* shows the extent of the Study Area for the EIA.

1.4 Structure of the EIA Report

1.4.1 The structure of this EIA Report has been organised into the following Sections:

Section 1	Introduction;
Section 2	Project Description;
Section 3	Noise;
Section 4	Air Quality;
Section 5	Water Quality;
Section 6	Waste;
Section 7	Ecology;
Section 8	Visual and Landscape;
Section 9	Cultural Heritage;
Section 10	Environmental Monitoring and Audit Requirements; and
Section 11	Overall Conclusions.



- - - 300m from alignment (study area)
 _____ 500m from alignment (study area (or air, landscape))

WCR STUDY AREA

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DATE: JUN 98	FIGURE NO. 1.3a		
SCALE: 1 : 10000			