1 INTRODUCTION

1.1 GENERAL

This Environmental Impact Assessment (EIA) is one part of a study for Stage 1 of Lantau Port Development (LPD), Preliminary Design of Container Terminals (CT)10 and CT11. The terminals will be located on reclaimed land extending south east from Tsing Chau Tsai peninsula and south of Penny's Bay on Lantau Island (Figure 1.1 shows the terminal location and Figure 1.2 a general arrangement of the terminals). The earlier Lantau Port and Western Harbour Development Studies (LAPH) confirmed an acceptable port shape and proposed phasing of terminal construction. The LAPH Studies included EIA of the terminals, which were documented as Volume III in the Final Report. A further study is being carried out in parallel with this study, titled " Ancillary Works". It is primarily concerned with the development of the reclaimed land within Pennys' Bay and backup areas, associated with the terminals. In this study, though engineering work has been confined to the construction and operation details of CT10 and CT11, environmental studies have been extended to include cumulative assessment of port operation noise when Phases I, II, III & IV are commissioned (CT10, 11, 12 and 13 respectively).

The final report for this study is presented in five volumes:

Volume 1	- Main Study	
Volume 2	- Container Terminals EIA	(This Report)
Volume 3	- TCT Borrow Area EIA	
Volume 4	- Appendices to Main Study	
Volume 5	- Drawings	

1.2 THIS VOLUME

This report is an EIA of the construction and operation of CT10 and CT11 and cumulative impact assessment of operation noise for CT10, 11, 12, 13. The environmental impacts of the proposals have been assessed in relation to compliance with the appropriate statutory requirements and planning standards and guidelines.

1.3 KEY ISSUES

Seven key areas of concern are identified and will be discussed in this document. They are:

(i)	Construction Noise	
(ii)	Operation Noise	
(iii)	Construction Dust	
(iv)	Construction Water Quality	dredging and fill placement erosion of reclamation and silty runoff dredging of contaminated sediments sewage disposal temporary embayment of Penny's Bay
(v)	Operation Water Quality	stormwater discharges sewage disposal

		embayment of Discovery Bay
(vi)	Waste Management	solid wastes
		fuel/oil use and storage
		MARPOL wastes
		accidental spillage
(vii)	Visual	visual impact
		glare

1.4 ASSUMPTIONS

The principal assumption is that CT10 refers to the eastern terminal and CT11 to a western terminal, construction of the western terminal first was assumed in LAPH. It is further assumed that noise attenuation bunds will be required to mitigate noise impact and this report assumes a noise bund at the western end of CT11 and a second bund at the western end of CT10. During the environmental studies adverse noise impacts have been identified at sensitive receivers for the terminal shape identified in the LAPH Studies. These new impacts are principally due to updating of operating assumptions and to mitigate these adverse impacts a modification to the later phases of the terminals has been made, though the location and arrangement of CT 10/11 remain unchanged. In the LAPH Studies it was assumed that all reclamation material would be supplied from a land borrow area situated immediately north of the terminals, the Tsing Chau Tsai (TCT) mega borrow area. Operations of the TCT borrow area are the subject of a separate EIA (Volume II of this study) which indicated potential adverse air quality impacts. The consultants were instructed to assume an alternative source of reclamation material and this volume reports environmental impacts for reclamation carried out using marine sand. The marine sand source is not identified and will be the subject of a separate EIA. Operation noise characteristics of the backup areas have been obtained from the Ancillary Works consultant and are included in this assessment.

1.5 STRUCTURE OF THIS REPORT

The report has been written in 10 sections with this section providing a broad introduction to the study. Section 2 is an introduction to the environmental conditions which are presently experienced within the study area, there are more detailed quantitative data presented in later sections of the report. This section also identifies the main sensitive receivers which are likely to experience the most acute impact during terminal construction and operation. Section 3 describes the modifications which have come about during this study, their impact and the requirements for mitigation. The section goes on to describe the main activities expected during the construction and operation of the terminals. Sections 4 to 8 are the detailed assessment studies of noise, air quality, water quality, waste management and visual impact & glare. Each assessment is presented as : (i) the relevant environmental baseline; (ii) legislative and environmental planning requirements; (iii) quantitative modelling; (iv) an assessment of the significance of impact; and (v) proposals for mitigation in cases of adverse impact. Section 9 is a summary of issues addressed in the LAPH studies but deemed to have minimal environmental significance reported here to give a complete picture of construction and operation of the LPD. The areas reported are terrestrial ecology and antiquities and monuments. Section 10 is a summary and conclusion on the construction and operation of CT10 & 11 and cumulative operation noise from CT10, 11, 12 &13. An Environmental Monitoring and Audit Manual (EM&A) for the terminals is included as Annex A.

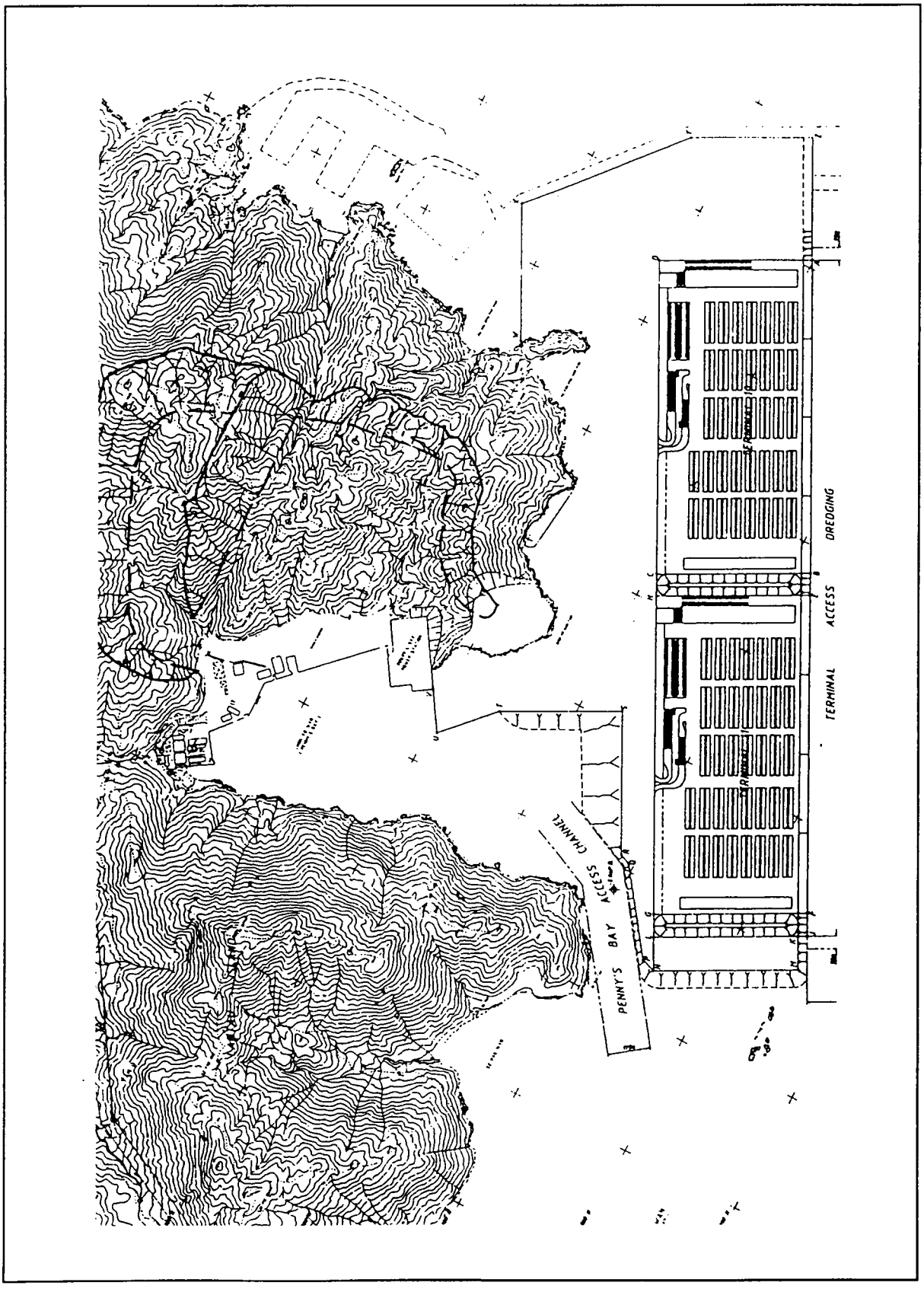

Figure 1.1 Location Plan

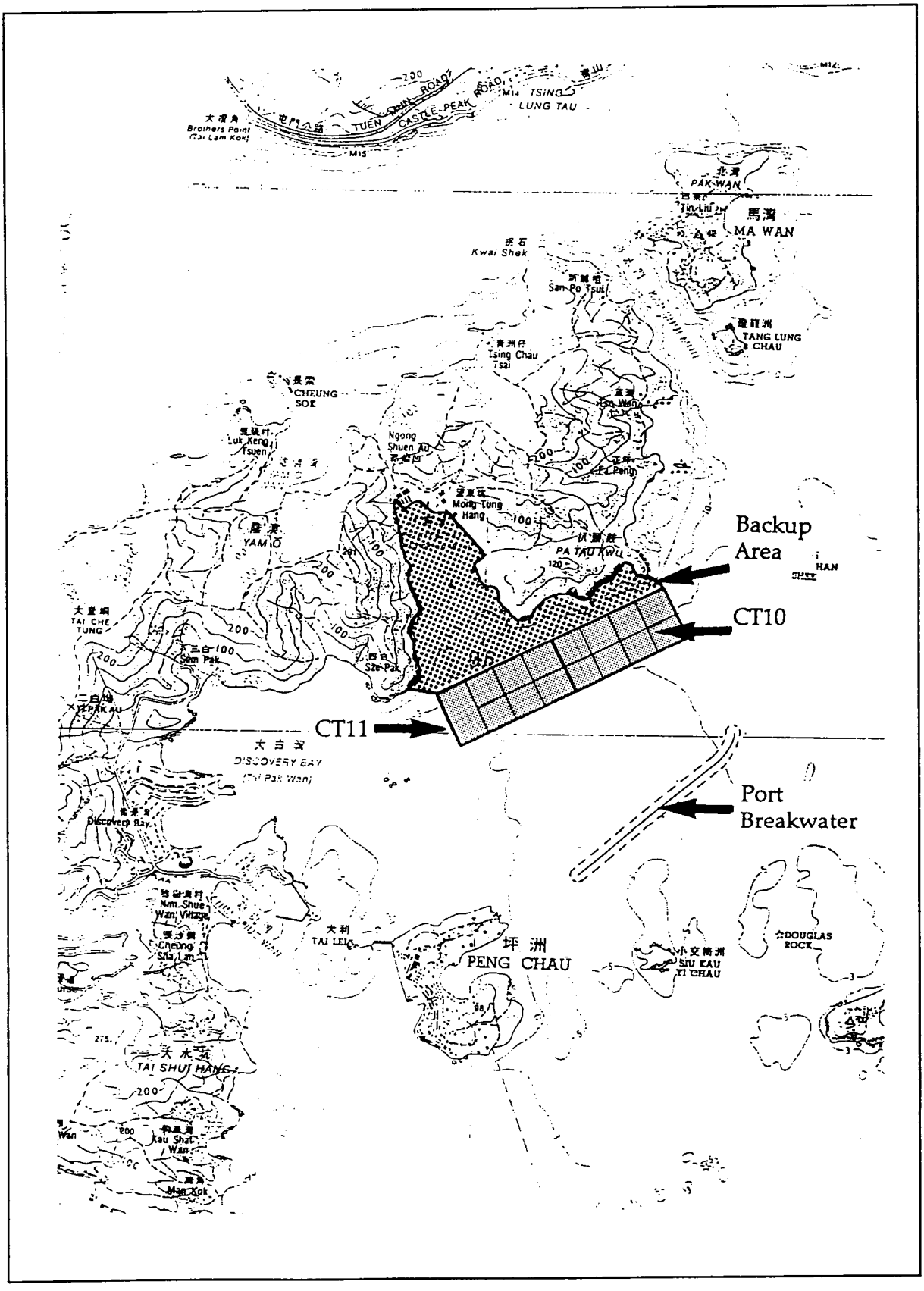

Figure 1.2 General Arrangement