1. INTRODUCTION

1.1 Background

Hong Kong has a very unique noise problem. High-rise, high density development and close proximity of dwellings, hospitals and other noise sensitive developments to major roadways have rendered traffic noise very difficult to ameliorate. While direct technical remedies such as erecting noise barriers and totally enclosing the roads are desirable, their applicability is very limited because of past neglect.

The Second Review of the 1989 "White Paper: Pollution in Hong Kong - A time to act", has identified the need for a study to review the practicability of reducing the adverse impacts brought about by existing roads in Hong Kong. Given the scope of the study required, the review is carried out in two phases. The Phase I review (this study) is a scoping study examining all roads on the feasibility of providing retroactive road traffic noise mitigation measures while the Phase 2 review will focus on the detailed engineering and design aspects of the recommended technical remedies for the roads identified in Phase 1 review. ENPAC Limited (ENPAC) was commissioned by the Environmental Protection Department (EPD) of the Hong Kong Government (Government) on 1 September 1994 to undertake the Phase 1 Study.

1.2 Terms of Reference

The Study has been conducted under the following terms of reference:

- To conduct a scoping study to examine all existing roads with a view to providing retroactive road traffic noise mitigation measures.
- To consult relevant Government Departments for their views and concerns on the development of direct technical remedies for existing roads.
- To recommend a list of existing roads with potential for providing retroactive direct technical remedies for the subsequent Phase 2 assessment. The recommendation will include appropriate form(s) of direct technical remedies, cost estimates of the measures as well as the likely noise reduction and number of dwellings to be benefitted from measures in place.
- To prepare a time table for incorporation of the recommended measures.

1.3 Structure of the Report

This report is contained in two volumes. Volume 1 (this text) contains Chapters 1 to 10, including all tables and figures, and Volume 2 contains all Appendices.