1. INTRODUCTION

1.1. BACKGROUND

1.1.1. The Project is for construction of a new Annex Block, and refurbishment of the existing Red House at Hong Kong Observatory (HKO) Headquarters in Tsim Sha Tsui to (i) meet the existing shortfall in office space and functional areas for operation needs of the HKO; (ii) provide space for developing HKO's essential operation and services; and (iii) provide space for organizing public education and outreach activities relating the HKO's work.

1.1.2. Allied Environmental Consultants Limited (AEC) was commissioned by Architectural Services Department (ArchSD) to undertake the Environmental Impact Assessment (EIA) study for the Project.

1.1.3. In accordance with the requirements of *Section 5(1)* of the Environmental Impact Assessment Ordinance (EIAO), a Project Profile (No. PP-630/2021) for the Project was submitted to the Director of Environmental Protection (DEP) for application for an EIA Study Brief on 20 September 2021. Pursuant to *Section 5(7)(a)* of the EIA Ordinance, the DEP issued a Study Brief (No.:ESB-347/2021) on 29 October 2021 for the EIA study.

1.2. THE ASSIGNMENT

1.2.1. According to the approved Tsim Sha Tsui Outline Zoning Plan (OZP) No. S/K1/28, the Project Site is currently zoned "Government, Institution or Community" ("G/IC").The Project is located at the southern side of HKO Headquarters which is a Declared Monument under the *Antiquities and Monuments Ordinance (Cap.53)* at 134A Nathan Road, Tsim Sha Tsui, as shown in ***Figure 1.1***.

1.2.2. The Project is classified as a Designated Project (DP) under

- Item Q.1, Part I of Schedule 2 of the EIAO – All projects, including new access roads, earthworks and other building works partly or wholly in a site of cultural heritage.

1.3. PURPOSE AND OBJECTIVES OF THIS EIA STUDY

1.3.1. The purpose of this EIA study is to provide information on the nature and extent of the potential environmental impacts arising from construction and operation of the Project and associated works that will take place concurrently. This information will contribute to the decisions by DEP on:

- The overall acceptability of any adverse environmental consequences that are likely to arise as a result of the Project;

- The conditions and requirements for the detailed design, construction and operation of the Project to mitigate against adverse environmental consequences wherever practicable; and
- The acceptability of residual impacts after the proposed mitigation measures are implemented.

1.3.2. The objectives of the EIA study as stated in the EIA Study Brief are as follows:

- To describe the Project and associated works together with the requirements and environmental benefits 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 to the Project, including both the natural and man-made environment and the associated environmental constraints;
- To identify and quantify emission sources and determine the significance of impacts on sensitive receivers and potentially affected uses;
- To identify and quantify potential waste management issues and impacts arising as a result of the construction activities of the Project and to propose measures to mitigate these impacts;
- To identify any potential landscape and visual impacts and to propose measures to mitigate these impacts;
- To identify any negative impacts on sites of cultural heritage and to propose measures to mitigate these impacts;
- To propose measures / actions to avoid or minimise potential ecological impacts if any ecological impacts are identified during construction and operation of the Project;
- 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 investigate the feasibility, effectiveness and implications of the proposed mitigation measures;
- To identify, predict and evaluate the residual (i.e. after practicable mitigation) environmental impacts and the cumulative effects expected to arise during the construction and operation phases of the Project in relation to the sensitive receivers and potential affected uses;
- To identify, assess and specify methods, measures and standards, to be included in the detailed design, construction and operation of the Project which are necessary to mitigate these residual environmental impacts and cumulative effects and reduce them to acceptable levels;
- To design and specify the environmental monitoring and audit requirements;

- To investigate the extent of the secondary environmental impacts that may arise from the proposed mitigation measures and to identify constraints associated with the mitigation measures recommended in the EIA study, as well as the provision of any necessary modification; and
- To identify any additional studies necessary to implement the mitigation measures or monitoring and proposals recommended in the EIA Report.

1.4. EIA STUDY SCOPE

1.4.1. The environmental issues covered in this EIA study, as addressed in the EIA Study Brief (No.ESB-347/2021), are as follows:

- Environmental benefits and dis-benefits of different development options, alignments, siting, layout, design and construction methods of the Project with a view to deriving the preferred development option(s) that will avoid or minimise adverse environmental impact;
- Potential air quality impacts on air sensitive receivers (ASRs) due to the construction and operation of the Project;
- Potential noise impacts on noise sensitive receivers (NSRs) due to the construction and operation of the Project;
- Potential water quality impacts on water sensitive receivers (WSRs) and any water system in the vicinity due to the construction of the Project and potential sewerage and sewage treatment implications to cope with discharges from the operation of the Project, taking into account the capacity requirements for the existing, committed and planned developments within the same sewage catchment;
- Potential waste management implications arising from the construction of the Project;
- Potential impact to the sites of cultural heritage, in particular the entire premises of HKO Headquarters which is a declared monument and its integrity, arising from the construction and operation of the Project;
- Potential landscape and visual impacts arising from the construction and operation of the Project; and
- Potential cumulative environmental impacts of the Project, through interaction or in combination with other existing, committed and planned developments in the vicinity of the Project, and those cumulative impacts may have a bearing on the environmental acceptability of the Project.

1.5. USE OF RELEVANT STUDIES

1.5.1. This EIA study has made use of findings from the previously approved EIA Reports, including the following:

- Central Police Station Compound Conservation and Revitalisation (AEIAR-162/2011)

1.6. STRUCTURE OF THIS REPORT

1.6.1. The remainder of this EIA Report are organized as follows:

- *Section 2*: Project Description
- *Section 3* Needs of Project and Consideration of Alternatives
- *Section 4*: Air Quality Impact
- *Section 5*: Noise Impact
- *Section 6*: Water Quality and Sewerage Impact
- *Section 7*: Waste Management Implications
- *Section 8*: Cultural Heritage Impact
- *Section 9*: Landscape and Visual Impact
- *Section 10*: Overall Conclusion of this EIA Report
- *Section 11*: Outline of Environmental Monitoring and Audit (EM&A) Requirements
- *Section 12*: Implementation Schedule of the Mitigation Measures

1.6.2 Impacts on ecology, hazard to life, land contamination, agricultural and fisheries are not expected due to the construction and operation of the Project, and have not been included in the EIA study.

1.6.3 All quoted appendices and figures in this EIA Report are presented under separate covers, which are APPENDICES and FIGURES respectively.

1.6.4 An Executive Summary has been prepared as a separate document in both Chinese and English, which contains summaries of the key findings, recommendations, and conclusions of the EIA study.