

3. EIAO REQUIRMENTS AND APPROACH TO ASSESSMENT

3.1 Requirements under Environmental Impact Assessment Ordinance

3.1.1 The proposed construction and operation of the Hong Kong West Drainage Tunnel, including drop shafts to collect storm runoff from the uplands of Hong Kong Island to a discharge point located adjacent to the Cyberport Phase I at the former Sandy Bay. The proposal works is considered to be a Designated Project (DP) under the Environmental Impact Ordinance (EIAO) Schedule 2, Part I, Q1, the proposed tunnel underground alignment falls within the Aberdeen Country Park, Tai Tam Country Park, Pok Fu Lam Country Park and Lung Fu Shan Country Park. This EIA Study Brief (No. ESB-070/2001) was issued in May 2001. This EIA is prepared in accordance with the EIA Study Brief No. ESB-070/2001.

3.2 Purpose of the EIA Study

3.2.1 The purpose of this EIA is to provide information on the nature and extent of environmental impacts arising from the construction and operation of the proposed DP and any related activities taking place concurrently. This EIA is aimed at providing the following:

- i) An evaluation of the overall acceptability of any adverse environmental consequences likely to arise due to the DP;
- ii) Recommendations on conditions and requirements to be imposed on the detailed design, construction and operation of the DP;
- iii) An evaluation of the acceptability of the residual impacts after the recommended conditions and requirement on the detailed design, construction and operation of the DP.

3.3 Approach of the EIA Study

Interaction with ongoing design

3.3.1 Environmental considerations had been part of the planning process undertaken for this Assignment from the outset. The choice of an environmentally appropriate alignment, as illustrated in Section 2, has been the goal from the conception. This EIA Study and the relevant assessments are to demonstrate the environmental acceptability for the preferred alignment Option C(3). Its findings contribute to the decision making process of the ongoing preliminary design. This way, potential environmental impacts can be prevented or reduced at an early design stage.

3.3.2 Changes of the preliminary design are assessed in terms of their environmental implications. The findings are in turn fed into the ongoing preliminary design. As a result the environmental impacts are minimized by an iterative process as the preliminary design progresses. Hence this EIA adopts an approach of assessing and preventing impacts as it is conducted.

3.3.3 The following is an example of responding to design changes in the EIA. Since the completion of the EIA inception report, the proposed reclamation for landscaping area at the Western Portal was cancelled. Therefore, the chance of construction phase water

quality impact and ecological impact occurring has been reduced. These changes are reflected in the water quality and ecological impact assessment.

- 3.3.4 An example of the EIA influencing the design process and implementation planning is provided here. The key issue that influences the design decision most is the potential construction noise impact. Since construction works for the intake shafts will have to be carried out at close distance from noise sensitive receivers, airborne construction noise impact is significant. The construction method have been reviewed and revised to ensure the duration of noisy activities, number of noisy equipment are minimized.

Approach for Designing Mitigation Measures

- 3.3.5 When a potential impact is predicted to occur, in both qualitative sense and when the impact is expected to breach statutory or non-statutory guidelines, the approach of impact management is to advocate the avoidance, prevention and minimization of the potential environmental impacts before considering purpose-built mitigation measures.

- (1) As a result the following priority is given when considering the approach for reducing the potential and residual environmental impacts to an acceptable level:
- (2) Liaison with the design team to consider alternative designs and construction methods to avoid creating an environmental impact.
- (3) Re-scheduling and re-organization of the impact causing activities to avoid or prevent the environmental impact.

- 3.3.6 Proposals for purpose-built technical or administrative mitigation measures, either on their own or to supplement the alternative design / construction method, re-scheduling and re-organization of activities.