

1 Introduction

1.1 Study Background

- 1.1.1 Land is a scarce resource in Hong Kong and there is a pressing need to optimise the supply of land for various uses by sustainable and innovative approaches to support social and economic development. One practicable approach is rock cavern development.
- 1.1.2 Cavern construction is an established technology that has seen continual improvement in its application. Many cavern schemes for various uses have been successfully adopted around the world with notable examples in Canada, China, Finland, Japan, Korea, Norway, Singapore, Sweden and the USA.
- 1.1.3 The benefits of rock cavern development are manifold. Systematic relocation of suitable existing government facilities to caverns could release surface sites for other developments and allow future expansion of the facilities underground. Also, placing NIMBY (“not-in-my-backyard”) facilities in caverns could improve the environment and remove incompatible land uses. In fact, there have been successful local examples of accommodating facilities in rock caverns, including the Stanley Sewage Treatment Works completed in 1995, as well as Island West Refuse Transfer Station and Kau Shat Wan Explosives Depot both completed in 1997. Also, in 2009, the University of Hong Kong reprovisioned the Western salt-water service reservoirs in rock caverns to release the site for its Centennial Campus development. These projects have demonstrated that rock caverns are valuable resources, while providing added environmental, safety and security benefits for many applications.
- 1.1.4 The existing Sha Tin Sewage Treatment Works (STSTW) is located at the mouth of the Shing Mun River, bounded by the River to its East, the Sha Tin Hoi water body to its North, Tolo Highway to its West and the Sha Tin Racecourse to its South. With design sewage treatment capacity of 340 000 m³ per day, the STSTW is the largest secondary sewage treatment works in Hong Kong and is serving the population of Sha Tin and Ma On Shan areas. Relocating the STSTW to caverns can release about 28 hectares of the existing site for housing and other beneficial uses. In addition to release valuable land resource for the society, this proposal will help remove incompatible land uses with the surrounding, benefit the community and improve the environment of Sha Tin.

- 1.1.5 To take forward the cavern initiative, the Drainage Services Department (DSD) commissioned AECOM Asia Company Limited (the Consultant) under Agreement No. CE 43/2011 (DS) to conduct a detailed feasibility study on the relocation of the STSTW to caverns (the feasibility study) on 30 May 2012. The whole study is tentatively scheduled to complete within about 24 months.

1.2 Purpose and Structure of Report

- 1.2.1 In order to solicit comments and opinions from the public and stakeholders and build consensus on the proposed relocation of the STSTW to caverns (the relocation project), we have conducted a two-stage public engagement (PE) exercise under the feasibility study.
- 1.2.2 The Stage 1 PE was carried out between 8 November 2012 and 31 March 2013 to share the experience of cavern sewage treatment works and collect the public's views and concerns on the relocation project. During the Stage 1 PE, a series of PE activities were carried out to solicit support of the project by providing the public with the information of the local and overseas examples of sewage treatment works in caverns. The result of the re-confirmation review of the proposed relocation site, namely Nui Po Shan of A Kung Kong, was announced to the public. The interim findings and recommendations about the preliminary technical assessments on odour, traffic and blasting vibration issues were presented to the public. Public comments and concerns on the relocation project were collected during various PE activities. Afterwards, the outline design, preliminary technical assessments and proposed mitigation measures were refined to address the comments and concerns received in the Stage 1 PE.
- 1.2.3 With a view to building consensus amongst various stakeholders and fostering their support and understanding of the relocation project, the Stage 2 PE was carried out to address the public's concerns received in the Stage 1 PE and further consult the public regarding the results and recommendations of the relevant preliminary technical assessments on their concerns such as odour, traffic and blasting vibration issues through a series of PE activities in the Stage 2 PE.
- 1.2.4 This Report presents the information and findings of the Stage 2 PE. Details of PE channels and activities during the Stage 2 PE are summarized in Section 2 of the Report. Comments and opinions received from the public and stakeholders during various PE activities are collated, summarized and responded in Section 3 of the Report.