

Legislative Council Panel on Development

PWP Item No. 399DS – Relocation of Sha Tin Sewage Treatment Works to caverns

Follow-up Issues of the Meeting held on 27 October 2020

At the Panel on Development meeting on 27 October 2020, the Administration was requested to provide the following information:

- (a) the list of the 30 government facilities with higher relocation potential to caverns identified in the “Long-term Strategy for Cavern Development – Feasibility Study”, and an overview of the latest follow-up progress, including planning, technical assessments, etc. conducted on these 30 facilities; and
- (b) an elaboration on the results of the cost-benefit assessment in respect of the relocation of Sha Tin Sewage Treatment Works to caverns.

This note sets out our response to the request.

Latest progress of 30 government facilities with higher relocation potential to caverns

2. Civil Engineering and Development Department completed the “Long-term Strategy for Cavern Development – Feasibility Study” (hereinafter referred to as “the Study”) in 2017. Apart from the formulation of the Cavern Master Plan, which provides a broad strategic planning framework to guide and facilitate territory-wide cavern development in Hong Kong, the Study identified 30 facilities with higher potential for relocation to caverns, among a number of government facilities, based on considerations such as the existing site conditions, potential land uses, development constraints, relocation timeframe and client department’s consent, merits and constraints brought about by the relocation of these facilities etc. These 30 facilities are suitable for further feasibility studies and effectiveness assessments. They are scattered in different districts and involve a wide range of facility types, including sewage treatment works, fresh water/salt water service reservoirs and water treatment works, refuse transfer stations, vehicle depots, archives, warehouses and material testing laboratory, etc., managed by different departments. A plan showing the location of these 30 facilities is at **Enclosure 1**.

3. The Government is progressively taking onboard feasibility studies on the aforementioned 30 facilities with higher potential for relocation. Various factors, including resource implications, overall planning and

development needs of the neighbourhood community, relocation schemes and planned uses of the released sites, and management of the relevant facilities, etc., will be considered in a comprehensive manner with a view to working out the implementation priority and schedules of individual relocation projects that are feasible. Currently, feasibility studies on four relocation projects¹ commenced from late 2017 to 2018 will be substantially completed next year. Feasibility studies for another four projects² will be put forward in the next batch. For those projects which feasibility and benefits are established, the Government will carry out investigation and design in the next phase and conduct planning and engineering studies for the released sites.

4. Cavern development usually involves substantial capital and manpower investment, relatively long implementation period and very complicated technical problems. Cost-effectiveness may vary significantly among individual relocation projects. The Government will take forward feasibility studies on the remaining facilities with higher relocation potential in a timely manner, with consideration of resources and operation of the relevant departments and catering for the local developments. In parallel, the Government will continue to review and explore the feasibility of relocating other suitable government facilities to caverns³, so as to strive for increasing land supply through releasing land for housing and other uses beneficial to people's livelihood and economic development.

Results of cost-benefit assessment in respect of the relocation of Sha Tin Sewage Treatment Works (STSTW) to caverns

5. The Drainage Services Department (DSD) completed the feasibility study on the relocation of STSTW to caverns (hereinafter referred to as the "Feasibility Study") in 2014. In the Feasibility Study, DSD conducted analysis and assessments in terms of environmental benefits and cost effectiveness, etc., and established the feasibility of the relocation of STSTW to caverns (hereinafter referred to as the "ST cavern project").

¹ These four relocation projects include two fresh water service reservoir projects and one salt water service reservoir project in Yau Tong and the project for relocating the Public Works Central Laboratory currently in Kowloon Bay.

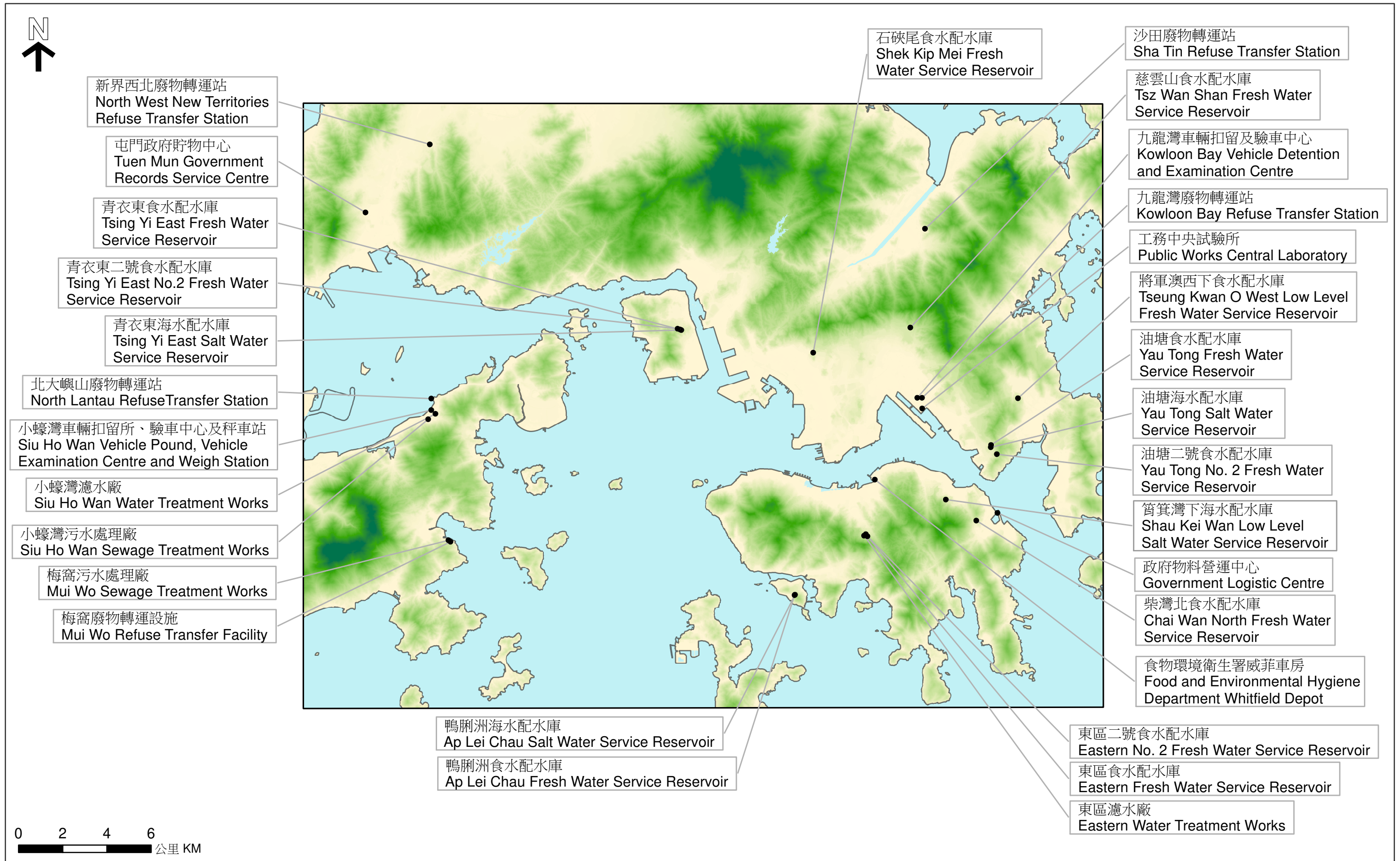
² These four relocation projects include two fresh water service reservoir projects and one salt water service reservoir project in Tsing Yi and one salt water service reservoir project in Shau Kei Wan.

³ Apart from the aforementioned 30 facilities with higher relocation potential, the Government has simultaneously implemented studies on relocating a number of Government facilities to caverns to cater for the specific development of individual districts and conditions of the Strategic Cavern Areas nearby. These facilities include Sha Tin Sewage Treatment Works, Sham Tseng Sewage Treatment Works, Sai Kung Sewage Treatment Works, Tsuen Wan No. 2 Fresh Water Service Reservoir and Diamond Hill Fresh Water and Salt Water Service Reservoirs, etc.

6. In terms of environmental benefits, in comparison with the open-plant arrangement of the existing STSTW, the relocated STSTW will be concealed within caverns. The entrance façade of the caverns will blend in with the surrounding environment. The cavern environment will serve as a natural barrier, which enables more effective odour management and improves the environment of the community nearby. In terms of cost-effectiveness, the Feasibility Study has made some preliminary planning assumptions in relation to the land use of the released site, including different splits between public and private housing, in order to roughly estimate the development potential and potential value of the concerned site. Besides, the STSTW, which was commissioned in 1982, will have been in operation for nearly 50 years by 2030. A large-scale refurbishment will be required irrespective of whether the STSTW is to be relocated to caverns. Alongside the construction of the cavern sewage treatment works, the proposed ST cavern project can also adopt advanced technology for comprehensive renovation of facilities, improving the operation effectiveness of STSTW and offering enhanced sewage treatment services to the people in the district, while maintaining the operation of STSTW at all time.

7. In essence nutshell, the assessment results of the Feasibility Study have confirmed the overall cost-effectiveness of the ST cavern project. The project will release about 28 hectares of land occupied by the existing STSTW for housing and other uses beneficial to people's livelihood. The expanded land resources will help meet public needs and benefit Sha Tin and the adjacent Ma On Shan community. In light of the implementation progress of the ST cavern project, the Government will plan for implementing a planning and engineering study and undertake public consultation for the formulation of appropriate land use planning scheme for the released site.

Development Bureau
Drainage Services Department
November 2020



30個較具潛力搬遷往岩洞的政府設施位置分佈圖

LOCATION PLAN OF 30 GOVERNMENT FACILITIES WITH HIGHER POTENTIAL OF RELOCATION TO CAVERNS