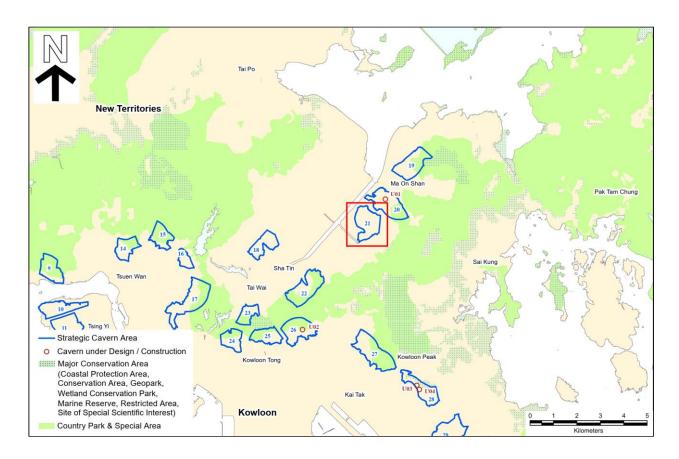
CAVERN MASTER PLAN – INFORMATION NOTE

STRATEGIC CAVERN AREA NO. 21 – SHEK MUN

This Information Note describes the characteristics and development constraints of Strategic Cavern Area No. 21 - Shek Mun (the SCVA). It also denotes the extent of potential portal locations. The spatial context of the SCVA is illustrated in the Reference Drawing appended to this Information Note.

Reference should be made to the Explanatory Statement of the Cavern Master Plan for its background and purposes, as well as the definition and delineation criteria of SCVAs.

1. Location Plan



2. Strategic Cavern Area Details

Outline Zoning Plan $(OZP)^1$: Sha Tin OZP

Area: 109.7 ha

Maximum elevation in the SCVA: +291 mPD

Minimum elevation in the SCVA: +3 mPD

3. District Context

Location

The SCVA is located to the east of the Shek Mun Industrial/Business Area in Sha Tin, which is to the northeast of Kowloon. It covers the area of Shek Mun in Sha Tin. A Kung Kok is to the north of the SCVA, Siu Lek Yuen is to the south and Shing Mun River Channel is to the west.

The SCVA is generally hilly with a maximum elevation of about +291 mPD. To the south and west of the SCVA, it is the Sha Tin New Town area which mainly consists of medium- to highrise residential developments (e.g. Shek Mun Estate about 100 m to the southwest of the SCVA and City One Shatin about 600 m to the southwest of the SCVA) and a number of local villages (e.g. Shek Kwu Lung, Tai Lam Liu and Siu Lek Yuen). In the proximity of the SCVA, there are a number of key Government, Institution or Community (GIC) facilities supporting the development of Sha Tin New Town, including Sha Tin Transfer Station and Construction Industry Council Training Academy (CICTA) Shatin Training Ground (both at the western boundary of the SCVA), Penfold Park (about 500 m to the northwest of the SCVA), Shatin Hospital (at the northern boundary of the SCVA), A Kung Kok Fresh Water Service Reservoir (about 300 m to the north of the SCVA) and Sha Tin Sewage Treatment Works (about 800 m to the north of the SCVA). Under Agreement No. CE 30/2014 (DS) "Relocation of Sha Tin Sewage Treatment Works to Caverns: Caverns and Sewage Treatment Works – Investigation, Design and Construction", the ventilation shaft and ventilation adit of the sewage treatment works have been proposed at the north of SCVA No. 21 with construction work commenced in July 2021.

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¹ For details of the latest land use zonings on the OZPs, please refer to the Town Planning Board Statutory Planning Portal 3 (https://www.ozp.tpb.gov.hk/).

<u>Access</u>

The SCVA is accessible from its northern, western and southern edges via A Kung Kok Shan Road, On Hing Lane and Kwong Sin Street. Regional connections could be routed through the nearby Tate's Cairn Highway, Tai Po Road and Tolo Highway.

The MTR Tuen Ma Line and East Rail Line run by the western side of the SCVA. The nearest station is Shek Mun Station of Tuen Ma Line located about 200 m to the west of the SCVA.

Existing / Planned Facility in SCVA

There is currently no existing cavern facility within the SCVA. The relocation of the existing Sha Tin Sewage Treatment Works to caverns is currently under construction in SCVA No. 20. The ventilation shaft and ventilation adit of the Shatin sewerage treatment works under construction in SCVA No. 20 have been proposed at the north of SCVA No. 21 with construction work commenced in July 2021.

4. Summary of Characteristics of Strategic Cavern Area

4.1. Boundary

The northern boundary of the SCVA is defined by valley topography and A Kung Kok Shan Road. The eastern boundary of the SCVA is defined by a Drainage Services Department's tunnel. The western boundary of the SCVA is defined by Tate's Cairn Highway, Sha Tin Transfer Station and CICTA Shatin Training Ground. The southern boundary of the SCVA is defined by a geological photolineament, permitted burial grounds, private lots of Nam Shan and residential development of Castello.

4.2. Geology

The solid geology of the SCVA is primarily medium-grained granite with local coarse-grained granite in the eastern portion of the SCVA, both of which belong to Shui Chuen O Granite. The SCVA is with the rock types that are suitable for the uses of rock caverns. A number of geological features, such as faults, photolineaments and isolated dykes, are identified within and in the areas surrounding the SCVA. The excavated medium-grained granite within the SCVA is suitable for reuse as construction aggregate.

Further geological information of the SCVA can be found on the 1:20,000-scale Geological Map Sheet 7 (Sha Tin) published by the Geotechncial Engineering Office, Civil Engineering and Development Department.

4.3. Planning

The SCVA is close to the existing and proposed urban developments in Sha Tin New Town and is well connected to the rest of the territory by several highways and railways. The southern and western sides of the SCVA are the major residential development areas in Sha Tin New Town. These areas consist of various medium- to high-rise residential developments (e.g. Shek Mun Estate and City One Shatin) and local villages (e.g. Shek Kwu Lung, Tai Lam Liu and Siu Lek Yuen) supported by a number of GIC facilities (e.g. sports ground, hospital, school, sewage treatment plant, service reservoir, proposed columbarium, etc.).

4.4. Environmental

Environmental sensitive receivers to the potential caverns in the SCVA are the nearby existing residential developments (e.g. Shek Mun Estate, Castello, Ravana Garden), institutions (e.g. CICTA Shatin Training Ground, Bradbury Hospice, Hong Kong Baptist University (HKBU) College of International Education, HKBU Affiliated School Wong Kam Fai Secondary and Primary School, International Christian School and Stewards Pooi Kei College) and hospital (i.e. Shatin Hospital). The SCVA comprises wooded area and shrubby hillside, but is distant from any recognised sites of conservation importance. Several traditional permitted burial grounds are located in proximity to the southeastern boundary of the SCVA. There are natural or modified surface water courses within the SCVA.

All potential environmental constraints, which may impose restrictions on the potential caverns, should be identified and taken into account under the Environmental Impact Assessment Ordinance (EIAO) and other relevant ordinances. Project proponents are required to take into account the potential environmental constraints when considering cavern options and undertaking the environmental impact assessment under the EIAO to determine its environmental acceptability, potential environmental impacts and environmental mitigation measures required.

4.5. Traffic

The SCVA can be accessed from its northern, western and southern edges via A Kung Kok Shan Road, On Hing Lane and Kwong Sin Street.

The potential portal location on A Kung Kok Shan Road may be constrained by the traffic capacity of A Kung Kok Street. Further detailed traffic impact assessment based on the proposed uses of the SCVA shall be conducted by the project proponents. The access to the potential portal location at the slope behind the existing CICTA Shatin Training Ground via On Hing Lane may be constrained by the proposed columbarium related development at the site of the training ground. Project proponents should take into account the latest development on the

proposed columbarium project. For accessing the potential portals located alongside the only access road near the proposed residential development off Kwong Sin Street, the project proponents shall liaise relevant stakeholders to obtain permission for use, and to resolve possible traffic issues.

All potential portal locations can be easily connected to the primary road network in Sha Tin, which allows for easy connections to other parts of the territory via Shing Mun Tunnel Road, Tsing Sha Highway, Lion Rock Tunnel Road and Tate's Cairn Highway and Tai Po Road.

4.6. Other Key Issues / Constraints on Cavern Development

A Drainage Services Department's tunnel, namely the Tolo Harbour Effluent Export Scheme Tunnel, is located approximately 50 m to the east of the SCVA. As it is far away from the SCVA, it would not pose any insurmountable constraint to the potential uses of rock caverns in the SCVA.

Project proponents should take into account the latest development of the proposed columbarium project by the Food and Environmental Hygiene Department at the site of the CICTA Shatin Training Ground including an associated subway underneath and across Tate's Cairn Highway connecting On Muk Street and the columbarium site and resolve any interfacing issues.

5. Extent of Potential Portal Locations

The extent of the potential portal locations is shown on the Reference Drawing.

The potential portal location at A Kung Kok Shan Road is located at the slope alongside the carriageways and direct road connection can be established. The potential portal location accessed via On Hing Lane is located at the rock cut slope. Access to this potential portal location may be constrained by the proposed columbarium development currently under construction in the site of the existing CICTA Shatin Training Ground. Project proponents should take into account the latest development of the proposed columbarium project. The potential portal location accessed via Kwong Sin Street is located alongside the only access road near the proposed residential development. Permission has to be obtained for access and for portal formation. Subject to further assessment and design, separate access road to the SCVA may be constructed from Siu Lek Yuen Road so as to minimise the interfacing issues and the traffic impact on Kwong Sin Street.

There are natural slopes above the potential portal locations. There may be potential natural terrain hazards in the vicinity which may require further study by the project proponents.

Project proponents should carry out further studies on identifying specific locations of portals forprojects considering cavern options.

6. Remarks to Information Note

The Cavern Master Plan and all supporting documents do not exempt project proponents for cavern projects from following the relevant statutory procedures. Information including the extent of potential portal locations indicated in this Information Note should serve as reference materials only. In formulation of development proposals, project proponents should conduct the necessary studies and assessments relevant to each project stage. Reference should be made to the "Implementation" section of the Explanatory Statement of the Cavern Master Plan for further details.

