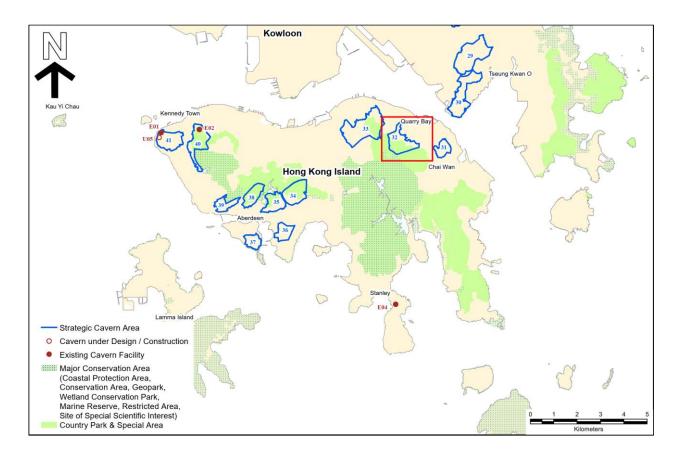
# <u>CAVERN MASTER PLAN – INFORMATION NOTE</u>

## STRATEGIC CAVERN AREA NO. 32 – SHAU KEI WAN

This Information Note describes the characteristics and development constraints of Strategic Cavern Area No. 32 - Shau Kei Wan (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 Plans (OZPs)<sup>1</sup>: Quarry Bay OZP

Shau Kei Wan OZP

Area: 83.6 ha

Maximum elevation in the SCVA: +299 mPD

Minimum elevation in the SCVA: +20 mPD

## 3. District Context

## **Location**

The SCVA is located in the eastern part of Hong Kong Island. It occupies the foothill area facing Sai Wan Ho and Shau Kei Wan to the north and east. Tai Tam Country Park (Quarry Bay Extension) is located to the south and west of the SCVA and Quarry Bay is to the northwest.

The SCVA is generally hilly with a maximum elevation of about +299 mPD. A majority of the SCVA encroaches onto Tai Tam Country Park (Quarry Bay Extension). In the northern portion of the SCVA, there is the Shau Kei Wan Fresh Water Service Reservoir, Shau Kei Wan No. 2 Fresh Water Service Reservoir and Shau Kei Wan High Level Fresh & Salt Water Service Reservoirs.

There are several existing communities around the SCVA. To the north and east of the SCVA, Sai Wan Ho and Shau Kei Wan are two major residential areas on Hong Kong Island, with high-rise and high-density housing developments including Yiu Tung Estate (at the eastern boundary of the SCVA), Aldrich Garden (about 600 m to the northeast of the SCVA), Tung Hei Court and Hing Tung Estate (both at the northeastern boundary of the SCVA). Quarry Bay located to the northwest of the SCVA is a major residential and commercial area with high-rise and high-density developments including Taikoo Shing (about 200 m to the north of the SCVA) and Taikoo Place (about 750 m to the northwest of the SCVA). These areas are supported by various Government, Institution or Community (GIC) facilities, such as Sai Wan Ho Civic Centre (about 400 m to the northeast of the SCVA) and Shau Kei Wan Low Level Salt Water Service Reservoir (at the eastern boundary of the SCVA).

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<sup>&</sup>lt;sup>1</sup> For details of the latest land use zonings on the OZPs, please refer to the Town Planning Board Statutory Planning Portal 3 (<a href="https://www.ozp.tpb.gov.hk/">https://www.ozp.tpb.gov.hk/</a>).

#### <u>Access</u>

The SCVA is accessible from its eastern and northern edges via Yiu Hing Road and Hong Yue Street, both of which link to the district distributors (i.e. Shau Kei Wan Road and King's Road) and further connect to regional distributors. Regional connections could be routed through the nearby Island Eastern Corridor and Eastern Harbour Crossing.

The MTR Island Line and Tseung Kwan O Line serve the neighbouring areas of the SCVA. The nearest stations include Island Line's Shau Kei Wan Station (about 500 m to the east of the SCVA), Sai Wan Ho Station (about 350 m to the northeast of the SCVA), Tai Koo Station (about 100 m to the north of the SCVA) and Quarry Bay Station (about 1,000 m to the northwest of the SCVA; interchange station of Island Line and Tseung Kwan O Line). Tramway service is also provided in the area along Shau Kei Wan Road and King's Road.

## Existing / Planned Facility in SCVA

There is no existing or planned cavern facility within the SCVA.

## 4. Summary of Characteristics of Strategic Cavern Area

#### 4.1. Boundary

The northern boundary of the SCVA is defined by Hong Yue Street, Yiu Hing Road, private lots and residential developments, including Kornhill, Hing Tung Estate and Tung Hei Court. The eastern boundary of the SCVA is defined by private lots and residential developments, including Yiu Tung Estate and Tung Chun Court. The western boundary of the SCVA is defined by residential development of Kornhill and the valley topography. The southern boundary of the SCVA is defined by the Hong Kong Electric Nam Fung – Parker Cable Tunnel. Individual private lots located within the SCVA have been excised from the SCVA. Project proponents shall check the latest land status with Lands Department. Reference should be made to the Explanatory Statement of the Cavern Master Plan for the delineation criteria of SCVA.

## 4.2. Geology

The solid geology of the SCVA is primarily fine-grained granite within the western and southern portions, which belongs to Mount Butler Granite; and medium-grained granite within the northern and eastern portions, which belongs to Kowloon 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 areas surrounding the SCVA. The excavated fine-grained granite and medium-grained granite within the SCVA are suitable for reuse as construction aggregate.

Further geological information of the SCVA can be found on the 1:20,000-scale Geological Map Sheet 11 (Hong Kong & Kowloon) published by the Geotechnical Engineering Office, Civil Engineering and Development Department.

## 4.3. Planning

The SCVA is close to the existing urban developments in Shau Kei Wan, Sai Wan Ho and Quarry Bay and is well connected to the rest of the territory by highways and railways.

The eastern, northern and western sides of the SCVA are the major residential and commercial development areas in Shau Kei Wan, Sai Wan Ho and Quarry Bay. These areas consist of various high-rise and high-density residential developments (e.g. Yiu Tung Estate, Aldrich Garden, Taikoo Shing) and commercial developments (e.g. Taikoo Place) supported by a number of GIC facilities (e.g. school, civic centre, service reservoir, etc.).

Quarry Bay is a major commercial area in the eastern part of Hong Kong Island, with key commercial developments such as Taikoo Place and a number of shopping centres. The industrial areas around Shipyard Lane, Westlands Road and Tong Chong Street are intended to be phased out through redevelopment for commercial use. Several data centres have been developed in the Eastern District, such as those in the industrial areas in Chai Wan and Taikoo Place in Quarry Bay.

#### 4.4. Environmental

Environmental sensitive receivers to potential caverns in the SCVA are the nearby existing residential developments (e.g. Yiu Tung Estate, Tung Chun Court, Tung Hei Court and Kornhill) and schools (e.g. The Endeavourers Leung Lee Sau Yu Memorial Primary School and Hong Kong Chinese Women's Club College). A majority of the SCVA encroaches onto Tai Tam Country Park (Quarry Bay Extension) and Water Gathering Grounds. Tai Tam Reservoir Catchment Area Site of Special Scientific Interest is at the southwestern boundary of the SCVA. There are natural and modified water courses within the SCVA. Graded historic buildings including the Mansion and Garage, Woodside, and Main Building and Villa, Salesian Mission House (all are Grade 2 historic buildings) are located in the vicinity of the SCVA. Meanwhile, Kik Lok Tung, Fu Tau Wat Village, Yiu Hing Road, Shau Kei Wan (New Item Pending for Grading Assessment, N254), is located in the vicinity to the SCVA. A government historic site identified by Antiquities and Monuments Office (AMO), namely Wartime Cooking Ranges, Tai Tam Country Park, Quarry Bay, is located in the vicinity to the SCVA. There are wooded areas within the SCVA.

All potential environmental constraints, which may impose restrictions on potential caverns, should be identified and taken into account under the Environmental Impact Assessment Ordinance (EIAO) and other relevant ordinances, such as the Country Parks Ordinance. Project proponents are required to take into account the potential environmental constraints when planning each project 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 eastern and northern edges via Yiu Hing Road and Hong Yue Street. Regional connections could be routed through the nearby Island Eastern Corridor and Eastern Harbour Crossing.

Although the SCVA is close to the primary road network, access to the potential portal locations can only be routed through relatively narrow, congested and densely-populated district roads. This might impose certain limit on the number of trips that could be generated from the potential caverns in the SCVA. Additional access roads may be required to connect the SCVA with Island Eastern Corridor and Shau Kei Wan Road or main roads subject to the scale of the potential caverns. The project proponents shall take into account the traffic condition and detailed assessment when pursuing cavern projects. Nonetheless, these roads can be accessed from the Island Eastern Corridor and Shau Kei Wan Road, which both serve as the main arterial routes along the northeastern coast of Hong Kong Island.

The project proponents would be required to assess the traffic impacts to the road networks and junctions in the vicinity and carry out traffic improvement measures so as to ensure that the traffic infrastructure could cope with the additional traffic flow brought by the project when formulating cavern options in any development proposals in the SCVA. Further advice on the scope of the Traffic Impact Assessment shall be sought by the project proponents.

#### 4.6. Other Key Issues / Constraints on Cavern Development

A Water Supplies Department's tunnel, namely the Kornhill Tunnel, is located at the northwestern boundary of the SCVA. The nearest section of the MTR Island Line railway tunnel and Tai Koo Station are located approximately 100 m to the north of the SCVA. The Hong Kong Electric Nam Fung - Parker cable tunnel is located approximately 50 m to the south of the SCVA. Several abandoned tunnels are located at the northern boundary and some are about 300 m to the east of the SCVA. As these tunnels are either far away from the SCVA or at elevations different from that of potential caverns in the SCVA, they would not pose any insurmountable constraint to the potential uses of rock caverns.

Hong Pak Country Trail and Wilson Trail Section 2 are located within the SCVA. Project proponents shall take into account when considering cavern options.

## 5. Extent of Potential Portal Locations

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

The SCVA is accessible from Yiu Hing Road, a restricted access to Tung Chun Court off Yiu Hing Road, and a cut slope adjacent to Shau Kei Wan Low Level Salt Water Service Reservoir to the east; and Hong Yue Street to the north of the SCVA.

The majority of potential portal locations of the SCVA are located on slopes adjacent to the carriageways, and access could be provided via a suitable run-in/out or priority controlled junctions, depending on the proposed land-use. Multiple portal locations could be formed along Yiu Hing Road.

Accessing the potential portal locations at the slope adjacent to Shau Kei Wan Low Level Salt Water Service Reservoir and at the access road to Tung Chun Court is restricted. Further liaison with relevant owners/stakeholders would be required, particularly for the potential portals in Tung Chun Court and Yiu Tung Estate which involves land matters under lease of Tung Chun Court and Yiu Tung Estate. These potential locations may only be suitable for low trafficgenerating activities unless road widening or upgrading is carried out.

The extent of potential portal locations may be of interface with existing traffic facilities. The project proponents should take the existing traffic facilities into consideration when formulating cavern options in any development proposal in the SCVA.

All the extent of potential portal locations of the SCVA are located at cut slopes with natural slopes above. 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 for projects 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.

