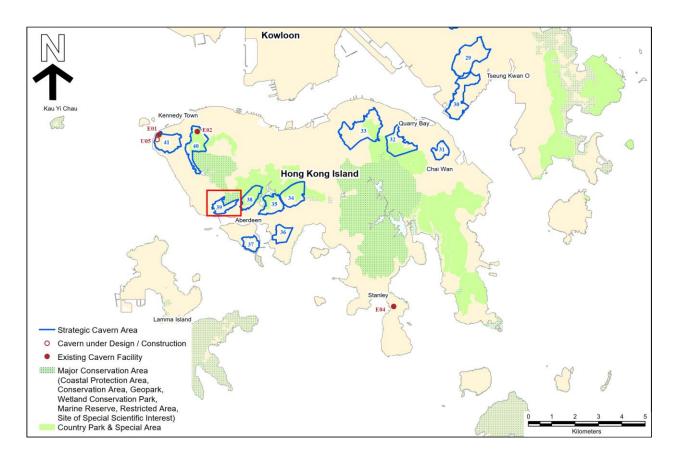
<u>CAVERN MASTER PLAN – INFORMATION NOTE</u>

STRATEGIC CAVERN AREA NO. 39 – MOUNT KELLETT

This Information Note describes the characteristics and development constraints of Strategic Cavern Area No. 39 - Mount Kellett (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)¹: Pok Fu Lam OZP

Aberdeen and Ap Lei Chau OZP

The Peak Area OZP

Area: 36.9 ha

Maximum elevation in the SCVA: +361 mPD

Minimum elevation in the SCVA: +16 mPD

3. District Context

Location

The SCVA is located in the southwestern part of Hong Kong Island. It occupies the foothill area of Mount Kellett in Aberdeen. Aberdeen Country Park is to the northeast of the SCVA, Pok Fu Lam Country Park is to the north, Aberdeen is to the east, Tin Wan is to the south and Wah Fu is to the west.

The SCVA is generally hilly with a maximum elevation of about +361 mPD. The Tam Kung Yeh Temple is located at the southeastern portion of the SCVA. To the north, the SCVA abuts the Pok Fu Lam Reservoir Catchment Area Site of Special Scientific Interest (SSSI). To the east, south and west of the SCVA, the areas of Aberdeen, Tin Wan and Wah Fu are predominantly residential communities with high-rise developments. These include Aberdeen Centre (about 750 m to the southeast of the SCVA), Tin Wan Estate (at the eastern boundary of the SCVA), Wah Kwai Estate (at the southwestern boundary of the SCVA), Wah Fu Estate (about 400 m to the west of the SCVA), proposed public housing developments at Kai Lung Wan North and Kai Lung Wan South (at the western boundary of the SCVA), proposed public housing developments at Wah Lok Path (about 200 m to the west of the SCVA) and proposed public housing developments at Wah King Street (about 450 m to the west of the SCVA). In Aberdeen and Tin Wan, industrial related uses are intended to be phased out gradually through redevelopment for residential uses.

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/).

In the proximity of the SCVA, there are a number of key Government, Institution or Community (GIC) facilities and other facilities supporting the development of surrounding areas and the territory, including Aberdeen Chinese Permanent Cemetery (about 350 m to the east of the SCVA), Aberdeen Preliminary Treatment Works (about 100 m to the south of the SCVA), Kai Lung Wan Fresh Water Service Reservoir (at the northwestern boundary of the SCVA) and Wah Fu Fresh & Salt Water Service Reservoirs (about 500 m to the northwest of the SCVA).

<u>Access</u>

The SCVA is accessible from its eastern and southern edges via an access road to Tin Wan Estate, Tin Wan Hill Road and Shek Pai Wan Road. Regional connections could be routed through Pok Fu Lam Road, Aberdeen Praya Road and Aberdeen Tunnel.

The proposed MTR South Island Line (West) is proposed to serve the western and southern parts of Hong Kong Island. This proposed line together with the South Island Line and the Island Line will form a railway loop covering the central and western parts of Hong Kong Island. The South Island Line (West) will comprise proposed stations at Tin Wan and Wah Fu (exact locations to be determined) serving the locality of the SCVA.

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 the Pok Fu Lam Reservoir Catchment Area SSSI and the Hong Kong Electric Wah Fu – Bowen Road cable tunnel. The eastern boundary of the SCVA is defined by an inferred fault, residential development of Tin Wan Estate and some GIC facilities. The western boundary of the SCVA is defined by the Hong Kong Electric Cyberport - Wah Fu cable tunnel and Shek Pai Wan Road. The southern boundary of the SCVA is defined by Shek Pai Wan Road and Tin Wan Hill Road.

4.2. Geology

The solid geology of the SCVA is primarily fine ash vitric tuff, which belongs to Ap Lei Chau Formation. The SCVA is with a rock type that is suitable for the uses of rock caverns. A number of geological features, such as faults and folds, are identified within and in areas surrounding the SCVA. The excavated rocks within the SCVA can be used as road base materials and for asphalt production, etc.

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 adjacent to various residential areas in Aberdeen, Tin Wan and Wah Fu. The SCVA is also well connected to the rest of the territory by roads and a railway to be implemented.

The areas of Aberdeen, Tin Wan and Wah Fu are major residential communities consisted of high-rise developments (e.g. Aberdeen Centre, Tin Wan Estate, Wah Kwai Estate, proposed public housing developments at Kai Lung Wan North, Kai Lung Wan South, Wah Lok Path, Wah King Street and Wah Fu North) supported by various GIC facilities (e.g. sports hall, school, sewage treatment plant and service reservoir, etc.).

4.4. Environmental

Environmental sensitive receivers to the potential caverns in the SCVA are the nearby existing residential developments (e.g. Tin Wan Estate, Wah Kwai Estate, proposed public housing developments at Kai Lung Wan North, Kai Lung Wan South, Wah Lok Path, Wah King Street and Wah Fu North, SAGE Bradbury Home for the Elderly and SAGE Quan Chuen Home for the Elderly) and schools (e.g. SKH Tin Wan Chi Nam Primary School). The SCVA comprises natural greenery and Reservoir Catchment Area. Pok Fu Lam Country Park, Aberdeen Country Park and the Pok Fu Lam Reservoir Catchment Area SSSI abut to the northern boundary of the SCVA. The Main Building of Matilda and War Memorial Hospital (Grade 2 historic building) is located to the further north of the SCVA. The Historic Structures at the Former Chiu Chow Pak Yap Cemetery (Grade 2 historic building) is located within the SCVA. Some graded historic monuments are located in the vicinity of the SCVA, including: Old Dairy Farm, Paddock C20; Old Dairy Farm, Bull Pen with Paddock; Old Dairy Farm, Paddock C18; Old Dairy Farm, Paddock C17; Old Dairy Farm, Paddock C42; Old Dairy Farm, Silo; Old Dairy Farm, Manure Pit; Old Dairy Farm, Piggeries and Old Dairy Farm, Stream Crossing which are all located near Chi Fu Fa Yuen. Natural or modified surface water courses are identified 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, 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 is accessible from its eastern and southern edges via Tin Wan Hill Road, access road to Tin Wan Estate and Shek Pai Wan Road. Regional connections could be routed through Pok Fu Lam Road, Aberdeen Praya Road and Aberdeen Tunnel.

As the SCVA falls partly within the area covered by the Pok Fu Lam Moratorium, project proponents are required to take special attention to any potential traffic impacts to the Pok Fu Lam area (i.e. west of the SCVA) when considering cavern options. In view of local concerns, any potential local and accumulative traffic impacts to the Southern District as a whole should also be assessed and minimised as far as possible. The project proponent 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 considering cavern options in the SCVA and review and assess any potential traffic impact on both local and district basis. 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 Drainage Services Department's tunnel, namely the Harbour Area Treatment Scheme Stage 2A tunnel, passes through the southwestern tip of the SCVA. The proposed railway tunnel for the South Island Line (West) will pass through the SCVA from west to east. Two cable tunnels, namely the Hong Kong Electric Wah Fu – Bowen cable tunnel and the Hong Kong Electric Cyberport – Wah Fu cable tunnel, are located approximately 100 m to the north and west of the SCVA respectively. Owing to the difference in elevations with respect to the extent of potential portal locations, these tunnels would not pose any insurmountable constraint on the potential uses of rock caverns within the SCVA.

5. Extent of Potential Portal Locations

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

The SCVA is accessible from Shek Pai Wan Road to the south and southwest; and Tin Wan Hill Road and the access road to Tin Wan Estate to the east of the SCVA.

Since Shek Pai Wan Road is a District Distributor, slip roads with adequate merging and diverging arrangements would be required for connecting the portal access for any level of traffic generating activities. This would require excavation to the hillside to form slopes or retaining structures.

Portal access could be provided on Tin Wan Hill Road or access road to Tin Wan Estate via a run-in/out or priority controlled junction, depending on the proposed use. The use of these locations would minimise the disruption to the existing primary road network but may be limited by the actual capacity of the roads, and the restricted nature of the access road to Tin Wan Estate.

Some potential portal locations are located in close proximity to existing Tin Wan Estate and Wah Kwai Estate and proposed public housing development at Kai Lung Wan North and Kai Lung Wan South. Project proponent should take the Tin Wan Estate and Wah Kwai Estate and proposed public housing developments at Kai Lung Wan North and Kai Lung Wan South into consideration when formulating cavern options in any development proposal in its vicinity and consult relevant Government departments, including but not limited to Planning Department and Housing Department, where appropriate.

All the extent of potential portal locations of the SCVA are located at cut slopes with natural terrain above. There may be potential natural terrain hazards in the vicinity which will 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.

