

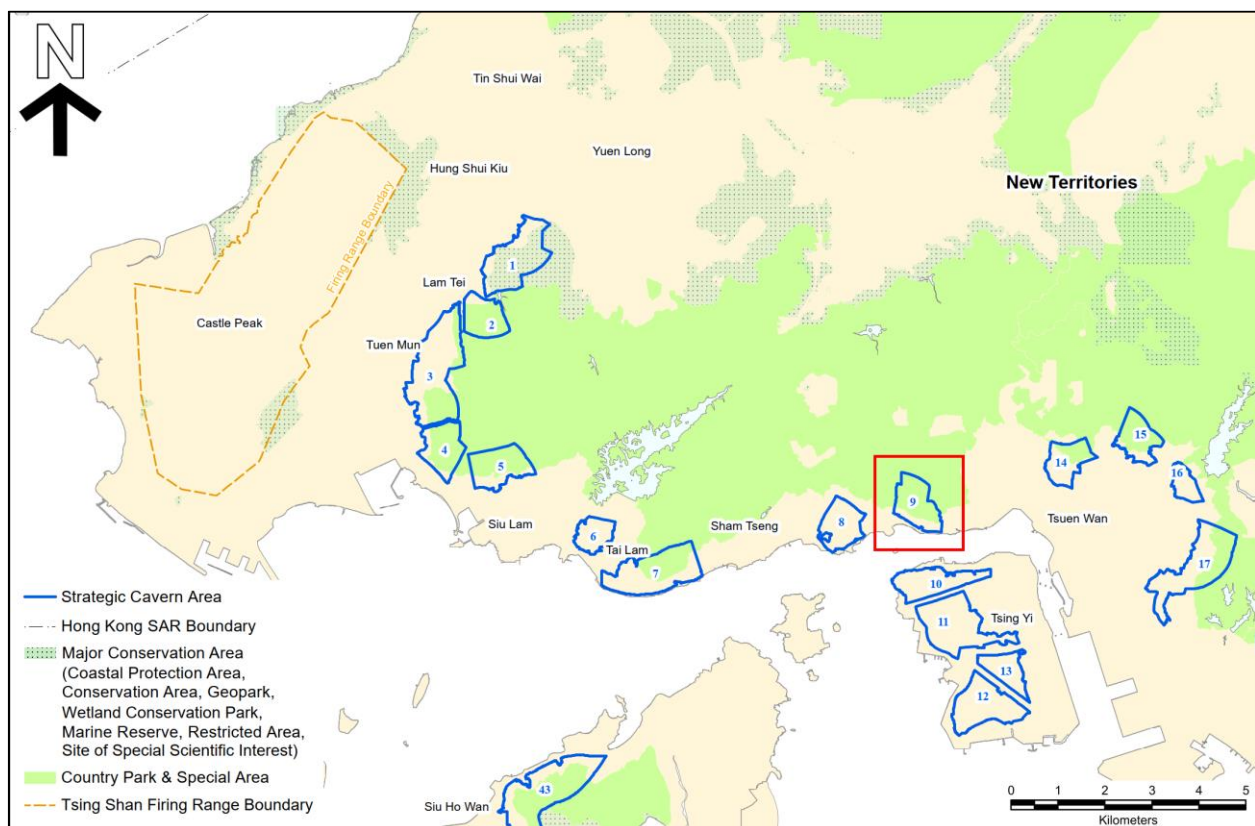
## **CAVERN MASTER PLAN – INFORMATION NOTE**

### **STRATEGIC CAVERN AREA NO. 09 – TING KAU**

*This Information Note describes the characteristics and development constraints of Strategic Cavern Area No. 09 - Ting Kau (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> :	Tsuen Wan West OZP Tsuen Wan OZP
Area:	82.2 ha
Maximum elevation in the SCVA:	+418 mPD
Minimum elevation in the SCVA:	+11 mPD

## 3. District Context

### Location

The SCVA is located at Ting Kau in the western part of the New Territories. Yau Kom Tau is to the east of the SCVA, Sham Tseng is to the west, Tai Lam Country Park is to the north and Tsing Yi across Rambler Channel is to the south.

The SCVA is generally hilly with a maximum elevation of about +418 mPD. The majority of the SCVA, including its northern and central portions, encroaches onto Tai Lam Country Park. Surrounding the SCVA, Ting Kau is a residential area with low-rise residential developments, including Royal Dragon Villa (about 50 m to the south of the SCVA) and a local village namely Ting Kau Village (about 150 m to the southwest of the SCVA). To the east of the SCVA, Yau Kom Tau is also a residential area with low- to high-rise developments, including Sunny Villa (about 50 m to the east of the SCVA), Hanley Villa (about 250 m to the east of the SCVA), a local village namely Yau Kom Tau Village (about 800 m to the east of the SCVA) and two housing sites near Yau Kom Tau Village and at Po Fung Road. To the further west of the SCVA, Sham Tseng is another residential area with high-rise residential developments as well as local villages.

In the proximity of the SCVA, there are a number of key Government, Institution or Community (GIC) facilities supporting the development of Ting Kau and Yau Kom Tau, including Yau Kom Tau Fresh Water Primary Service Reservoir (about 550 m to the east of the SCVA), Yau Kom Tau No. 2 Fresh Water Service Reservoir (about 350 m to the east of the SCVA) and Yau Kom Tau Water Treatment Works (about 550 m to the east of the SCVA).

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<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 (<https://www.ozp.tpb.gov.hk/>).

### Access

The SCVA is accessible from its southern boundary via Castle Peak Road (New Ting Kau and Ting Kau sections). Regional connections could be routed through Castle Peak Road and the nearby Tuen Mun Road and Tsing Long Highway. There is no railway 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 eastern boundary of the SCVA is defined by permitted burial grounds, valley topography and private lots in Yau Kom Tau. The western boundary of the SCVA is defined by valley topography and private lots. The southern boundary of the SCVA is defined by Castle Peak Road (New Ting Kau and Ting Kau sections) and private lots.

### **4.2. Geology**

The solid geology of the SCVA is primarily coarse ash crystal tuff, which belongs to Yim Tin Tsai Formation; and tuff breccia in the northern portion of the SCVA, which belongs to Shing Mun Formation. The SCVA is with the rock types that are suitable for the uses of rock caverns. A number of geological features, such as inferred faults and photolineaments, are identified within and in the areas surrounding the SCVA. The excavated rocks can be used as road base materials and for asphalt production, etc.

Further geological information of the SCVA can be found in the 1:20,000-scale Geological Map Sheet 6 (Yuen Long) published by the Geotechnical Engineering Office, Civil Engineering and Development Department.

### **4.3. Planning**

The SCVA is close to the existing developments in Ting Kau, Yau Kom Tau and Sham Tseng. The SCVA is also well connected to the rest of the territory by major highways, namely Castle Peak Road and Tuen Mun Road.

The areas surrounding the SCVA, in Ting Kau and Yau Kom Tau are residential development areas with various low- to high- rise developments (e.g. Royal Dragon Villa, Sunny Villa) as well as local villages (e.g. Ting Kau Village and Yau Kom Tau Village) supported by a number of GIC facilities (e.g. water treatment plants and service reservoirs).

#### **4.4. Environmental**

Environmental sensitive receivers to the potential caverns in the SCVA are the nearby existing residential developments (e.g. Royal Dragon Villa, Ting Kau Village and Sunny Villa). The eastern portion of the SCVA is located proximity to Yau Kom Tau Water Treatment Works of Water Supplies Department. Two traditional permitted burial grounds adjoin the eastern boundary of the SCVA. Also, Ting Kau Kiln Site of Archaeological Interest is located at about 250 m to the southwest of the SCVA. The majority of the SCVA encroaches onto Tai Lam Country Park and Water Gathering Grounds. There are wooded areas within the SCVA. Meanwhile, some natural water courses and streams are within the SCVA and are close to the extent of potential portal locations. Species of conservation importance including Lesser Spiny Frog and Hong Kong Cascade Frog, are recorded at the watercourse in the fringe of Tai Lam Country Park. The Tai Lam Chung Catchwater LMNO Tunnel partly located in the SCVA is also identified to be occupied by bat colonies. Potential impacts on the abovementioned species and their habitats should be assessed by the project proponents.

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 can be accessed from its southern edge via Castle Peak Road (New Ting Kau and Ting Kau sections). Regional connections could be routed through Castle Peak Road, Tuen Mun Road and Tsing Long Highway.

Tuen Mun Road is an expressway that offers good connectivity to and from the west and the east of the New Territories. Accessibility to and from Tuen Mun Road through the expressway interchanges, at Sham Tseng to the west and Tsuen Wan to the east of the SCVA respectively, would allow for multi-directional access for the potential portal locations on Castle Peak Road (New Ting Kau and Ting Kau sections) connecting to other parts of Hong Kong.

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

Two Water Supplies Department tunnels are found within the SCVA or in close proximity of the SCVA. The Tai Lam Chung Supply Tunnel No. 03 passes through the southern portion of the SCVA. The Tai Lam Chung Catchwater LMNO Tunnels 04B, 4C & 4D are located in the western portion of the SCVA. Due to the differences in elevations, these tunnels would not pose any insurmountable constraint to the potential uses of rock caverns in the SCVA.

#### **5. Extent of Potential Portal Locations**

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

The potential portal locations on Castle Peak Road (New Ting Kau and Ting Kau sections) are located at the toe of slopes alongside the carriageway. Castle Peak Road (New Ting Kau and Ting Kau sections) is a dual carriageway and could support a range of traffic generating activities.

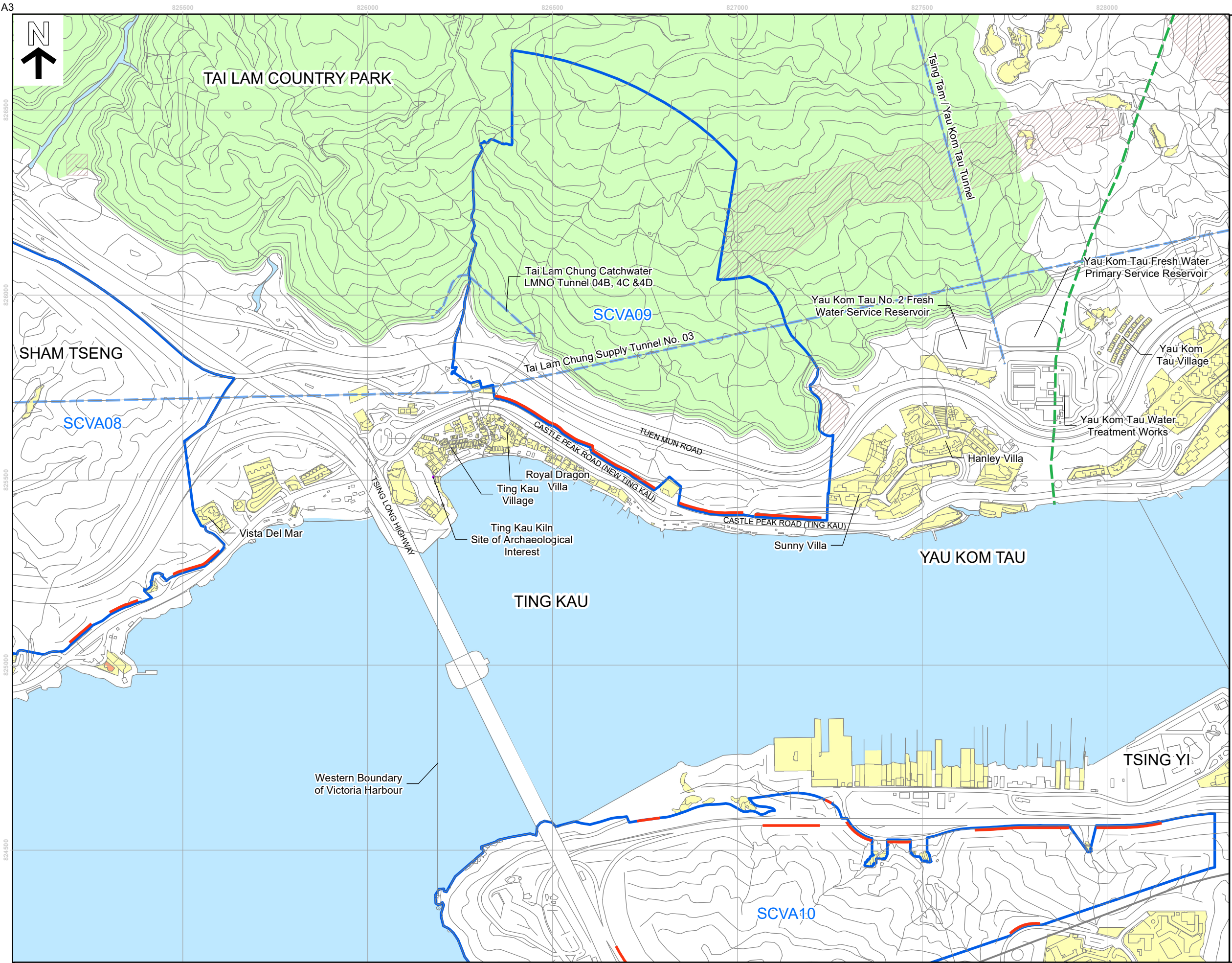
There are natural slopes above the potential portal locations. There may be potential natural terrain hazards in the vicinity of the potential portal locations which may require further study by project proponents.

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.

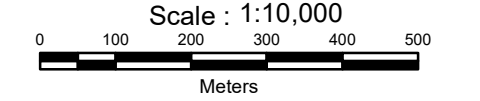




**Legend**

- Strategic Cavern Area
- Extent of Potential Portal Locations
- Existing Railway Line / Light Rail / Tram
- Drainage Services Department Tunnel
- Water Supplies Department Tunnel
- Reservoir / Sea
- Site of Archaeological Interest
- Graded Historic Building
- Private Lot
- Burial Ground
- Country Park

Note: All private lots located inside the boundary of the Strategic Cavern Area have been excised. Project proponents shall check the latest land status with the Lands Department. Reference should be made to the Explanatory Statement of the Cavern Master Plan for the delineation criteria of Strategic Cavern Area.



REFERENCE DRAWING OF STRATEGIC CAVERN AREA NO. 09 - TING KAU