研究背景 STUDY BACKGROUND

《搬遷深井污水處理廠往岩洞 — 可行性研究》建基於以下經已完成的研究：

The "Relocation of Sham Tseng Sewage Treatment Works (SmTSTW) to Caverns – Feasibility Study" is built on top of these two completed studies:

2009 - 2011

善用香港地下空間 — 可行性研究

Enhanced Use of Underground Space in Hong Kong – Feasibility Study

2011 - 2014

以填海和岩洞發展增加土地供應暨公眾參與 — 可行性研究

Increasing Land Supply by Reclamation and Rock Cavern Development cum Public Engagement – Feasibility Study

深井污水處理廠於這研究中確定成為岩洞發展的先導計劃。以下擬議在釋出土地上發展的土地用途獲得最多公眾支持：

SmTSTW was selected as a pilot scheme for rock cavern development in this Study. The following potential land uses for the Released Site received most support from the public:

- 住宅發展 RESIDENTIAL DEVELOPMENTS
- 公園 PUBLIC PARKS
- 休閒娛樂設施 RECREATIONAL OR LEISURE FACILITIES

公眾亦關注以下課題：

Major concerns on the pilot scheme:

- 交通 TRANSPORTATION
- 生態保護問題 ECOLOGICAL CONSERVATION ISSUES
- 工程的可行性 ENGINEERING FEASIBILITY
- 對當地社區的影響 IMPACT ON LOCAL COMMUNITY

公眾參與 Public Engagement

本研究的公眾參與將於2015年12月至2016年2月進行，主要目的是收集區內持分者及公眾對搬遷深井污水處理廠及釋出土地可能用途的意見。各持分者亦可以建基於早前的研究結果及這次研究最新資料提出進一步意見。

於公眾參與中所收集的意見將有助研究團隊構思釋出土地的初步規劃及完成新污水處理廠的設計大綱。

The Public Engagement (PE) under this Study will be conducted from December 2015 to February 2016. The main purpose is to reach out to local stakeholders and the public to understand their opinions on the relocation of SmTSTW and the possible uses of the existing SmTSTW site. With the findings of the previous studies, it is hoped that the local stakeholders can provide further comments in greater detail after deeper understanding of the project.

Public views collected in the PE would then be taken into consideration when envisioning the initial planning of the existing SmTSTW site, as well as the outline design of the relocated SmTSTW.

發表您的意見 PROVIDE YOUR VIEWS

我們希望聆聽您對搬遷深井污水處理廠及釋出土地可能用途的寶貴意見。

We would like to have your valuable views on the relocation of SmTSTW and the possible uses on the Released Site.

郵寄地址 Mail Address

香港灣仔告士打道5號稅務大樓42樓
渠務署顧問工程管理部
(請註明「搬遷深井污水處理廠往岩洞－可行性研究」)

Drainage Services Department / Consultants Management Division,
42/F, Revenue Tower, 5 Gloucester Road, Wan Chai, Hong Kong
(Please specify "Relocation of Sham Tseng Sewage Treatment Works to Caverns – Feasibility Study")

熱線電話 Hotline	3142 2256
傳真 Fax	2827 8526
電郵 E-Mail	enquiry@smtstwincaverns.hk
網頁 Website	www.smtstwincaverns.hk

誠邀您參加我們的公眾參與活動：

You are welcome to join our public engagement activities:

巡迴展覽 Roving Exhibitions

28/12/2015-7/1/2016	8-18/1/2016	19-29/1/2016
深井深慈街遊樂場 (位於深井污水處理廠旁) Sham Tsz Street Playground, Sham Tseng (next to the Sham Tseng Sewage Treatment Works)	荃灣西樓角路38號 荃灣政府合署2樓大堂 2/F Lobby, Tsuen Wan Government Offices 38 Sai Lau Kok Road, Tsuen Wan	荃灣深井村路 深井臨時遊樂場 Sham Tseng Temporary Playground Sham Tseng Tsuen Road, Tsuen Wan

社區工作坊 Community Workshop

30/1/2016 2:30pm - 5:00pm

深井天主教小學 Sham Tseng Catholic Primary School

如欲參與社區工作坊，可透過網頁上的網上報名表格登記，或從網頁下載報名表格，以電郵/ 傳真/ 郵寄遞交。截止報名日期為22/1/2016。成功報名人士將會優先安排入座。

To participate in the Community Workshop, please register through the online registration form on our website on or before 22 January 2016. Alternatively, you could download the registration form from our website and submit the completed form by email, fax or post . Successful applicants will have priority admittance for seating.

註：活動日期/ 地點或會因需要而更改，請到網頁了解活動詳情。
Note: Date/venue of the events are subject to change, please refer to our website for the latest announcement.

搬遷深井污水處理廠往岩洞
RELOCATION OF SHAM TSENG SEWAGE TREATMENT WORKS TO CAVERNS

可行性研究
Feasibility Study

公眾參與
PUBLIC ENGAGEMENT

28/12/2015 - 29/2/2016

渠務署 Drainage Services Department

ARUP

作為發展岩洞的先導計劃，渠務署於2014年12月展開《搬遷深井污水處理廠往岩洞 - 可行性研究》（本研究），為相關工程進行詳細工程可行性研究，舉行公眾參與活動，以及研究釋出土地可能的用途。

As a pilot scheme for cavern development, Drainage Services Department (DSD) launched the "Relocation of Sham Tseng Sewage Treatment Works to Caverns - Feasibility Study"(this Study) in December 2014. The overall objective is to examine the detailed engineering feasibility of the associated works; carry out public engagement; and study the possible uses of the Released Site.

有關現有深井污水處理廠 About the Existing Sham Tseng Sewage Treatment Works (SmTSTW)

位於深慈街的深井污水處理廠自2004年開始投入運作，為沿青山公路近水灣至青龍頭一帶約39,000人提供污水處理服務。

The SmTSTW, located at Sham Tsz Street, Sham Tseng, has been in operation since 2004. It provides sewage treatment services to a population of about 39,000 in the areas from Approach Bay to Tsing Lung Tau along Castle Peak Road.

佔地 Site Footprint	1.1 公頃 ha
設計污水處理量 Design Sewage Treatment Capacity	每天 17,000 立方米 m^3 per day
污水處理設施 Sewage Treatment Facility	化學強化一級處理 Chemically Enhanced Primary Treatment

搬遷污水處理廠到岩洞的好處
BENEFITS OF RELOCATING STW TO CAVERNS

搬遷污水處理廠有利釋放海濱用地作其他用途發展 。

The prime waterfront site currently occupied by the existing SmTSTW could be released for other developments.

將大部分的污水處理設施設置於岩洞內，可以與周邊環境融為一體。

By locating majority of the sewage treatment facilities inside caverns can integrate better with the surrounding environment.

未雨綢繆，更新老化設備， 為未來人口增長作準備 。

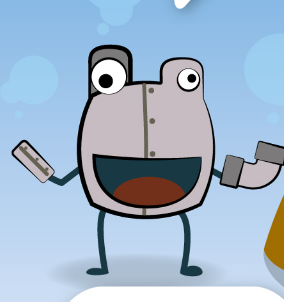
Upgrade ageing facilities and prepare for future growth in population.

因為污水處理廠設置於岩洞內，在運作過程中所產生的大部分氣體及聲浪將會與外界分隔，空氣及噪音影響因而受到控制 。

Since the STW would operate inside the cavern, most of the gas and noise generated during operation would be contained within the enclosed area. The air and noise impacts are therefore under control.

您知道把污水處理廠搬遷入岩洞的好處嗎？讓我告訴您吧！

Do you know the benefits of relocating sewage treatment works to caverns? Let me tell you!

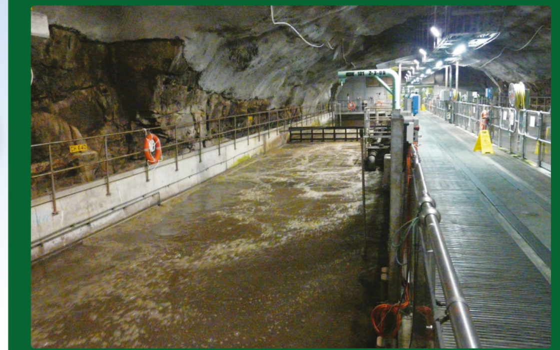


香港岩洞發展 Cavern Developments in Hong Kong

岩洞發展是成熟及日臻完善的技術，成功應用於不同的用途上。讓我為您介紹一些本地和海外的例子吧！

Cavern development is an established technology that has seen continual improvement in its application. Let me show you some of the local and overseas cavern developments!

赤柱污水處理廠
Stanley Sewage Treatment Works



香港首座設於岩洞內的赤柱污水處理廠於1995年起投入服務。這座二級污水處理廠設計污水處理量為每日 11,600 立方米，現時每天接收來自赤柱區 27,000 人約每天 9,000 立方米污水。廠房設於三組大約120米長、15米寬和17米高的岩洞，並由超過450米行車和通風隧道及豎井連接起來。

從赤柱污水處理的經驗所見，設於岩洞內的廠房不但能融合四周環境，而且在建造和日常運作都沒有對鄰近居民構成不良環境影響。

In 1995, the first cavern sewage treatment works (STW) in Hong Kong was established at Stanley. It is a secondary STW with a design sewage treatment capacity of 11,600m³/day, and currently receiving about 9,000m³/day of sewage arising from 27,000 residents. It is housed in three caverns of 120m long, 15m wide and 17m high that are connected by a series of access, ventilation tunnels and shafts.

The experience with Stanley STW demonstrates that STW in caverns not only blends in with the nearby environment, but also spares the local residents undesirable environment impacts during construction and daily operation.

西區鹹水配水庫
Western Salt-water Service Reservoirs

坐落於香港大學的西區鹹水配水庫於2009年投入服務。配水庫設於50米長、17.6米寬和17米高的岩洞，容量達到12,000立方米，服務中、西、及山頂區約120,000人口。配水庫搬遷到岩洞後釋放寶貴的土地，提供土地予香港大學建造百周年校園。設計亦能有效保存三座歷史建築及減少砍樹。

In 2009, the Western Salt-water Service Reservoirs at the University of Hong Kong was relocated to rock caverns that are 50m long, 17.6m wide and 17m high. The Salt-water Reservoir has a capacity of 12,000m³ and serves a population of more than 120,000 in the Central, Western and Peak areas. The precious surface land was released for the University's Centennial Campus development. The design helped preserve three graded historic buildings and minimised tree felling.

港島西廢物轉運站
The Island West Transfer Station

港島西廢物轉運站於1997年啓用，是一所在岩洞內建造的廢物轉運設施。它位處於堅尼地城海傍，為中西區及南區（部分）提供服務。由於該區並未有合適的垃圾轉運站選址，發展岩洞提供了一個合適及可行的解決方案。該岩洞長65米，寬度達27米，高12米。

The Island West Transfer Station completed in 1997, involved the construction of a waste transfer facility in a rock cavern near Kennedy Town waterfront. It provides service to Central and Western District and Southern District (part). As there was difficulty in identifying a suitable site for the refuse transfer station within the area, cavern development provided a good and feasible solution. The rock cavern is about 65m long, 27m wide and 12m high.

海外岩洞發展 Overseas Cavern Developments

挪威奧斯陸Oset綜合水處理廠
Oset Water Treatment Complex in Oslo, Norway

Oset綜合食水處理廠於1971年建立，建造在五組並排的岩洞內，並於2008年提升後成為歐洲其中一座最大規模的食水處理廠。廠房現在為奧斯陸九成的市民服務，提供每日391,000立方米的飲用水。

The Oset Water Treatment Complex is one of the largest facilities for water treatment in Europe. The original plant was constructed in 1971 and consisted of 5 parallel caverns. The plant was upgraded in 2008 and now produces over 391,000m³ of potable water per day whilst meeting EU standards. The plant serves about 90% of Oslo's population.

釋出土地的發展機遇及主要關注
OPPORTUNITIES AND KEY ISSUES OF DEVELOPING THE RELEASED SITE

主要機遇 Key Opportunities

延伸海濱長廊的可能
Possibility to Extend the Waterfront Promenade

住宅用途
Residential Uses

社區設施及鄰舍商業空間
Community Facilities and Local Commercial Spaces

主要關注 Key Issues

交通影響
Traffic Impact

空氣流通影響
Air Ventilation Impact

環境影響
Environmental Impacts

視覺影響
Visual Impact