Information Sheet (6)

## Enhancing Land Supply Strategy: Reclamation outside Victoria Harbour and Rock Cavern Development



Enhancing Land Supply Strategy **RECLAMATION OUTSIDE VICTORIA HARBOUR** and **ROCK CAVERN DEVELOPMENT** 

## 1. Background

The Government commenced a study on "Enhancing Land Supply Strategy: Reclamation Outside Victoria Harbour and Rock Cavern Development" (hereafter called "Enhancing Land Supply Strategy") in 2011, aiming to assess the feasibility of enhancing land supply through two land supply options, namely reclamation outside Victoria Harbour and rock cavern development. Apart from the broad technical assessments, the study comprised a 2-stage Public Engagement (PE) Exercise.

The "Enhancing Land Supply Strategy" study was concluded in 2014. Members of the public may browse the sections under "Topics in Focus" at the website of Civil Engineering and Development Department (<u>http://www.cedd.gov.hk</u>) for relevant information of the study and the Executive Summaries of the reports.

## 2. Stage 1 Public Engagement



Stage 1 PE activities were conducted from November 2011 to March 2012 to seek public views on government initiatives to enhance the land supply strategy by a "six-pronged approach", including reclamation outside Victoria Harbour and rock cavern development.

The six existing land supply options, namely:

- ✓ Rezoning land
- ✓ Redevelopment
- ✓ Land resumption
- Reclamation outside Victoria Harbour
- ✓ Rock Cavern Development
- ✓ Reuse of ex-quarry sites

As each of the six land supply options has its own limitations, in order to cater for future demand for land for housing supply and social and economic development, we need to adopt a "six-pronged approach" and flexibly apply all six land supply options. In addition, the Government also needs to build up land reserve so as to meet the changing demand for land in future.

A series of PE activities including focus group meetings, topical discussions, public forums and roving exhibitions were organized

during Stage 1 PE. Telephone surveys and opinion polls were also carried out during the period.



Major views collected are summarized below:

- There was broad support for increasing land supply and building up land reserve.
- There was broad consensus that more land is required to meet the social needs for housing and community facilities, improvement of the



living environment and development of infrastructure.

- There was broad support for a "six-pronged approach" for increasing land supply.
- Impacts on the environment and local communities are considered as the most important site selection criteria.
- There was no consensus on reclamation, with strong opposition to reclamation at some individual sites, and for those opposing reclamation, their concerns are mainly



related to impacts on the environment and local communities; site location is regarded as an important factor in considering reclamation.

There was broad support on rock cavern development, with concerns about the engineering feasibility and uses of rock caverns.

## 3. Formulation of Site Selection Criteria

The initially formulated Site Selection Criteria were put forward for discussion in Stage 1 PE. The results of Stage 1 PE showed there was broad consensus that impacts on the environment and local communities should be regarded as the most important Site Selection Criteria. The Government therefore attached great importance to these two criteria when identifying potential sites for reclamation and rock cavern development.







#### Site Selection Criteria for Reclamation



The above are eight site selection criteria for reclamation, with particular emphasis on environmental impacts and impacts on local community.

#### Site Selection Criteria for RCD



The above are eight Site Selection Criteria for rock cavern development, with particular emphasis on environmental impacts, social impacts and engineering feasibility.

# 4. Identifying Potential Sites for Reclamation and Rock Cavern Development

On reclamation, based on the Stage 1 PE results and broad technical assessments, those sites would cause significant impacts on the local communities and environment/ecology were not considered. Other sites were then evaluated against the Site Selection Criteria, singling out a few sites of higher development potential for further consideration. They included five near-shore reclamation sites, namely Lung Kwu Tan, Siu Ho Wan, Sunny Bay, Ma Liu Shui and Tsing Yi Southwest as well as artificial islands in the central waters.



Major considerations include:

- Priority is given to near-shore reclamation since it can easily be connected to existing road networks and developed areas
- Man-made shorelines far from existing communities are selected as far as possible
- Avoid encroaching on natural shorelines or environmentally sensitive areas

As regards the option of artificial islands, we have reviewed the eastern waters, central waters and western waters of Hong Kong. The eastern waters are bound by shorelines of high ecological value whilst the western waters are constrained by a number of major infrastructure projects. The central waters, however, can be developed without encroaching on shorelines of high ecological value.

On rock cavern development, a similar selection procedure was followed by the Government. Yet, the public considered that engineering feasibility of rock cavern development is also important. Therefore, this factor has also been taken into account in our selection work. The three sites selected for implementation of the pilot schemes of rock cavern development include Diamond Hill Fresh Water and Salt Water Service Reservoirs, Sai Kung Sewage Treatment Works and Sham Tseng Sewage Treatment Works.

Major considerations include:

- Priority is given to relocation of those Not-in-My-Backyard facilities near urban or developed areas, thus creating synergy with the surrounding areas.
- Avoid selecting those facilities already with recreational or leisure uses as far as possible.



• In light of technical constraints or unavailability of suitable cavern sites, the feasibility of relocating some major facilities such as water treatment works should be subject to further studies.

That said, no matter if it is for reclamation or rock cavern developments, further studies are required to establish their engineering feasibility and to address the relevant technical issues.

## 5. Stage 2 Public Engagement



Stage 2 PE were conducted from March 2013 to June 2013, aiming to introduce to the public the potential reclamation and rock cavern development sites, their potential and challenges and seek public views on their possible land uses as well as particular issues requiring special attention in further studies.

A series of PE activities including public forums, roving exhibitions and opinion polls were organized during Stage 2 PE.

- Findings indicated that:
- Land reserve, residential development (in particular public rental housing), recreational or leisure facilities and public parks were the four land uses with most support among those providing feedback on reclamation.
- Increasing job opportunities and alleviating housing shortage were most frequently cited reasons in support of reclamation. As in Stage 1 PE, the dominant theme of the public concerns was the environment. As for the reclamation sites in western waters, the primary concern was about the marine ecological impacts, in particular those upon the habitats of Chinese White Dolphins.

There was particularly strong resistance against the potential reclamation site at Ma Liu Shui from the residents in Ma On Shan, opposite to Ma Liu Shui, and some students of the Chinese University of Hong



Kong (CUHK), who expressed their views through submission of large number of questionnaires, the signature campaigns/petitions and Facebook initiated by local groups, residents' groups and the Student Union of CUHK. Impacts on the existing community and transport services, as well as concerns about the environment, including those impacts upon coastal landscape and habitats, marine ecology, air and noise pollution, water flow and quality of Shing Mun River, were the major reasons for the resistance to the proposal from the residents and students.

There were a number of views collected via different channels expressing opposition to all potential reclamation sites, mostly from the signature campaigns/petitions and Facebook initiated by the Student Union of CUHK, indicating their remarkable resistance to any one of the five reclamation sites. On the other hand,



construction some industry groups expressed their acceptance for all five reclamation sites and proposed economic rationales (e.g. job creation) in support of reclamation, which were shared and supported by some quarters of the community.

There were fewer objections specifically to the reclamation sites at Sunny Bay and Tsing Yi Southwest. The number of objections to the artificial islands was also relatively limited. As regards the pilot schemes for rock cavern development, residential development (in particular public rental housing), public parks and recreational or leisure facilities were the three possible land uses with the most support. The concerns over the pilot schemes were primarily related to the environment, transportation and safety.

The views collected will be taken into account in further studies.





### 6. Next Step

As set out by the Chief Executive in his 2015 Policy Address, reclamation outside Victoria Harbour is an important source of long-term land supply. To build up the land reserve, it is necessary to press ahead with reclamation at suitable sites outside Victoria Harbour, while endeavoring to keep the impacts on the environment and marine ecology to a minimum.

Feasibility studies on some individual potential near-shore reclamation sites are under way. The more detailed technical studies, environmental impact assessments as well as the work required by statutory procedures will also be carried out in future.

Three of the five potential near-shore reclamation sites, namely Sunny Bay, Siu Ho Wan and Lung Kwu Tan, are located in the western waters where there are already a number of large-scale infrastructure projects under planning or construction. To consider the major environmental considerations in advance, the Government has completed a study on cumulative environmental impact assessment at these three reclamation sites, with a view to strategically assessing the overall environmental impacts of these three reclamation sites on the western waters. The findings will serve as an important reference in our planning of and preparation for the studies, including the statutory environmental impact assessments, in the next stage.

As for rock cavern development, the Drainage Services Department and Water Supplies Department commenced the feasibility studies on the three pilot schemes in 2014.