

**Island District Council
Paper No. IDC 36/2013**

**Enhancing Land Supply Strategy:
Reclamation Outside Victoria Harbour and Rock Cavern Development –
Stage 2 Public Engagement**

1. PURPOSE

Development Bureau, Civil Engineering and Development Department and Planning Department are now conducting stage 2 public engagement (PE) under the study “Enhancing Land Supply Strategy: Reclamation Outside Victoria Harbour and Rock Cavern Development” (ELSS). The purpose of this paper is to brief Island District Council of stage 1 PE results and stage 2 PE activities, introduce the proposed reclamation site at Siu Ho Wan and the study of artificial islands in central waters of Hong Kong, and seek members’ comments.

2. BACKGROUND

- 2.1 The Government has adopted a six-pronged and flexible approach in land supply through rezoning land, redevelopment, land resumption, reclamation, rock cavern development and reuse of ex-quarry sites to support the economic and social development of Hong Kong and aspiration to improve living environment.
- 2.2 Stage 1 PE was carried out from November 2011 to March 2012 to collect public views on enhancing land supply strategy. Based on the public views collected from stage 1 PE, we formulated site selection criteria for reclamation and rock cavern development, conducted broad technical assessment and selected a few reclamation and rock cavern development sites to consult the public at stage 2 PE.
- 2.4 The Chief Executive proposed in his 2013 Policy Address that to respond more flexibly to society’s needs for land, the Government is determined to develop new land extensively and build up an abundant “land reserve” that can more than meet the short-term demand. That way, the reserve can be used to meet future demand in a timely manner. To build up the land reserve, we will actively press ahead with reclamation outside Victoria Harbour, while endeavouring to keep the impact on the environment and marine ecology to a minimum. Reclamation aside, rock cavern development is a viable source of land supply.

3. Results of Stage 1 Public Engagement

- 3.1 The results of the stage 1 PE revealed that the majority of the public generally agreed on a six-pronged land supply strategy, including reclamation outside

Victoria Harbour and rock cavern development to increase land supply. Most of the public also agreed that a land reserve should be built up for meeting unexpected demands in Hong Kong.

- 3.2 On reclamation outside the Victoria Harbour, the public opinions were mixed with supporting and objecting views. Most of the objecting views focused on several reclamation sites that might cause greater impacts on the environment and the community. Separately, members of the public generally agreed on the eight site selection criteria with guiding principles in accordance with the social, environmental and economic benefits, and with particular emphasis on the criteria relating to the environmental, marine ecological and social impacts. Results of stage 1 PE are uploaded to the ELSS website (address: www.landsupply.hk).

4. SELECTION OF POTENTIAL RECLAMATION AND ROCK CAVERN DEVELOPMENT SITES

- 4.1 The results of the stage 1 PE indicated that impacts on local communities and the environment were considered the most important among all the site selection criteria. Hence, we have attached particular importance to these criteria in identifying potential reclamation and rock cavern development sites.
- 4.2 Based on the stage 1 PE results and broad technical assessments, reclamation sites that might have significant impacts on local communities and environment / ecology were not considered. Other sites were evaluated with reference to the site selection criteria¹. A few sites with relatively higher potential were selected for further assessment. Preliminary mitigation measures for the shortlisted potential sites were assessed. However, further studies are necessary to confirm the engineering feasibility of the shortlisted sites and to address the relevant technical issues.
- 4.3 A similar selection process² was applied to rock cavern development. Yet, the public considered engineering feasibility of rock cavern development was also important. This factor has also been taken into consideration.
- 4.4 Based on the site selection criteria confirmed in the stage 1 PE, we have selected five near shore reclamation sites comprising Lung Kwu Tan, Ma Liu Shui, Siu Ho Wan and Sunny Bay at Lantau North, as well as Tsing Yi Southwest and

¹ The site selection criteria for reclamation are the impact on the local community, site location and accessibility, meeting local needs, environmental impacts (particularly marine ecology), environmental benefits, planning flexibility, engineering feasibility and cost effectiveness.

² Site selection criteria for rock cavern development sites : social impact at the cavern development site, environmental impacts at the cavern development site, social benefits at the releasing site, environmental benefit of relocating existing facilities, cost effectiveness, specific requirements of facility, suitability of relocation based on existing facility status, engineering feasibility.

possible artificial islands in the central waters for further consideration. Major considerations in selecting reclamation sites include:

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

4.5 As regards the option of artificial islands, we have reviewed the eastern waters, the central waters and the western waters of Hong Kong. The eastern waters of Hong Kong are extensively bounded by protected shorelines of high ecological values. These waters are commonly characterized by abundance of mangroves with rich diversity and fauna species, seagrass areas, and key coral areas. In addition, the eastern waters are more exposed to severe offshore wave conditions which would necessitate the provision of robust and massive engineered shore-protection structures. Reclaiming artificial islands in such deep waters will involve high construction cost. On the other hand, the western waters are already heavily constrained by a number of major infrastructure projects which are under planning or construction. The central waters of Hong Kong (waters between Lantau and Hong Kong Island) have been identified as having good opportunity for artificial island. Artificial islands have greater flexibility in planning and with proper site selection, can avoid encroaching on natural shorelines of high ecological value.

4.6 The total area of the five near shore reclamation sites is about 600 hectares. Together with the artificial islands, the total area of these sites is about 2,000 to 3,000 hectares which could be used for land reserve, housing and other uses in future.

5. POTENTIAL RECLAMTION SITES IN ISLANDS DISTRICT

Siu Ho Wan

5.1 The potential reclamation site at Siu Ho Wan is near the airport and can link up with major trunk road and infrastructure. It is suitable for strategic economic development and can create job opportunities and support the development of the Tung Chung new town. The area of the reclamation site is approximately 100-150 hectare.

5.2 The opportunities for the reclamation site at Siu Ho Wan are unique. The site is connected to major infrastructure and facilities including the airport, Hong Kong-Zhuhai-Macau Bridge, Tuen Mun – Chek Lap Kok Link and North Lantau

Highway. According to the 2007 Revised Concept Plan for Lantau, the site has potential to be developed into a logistics park. The development will provide job opportunities benefiting Hong Kong and Tung Chung New Town. For the proposed reclamation at Siu Ho Wan, we will conduct comprehensive traffic impact assessment to provide effective transportation infrastructure, including connection with other districts, to cope with the future land use of the reclamation site.

- 5.3 We have also faced a number of challenges. The future planning should take into account the potential development constraint due to the noise induced by aircraft. The boundary of reclamation will avoid encroachment on the Tai Ho Conservation Area nearby. Chinese White Dolphins are active in nearby waters. The proposed site will be refined to avoid encroachment on Chinese White Dolphin active spot. Recently, we have conducted preliminary ecological survey. No special species of high ecological value have been found.

Artificial Islands in Central Waters

- 5.4 The central waters of Hong Kong (waters between Lantau Island and Hong Kong Island) has been identified as having good opportunity for artificial islands. The artificial islands have more flexibility in planning and can avoid encroaching on natural shoreline of high ecological value. They can be developed as new development areas in the long term if supported by convenient and cost-effective transportation network.
- 5.5 Strategic studies will be conducted to assess the impact on marine traffic safety, port operations, water quality and marine ecology, and examine the engineering feasibility, external transport links, possible land uses, etc.

6. VISION OF RECLAMATION

- 6.1 Reclamation will not affect existing land uses and can generate a large piece of new land to cater for unexpected demand timely. Hence, it is most suitable as land reserve. Compared with other approaches of land supply, reclamation can provide greater flexibility for comprehensive planning of a balanced and sustainable community. In fact, there are many successful examples. Reclamation in Shatin, Ma On Shan and Tai Po New Town has provided land for housing development and community facilities to accommodate over hundreds of thousands population. Reclamation can also provide decanting site to accommodate residents and facilities affected by other approaches of land supply. It also allows relocation of unpleasant or special industrial facilities in the urban areas to reduce impacts on the local community and to release valuable land in the urban areas for other uses.

- 6.2 Hong Kong generates about 6 to 7 million tonnes of surplus construction and demolition materials annually. Reusing surplus materials for reclamation is environmentally friendly, less costly and helps prevent occupying valuable land by surplus materials. Reclamation can also handle the contaminated mud generated from routine dredging of navigation channels.
- 6.3 Reclamation can enhance the marine environment of existing man-made shorelines by creation of eco-shoreline, and allow for public enjoyment.

7. STAGE 2 PUBLIC ENGAGEMENT

- 7.1 We held a press conference and launched the stage 2 PE on 21 March 2013. The stage 2 PE will last for three months. We have scheduled a series of PE activities including briefings to the LegCo Panel on Development, relevant district councils, statutory bodies, local communities and stakeholders; conducting public forums and roving exhibitions with face to face interviews. We have set up a PE website (address: www.landsupply.hk) since commencement of the stage 1 PE and will continue update the information in the website such as the schedule of roving exhibitions. Members of the public are welcomed to participate in the PE activities or express their views.
- 7.2 The purpose of stage 2 PE is to collect the views of the public on the potential reclamation and rock cavern development sites and the concept of artificial islands in central waters. We would like to know what particular aspects on individual sites that the Administration should pay attention to when carrying out further studies, including views on potential future land uses of the selected sites.
- 7.3 To facilitate informed discussions, the PE digest will be widely disseminated to the public at various outlets including District Offices, roving exhibition counters, public forums and briefing meetings, and uploaded to the PE website. Members of the public are welcomed to give their views to us by email, fax or post on or before 21 June 2013

8. WAY FORWARD

- 8.1 On reclamation outside Victoria Harbour, we plan to seek funding to embark on the following studies –
 - (a) cumulative environmental impact assessment study on the three proposed near shore reclamation sites at the western waters including Lung Kwu Tan, Siu Ho Wan and Sunny Bay;
 - (b) detailed feasibility studies for the five near shore reclamation sites including Lung Kwu Tan, Siu Ho Wan, Sunny Bay, Tsing Yi Southwest and

Ma Liu Shui;

- (c) strategic studies to identify potential sites for artificial islands in the central waters;

8.2 Following the completion of the studies to establish the feasibility, we will carry out design and relevant statutory procedures with a view to commencing reclamation as soon as possible to build up a land reserve.

9. ADVICE SOUGHT

9.1 Members are invited to provide views on the proposed reclamation site at Siu Ho Wan and study on the artificial island in central waters, and the stage 2 PE on Enhancing Land Supply Strategy: Reclamation and Rock Cavern Development.

Civil Engineering and Development Department
April 2013

Enclosure: Enhancing Land Supply Strategy: Reclamation Outside Victoria Harbour and Rock Cavern Development - Stage 2 Public Engagement Digest