For discussion
on 25 March 2014

Legislative Council Panel on Development

768CL - Strategic studies for artificial islands in the central waters

PURPOSE

This paper seeks Members’ views on the proposal to upgrade 768CL to Category A at an estimated cost of $226.9 million in money-of-the-day (MOD) prices for carrying out the strategic studies for artificial islands in the central waters (the Study) and associated site investigation works.

PROJECT SCOPE AND NATURE

2. We plan to conduct the Study to explore the feasibility of constructing artificial islands in the central waters between Hong Kong Island and Lantau, including development of an East Lantau Metropolis (ELM) as announced in the Chief Executive’s 2014 Policy Address (PA), for accommodating new population and supporting the economic development of Hong Kong. The Study aims to formulate proposals at strategic level for potential artificial islands and associated reclamation in the central waters.

3. The scope of 768CL comprises-

   (a) engineering feasibility and infrastructure study on proposals of artificial islands and associated reclamation including broad reclamation extent, possible land uses and transport links;

   (b) port operations and marine traffic and safety study;

   (c) strategic environmental assessment;

   (d) fisheries impact assessment;

   (e) consultation exercises with relevant stakeholders; and

   (f) associated site investigation works including supervision.

A location plan showing the study area is at Enclosure 1.
4. Subject to the funding approval of the Finance Committee, we plan to commence the Study and the associated site investigation works in July 2014 for completion in July 2017.

JUSTIFICATION

5. We started the technical studies and two-stage public engagement (PE) exercise for the “Enhancing Land Supply Strategy (ELSS): Reclamation outside Victoria Harbour and Rock Cavern Development” in July 2011. During the Stage 1 PE conducted from November 2011 to March 2012, there has been broad support for a six-pronged approach\(^1\) for enhancing land supply, including reclamation outside Victoria Harbour.

6. Taking the public views on the site selection criteria into consideration, we identified five potential near-shore reclamation sites and the potential of artificial islands. On the locations of artificial islands, we have reviewed the eastern waters, the central waters and the western waters of Hong Kong. We concluded that the central waters have good opportunity for artificial island development since they are neither bounded by shorelines of high ecological value as in the eastern waters nor constrained by many major infrastructure projects under planning/construction as in the western waters. Sizable reclaimed land can provide opportunities for abundant supply of new land and comprehensive land use planning and design.

7. During the Stage 2 PE conducted from March to June 2013, the public was consulted on the possible land uses for the proposed reclamation sites and artificial islands as well as the areas of concern to be addressed in future technical studies. For artificial islands, residential development (in particular the public rental housing), tourism related facilities, recreational or leisure facilities, utilities, new towns and land reserve are the major supported land uses. Marine ecology, ecological conservation, transport infrastructure, cost-effectiveness and the need to expedite land supply are the major concerns. A summary of the views on artificial islands in the central waters collected during the Stage 2 PE is at Enclosure 2.

8. As set out in the 2014 PA, the Government will explore ways to develop the waters east of Lantau Island and neighbouring areas, with a view to developing the ELM for accommodating new population and a new core business district in addition to Central and Kowloon East for promoting economic development and providing job opportunities.

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\(^1\) The six-pronged approach includes re-zoning, resumption, redevelopment, reclamation outside Victoria Harbour, rock cavern development and re-use of ex-quarry sites.
9. Apart from the artificial islands in the ELM, there is great potential for developing artificial islands in other areas of the central waters in the longer term for accommodating other beneficial uses, with a view to releasing the scarce land resources in existing urban areas and providing new land to meet our socio-economic needs.

10. Therefore, we propose to carry out the Study to ascertain the preliminary engineering feasibility and evaluate environmental implications of the artificial islands, with due regard to concerns expressed by the public during the Stage 2 PE. Separate planning and engineering studies will then be carried out on the artificial islands and associated reclamation proposed in the Study as necessary.

11. In view of the complex and multi-disciplinary nature of the Study requirements, we propose to engage consultants to undertake the Study and to supervise the associated site investigation works.

**FINANCIAL IMPLICATIONS**

12. We estimate the capital costs of 768CL to be $226.9 million in MOD prices, made up as follows-

<table>
<thead>
<tr>
<th>(a) Consultants’ fees for</th>
<th>$ million</th>
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<tbody>
<tr>
<td>(i) Engineering feasibility and infrastructure study on proposals of artificial islands and associated reclamation</td>
<td>61.6</td>
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<tr>
<td>(ii) Port operations and marine traffic and safety study</td>
<td>31.5</td>
</tr>
<tr>
<td>(iii) Strategic environmental assessment</td>
<td>29.8</td>
</tr>
<tr>
<td>(iv) Fisheries impact assessment</td>
<td>14.9</td>
</tr>
<tr>
<td>(v) Consultation exercises with relevant stakeholders</td>
<td>6.6</td>
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<tr>
<td>(vi) Supervision of associated site investigation works</td>
<td>2.9</td>
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| (b) Site investigation works | 29.0 |
$ million

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<tr>
<td>(c) Contingencies</td>
<td>17.5</td>
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<tr>
<td>Sub-total</td>
<td>193.8 (in September 2013 prices)</td>
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<tr>
<td>(d) Provision for price adjustment</td>
<td>33.1</td>
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<tr>
<td>Total</td>
<td>226.9 (in MOD prices)</td>
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PUBLIC CONSULTATION

13. We have completed a two-stage PE exercise on “ELSS: Reclamation outside Victoria Harbour and Rock Cavern Development” as mentioned in paragraphs 5 and 7 above.

14. As part of the Stage 2 PE, we briefed the Islands District Council (IsDC) on the proposal of constructing artificial islands on 22 April 2013. Members generally requested more details and cited concerns about constructing artificial islands in the central waters. We further consulted IsDC on the Study on 24 February 2014. Members requested that the Study should take into account the possible transport links to the existing road network on Lantau and other technical issues such as water flow, port operation, marine safety and cost effectiveness etc. Members had no further comment on the Study after the Civil Engineering and Development Department re-affirmed that they would address these issues in the Study.

ENVIRONMENTAL IMPLICATIONS

15. The Study and the associated site investigation works are not designated projects under the Environmental Impact Assessment Ordinance (Cap. 499) and will not cause any adverse environmental impact. A strategic environmental assessment will be conducted under the Study to evaluate the environmental implications and avoid potential environmental problems.

16. The proposed site investigation works will only generate very little construction waste. We will require the consultants to fully consider measures to be implemented in future construction stage to minimise the generation of construction waste and to reuse/recycle construction waste as much as possible. We will implement suitable mitigation measures to control any short-term environmental impacts arising from the site investigation works.
17. The proposed reclamations, major infrastructures and future follow-up engineering feasibility studies are designated projects under the Environmental Impact Assessment Ordinance (Cap. 499). Environmental impact assessment will be carried out under the respective future studies to confirm their environmental acceptability and mitigation measures, and environmental permits are required prior to the commencement of construction and operation of these projects.

**HERITAGE IMPLICATIONS**

18. Cultural heritage impact assessment for the proposed development and infrastructures will be carried out as part of the strategic environmental assessment in the Study.

**LAND ACQUISITION**

19. The Study and the associated site investigation works will not require any land acquisition.

**BACKGROUND INFORMATION**

20. On 24 May 2011, we briefed Members on the Administration’s plan to launch a two-stage PE on enhancing land supply strategy and conduct technical studies to explore the options of reclamation on an appropriate scale outside Victoria Harbour and rock cavern development. Members expressed support to commence the technical studies and the PE exercise.

21. We launched the Stage 1 PE on 10 November 2011 and briefed Members on 22 November 2011 on the progress of the technical studies and Stage 1 PE, key issues including the proposed six-pronged approach of increasing land supply, and the initial site selection criteria for reclamation outside Victoria Harbour and rock cavern development.

22. The Panel on Development held a special meeting on 10 March 2012 to receive public views on the Administration’s strategy on enhancing land supply.

23. On 22 January 2013, we briefed Members on the policy initiatives of the Development Bureau in the 2013 PA. Among others, we outlined the results of the Stage 1 PE.
24. We launched the Stage 2 PE on 21 March 2013 and briefed Members on 23 April 2013 on the possibility of further exploring the development of artificial islands in the central waters.

25. The Panel on Development held a special meeting on 1 June 2013 to receive public views on the proposed reclamation sites including artificial islands in the central waters.

26. We upgraded 768CL in Category B in September 2013.

27. On 28 January 2014, we briefed Members on the results of Stage 2 PE and the new initiatives of developing an ELM.

28. The Study and the associated site investigation works will not involve any tree removal or planting proposal.

WAY FORWARD

29. Subject to Members’ support, we plan to seek the Public Works Subcommittee’s endorsement in April 2014 for upgrading 768CL to Category A, with a view to seeking funding approval from the Finance Committee in May 2014.

Development Bureau
Civil Engineering and Development Department
March 2014
A summary of views collected in Stage 2 Public Engagement on artificial islands in the central waters

**Land Use**

Land reserve and residential development (in particular public rental housing) received the highest support among the supported land uses for possible artificial islands in the central waters between Lantau and Hong Kong Island.

2. Other major supported land uses covered uses for commercial, industrial, Government, institution or community, open space and utilities. These included tourism related facilities, recreational or leisure facilities, holiday village, tourist spots, industrial land/estate/facilities, and Not-in-my-backyard (NIMBY) facilities relocated from urban areas.

3. New town, which is in the form of comprehensive development, received more support as potential land use for artificial islands than for other potential near-shore reclamation sites.

4. However, there was also similar number of comments which did not support the use of artificial islands to house NIMBY facilities.

**Aspects of Specific Concern**

5. A considerable number of respondents indicated that reclamation works would increase job opportunities and help alleviating housing problem. Some considered that constructing the artificial islands in the central waters would be beneficial to local community and to economic growth.

6. Impact on marine ecology, ecological conservation, transportation, cost-effectiveness and the need to expedite land supply were major concerns about the artificial islands in the central waters.

7. Other concerns included deterioration of seawater quality, air and noise pollution near the development site, impact on fisheries, local community, water flow, shipping routes or safety, construction cost, and engineering feasibility.