

**Provisional Local Vessel Advisory Committee**

**Planning and Engineering Feasibility Study for Development  
on Sham Tseng Further Reclamation**

**PURPOSE**

1. This paper is to brief the Members of the Committee on the findings of Stage 1 of the Planning and Engineering Feasibility Study for Development on Sham Tseng Further Reclamation and to seek the Members' view on the proposal.

**BACKGROUND**

2. Housing Bureau recently directed that the feasibility of extending the originally planned reclamation for more housing to meet the Chief Executive's housing target be investigated. CED undertook a preliminary study in March 1997 and found that it was feasible from the engineering viewpoint to further reclaim the water area south of the Sham Tseng Township to about 25 ha. (**Figure 1** refers). CED then commissioned a planning and engineering feasibility study for the proposed further reclamation in April 1998 to examine the possible reclamation layouts, housing type, development parameters and the potential impacts of the developments on marine traffic, transport and infrastructure capacities as well as the environment.

**SCOPE OF STUDY**

3. The Study is divided into two Stages with a total estimated study period of 18 months. Stage 1 Study has established the feasibility of the reclamation. Stage 2 Study has commenced on 15 April 1999 and the public consultation will be carried out during the first three months of the second part of the study. The Provisional Local Vessel Advisory Committee is one of the forums to be consulted.
4. One of the key objectives of the Study is to ascertain the extent and configuration of the proposed reclamation and the associated civil engineering works with particular attention given to the impacts associated with marine traffic. The reclamation proposal shall ensure that the marine traffic within the Ma Wan Fairway will not be adversely affected by the reclamation.

**THE RECLAMATION**

5. The proposed reclamation as outlined in the Study Brief covers the water area south of the existing Sham Tseng township extending eastward from Tsing Lung Tau to the newly formed Sham Tseng Sewage Treatment site. The reclamation considered is approximately 16.3 ha in area. This reclamation would effectively complete the infill of the embayment at Sham Tseng.

6. In determining the optimal reclamation layout and extent, a number of reclamation layout options have been generated from the proposed reclamation extent described in the Study Brief. The layout that will best achieve the overall objective of the further reclamation is shown in **Figure 2**.
7. The sea-wall will be constructed with a vertical step to provide a water depth of –6mPD from the toe of which will be a 1(V):1.7(H) slope to the seabed, at approximately –20mPD. The foot of the slope will be to the north of the present northern boundary of the Ma Wan Fairway and will not reduce either the depth or width of the existing Fairway. **Figure 3** illustrates the proposed typical sea-wall section.

## **MARINE IMPACT ASSESSMENT**

8. A Marine Traffic Impact Assessment has been undertaken to assess the effects that the proposed reclamation option, with its commensurate loss of water space, might have on the flow of marine traffic. This has been considered both in terms of safety of navigation and the capacity of the Ma Wan Fairway in view that this is one of the busiest shipping fairways within Hong Kong waters. The assessment has also considered the future growth of the marine traffic and the anticipated construction traffic. The following conclusions have been reached:
  - The further reclamation is not considered to have any significant effect on the overall safety of navigation.
  - Assessments of changes in current velocity have indicated that the increase of current velocity as a result of the reclamation is small
  - The existence of the proposed reclamation will displace the routes of small crafts to the south and will result of a minor increase in vessel density towards central portion of the Ma Wan Fairway.

## **PROPOSED DEVELOPMENT**

9. Under the recommended Master Development Plan, a marine basin will be formed at the western end of the proposed reclamation (**Figure 4** refers). This marine basin will be provided as a re-provisional item for the existing kaito pier at Angler's Beach.
10. To relieve the anticipated traffic congestion in the future for the Sham Tseng area, a bypass has been proposed on the reclamation. The alignment that has been adopted will be running along the waterfront of the proposed reclamation to minimise disruption to the existing development and maximise the development potential of the reclamation. The adopted alignment will in general be within the footprint of the reclamation except at the western connection to the future widened Castle Peak Road. The connection will be in the form of an elevated viaduct with a set of bridge piers being proposed in the water area south of the Ting Kau Sewage Treatment Work site. The impact of the pier structure to the marine traffic has been assessed in the MTIA and negligible impact is found. **Figure 5** shows the arrangement of the western connection of the bypass.

## **IMPLEMENTATION PROGRAMME**

11. The reclamation works are anticipated to commence in mid 2003 and are expected to be completed in late 2005.

## **PRESENTATION**

12. This paper will be presented to members by the consultant, Scott Wilson (Hong Kong) Ltd.

## **ATTACHMENT**

- Figure 1 Sham Tseng Further Reclamation – Development Area
- Figure 2 Selected Reclamation Layout Option
- Figure 3 Typical Seawall Layout
- Figure 4 Location of the Existing Kaito Pier and the Proposed Marine Basin.
- Figure 5 Bypass – Western Connection.

Planning and Development Branch  
Planning and Services Division  
Marine Department  
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