For information

Legislative Council
Panel on Development

Proposed Riverwall at Yat Chung, Tai O

Purpose

This paper serves to inform Members of the proposal for the construction of a riverwall at Yat Chung, Tai O.

Background

2. In June 2007, Civil Engineering and Development Department commissioned the consultancy "Improvement Works for Tai O Facelift – Feasibility Study", to examine in detail the feasibility of various proposals for revitalising Tai O. The public in general supported the early implementation of the revitalisation plan for Tai O and provided valuable suggestions in respect of the development proposals. Meanwhile, we have identified, with the advice of the Tai O Rural Committee, a number of advance improvement works to cater for the more imminent needs of the local community of Tai O. One of the proposals is the riverwall at Yat Chung.

3. To alleviate the flooding problem in Wing On Street which occurs under average meteorological conditions, a riverwall of about 160m long running along Yat Chung in parallel to Wing On Street and ramps at both ends of Wing On Street are planned to be constructed (see Figure 1).

4. According to the preliminary design, the proposed riverwall and ramps will be constructed on Government land.

Proposed Coping Level

5. A flood protection level of +3.0mPD is proposed, which is higher than the highest astronomical tide at about +2.7mPD as forecasted by the Hong Kong Observatory. Accordingly, a coping level of +3.3mPD is recommended for the proposed riverwall to account for wave run-ups and provide a margin of safety (see Figure 2). This will reduce the risk of flooding at Wing On Street due to

high tides under average meteorological conditions.

Construction Method and Associated Works

6. Currently, there are a number of technically feasible construction methods and the method to be selected will be determined in the detailed design stage. The selected method will seek to minimize the impacts (e.g. noise and vibration) to the nearby residents and the environment during construction. Visual mitigation measures for the riverwall will also be considered in the detailed design stage.

7. Associated works and facilities are being planned to be constructed in conjunction with the riverwall construction. They include the provision of stairways at certain locations of the riverwall to maintain access to the river, pebble paving on the existing ground to be enclosed by the riverwall, and the construction of drainage channels to collect surface runoff.

Site Investigation

8. Site investigations will need to be carried out in order to obtain geological information for the detailed design. The noise and vibration nuisance caused by the site investigation works will be intermittent and will not impose significant impact on residents' daily lives.

Sewerage Connection

9. Prior to the riverwall construction, it is necessary to carry out a pre-condition survey on each house/stilted structure on the waterfront along Wing On Street to facilitate the detailed design. We will prepare photographic records, site sketches and layout plan of the sewerage system. We will also carry out surveying of the ground level and structural assessment. The pre-condition survey may require access to the affected premises but this will not impose significant impact on residents' daily lives.

10. The sewerage connection works are pre-requisite for the riverwall construction to connect the existing discharges from toilets/kitchens to the public sewage system. The works may require temporary suspension of use of the toilets/kitchens during the construction stage.

Public Consultation

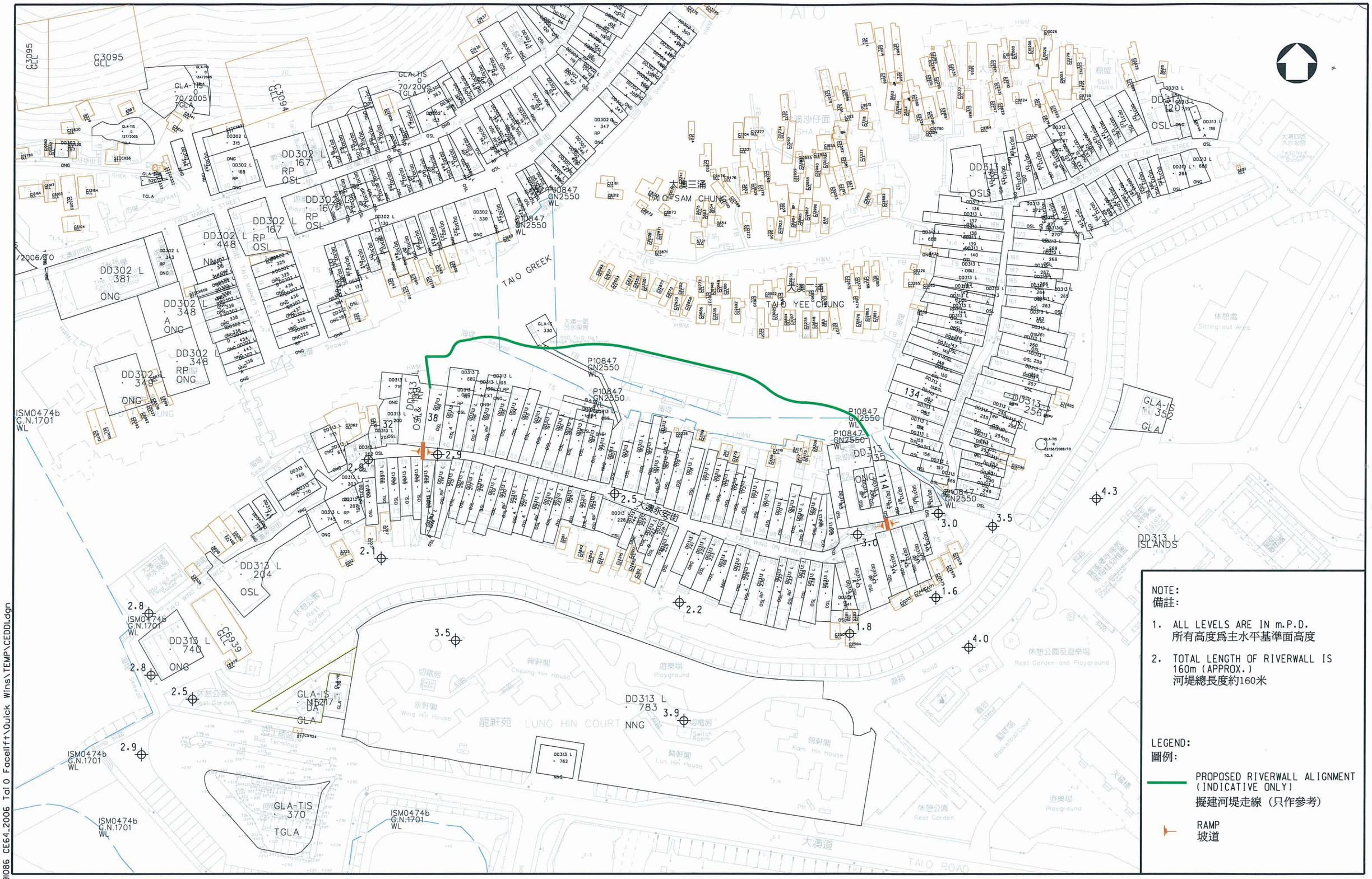
11. The preliminary design of the proposed riverwall and the associated works have been completed. On 14 January 2009, we conducted the first public consultation with the Tai O Rural Committee and the local residents of Wing On Street on the preliminary design of the riverwall. The second public consultation in the form of a residents' forum was held on 11 March 2009. The forum was attended by representatives from the Tai O Rural Committee and the Office of Hon Leung Yiu-chung, members of the Islands District Council and local residents. There was general support at the forum for the implementation of the project, with requests for further information on the riverwall during the detailed design stage. We recently had a site meeting with Hon Leung Yiu-chung on 3 April 2009. Hon Leung agreed in principle to the riverwall design and provided some suggestions for our consideration in the detailed design stage.

12. We will conduct further public consultation with the Tai O Rural Committee, all interested groups and local residents during the detailed design stage. We will also gazette the project details under relevant Ordinances during the detailed design stage for public consultation, and consult the Panel on Development of the Legislative Council regarding the riverwall design before funding application.

Timetable

13. The site investigation works for the riverwall has commenced and detailed design will be carried out soon. Funding application for the project will be submitted to the Legislative Council for consideration in early 2010. Construction works are anticipated to commence in 2010 for completion by 2011.

Civil Engineering and Development Department
April 2009


TAI O
TAI O SAM CHUN
大澳三涌
TAI O YEE CHUNG
大澳一涌
TAI O GREEK
大澳涌
TAI O ROAD
大澳道
LUNG HIN COURT
龍軒苑
Cheung Hin House
Wing Hin House
Kam Hin House
Lun Hin House
Switch Room
Rest Garden
Rest Garden and Playground
Playground
Basketball Court
Bus Terminus
Sitting-out Area
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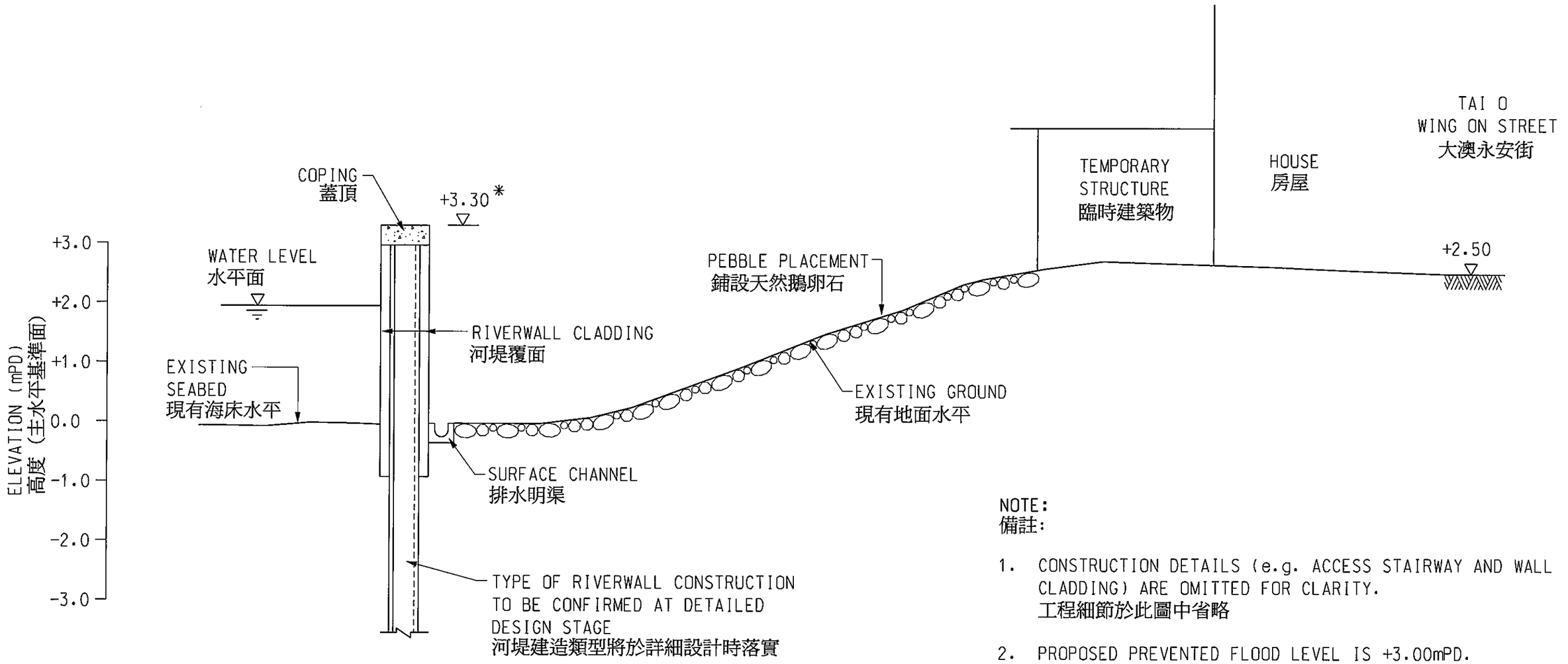

*COPING LEVEL TO BE CONFIRMED AT DETAILED DESIGN STAGE
蓋頂水平將於詳細設計時落實

NOTE:
備註:

1. CONSTRUCTION DETAILS (e.g. ACCESS STAIRWAY AND WALL CLADDING) ARE OMITTED FOR CLARITY.
工程細節於此圖中省略

2. PROPOSED PREVENTED FLOOD LEVEL IS +3.00mPD.
建議防洪水平爲高於主水平基準面3米

3. SEABED LEVEL VARIES FROM 0 TO +1mPD.
海床水平約爲0至高於主水平基準面1米

4. TYPE OF SHEET PILE USED TO BE DESIGNED IN DETAILED DESIGN STAGE.
河堤建築物料將於詳細設計時落實

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土木工程拓展署
Civil Engineering and Development Department

Meinhardt Infrastructure and Environment Limited
邁進基建環保工程顧問有限公司

Supported by Urbis Limited

ADVANCE IMPROVEMENT WORKS IN TAI O - RIVERWALL AT YAT CHUNG, TAI O
大澳前期改善工程 – 在大澳一涌興建防汛河堤

Figure 圖 2

Scale 比例 N.T.S.