

The Green Island Development Project

Purpose

The purpose of this paper is to up-date members and seek their advice in respect of the latest development on the Green Island Development Project.

Background

2. Members were briefed by the Consultants, BMT in respect of the result of the Marine Traffic Impact Assessment Study regarding the Green Island Development Project at the PAC meetings held on 3.6.98 (PAC Paper No. 2/98) and 16.9.98 (PAC Paper No. 6/98) respectively.

3. Following the review of the ongoing Engineering Investigation and Planning Study, additional marine assessments have been conducted to address the marine traffic and safety impacts in respect of the latest development arrangement.

Consultation

4. A consultation paper to brief the members on the background and findings of the additional marine assessments drawn up by the Consultants, BMT is attached at Annex.

Advice Sought

5. Members are requested to consider the consultation made by the Consultants, BMT and provide advice on the latest developments.

Presentation

6. The attached consultation paper will be presented by the Consultants, BMT and Project Manager, and accompanied by Mr. L.K. SZETO, a Senior Marine Officer of Marine Department, at the forthcoming meeting scheduled for 3 February 1999.

Planning and Development Branch
Marine Department
HKSAR

Date : 20 January 1999

Subject File : PA/S 909/2/11

GID Marine Traffic Impact Assessment – Further Developments

1 Introduction

The Green Island Development (GID) Project comprises a total of approximately 186 ha of reclamation between the coast of Kennedy Town and Green Island at the western corner of Hong Kong Island. These reclamations are intended to provide land for residential development, an improvement in environmental and traffic conditions in the Western District, and land for a number of planned major strategic routes.

The closure of the Sulphur Channel through construction of the GID will result in significant rerouting of traffic flows around Green Island and the PAC has been rightly concerned with the potential impacts. Mitigation measures developed within the recent extensive assessments conducted on navigation and marine traffic issues have been presented to the PAC on two previous occasions. Discussions conducted within these meetings have been particularly helpful in the development of the study and planning of future farway alignments.

As a result of further developments arising within the ongoing Engineering Investigation and Planning Review Study additional marine assessments have been conducted, primarily associated with the development and arrangement of the Stage 1 reclamation basin. This will have an impact on both the local distribution of marine facilities in Western Hong Kong Island, and the traffic generated by the PCWA.

This briefing appraises the PAC of these latest developments, the arrangement within the basin, and the impact on the area adjacent to Green Island.

2 Marine Basin Arrangement

The arrangement of the basin has been subject to extensive review, balancing the marine requirements against the land-use constraints. Figure 1 illustrates the proposed form of the Stage 1 Reclamation Marine Basins. The proposal consists of two basins, the main basin being used for larger river trade vessels, tugs and barges, with Government and pilot boat moorings within a small boat harbour. Deepwater access is provided for China Merchants Wharf (CMW) and the Island West Transfer Station, with piers providing shelter for the Public Cargo Working operations. This basin will not be a designated typhoon shelter.

A sheltered anchorage of 2 ha has been retained within the larger basin. This will have the capacity to accommodate 15 - 20 barges/river trade vessels, and is intended to serve vessels awaiting space at the PCWA and CMW. This capacity is below the present patronage of the existing Belcher Bay waterspace which regularly accommodates 50-60 barges/river trade vessels. These vessels could not easily be accommodated within the nearby Yau Ma Tei anchorage given its present usage. Fortunately, the development of the Tuen Mun River Trade Terminal is expected to result in substantial reduction in river trade vessels movements through the Ma Wan channel and into the Harbour area. Usage of the Yau Ma Tei anchorage is expected to decline freeing sufficient capacity for the displaced Belcher Bay craft.

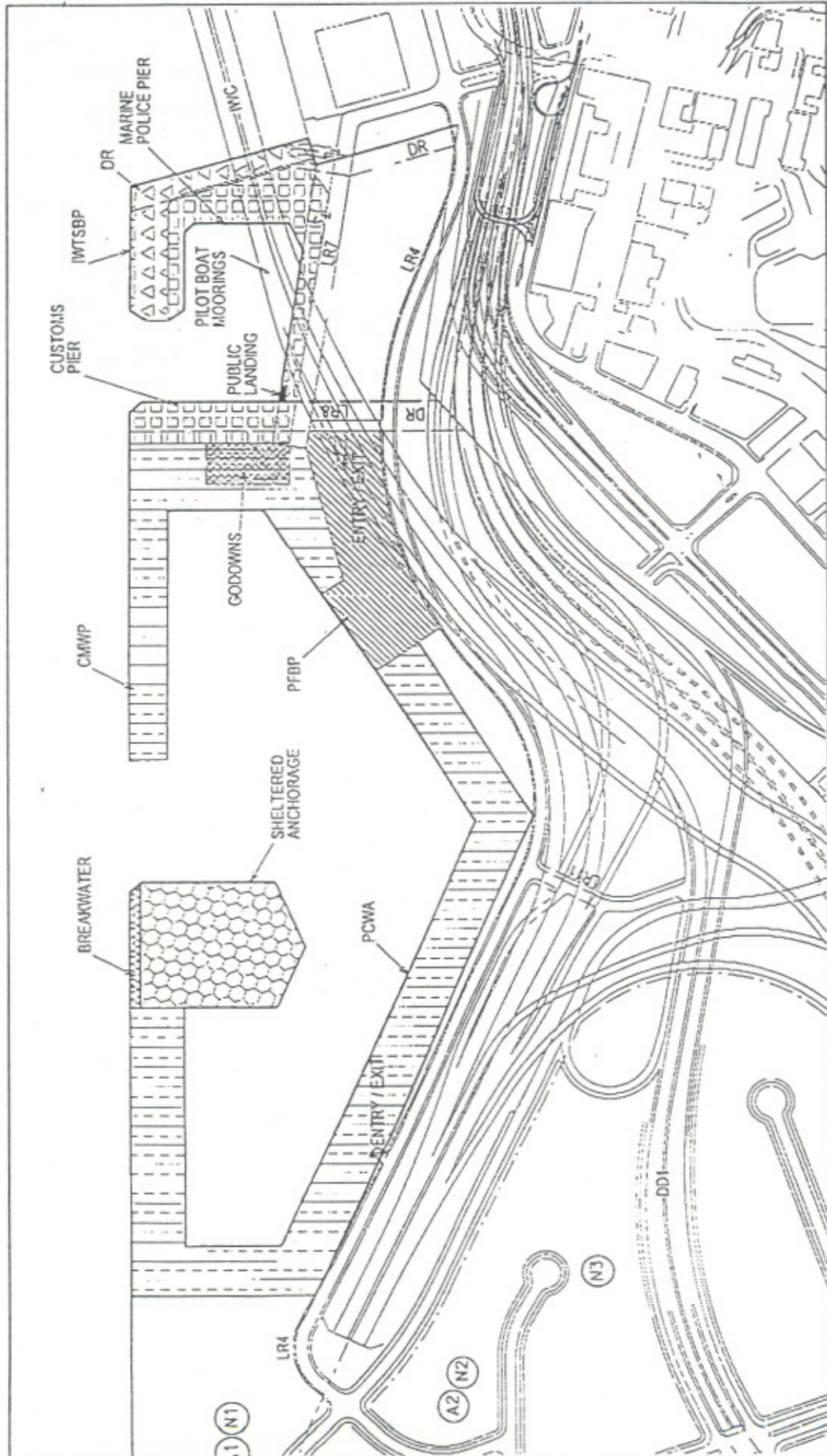
The arrangement of marine facilities within the GID has resulted in the reduction in PCWA wharfage of 600m (approximately 40%) from 1543m to 943. The loss in waterfrontage is foreseen as being re-provisioned outside the GID.

The proposed wharfage will be provided with a 50m wide working area throughout the PCWA. This area, which far exceeds current provision will allow the efficient processing of cargo, with the potential to maintain current levels of productivity within a shorter length. Wave protection provided by the piers will further improve the efficiency and safety of cargo handling operations.

3 Marine Traffic & Safety Impacts

PCWA working on the northern face of the GID adjacent to the 200m wide inshore zone of the Southern Fairway will be prohibited to ensure the uninhibited passage of small craft. Larger river trade vessels are expected to use the berth required for China Merchants Wharf, while waste transfer vessels will operate from the easterly pier.

The reprovision of PCWA wharfage will result in a reduction of approximately 40% in the available seawall length within the Western PCWA. While, as noted previously, it is expected that capacity throughput may be maintained due to the better handling area and calmer wave environment, any reduction in activity would have a beneficial effect on marine safety. River trade vessels and tug and tow combinations, crossing the Southern fairways are a significant percentage of encounters developed, within the Study Area. Reduction of these movements by 40% will, when combined with other traffic, result in a reduction of approximately 20% of crossing vessels, and hence encounters of vessels within the Southern Fairway.



Proposed Berthing Guideline Amendments

Location RT7-1 RIVER TRADE TERMINAL NO.1
BERTH

010	BERTHING	LOA: MAX 130.00m	011	UNBERTHING	LOA: MAX 130.00m
DRAFT:	MAX. 8.5m (min 10% UKC)		DRAFT:	MAX. 8.5m (min 10% UKC)	
TIME:	24 HRS		TIME:	24 HRS	
TUGS:	2 (GRADE II)		TUGS:	2 (GRADE II)	
REMARKS:	STEM TO TIDE WHEN BERTHING		REMARKS:		
020	BERTHING	LOA: MAX 175.00m	021	UNBERTHING	LOA: MAX 175.00m
DRAFT:	MAX. 8.5m (min 10% UKC)		DRAFT:	MAX. 8.5m (min 10% UKC)	
TIME:	24 HRS		TIME:	24 HRS	
TUGS:	2		TUGS:	2	
REMARKS:	STEM TO TIDE WHEN BERTHING		REMARKS:		

Proposed Berthing Guideline Amendments

Location RTT-2 RIVER TRADE TERMINAL NO.
2 BERTH

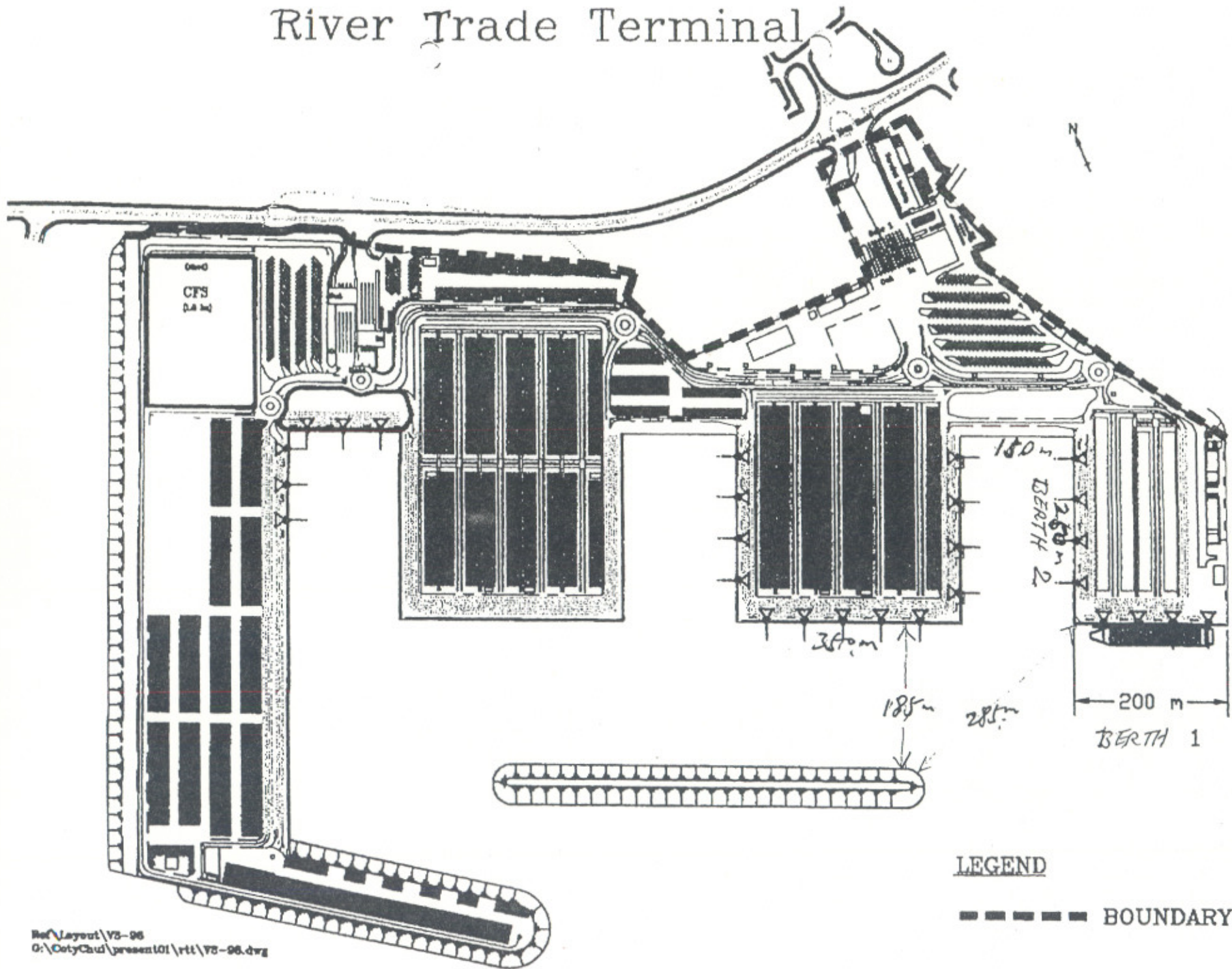
010 BERTHING LOA: MAX 130.00m
DRAFT: MAX. 8.5m (min 10% UKC)
TIME: 24 HRS
TUGS: 2 (GRADE II)
REMARKS: STBD SIDE TO

011 UNBERTHING LOA: MAX 130.00
DRAFT: MAX. 8.5m (min 10% UKC)
TIME: 24 HRS
TUGS: 2 (GRADE II)
REMARKS:

020 BERTHING LOA: MAX 150.00m
DRAFT: MAX. 8.5m (min 10% UKC)
TIME: 24 HRS
TUGS: 2
REMARKS: STBD SIDE TO

021 UNBERTHING LOA: MAX 150.00
DRAFT: MAX. 8.5m (min 10% UKC)
TIME: 24 HRS
TUGS: 2
REMARKS:

River Trade Terminal



LEGEND

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