

**ADVISORY COUNCIL ON THE ENVIRONMENT**  
**SUB-COMMITTEE ON ENVIRONMENTAL IMPACT ASSESSMENT**

**Supplementary Information on the**  
**Environmental Impact Assessment Study**  
**for the Proposed Green Island Public Dump**

1. Purpose

The purpose of this document is to explain the change of strategy for the delivery of public dumping materials to the proposed Green Island Public Dump (GIPD). The sole use of marine barging points is now proposed to be adopted instead of a barging point and a temporary land access for the transportation of public dumping materials to the proposed GIPD. This document will serve as a supplement to the Final Report and the Executive Summary of the environmental impact assessment (EIA) study for the GIPD.

2. Background

In March 1992, the Land Development Policy Committee endorsed a public dumping strategy formulated by the Fill Management Committee of the Civil Engineering Department (CED). The strategy was to identify those short and long term reclamation sites required to meet the Territorial demand for the disposal of surplus construction materials suitable for public dumping .

The proposed GIPD, which is a key component of the public dumping programme, is to reclaim the portion of seabed at Sulphur Channel between Kennedy Town and Green Island by means of public dumping forming an area of about 37 hectares. The aim of the project is to provide a strategic public dump on Hong Kong Island, with 7 million cubic metres of capacity for public dumping materials, in the period 1996 to 2002. In August 1993, Scott Wilson Kirkpatrick (Hong Kong) Limited was commissioned by the CED to assess the environmental and traffic impacts arising from the proposed GIPD. Other issues, inter alia, included identifying a suitable road access from Victoria Road and the use of a marine barging point at the de-commissioned Kennedy Town Incinerator Plant (KTIP) site for transportation of public dumping materials to the proposed GIPD.

3. Findings of the Study

- (a) The proposed reclamation and operation of the proposed GIPD was found environmentally acceptable subject to implementation of the mitigation measures detailed in the Final Report of the EIA Study.

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EIA/003/3/95

- (b) The use of KTIP site as a marine barging point for the initial operation of the GIPD was found environmentally acceptable also subject to the implementation of mitigation measures detailed in the Final Report.
- (c) An access road by up-grading an existing disused track, branching from Victoria Road at the lower slope of Mt. Davis, i.e. the disused track access road option, was identified as a preferred access option for the GIPD.

4. Change of Strategy for Delivery of Public Dumping Materials to the GIPD

- (a) In May 1994, the Task Force on Land Supply and Property Prices identified two residential sites along the proposed alignment of the disused track access road option. Hence, this access road option became unacceptable.
- (b) As a result, a supplementary EIA study was commissioned in December 1994 for comparing the use of a modified disused track access option and the option of sharing the proposed access to the Island West Transfer Station (IWTS). Although the shared use of the IWTS access option was considered as the preferred option by the Consultants, because the IWTS contract has already been awarded, contractual, operational and design complication means that this option has now to be rejected.
- (c) The Central and Western District Board (C&W DB) was consulted on 12-1-95 and 9-3-95 regarding the proposed GIPD. Despite the advice by the Consultants and Transport Department that there would not be any adverse traffic impact in the Western District and in the vicinity of the proposed GIPD, the DB members, while not objecting to the public dumping per se, expressed considerable concern regarding the increase in road traffic that would be generated in the Western District due to dump-related activities.
- (d) As a result, the use of road access for transporting public dumping materials to the proposed GIPD will no longer be considered. Instead, the use of marine barging points located at various parts of Hong Kong Island will be adopted for the transportation of public dumping materials to the GIPD.

5. Proposed Marine Barging Points

(a) Aldrich Bay Marine Barging Point (AB MBP)

AB MBP is scheduled to operate in July 1995. It will be initially used for receiving public dumping materials for disposal in reclamation at Tseung Kwan O and then for GIPD from early 1997 to mid 1998. The design capacity of this MBP is 300 truck loads per day. It is anticipated that the AB MBP will be utilized to its full capacity.

It has been confirmed by the Environmental Protection Department (EPD) that an EIA for the AB MBP is not required apart from a noise impact assessment study. Further study indicated that there would not be any adverse noise impact on the environment arising from the operation of AB MBP. However, some proposed environmental mitigation measures as detailed in appendix I have been agreed with the EPD for the operation of the AB MBP. The AB MBP will be closed as soon as the occupation of the new residential development at the Aldrich Bay Reclamation commences. The current programme of the occupation intake is scheduled in mid 1998.

Eastern District Board (EDB) has been informed of the proposed AB MBP by paper circulation and EDB's members had already made a site visit in May 1995. EDB has now confirmed that the AB MBP is acceptable. The location of AB MBP is shown in Appendix II.

(b) Quarry Bay Marine Barging Point (QB MBP)

QB MBP is proposed to be a permanent barging point and planned to commence operation by mid 1996. Traffic Impact Assessment for QB MBP was completed and Transport Department considered that the traffic impact is acceptable. EPD have confirmed that neither an environmental impact assessment nor a noise impact assessment study will be required. However those proposed mitigation measures as detailed in Appendix I will be implemented apart from the provision of noise barrier.

The design capacity of QB MBP is 380 truck loads per day. It is anticipated that about 250 truck loads will make use of the facility at QB MBP. Consultation with EDB on the setting up of QB MBP is scheduled in August/October 95.

Planning Department has confirmed in writing that the site for QB MBP has no conflict with the proposed mid-stream operation site in the vicinity. The location of QB MBP is shown in Appendix III.

(c) Marine Barging Point at Kennedy Town Incinerator Plant Site - (KTIP MBP)

Although there has been previous objection by the C&W DB on the use of KTIP site as a marine barging point because of road traffic concerns, CED proposes to consult C&W DB again in September 95 on the proposed KTIP MBP, emphasising that CED would set up MBPs in other districts on Hong Kong Island in order to reduce vehicular traffic in Western District.

The design capacity of KTIP MBP is 400 truck loads per day and the anticipated daily input rate is 350 truck loads. The use of KTIP site as a marine barging point has been found environmentally acceptable provided the recommended mitigation measures are implemented.

The KTIP MBP will serve from early 1997 until 1998 when the site is scheduled for re-development with the adjoining abattoir site.

(d) Other Marine Barging Points on Hong Kong Island

Apart from QB MBP, both AB MBP and KTIP MBP are temporary ones. CED has requested the Planning Department to continue a site search for more MBPs on Hong Kong Island as replacement sites for AB MBP and KTIP MBP in order that road traffic due to dump-related activities can be evenly distributed on Hong Kong Island. Any new identified MBPs will undergo traffic impact assessment studies and if necessary, environmental impact assessments will be conducted as well.

6. Conclusion

Since there are many restraints on the provision of a temporary land access to the proposed GIPD, it has been decided to adopt the barging strategy for completing the GIPD due the imminent need to provide a strategic public dump on Hong Kong Island. The provision of three marine barging points as mentioned above will enable a better distribution of the dump truck vehicles, so as to alleviate the concern of the relevant District Boards. EPD have confirmed that the operation of these three barging points are all environmentally acceptable provided that the recommended environmental mitigation measures are implemented.

Owing to the urgency of the project, related references to the access road options within the Executive Summary and the Final Report for the environmental impact assessment study have been kept unaltered for completion of the consultants' assignment. However ACE members are reminded that as detailed above these references can now be ignored.

Proposed Environmental Mitigation Measures for the Operation of the Aldrich Bay and Quarry Bay Marine Barging Points

**A. Noise**

- (i) Operation hours from 8:00am to 12:00 noon and from 1:00pm to 6:00pm on all days except Sundays and Public Holidays.
- (ii) Noise barrier in the form of a 3 metre high earth mound will be provided alongside the access road leading to the unloading platform (for Aldrich Bay MBP only).
- (iii) A buffer distance of at least 200 m will be provided between the existing residential blocks in Lei King Wan and the MBP (for Aldrich Bay MBP only).

**B. Dust Control**

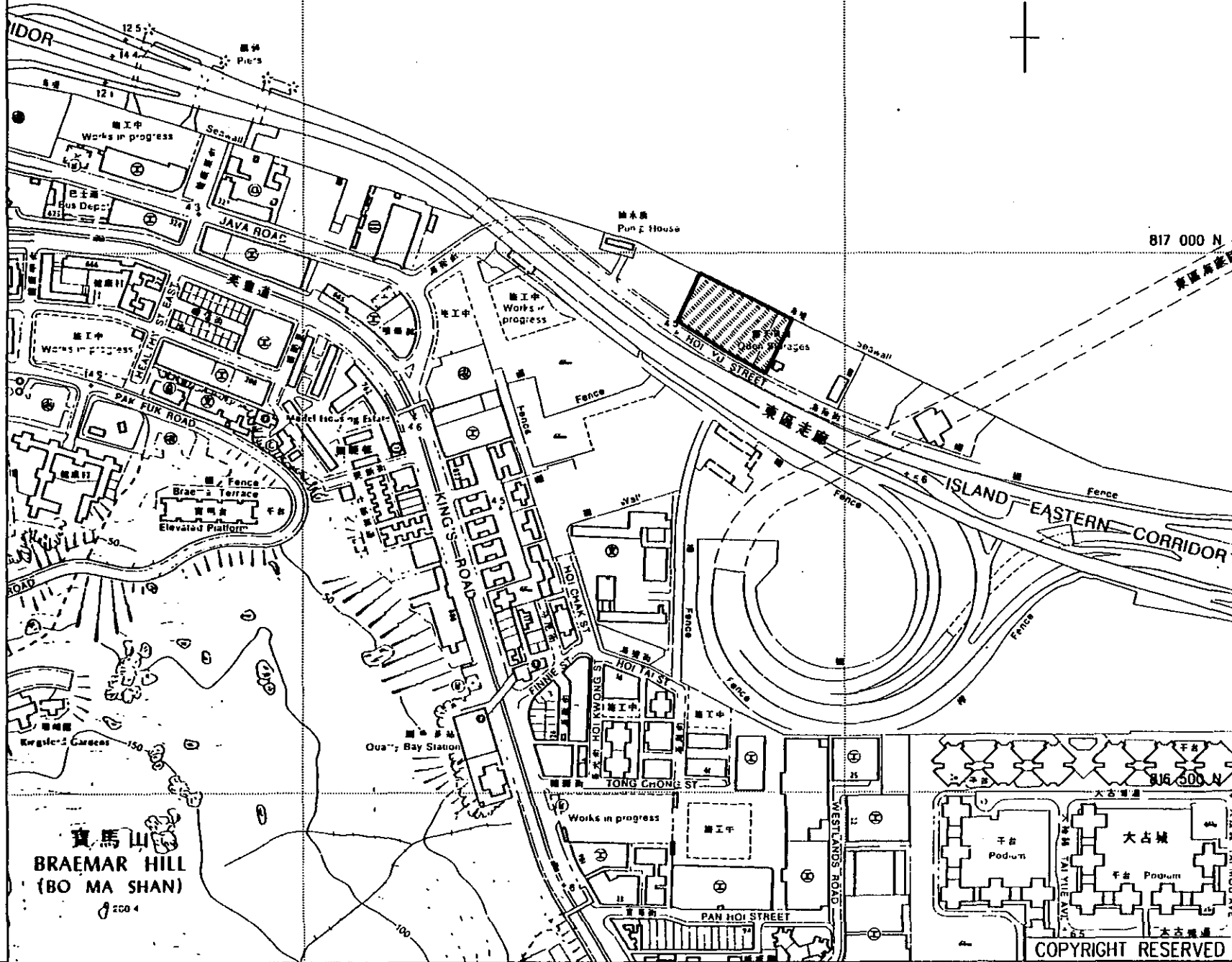
- (i) The Contractor shall install effective dust suppression equipment and/or take such other measures as may be necessary to ensure that at the site boundary and any nearby sensitive receiver the concentration of air-borne dust shall be within an acceptable limit.
- (ii) In the process of material handling, any material which has the potential to create dust shall be treated with water or sprayed with wetting agent.
- (iii) The Contractor shall frequently clean and water the site to minimize the fugitive dust emissions.
- (iv) The Contractor shall restrict all motorized vehicle to a maximum speed of 8Km per hour and confine haulage and delivery vehicles to designated roadways inside the site.
- (v) Wheel washing facilities shall be installed and used by all vehicles leaving the site. No earth, mud, debris, dust and the like shall be deposited on public roads. Water in the wheel washing facilities shall be changed regularly. The Contractor shall also provide a hard-surfaced road between washing facility and the public road.
- (vi) Water spray system shall be provided at the unloading structure to suppress dust emission during tipping of material into barges.

- (vii) Any vehicle with an open load carrying area used for moving materials which have the potential to create dust shall have properly fitting side and tail boards. Materials having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin. The tarpaulin shall be properly secured and shall extend at least 300mm over the edges of the side and tail boards.

**C Prevention of Spillage/ Accidental Tipping into the Sea**

- (i) In order to prevent spillage or accidental tipping of public dumping materials into the sea during operation of the MBP, the unloading ramp shall be designed in such a way that material is tipped onto the mid-line of the barge, allowing even distribution. Loading of the barge shall be controlled so as to prevent any mound forming in such a manner as to allow material to fall overboard during movement from the MBP to the public dump site.
- (ii) Any material dropped onto the ramp shall be cleared and transferred to the barge before delivery of the next load. Rain and surface wash water shall be intercepted and settled before discharge to the harbour through the surface water drains.
- (iii) Losses through leakage from the bottom of the barge shall be controlled by ensuring that the bottom doors are closed following dumping and prior to loading.





NOTES

LEGEND :


 Proposed Barging Point

no.	date	description
REVISION		
drawn	15.6.95	W L KON
checked	15.6.95	K K HO
approved		

contract no.	
file no.	SW 0206
project no.	432 CL
contract	GREEN ISLAND PUBLIC DUMP

drawing title	
BARGING POINT AT QUARRY BAY	
drawing no.	SWG 50
scale	1:5 000

office  
SOLID WASTE DIVISION  
CIVIL ENGINEERING OFFICE

 CIVIL ENGINEERING DEPARTMENT HONG KONG

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Appendix III