

For information

Legislative Council Panel on Economic Services

Infrastructure for Penny's Bay Development, Package 1 Yam O Tuk Fresh Water Service Reservoir and Associated Works

Purpose

This paper presents for Members' information the proposed construction of a fresh water service reservoir at Yam O Tuk and associated works for Penny's Bay Development, Package 1, under part of the Public Works Project (PWP) Item No. **660CL**.

Problem

2. The existing fresh water supply infrastructure facilities are not adequate for supporting the development of Hong Kong Disneyland (HKD) at Penny's Bay on Lantau Island.

Proposal

3. The Director of Civil Engineering, with the support of the Secretary for Economic Services, proposes to upgrade part of **660 CL** to Category A for the construction of Yam O Tuk fresh water service reservoir and its associated works (as set out in paragraph 6 below) at an estimated cost of \$165.0 million in money-of-the-day (MOD) prices to serve the development of Phase 1 of HKD.

Background

4. Government and the Walt Disney Company have reached agreement in November 1999 to proceed with Phase I of HKD, which is expected to open in 2005. To implement the development, Government

will provide a fully formed and serviced site on reclaimed land at Penny's Bay, associated and supporting infrastructure (which include **fresh water supply**) and government, institution and community (GIC) facilities. All these works come under PWP item **660CL**.

5. We upgraded **660CL** to Category B in November 1999. On 17 December 1999, Finance Committee approved the upgrading of part of **660CL** to Category A as **662CL** for the reclamation of Penny's Bay Stage 1 works, design of site formation at Yam O, and design of associated infrastructure and GIC facilities for Phase I of HKD.

Project Scope and Nature

6. The scope of the part of **660CL** which we now propose to upgrade to Category A comprises –

- (a) the construction of Yam O Tuk fresh water service reservoir with a capacity of 13 000 cubic metres;
- (b) the construction of a maintenance access road about 1.1 kilometres long connecting the proposed service reservoir to an existing utility service road, namely Cheung Tung Road;
- (c) the laying of about 500 metres of 800 millimetres diameter twin fresh water mains and 500 metres of 600 millimetres diameter washwater drain pipe from the proposed service reservoir to Cheung Tung Road;
- (d) mechanical and electrical works in the proposed service reservoir;
and
- (e) environmental mitigation measures.

A site plan of the proposed works is at Annex. We intend to start the proposed works in August 2001 for completion in January 2004.

Justification

7. HKD will be a major entertainment and tourist attraction and we anticipate an annual attendance of over five million in the first year of operation. The existing fresh water supply infrastructure is, however, insufficient for this scale of project and other possible future developments in North Lantau. Government therefore needs to put in place additional facilities to ensure provision of adequate and reliable fresh water supply services for HKD as well as for the area¹.

Financial Implications-

8. We estimate the capital cost of the proposed works to be \$165.0 million in MOD prices, made up as follows –

	\$ million	
(a) Construction of Yam O Tuk fresh water service reservoir	56.2	
(b) Construction of access road	60.7	
(c) Mainlaying works and pipeworks	19.4	
(d) Mechanical and electrical works	1.1	
(e) Environmental mitigation measures	1.5	
(f) Contingencies	13.9	
	<hr/>	
Sub-total	152.8	(in September 2000 prices)
(g) Provision for price adjustment	12.2	
	<hr/>	
Total	165.0	(in MOD prices)

¹ Infrastructure for salt water supply for HKD and the area also comes under 660CL and will be upgraded at a later date.

9. We estimate that the project will entail an annually recurrent expenditure of \$198,000.

10. The project by itself would lead to a slight increase in water charges by a maximum of 0.06% in real terms by 2006².

Job Creation

11. We estimate that the proposed works will create some 115 new jobs comprising 15 professional / technical staff and 100 labourers, totalling 3 105 man months during the construction period.

Public Consultation

12. We consulted the Tsuen Wan District Council on the proposed works in October 2000. Members had no objection to the proposal.

Environmental Implications

13. We completed an Environmental Impact Assessment (EIA) in March 2000 for the Northshore Lantau Development Feasibility Study which covered, among other things, the proposed works. The EIA predicted that the proposed works would not have any insurmountable environmental issue and was endorsed with conditions by the Advisory Council on the Environment on 17 April 2000 and approved by the Director of Environmental Protection on 28 April 2000 under the EIA Ordinance (Cap 499).

² The water charges are calculated on the assumption that the demand remains static during the period from 2001 to 2006 and the amount of Government subsidy to the waterworks operations is to be contained at the present level.

14. We will implement mitigation measures to control noise, dust and site run-off during construction to within established standards and guidelines by incorporating standard environmental pollution control measures clauses³ in the civil engineering works contract. We will also implement landscape and visual mitigation measures including planting over 100,000 shrubs and 10,000 tree seedlings in the project.

15. Apart from the above-mentioned mitigation measures, we are determined to minimise the amount of construction and demolition (C&D) materials generated during construction as well as reuse and recycle C&D materials as far as possible. We will require the contractor to submit a waste management plan with appropriate mitigation measures and to reuse the excavated material as filling material on site. We will control the disposal of public fill and C&D waste at designated public filling facilities and landfills respectively through a trip ticket system. We will also record the disposal, reuse and recycling of C&D materials for monitoring purposes.

Land Acquisition

16. The proposed works do not require any land acquisition.

Way Forward

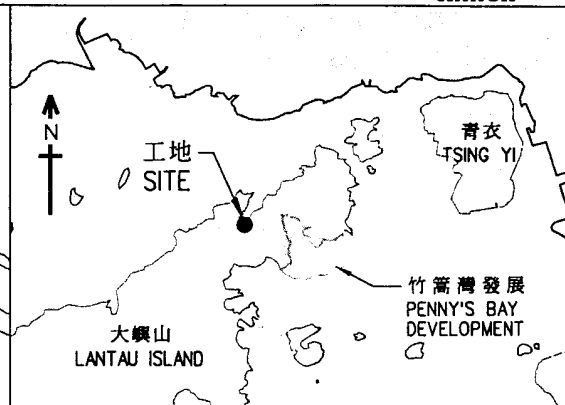
17. We intend to seek Public Works Subcommittee's endorsement and Finance Committee's approval for upgrading this project to Category A in February and March 2001 respectively.

Tourism Commission
Economic Services Bureau
January 2001

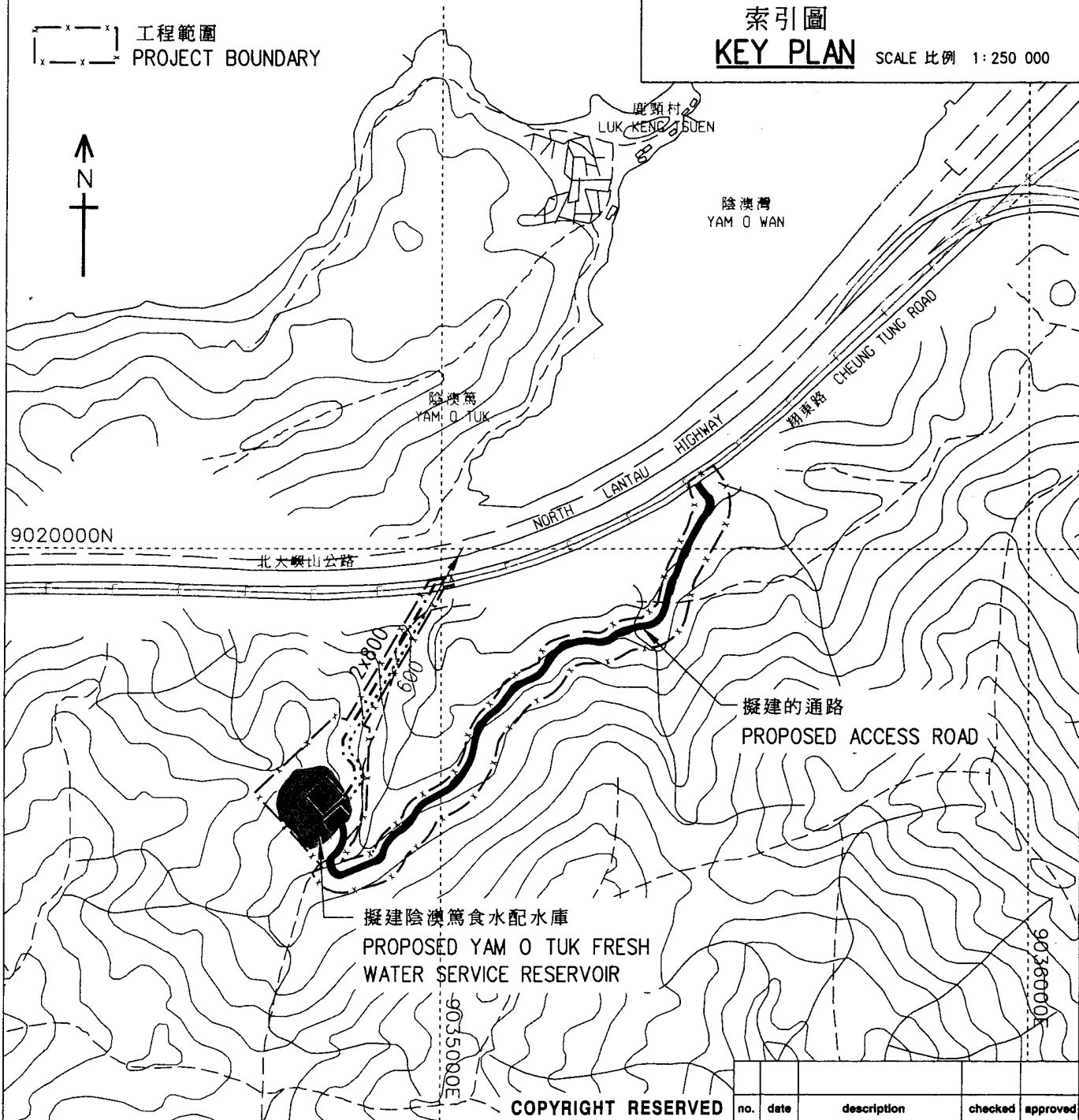
³ The standard pollution control measures include wheel washing facilities, de-silting traps, the use of silenced plant and other procedures as recommended in the Environmental Protection Department's Recommended Pollution Control Clauses.

圖例 LEGEND :

- 擬敷設的外露食水管道
PROPOSED EXPOSED FRESH WATER MAINS
- 擬敷設的外露排水管道
PROPOSED EXPOSED DRAIN PIPE
- ▶— 現有雨水渠
EXISTING STORMWATER DRAIN
- — — 現有的食水管道
EXISTING FRESH WATER MAINS
- ┌───┐ 工程範圍
└───┘ PROJECT BOUNDARY



索引圖
KEY PLAN SCALE 比例 1:250 000



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title 圖目
竹篙灣發展計劃的基礎設施，第一組
- 陰澳篤食水配水庫及相關工程
INFRASTRUCTURE FOR PENNY'S BAY
DEVELOPMENT, PACKAGE 1
- YAM O TUK FRESH WATER
SERVICE RESERVOIR AND
ASSOCIATED WORKS

	name	initial	date
designed			
drawn	K.L. CHEUNG	SIGNED	27.11.00
checked	C.C. NG	SIGNED	28.11.00
approved	W.L. CHAN	SIGNED	28.11.00
office	專責事務處 SPECIAL DUTIES OFFICE		

no.	date	description	checked	approved

drawing no. 圖號
SD1001-073

scale 比例
1:10 000



**CIVIL ENGINEERING
DEPARTMENT
HONG KONG**