

For Information**Legislative Council Panel on Transport****Supplementary Information on
Central Kowloon Route****PURPOSE**

This note provides supplementary information requested by Members at the meeting of the Legislative Council Panel on Transport on 26 April 2002 regarding the revised alignment of Central Kowloon Route (CKR). The supplementary information includes –

- (a) Ways to minimise construction impact on existing buildings;
- (b) Traffic arrangements and forecasts at the interchanges;
- (c) Additional entry/exit points to CKR;
- (d) Pedestrian access to the future car park/library building at Ferry Street; and
- (e) Funding for CKR.

Ways to Minimise Construction Impact on Buildings

2. Before carrying out any construction works for CKR, we will conduct structural checks on existing buildings that may be affected by the works. All these buildings will be surveyed to establish their existing conditions and a monitoring system will be installed to detect any ground movement or damage. Regular readings will be made so that prompt remedial actions can be taken. We would also set up an independent structural team to analyse/interpret the survey and monitoring results and to decide what, if any, remedial works need to be done.

Traffic Arrangements and Forecasts at the Interchanges

3. The layouts of the slip roads joining CKR at the Yau Ma Tei Interchange in the west and the Kowloon Bay Interchange in the east are shown in

Annex A and Annex B respectively. The critical volume to capacity ratios at peak hours in 2016 of these road sections are as follows:

(a) Yau Ma Tei Interchange

From	To	No. of lanes	Dual 3-lane CKR (v/c ratio)
CKR	Kwai Chung & Lantau (Ramp A)	2	0.9
	Sham Shui Po (Ramp B)	1	0.5
	Western Harbour Crossing (Ramp C)	1	0.2
	Tsim Sha Tsui (Ramp D)	1	0.3
Kwai Chung & Lantau (Ramp E)	CKR	2	0.9
Sham Shui Po (Ramp F)		1	0.6
Western Harbour Crossing & Tsim Sha Tsui (Ramp G)		1	0.4

(b) Kowloon Bay Interchange

From	To	No. of lanes	Dual 3-lane CKR (v/c ratio)
CKR	Kai Cheung Road (Ramp A)	1	0.9
	Kai Fuk Road (Ramp B)	1*	1.0
	Road T2	2	0.5
Kai Cheung Road (Ramp C)	CKR	1	0.8
Kai Fuk Road (Ramp E)		1*	1.0
Road T2		2	0.5

* Note: We will review the need to widen Ramps B & E to 2-lanes, in order to remove potential bottlenecks to the CKR.

Additional Entry/Exit Points to CKR

4. Given the densely-populated nature of central Kowloon, there are severe constraints in providing additional vehicular access points to CKR. Within central Kowloon, for instance, the tunnels will be at least 60 metres below ground level in order to be constructed within solid rock, and as such, a slip road would

need to be at least 1.5 kilometres long in order to rise up to the ground level at a maximum desirable gradient of 4%. Building foundations would be undermined under such circumstances, resulting in the need for resumption and demolition of these affected buildings. Merging within the tunnel would be necessary to allow slip road tunnel traffic to join the main tunnel traffic, but this would be unacceptable on traffic safety grounds.

5. At To Kwa Wan Road, tunnels could rise to about 35 metres below ground level, which would reduce the length of slip roads required. However, a shallower tunnel would not be feasible, as adequate depth needs to be allowed at Ma Tau Wai, where the rock level is depressed locally, and at To Kwa Wan Road, where it needs to pass below the proposed Shatin to Central Link railway. The problem of traffic having to merge inside the tunnel would also remain. Technical constraints aside, the need for an access point in the To Kwa Wan area is indeed marginal, as currently traffic in the To Kwa Wan and Ma Tau Kok areas could travel across Kowloon using Chatham Road Flyover and Gascoigne Road Flyover. Plans are also underway to widen the Gascoigne Road Flyover in order to provide better access between West Kowloon and Hung Hom/To Kwa Wan.

Pedestrian Access to the Future Car Park/Library Building at Ferry Street

6. The existing parking and library facilities in the Yau Ma Tei Multi-storey Car Park Building will be reprovisioned at Ferry Street in the West Kowloon Reclamation Area to make way for the construction of CKR. For users of the future car park and library, there is an existing pedestrian subway crossing Ferry Street, and an access ramp will be maintained. Alternative access can also be made using the pedestrian footbridge at the junction of Waterloo Road and Ferry Street. A plan showing the future pedestrian access is at [Annex C](#).

Funding

7. Based on the revised alignment presented to Members at the Panel meeting on 26 April, our broad-brush estimate of the cost of CKR with a dual 3-lane configuration amounts to about \$10 billion, which is roughly 20% more than the original dual 2-lane option.

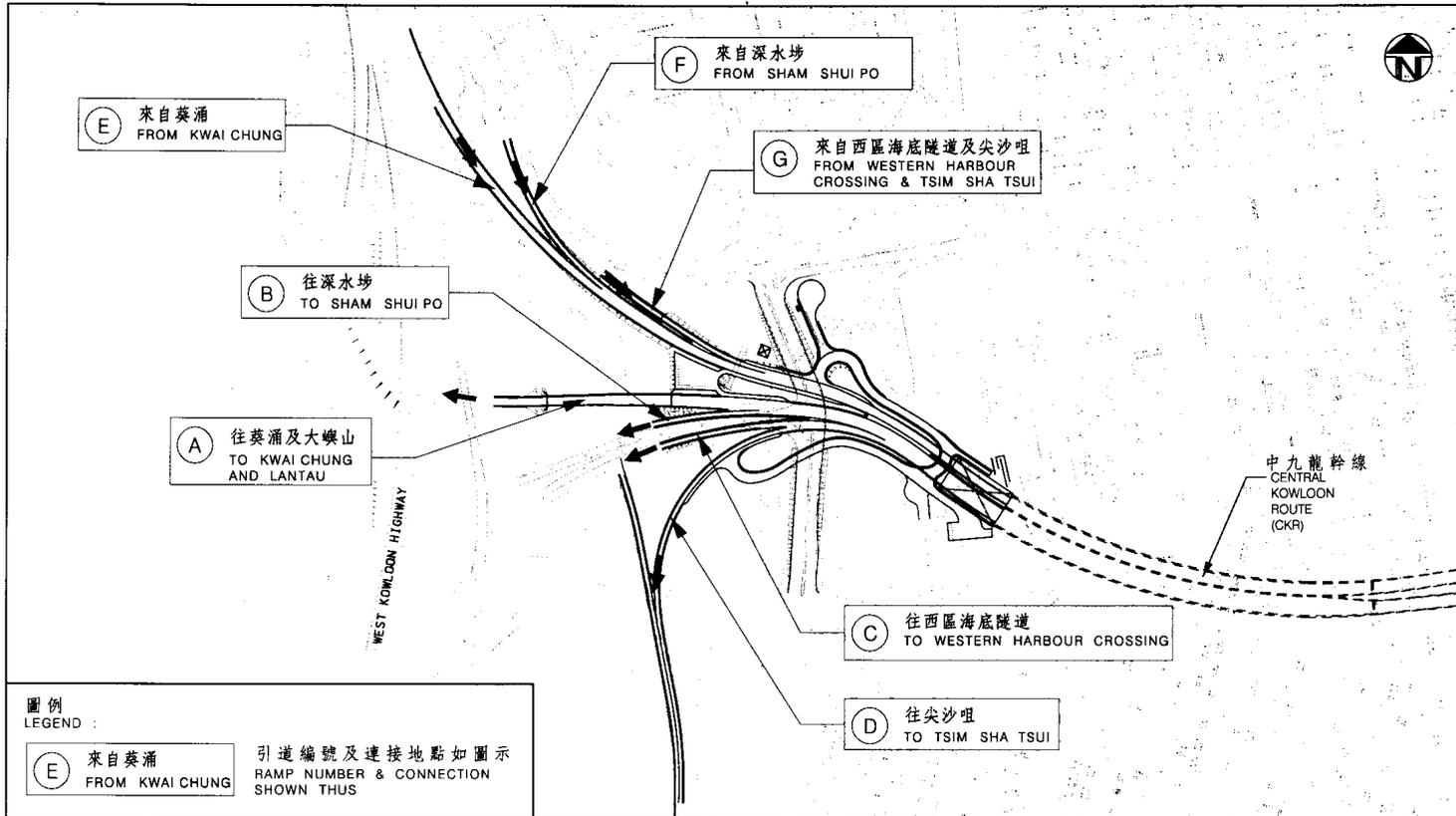
8. The Finance Committee of the Legislative Council approved in April 1998 the upgrading of the detailed design and associated site investigation package for CKR to Category A at an estimated cost of \$99 million in money-of-the-day prices, based on the previous alignment of a 3.9-kilometre trunk road including a 2.6-kilometre dual-2 lane road tunnel. A consultancy assignment was

subsequently commissioned in June 1998, which reviewed the project and proposed the present alignment. We have spent approximately \$38 million on this study to date. The remaining funding of \$61 million is insufficient to undertake the detailed design and site investigation for the CKR with a revised alignment of a 4.7-kilometre trunk road including a 3.9-kilometre dual-3 lane road tunnel. We therefore need to seek an increase in the approved project estimate by \$67 million to \$166 million.

WAY FORWARD

9. We plan to seek the funding support of the Public Works Subcommittee of the Legislative Council as soon as possible for the proposed increase in the approved project estimate. Subject to funding approval, we will employ consultants to carry out further investigations, in order to firm up proposals for the dual 3-lane alignment prior to commencing detailed design. We will start the detailed design of CKR in 2004 and the construction of CKR in 2007 for completion by 2010/2011.

Transport Bureau
June 2002



圖例
LEGEND :

(E) 來自葵涌
FROM KWAI CHUNG

引道編號及連接地點如圖示
RAMP NUMBER & CONNECTION
SHOWN THUS

圖則名稱 drawing title

中九龍幹線 - 油麻地交匯處連接圖
CENTRAL KOWLOON ROUTE -
CONNECTIONS AT YAU MA TEI INTERCHANGE

設計 designed	繪圖 drawn
C. K. LAM 10/05/02	W. K. CHIU 10/05/02

覆核 checked	批准 approved
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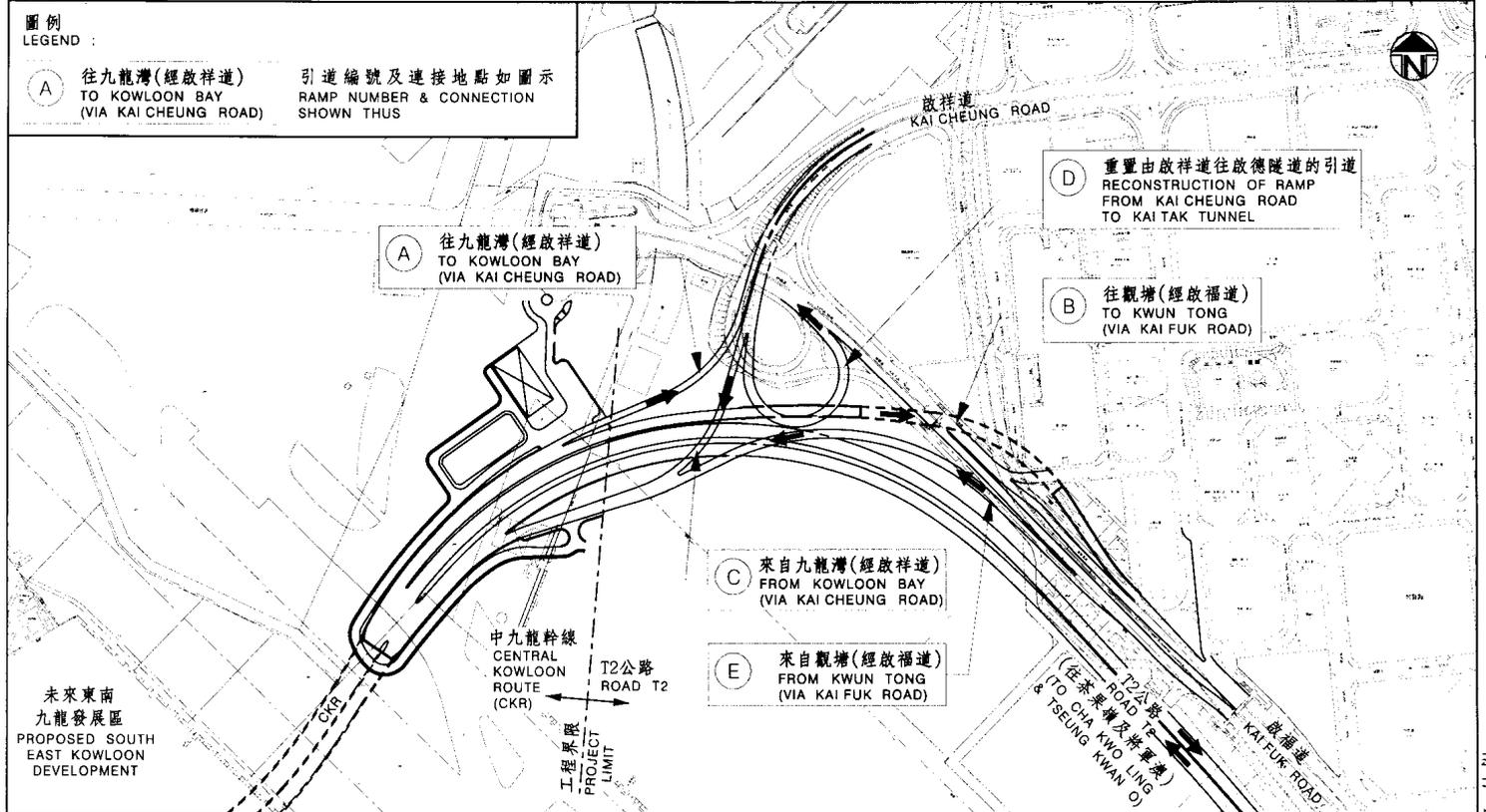
主要工程管理處
MAJOR WORKS
PROJECT MANAGEMENT OFFICE

圖則編號 drawing no.	比例 scale
MW6461TH-SK0050	1:5000

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 HIGHWAYS 路
DEPARTMENT 政
HONG KONG 署

附件 A
Annex A



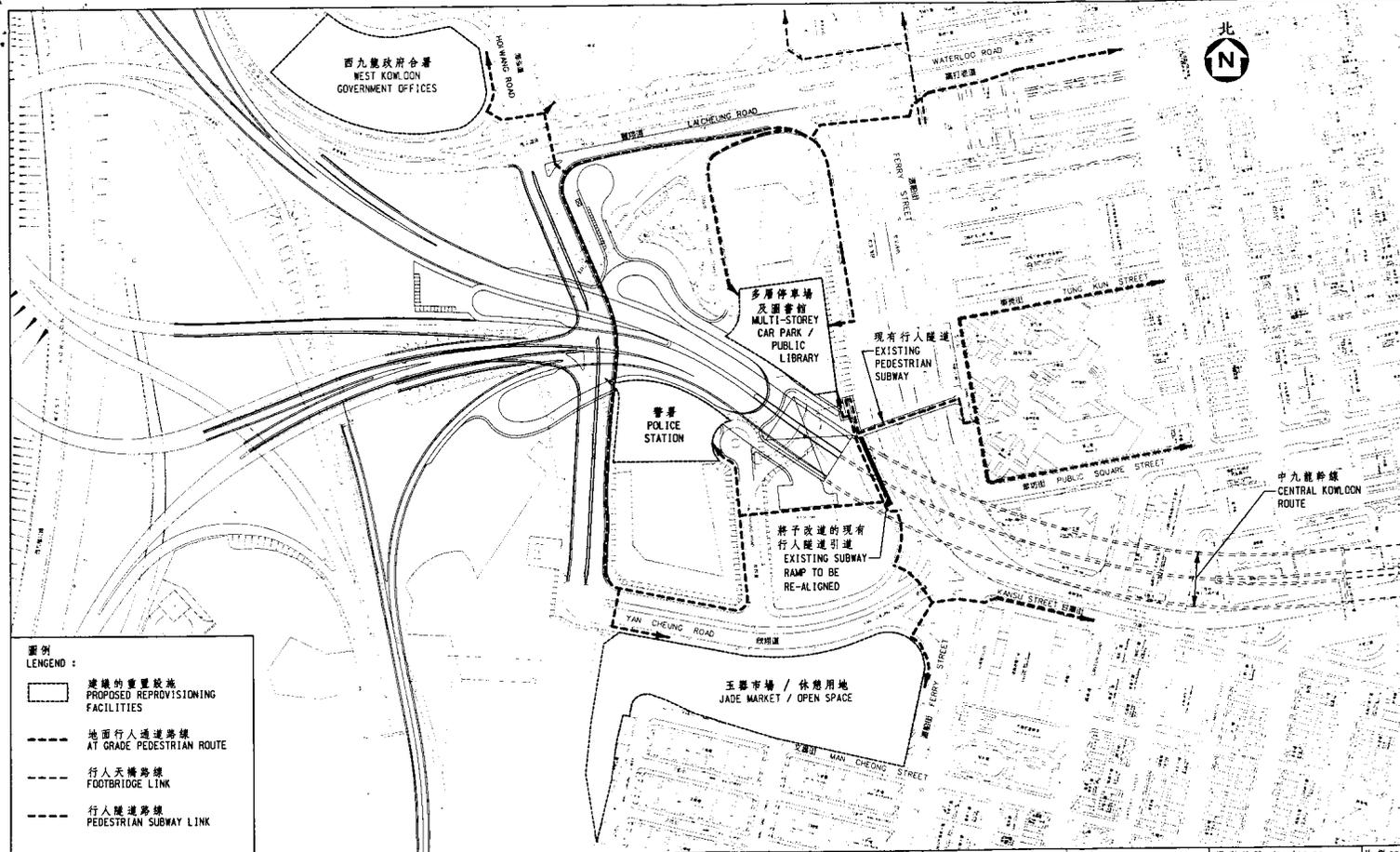
圖則名稱 drawing title

中九龍幹線 - 九龍灣交匯處連接圖
CENTRAL KOWLOON ROUTE -
CONNECTIONS AT KOWLOON BAY INTERCHANGE

設計 designed C. K. LAM 10/05/02	繪圖 drawn W. K. CHIU 10/05/02
覆核 checked	批准 approved
主要工程管理處 MAJOR WORKS PROJECT MANAGEMENT OFFICE	

圖則編號 drawing no. MW6461TH-SK0051	比例 scale 1:5000
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HIGHWAYS DEPARTMENT 路政署 HONG KONG	

附件 B
Annex B



圖例
LEGGEND :

- 建議的重置設施
PROPOSED REPROVISIONING FACILITIES
- 地面行人通道路線
AT GRADE PEDESTRIAN ROUTE
- 行人天橋路線
FOOTBRIDGE LINK
- 行人隧道路線
PEDESTRIAN SUBWAY LINK

圖則名稱 drawing title
中九龍幹線 - 通往重置設施的行人通道路線
CENTRAL KOWLOON ROUTE - PEDESTRIAN ACCESS ROUTES TO REPROVISIONING FACILITIES

設計 designed C.K. LAM 07/05/02	繪圖 drawn W.K. CHIU 07/05/02	圖則編號 drawing no. MW6461TH-SK0049	比例 scale 1:2500
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