

For discussion
on 6 December 2000

PWSC(2000-01)70

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 707 - NEW TOWNS AND URBAN AREA DEVELOPMENT
Kowloon Development
Civil Engineering - Land development
332CL - West Kowloon Reclamation - main works (remainder)

Members are invited to recommend to Finance Committee -

- (a) the upgrading of part of **332CL**, entitled "West Kowloon Reclamation - remaining roadworks, stage 4", to Category A at an estimated cost of \$65.7 million in money-of-the-day prices; and
- (b) the retention of the remainder of **332CL** in Category B.

PROBLEM

We need to construct Road NR14 between Tonkin Street and Fat Tseung Street in Sham Shui Po to serve a school site in the area. We also need to construct the remaining section of Road P1 southbound in West Kowloon Reclamation (WKR) to serve the Nam Cheong Station of the West Rail which is due to be commissioned in 2003.

/PROPOSAL

PROPOSAL

2. The Director of Territory Development (DTD), with the support of the Secretary for Planning and Lands, proposes to upgrade part of **332CL** to Category A at an estimated cost of \$65.7 million in money-of-the-day (MOD) prices for the construction of roads and associated drainage and sewerage works in WKR.

PROJECT SCOPE AND NATURE

3. The scope of **332CL** comprises the construction of the remaining roads, drains, footbridges and roadside landscaping works in WKR set out in the site plan at Enclosure 1.

4. The part of the project we now propose to upgrade to Category A comprises -

- (a) construction of a 250 metre (m)-long two-lane road (Road NR14);
- (b) construction of a 440m-long two-lane southbound carriageway as an extension to Road P1 (referred to as the “proposed P1 Extension” in short, and coded as P1(C)S/B on the Enclosures), and a 170m-long one lane up-ramp linking the proposed P1 Extension to Prince Edward Roundabout;
- (c) associated retaining walls, drainage and sewerage works; and
- (d) landscaping works.

Details of the proposed works are shown at Enclosures 2 to 4. We plan to start the construction works in May 2001 for completion in phases by end 2003.

/JUSTIFICATION

JUSTIFICATION

Construction of Road NR14

5. In accordance with the South West Kowloon (Northern Section) Outline Development Plan, a site at the former Fat Tseung Street Temporary Housing Area has been earmarked for government and education uses. Three new schools ¹ (two secondary and one primary) at the southern part of this site will be completed in mid 2003. To tie in with the completion of the three schools, the road works for Road NR14 and the associated drainage and sewerage works have to commence in September 2001 for completion in March 2003. We also propose to carry out landscaping works including the planting of about 70 trees along Road NR14.

Construction of the Proposed P1 Extension

6. The proposed P1 Extension is a southbound carriageway from Yen Chow Street West to Prince Edward Roundabout serving the Nam Cheong Station of West Rail. Upon completion of the southbound carriageway of the entire Road P1, there will be a direct link from Nam Cheong Station to West Kowloon Highway and local roads in WKR via Prince Edward Roundabout. The section of the southbound carriageway of Road P1 from Hing Wah Street West to Yen Chow Street West in conjunction with Nam Cheong Station is being constructed by KCRC under entrustment arrangements (funded under PWP Item 39TR “West Rail (Phase 1) - Essential public infrastructure works for Sham Shui Po section”) for completion by end 2003. To tie in with the commissioning of West Rail phase 1, we need to start construction of the proposed P1 Extension in May 2001 for completion by end 2003.

Entrustment works

7. As part of the works for the proposed P1 Extension, we need to construct a retaining wall adjacent to the Lantau & Airport Railway phase 2 (LAR2) to separate the road from the LAR. MTRCL will also need to construct a

/noise

¹ In June 2000, Finance Committee approved the upgrading of **235ES** “Two secondary schools at Fat Tsueng Street, Sham Shui Po” and **273EP** “Primary school at Fat Tseung Street, Sham Shui Po” to Category A.

noise barrier along this section of LAR2 to protect one of its adjacent developments² from excessive noise generated by LAR2. Due to limited space available between the noise barrier and the retaining wall, MTRCL has proposed to combine the retaining wall and the noise barrier into a single structure (see details at Enclosure 4). In order to improve the interface between the projects and to allow simultaneous completion of these works by having one single contract for related works in the same area, we consider MTRCL’s proposal justifiable. We intend to entrust this section of the retaining wall to MTRCL as part of its combined structure for design and construction in conjunction with the LAR2 works, which are scheduled to start in March 2001. We will reimburse MTRCL the cost of the entrusted works plus on-cost.

FINANCIAL IMPLICATIONS

8. We estimate the capital cost of the project to be \$65.7 million in MOD prices (see paragraph 9 below), made up as follows –

	\$ million
(a) Roadworks	15.4
(b) Drainage and sewerage works	12.7
(c) Retaining wall	16.5
(d) Landscaping works	5.3
(e) Consultants’ fees for -	4.8
(i) construction stage	0.6
(ii) resident site staff costs	4.2
(f) On-cost payable to MTRCL ³	1.2

/(g)

² The Comprehensive Development Area (CDA) site adjacent to this section of LAR2 was granted to MTRCL by private treaty in February 1999. In October 1999, Town Planning Board approved MTRCL’s application to change from previous hotel use to residential use. In order to protect the site from excessive noise generated by LAR2, MTRCL is required to provide a noise barrier along this section of LAR2 at its own cost.

³ We will pay on-costs of 16.5% of the construction cost to MTRCL for the design, construction supervision and insurance costs related to the retaining wall.

(g) Contingencies	5.6	
	61.5	(in September 2000 prices)
(h) Provision for price adjustment	4.2	
	65.7	(in MOD prices)

Owing to insufficient in-house resources, DTD proposes to engage consultants to carry out the construction supervision, except for the part of the works entrusted to MTRCL. A breakdown by man-months of the estimate for consultants' fees is at Enclosure 5.

9. Subject to approval, we will phase the expenditure as follows -

Year	\$ million (Sept 2000)	Price adjustment factor	\$ million (MOD)
2001 – 2002	10.0	1.02550	10.3
2002 – 2003	26.5	1.05627	28.0
2003 – 2004	20.0	1.08795	21.8
2004 – 2005	5.0	1.12059	5.6
	61.5		65.7

10. We have derived the MOD estimate on the basis of the Government's latest forecast of trend labour and construction prices for the period from 2001 to 2005. We will tender the proposed works (except those for entrustment) under a standard lump sum contract because we can clearly define the scope of the works in advance. The contract will provide for price adjustments because the contract period will exceed 21 months. For the works to be entrusted, MTRCL will tender the works as part of the contract for LAR2.

/11.

11. We estimate the annually recurrent expenditure arising from this project to be \$430,000.

PUBLIC CONSULTATION

12. We consulted the then Sham Shui Po District Board and the then Sham Shui Po Provisional District Board on the road schemes for the proposed P1 Extension and Road NR14 on 8 January 1992 and 16 December 1999 respectively. Members supported the proposed roadworks.

13. We gazetted the two proposed road schemes under the Roads (Works, Use and Compensation) Ordinance on 10 April 1992 (Road P1) and 25 February 2000 (Road NR14). We received no objection to the proposed works. The Secretary for Transport authorised the proposed road works on 18 December 1992 and 25 May 2000 respectively.

ENVIRONMENTAL IMPLICATIONS

14. Road NR14 is not a designated project under Environmental Impact Assessment Ordinance (EIAO). The proposed P1 Extension is a designated project but exempted from the EIA Ordinance by virtue of Section 9(2)(d) of the EIAO as the road was authorised under Road (Works, Use and Compensation) Ordinance on 18 December 1992 and therefore an environmental permit is not required for its construction and operation. To address their environmental impacts, both of these roads have been covered in a report entitled “West Kowloon Reclamation Comprehensive Traffic Analysis and Environmental Impact Assessment (August 1997)” which was endorsed by the Advisory Council on the Environment in February 1998.

15. The proposed P1 Extension together with other district distributors will affect nearby sensitive receivers. A package of noise mitigation measures including road side barriers, low noise road surfacing and indirect measures in the form of window insulation and air conditioning has been completed or is under construction for the protection of the affected sensitive receivers. The above-mentioned study concluded that, with the package of measures in place, further mitigation measures would not be required for Road NR14 or the proposed P1 Extension.

/16.

16. For short term impact during construction, we will control noise, dust, water quality and site run-off to within established standards and guidelines through the implementation of pollution control measures in the works contract.

17. We have considered in the planning and design stages ways of minimizing the generation of construction and demolition materials (C&DM) by giving due consideration to designing the level and layout of the roadworks. We estimate that about 5 000 cubic metres (m³) of C&DM will be generated by the project. Of these, about 4 000 m³ (80%) will be reused on site, 900 m³ of inert C&DM (18%) will be reused as fill in public filling areas⁴ and 100 m³ of C&D waste (2%) will be disposed of at landfills. We will require the contractor to reuse the excavated material on site or on other construction sites as filling materials as far as possible to minimise the disposal of public fill. To further minimize the generation of C&DM, we shall require the contractor not to use hardwood for site hoarding, falsework or shoring of excavation, but to use metal in all components of site hoarding and signboards. We shall control the disposal of public fill and C&D waste to designated public filling areas and landfills respectively through a trip-ticket system. We will record the disposal, reuse, and recycling of C&DM for monitoring purposes.

LAND ACQUISITION

18. The proposed works do not require any land acquisition or clearance.

BACKGROUND INFORMATION

19. We upgraded **332CL** to Category B in November 1989. Since June 1990, we have already upgraded 13 separate parts of the project to Category A to provide 340 hectares of land along the West Kowloon waterfront for the WKR development and associated supporting infrastructure.

/20.

⁴ A public filling area is a designated part of a development project that accepts public fill for reclamation purposes. Disposal of public fill in a public filling area requires a licence issued by the Director of Civil Engineering.

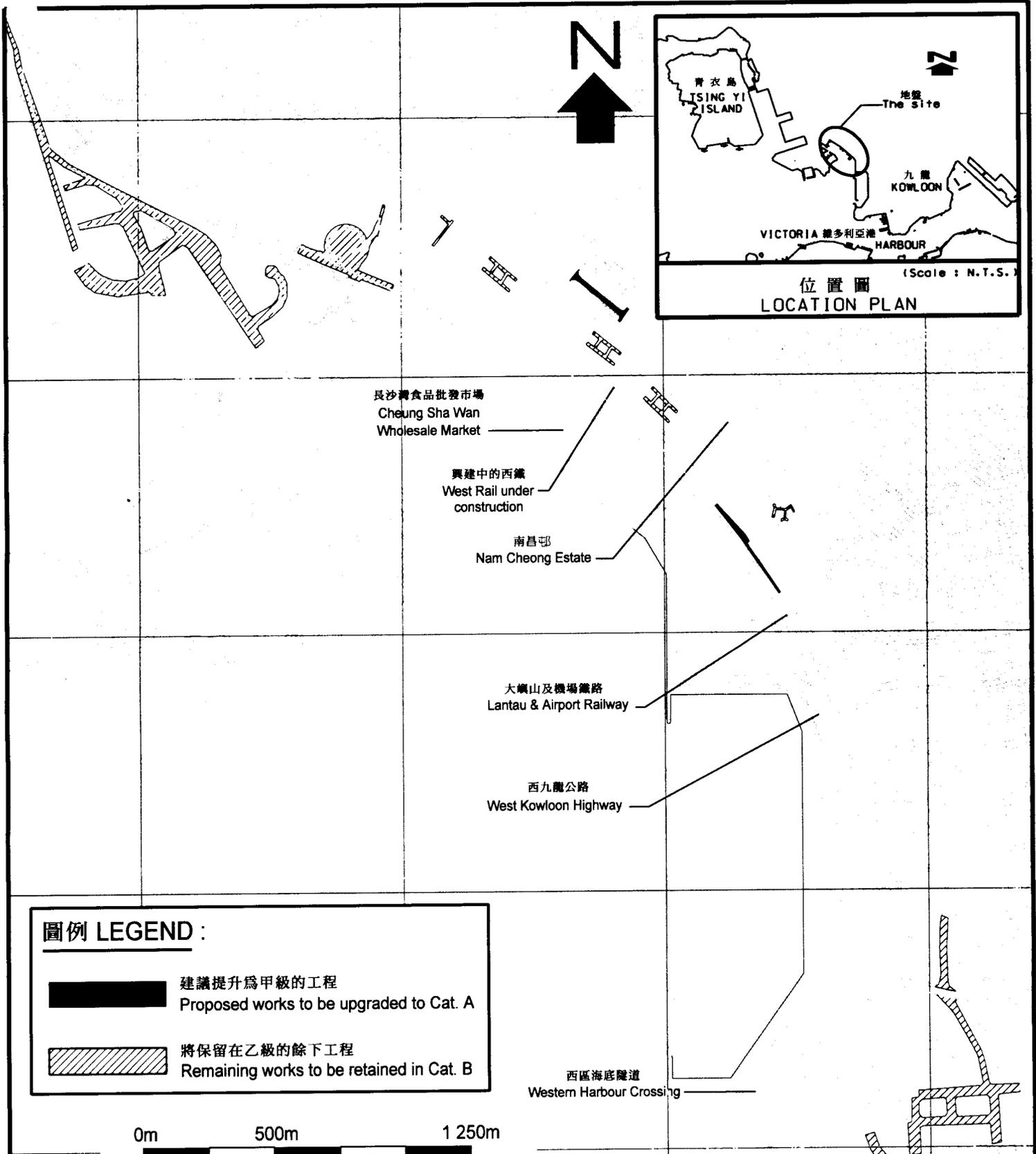
20. In October 1999, we engaged consultants to carry out the detailed design for all the proposed works apart from the design works to be entrusted to MTRCL. We have charged the detailed design costs to **354CL** "West Kowloon Reclamation - consultants' fees and site investigation". The consultants have completed the detailed design and drawings.

21. The remainder of **332CL** covers mainly five footbridges along Sham Mong Road and distributor roads in WKR, which are estimated to cost \$1,160 million. We plan to start these works in phases from June 2004 for overall completion by March 2007.

22. We estimate that the proposed works will create some 60 jobs comprising 15 professional/technical staff and 45 labourers totalling 1 670 man-months.

November 2000
Planning and Lands Bureau

[c1332-04.doc]



圖例 LEGEND :

 建議提升為甲級的工程
Proposed works to be upgraded to Cat. A

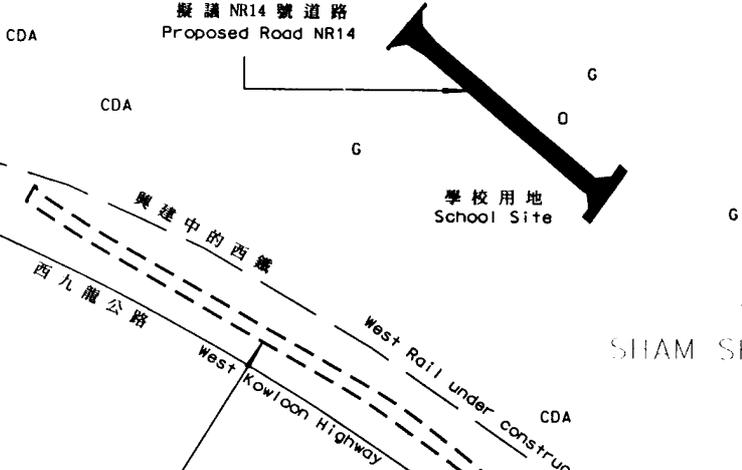
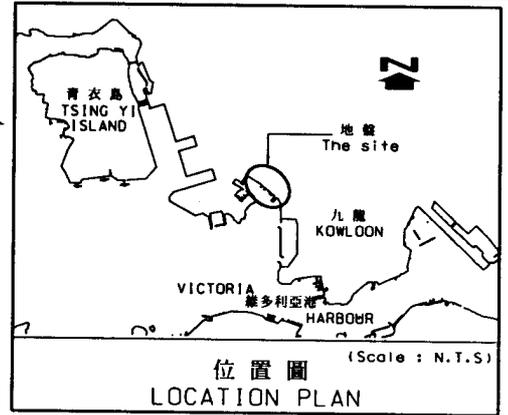
 將保留在乙級的餘下工程
Remaining works to be retained in Cat. B

0m 500m 1 250m
Scale 1 : 20 000

A	20.11.2000	Update existing roads and roads under construction / planning.	signed	signed
編號 no.	日期 date	內容摘要 description	核對 checked	核准 approved
修訂 REVISION				
繪圖 drawn	簽署 initial	日期 date	項目編號 item no.	辦事處 office 九龍拓展處 KOWLOON DEVELOPMENT OFFICE
Gary S.P. Yip	signed	25.10.00	332CL	
核對 checked	簽署 initial	日期 date	比例 scale	 拓展署 TERRITORY DEVELOPMENT DEPARTMENT
K.W. Cheung	signed	25.10.00	1 : 20 000	
核准 approved	簽署 initial	日期 date	圖則編號 drawing no.	
Christina Kwong	signed	25.10.00	K 139A	

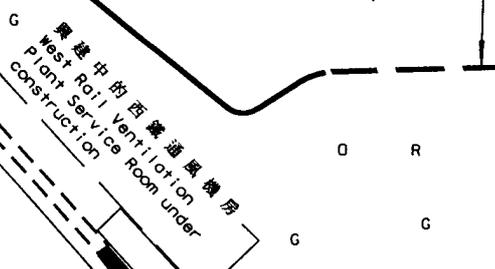
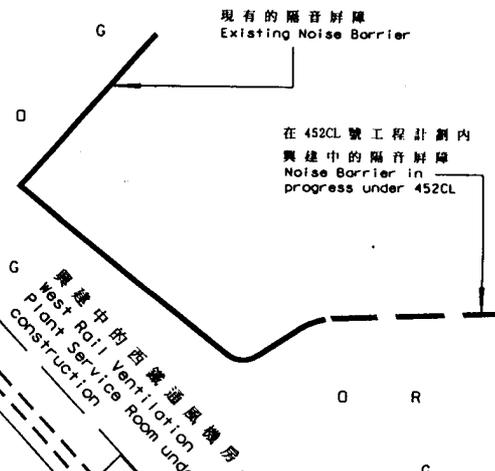
二000年至二00一年年度工務小組委員會文件
PWSC Submission 2000 - 2001

圖則名稱 drawing title
西九龍填海計劃 - 主要工程(餘下部份)
West Kowloon Reclamation - main works (remainder)



SHAM SHUI PO

39TR 號工程計劃下的一段 P1 號南行道路
(路政署已委託予九廣鐵路公司興建)
A section of Road P1 Southbound under 39TR
(entrusted to KCR by Highway Department)



大嶼山及機場鐵路
Lantau & Airport Railway

太子迴旋處
Prince Edward Roundabout

CDA
(將由地下鐵路有限公司負責興建)
(to be developed by MTRCL)

西九龍公路
West Kowloon Highway

圖例 Legend

擬提升為甲級的 332CL 號工程計劃部份工程項目
Part of the works under 332CL proposed to be upgraded to Category A

- 擬議道路工程
Proposed Roadworks
- 擬議上行斜路
Proposed Up-Ramp
- 擬議擋土牆 (由拓展署興建)
Proposed Retaining Walls (to be constructed by TDD)
- 擬議擋土牆 (將委託予地下鐵路有限公司興建)
Proposed Retaining Walls (to be entrusted to MTRCL)

CDA 綜合發展區
Comprehensive Development Area

R 住宅
Residential

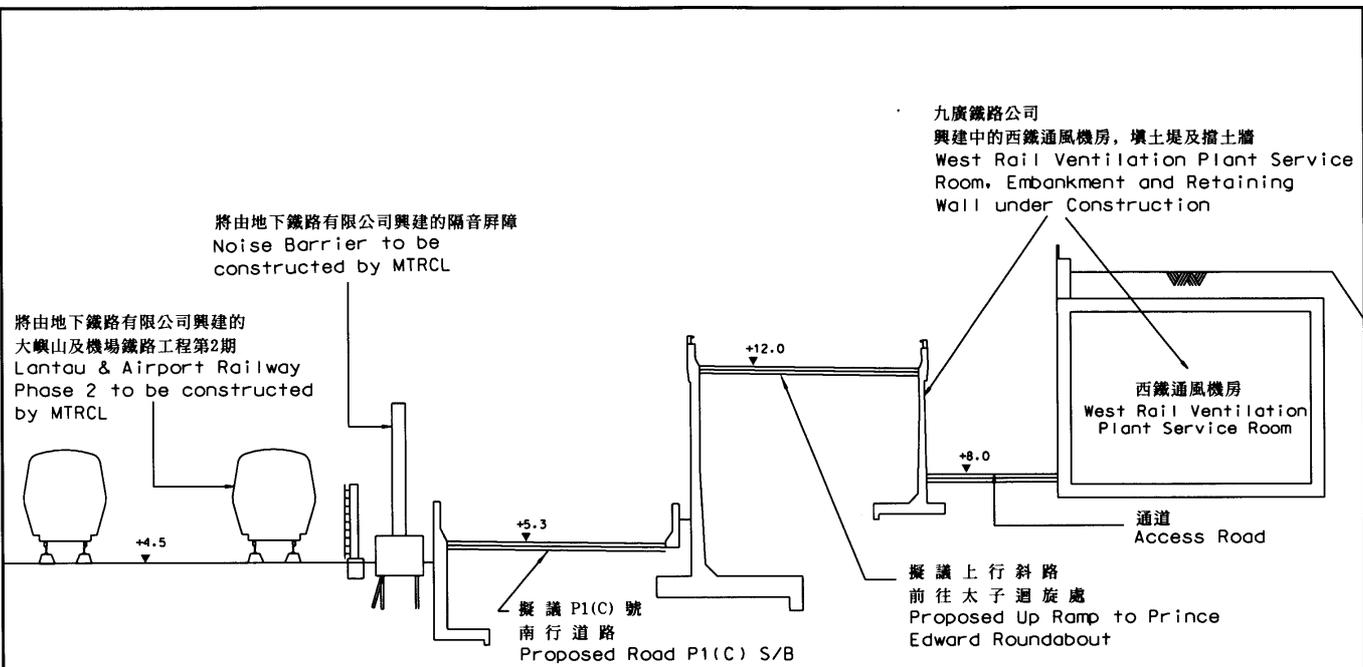
O 休憩用地
Open Space

G 政府用地
Government Site

A	23.11.00	PWP No. amended	signed	signed
編號 No.	日期 Date	內容摘要 Description	核對 Checked	核准 Approved

二000年至二00一年年度工務小組委員會文件 PWSC SUBMISSION 2000 - 2001 Drawing title 圖則名稱 西九龍填海計劃 - 餘下工程第4階段 West Kowloon Reclamation - remaining roadworks stage 4	Drawn 繪圖 C.F. Ng	Initial 簽署 signed	Date 日期 25.10.00	Item No. 項目編號 332CL	Office 辦事處 九龍拓展處 KOWLOON DEVELOPMENT OFFICE
	Checked 核對 K.W. Cheung	Initial 簽署 signed	Date 日期 25.10.00	Scale 比例尺 1 : 5 000	
	Approved 核准 Christina Kwong	Initial 簽署 signed	Date 日期 25.10.00	Drawing No. 圖則編號 K 140A	拓展署 TERRITORY DEVELOPMENT DEPARTMENT

附件 2 ENCLOSURE 2



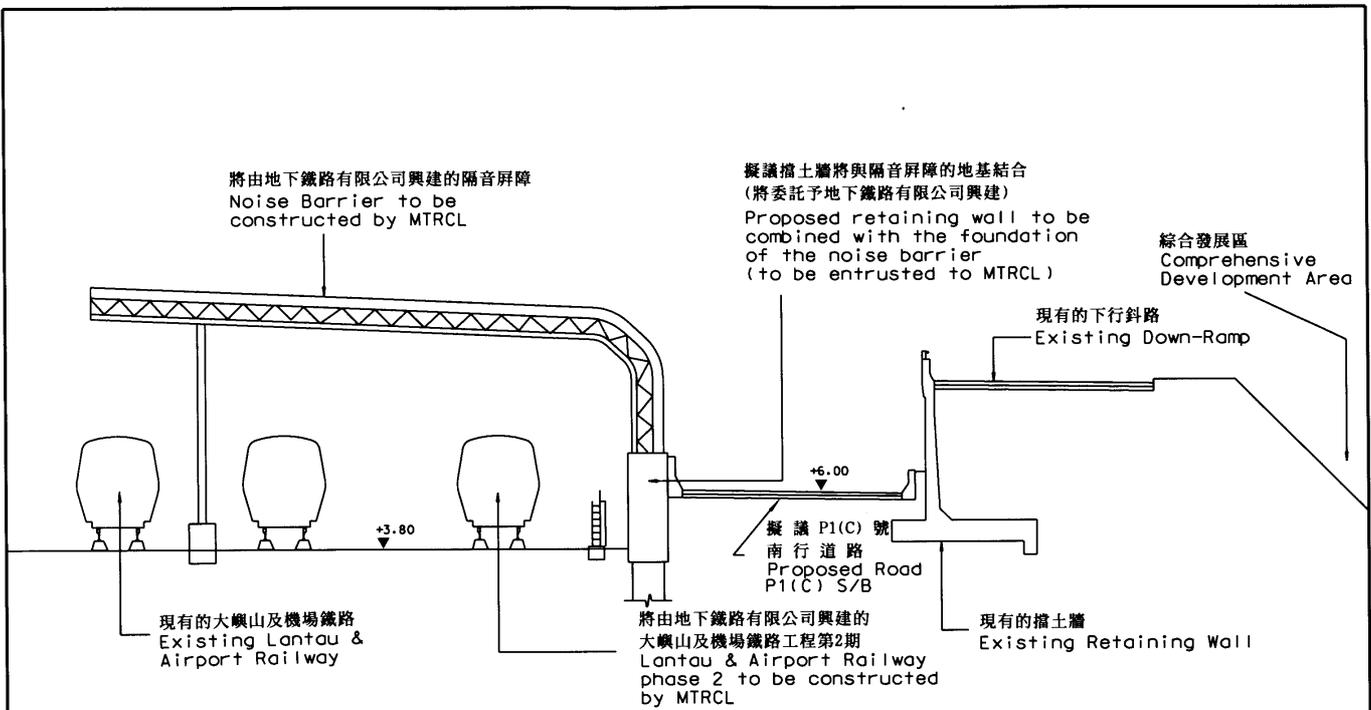
SECTION A-A

橫切面 A-A

A	24.11.00	MTRC amended to MTRCL	signed	signed
編號 No.	日期 Date	內容摘要 Description	核對 Checked	核准 Approved

二000年至二00一年年度工務小組委員會文件 PWSC SUBMISSION 2000-2001		Drawn 繪圖 C F Ng	Initial 簽署 signed	Date 日期 25.10.00	Item No. 項目編號 332CL	Office 辦事處 九龍拓展處 KOWLOON DEVELOPMENT OFFICE
Drawing title 圖則名稱 西九龍填海計劃 - 餘下工程第4階段 (橫切面 A-A) West Kowloon Reclamation - remaining roadworks stage 4 (Section A-A)		Checked 校對 K W Cheung	Initial 簽署 signed	Date 日期 25.10.00	Scale 比例尺 1 : 200	拓展署 TERRITORY DEVELOPMENT DEPARTMENT
		Approved 核准 Christina Kwong	Initial 簽署 signed	Date 日期 25.10.00	Drawing No. 圖則編號 K 142A	

附件3 ENCLOSURE 3



SECTION B-B
橫切面 B-B

A	24.11.00	MTRC amended to MTRCL	signed	signed
編號 No.	日期 Date	內容摘要 Description	核對 Checked	核准 Approved

二000年至二00一年年度工務小組委員會文件 PWSC SUBMISSION 2000-2001		Drawn 繪圖 C F Ng	Initial 簽署 signed	Date 日期 25.10.00	Item No. 項目編號 332CL	Office 辦事處 九龍拓展處 KOWLOON DEVELOPMENT OFFICE
Drawing title 圖則名稱 西九龍填海計劃 - 餘下工程第4階段 (橫切面 B-B) West Kowloon Reclamation - remaining roadworks stage 4 (Section B-B)		Checked 核對 K W Cheung	Initial 簽署 signed	Date 日期 25.10.00	Scale 比例尺 1 : 200	Territory Development Department 拓展署 TERRITORY DEVELOPMENT DEPARTMENT
		Approved 核准 Christina Kwong	Initial 簽署 signed	Date 日期 25.10.00	Drawing No. 圖則編號 K 143A	

Enclosure 5 to PWSC(2000-01)70

332CL - West Kowloon Reclamation - main works (remainder)

Breakdown of the estimate for consultants' fees

Consultants' staff costs		Estimated man- months	Average MPS* salary point	Multiplier factor	Estimated fees (\$ million)
(a) Constants' fees for construction stage					
(i) contract administration	Professional	2.5	38	2.4	0.3
	Technical	2.0	14	2.4	0.1
(ii) preparation of as-built drawings	Professional	0.5	38	2.4	0.1
	Technical	2.0	14	2.4	0.1
(b) Resident site staff costs	Professional	21	38	1.7	2.1
	Technical	65	14	1.7	2.1

				Total consultants' staff costs	4.8

* MPS = Master Pay Scale

Notes

1. A multiplier factor of 2.4 is applied to the average MPS point to arrive at the full staff costs including the consultants' overheads and profit, as the staff will be employed in the consultants' offices. A multiplier factor of 1.7 is applied to the average MPS point in the case of resident site staff supplied by the consultants. (At 1.4.2000, MPS pt. 38 = \$57,525p.m. and MPS pt. 14 = \$19,055 p.m.).

2. The figures given above are based on estimates prepared by the Director of Territory Development. The consultancy works for this project have been included as part of the consultancy agreement for the West Kowloon Reclamation.