Yuen Long DC Paper No. 53 /2008

Yuen Long District Council
Hong Kong Section of Guangzhou – Shenzhen – Hong Kong Express Rail Link

PURPOSE

1. The purpose of this paper is to brief Yuen Long District Council Members of the present development of the Hong Kong section of the Guangzhou – Shenzhen – Hong Kong Express Rail Link project (the XRL project), and to seek the District Council Members' comments on the project.

THE PROJECT

2 The Hong Kong section of the XRL is one of the ten major infrastructure projects announced in the 2007 Policy Address. The XRL will connect Hong Kong with Shenzhen and Guangzhou, and will also form part of the National high-speed railway network. With the completion of the XRL, the traveling time between Hong Kong and Guangzhou will be reduced to about 48 minutes. Through connections with other National high-speed railways, the XRL will also provide direct high-speed train service to other major cities outside Guangdong, such as Beijing, Shanghai etc. Through interchange with the Pearl River Delta Rapid Transport Railway, the XRL will also facilitate easy access to Pearl River Delta cities.

3. The Hong Kong section of the XRL is intended to comprise an approximately 26-km long rail link enclosed in an underground tunnel from the West Kowloon terminus to the boundary at Huanggang. The basic information and proposed alignment for the project are given in the Legislative Council Brief at Annex 1.

4. As pledged in the 2007 Policy Address, we aim to complete further planning and design for the Hong Kong section of the XRL in 2008 and commence construction in 2009. On 22 April 2008, the Executive Council decided that the MTR Corporation Limited should be asked to proceed with the further planning and design of the project. We have now commenced the further planning and preliminary design of the project so

that construction can commence in late 2009 after authorization of the railway scheme under the Railway Ordinance.

COMMENTS SOUGHT

5. District Council Members are invited to provide comments on the Hong Kong section of the XRL project.

Railway Development Office
Highways Department
June 2008

File Ref.: THB(T)CR 1/16/581/99

LEGISLATIVE COUNCIL BRIEF

HONG KONG SECTION OF
GUANGZHOU – SHENZHEN – HONG KONG
EXPRESS RAIL LINK

INTRODUCTION

At the meeting of the Executive Council on 22 April 2008, the Council ADVISED and the Chief Executive ORDERED that

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(a) the Central Alignment Scheme shown in Annex A should be adopted for the Hong Kong section of the XRL;

(b) MTR Corporation Limited (MTRCL) should be asked to proceed with the further planning and design of the Hong Kong section of the XRL on the understanding that it would be invited to undertake the Hong Kong section of XRL under the concession approach;

(c) further negotiation should be carried out with the MTRCL on the implementation details of XRL;

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(d) the development right of Site A (as shown in Annex B) will not be granted to MTRCL, and the site should be disposed of by Government in accordance with the prevailing land policy with due attention paid to ensuring proper integration with the terminus;

(e) the terminus of XRL should be allowed to extend into the underground area of the West Kowloon Cultural District (WKCD), and the terminus should be designed on the assumption that the development in the extension area above would be medium-rise structures (up to a maximum height of 70 mPD) which do not require sophisticated noise and vibration mitigation works; and

(f) further studies should be conducted on whether, and if so how, co-location of boundary control facilities (BCF) in West Kowloon should be arranged.

JUSTIFICATIONS

The Project Proposal of XRL

2. The decision of adopting the Dedicated Corridor Option for the Hong Kong section of the XRL was announced by the Chief Executive after the Tenth Plenary of the Hong Kong / Guangdong Co-operation Joint Conference on 2 August 2007. The KCRC completed and submitted a Project Proposal on the basis of the Dedicated Corridor Option to Government in 2007. Following the rail merger, the MTRCL has taken up the planning of the project

from the KCRC. The key project parameters are set out in **Table 1** below.

Table 1 – Key Project Parameters

Key Project Parameters	
Forecast 2-way Daily Patronage (2016) • West Kowloon – Shenzhen / Humen /Guangzhou • West Kowloon – beyond Guangzhou Total	 88,000 11,000 99,000
Capital Cost (in 2009 prices)	$39.5B[1]
Economic Internal Rate of Return (EIRR) in real terms	9%
Funding gap (in 2009 prices)	$29.5B
Earliest Completion Date	2014/2015

Alignment of the Hong Kong section of the XRL

3. The proposed alignment for the Hong Kong section of the XRL runs wholly in a 26-km long underground tunnel from the West Kowloon terminus to join the Mainland section at the boundary at Huanggang (See Annex A). The total journey time will be 48 minutes from West Kowloon to Shibi in Guangzhou, and 14 minutes from West Kowloon to Futian in Shenzhen.

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Location of the Terminus of the XRL

4. The terminus of the XRL will be located in West Kowloon, which together with the Kowloon Southern Link, will become a major rail hub. This location also has a point-to-point connection with the heart of Central via the existing MTR network. Together with the new commercial development at the Kowloon Station, this location will offer good potential for the emergence of a prime commercial district. The terminus can theoretically be confined to the underground area of the 6-hectare Site A just outside the WKCD (Annex B – Base WKT Layout). This can accommodate 12 platforms (8 long + 4 short) and can meet the forecast demand up to 2030. Alternatively, the terminus can be expanded with a 3.3 ha underground extension into the WKCD (Annex B – Alternative WKT Layout), accommodating two additional long platforms, giving a total of 14 platforms (10 long + 4 short). This would provide greater capacity for overnight stabling of trains within the terminus, thus resulting in greater flexibility in train scheduling and meeting additional demand, in particular long-haul service with main cities outside Guangdong, in the longer term. This will help reinforce Hong Kong's role as a transportation hub in Southern China.

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5. The underground extension would bring the terminus right into the WKCD. There will be direct access for WKCD visitors to the terminus. The extension will also enable more convenient linkage with the possible Automatic People Mover system running within the WKCD, should the WKCD Authority decide to build such a system. Integrating the XRL into the WKCD

[1] The corresponding cost in Money of the Day (MOD) terms is $44B.

will greatly enhance the prominence of the former as the gateway to Mainland China, and the latter as a regional cultural hub. The Tourism Commission envisages that proper integration of the two will help generate more visits to the proposed arts, cultural and tourism facilities in the WKCD thereby promoting cultural tourism.

6. There are however two major interface issues. First, to accommodate part of the terminus underground within the WKCD, we must ensure that it would not affect the GFA available for the development of the facilities in WKCD. The Town Planning Board has agreed to amend the relevant draft Outline Zoning Plan to allow the underground railway facilities area to be exempted from GFA calculation under the overall plot ratio of the WKCD. Accordingly, any underground ancillary retail space for meeting the daily needs of railway passengers authorized in the XRL scheme under the Railways Ordinance will be exempted from the GFA calculation. Except for the above-mentioned ancillary retail space, the underground railway facilities are not expected to hold any other commercial elements which are GFA accountable.

7. Secondly, there is a mismatch between the programmes of the XRL and the WKCD. The design of the XRL terminus would have to be finalised as soon as possible as the Mainland section is already under construction. However, the Development Plan for the WKCD could only be formulated sometime in 2009-2010 [2]. In other words, by the time we need to complete the design for the XRL terminus, the nature of development above the extension area is yet to be confirmed.

8. From the perspective of the planning of the WKCD, suitable enabling works including foundations, noise and vibration mitigation works etc. should be provided on the extension area in the context of the XRL project to preserve reasonable flexibility for the nature and types of facilities above the extension area. However, different developments, such as residential buildings as opposed to theatres, would dictate vastly different enabling and protection works. Theoretically it should be possible to install an all-purpose transfer plate to allow whatever development above. Such a transfer plate would be extremely costly (about $3B) and massive (about 5m thick). This would occupy significant precious space within the extension areas. We have explored the requirements of different development scenarios and taking into account the cost and thickness of the various types of transfer plates, and the need to provide adequate flexibility to the WKCD Authority, a possible compromise would be to assume that the site would be developed to medium-rise up to 70 mPD[3] not requiring sophisticated noise and vibration

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[2] The WKCD Authority can only be established in late 2008 (assuming that the enabling legislation would be passed before summer 2008), and it is estimated that the Development Plan for the WKCD can only be completed sometime in 2009-2010.

[3] This is in line with the proposed building height restriction applicable to this site as agreed by the Town Planning Board.

mitigation measures[4]. This will allow development such as offices, hotels and residential buildings, but not facilities such as opera houses, concert halls and museums. The cost of the transfer plate required would be about $1.5 billion. This can be considered as a necessary and reasonable price to pay in order to give the WKCD Authority the necessary flexibility in formulating a development plan that will enable the area to attain a vibrant cultural and city life through optimal integration with the neighbouring community. The decision would form the basis of the design work of XRL. The cost for the transfer plate is included in the project cost of XRL. There will be no cost implications for the WKCD Authority arising from the extension works. We will work closely with the WKCD Authority once it comes into being to address various interfacing issues.

Railway Operator

9. MTRCL has indicated that it would be prepared to continue with the planning work done by the KCRC on the XRL on the understanding that it will be the operator of the XRL. Taking into account the fact that MTRCL has absorbed the pool of experience gained by the KCRC in running the East Rail Line through trains as a result of the rail merger, and has the experience to implement and operate Mainland railways, it is well positioned to undertake the Hong Kong section of the XRL.

10. An alternative would be to award the project through an open tender or invite third parties to operate the XRL. However, many issues which may affect the operation of the XRL, including the availability of train paths and arrangement of BCF, will require substantial government involvement in discussing with the Mainland. Given the risks and uncertainties involved, it is not possible to develop a tender package at this juncture. If we wait until all the uncertainties are sorted out, it will take about two to three years. This will bring the completion of the XRL to beyond 2017. The economic loss during the delayed period would be in the region of $6B (at 2009 prices). Hence awarding the project direct to MTRCL, on balance, is the most practicable arrangement.

Funding Approach

11. After the rail merger, there are two approaches for implementing the XRL, namely the ownership approach and the concession approach. In deciding which funding approach is more appropriate for XRL, we have followed a set of criteria listed out at Annex C.

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12. Under the ownership approach, which is essentially identical to the way railway projects have been constructed and operated by the MTRCL before the rail merger, the MTRCL will be responsible for the funding, design,

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[4] The medium-rise development would still require the basic noise and vibration mitigation works which will be provided in the normal station design of the XRL terminus and there will be no cost implications for the WKCD Authority.

construction, operation and maintenance of the Hong Kong section of XRL and its ancillary infrastructures. Based on MTRCL's assessment, the XRL project in itself is not financially viable and a funding gap of $29.5 billion (in 2009 prices) would result if the project is carried out under the ownership approach.

13. Under the ownership approach, the Government does not need to bear the risks associated with the construction and operation of the project. However, since the ownership of XRL would then rest with MTRCL, the Government would not share in the additional financial returns of this project if the operation of the XRL turns out to be more profitable to the MTRCL than projected, other than indirectly in the form of dividends distributed by the MTRCL to its shareholders (Government currently owns around 76% of MTRCL's total shareholding).

14. Under the concession approach, the Government will fund under the Capital Works Reserve Fund the construction of the railway and its ancillary infrastructures, and ultimately owns the railway. The construction cost is estimated at $39.5 billion (in 2009 prices). Upon completion of the railway, the MTRCL would be granted a service concession for the operation and the Government will receive service concession payment accordingly. The total concession payment, which is dependent on the XRL fare prices, actual patronage and non-fare revenues after the XRL has come into operation, is estimated to be about $28.1 billion (in MOD terms) for 50 years. Upon the end, expiry or termination of the service concession period, the MTRCL will have to return an operating railway to the Government. The residual value of the railway should be quite substantial. Irrespective of which funding approach is adopted, it is estimated that the XRL will save the public 40 million hours per annum with an Economic Internal Rate of Return (EIRR) of 9% per annum in real terms. The economic benefits including time saving over 50 years of operation of XRL discounted to year 2009 are estimated to be about $83 billion in 2009 prices. The above economic benefits estimate has taken into account time savings to cross-boundary rail passengers and other general road users, and cost savings to operators arising from the Hong Kong section of the XRL. The entire economic benefits, including induced investments to the region, should be far greater to the mutual advantages of both Hong Kong and the Mainland cities.

15. When considering whether the ownership or concession approach should be adopted for the XRL, we have in mind the following considerations:

(a) XRL is a major cross-boundary infrastructure. The Hong Kong section would be connected to the Mainland section which forms part of the national railway network owned by the Mainland Government. Ownership of the Hong Kong section by the HKSAR would facilitate coordination and resolution of interface issues between the Hong Kong and Mainland sections, both during construction and operation. These interface issues include, for

example, the adoption of standards to ensure inter-operability of the two systems, the allocation of train paths, the fire-fighting and emergency evacuation arrangements etc. Ownership of the Hong Kong section by HKSAR is in line with the approach adopted for the other cross boundary rail line;

(b) The project is proposed under a forward-looking supply-led model, in line with the Action Agenda proposed by the Focus Group on Maritime, Logistics and Infrastructure issued in January 2007 following the Economic Summit on "China's 11th Five-Year Plan and the Development of Hong Kong". The financial viability of the project is subject to a host of factors, including, for example, fare level, fare adjustment mechanism and revenue split mechanism which need to be discussed with the company running the Mainland section, and the availability of train paths and cross boundary facilities arrangement, which need to be further negotiated between the HKSAR Government and the Mainland authorities. In light of these uncertainties, a conservative approach has been adopted in assessing the financial viability of the project, thus arriving at a substantial funding gap; and

(c) Under the concession approach, the Government can capture the upside of the XRL's performance under a revenue-sharing mechanism and can get back a fully operational XRL system at the end or upon termination of the service concession. Given that we have the commitment to and confidence in the long-term integration between Hong Kong and the Mainland, and are in a better position to liaise with the Mainland authorities over issues such as allocation of train paths and co-location of BCF to enhance the long-term profitability of the project, the concession approach would in the long run make more financial sense for the Government.

16. In light of the considerations, the Administration decided to adopt the concession approach for XRL. The current estimated capital cost is $39.5 billion (in 2009 prices). Upon completion of further planning and detailed design to be undertaken by MTRCL, the MTRCL will be able to firm up the estimated cost and we will be able to further verify the figures. The Financial Services and the Treasury Bureau and the Highways Department will appoint independent consultants to assess the reasonableness of the estimated cost of the project and other financial parameters in relation to the calculation of concession payments. In the mean time we will seek the necessary capital funding for the design and site investigation required in accordance with the established resource allocation procedures. This is estimated to be $2.6 billion (in 2007 prices).

Development Right of Site A

17. We have also considered how the development right of site A above the terminus should be disposed of. Under the concession approach, the Government will fund the construction of the railway under the Capital Works

Reserve Fund. Thus, in the case of the XRL, there is no need from a financing arrangement point of view to grant the development rights of the site to MTRCL. Bureaux and departments concerned will work together to see how best to dispose of Site A, under prevailing land policy to ensure proper integration and synergy between the terminus and the development within the site.

Boundary Control Facilities (BCF)

18. We will actively study the provision of a common immigration and customs clearance system for Hong Kong and the Mainland at the West Kowloon terminus. This will greatly facilitate the through train services between Hong Kong and major Mainland cities outside Guangdong. A task force has been set up to examine further the issues involved.

19. Meanwhile, in the planning and design of the Shibi Station, Longhua Station, Humen Station and Futian Station, the Mainland side has allowed for the need for separate BCF. Irrespective of the outcome of the deliberations on the BCF co-location, provisions have been allowed for in the West Kowloon terminus for its implementation.

Public Transport Interchange and Passenger Linkage

20. The new West Kowloon terminus will become a new transport hub for Mainland visitors. To support such an important transport function, a new public transport interchange will be planned at the Terminus to facilitate inter-modal change for XRL passengers. It will also be necessary for MTRCL to provide convenient and adequate passenger linkage with the nearby Airport Express Line Kowloon Station as well as the Kowloon Southern Link West Kowloon Station, which is under construction. We shall discuss with MTRCL the provision of such public transport interchange and passenger connections, and see how such facilities will support WKCD in a holistic manner.

Traffic Situation in West Kowloon

21. The Transport Department will conduct a comprehensive traffic study for West Kowloon, taking into account the cumulative impacts of the XRL West Kowloon terminus, and other developments in the study area, including the WKCD and the West Kowloon Station of the Kowloon Southern Link. The study will recommend the preferred road network for West Kowloon and help ensure that timely traffic management measures are taken during the construction stage of the different developments, and that the planning of relevant transport infrastructure can meet with the demand of the various developments. The first phase of the study will commence in May 2008 for completion in December 2008.

IMPLICATIONS OF THE PROPOSAL

22. The proposal has economic, financial, civil service, environmental

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and sustainability implications as shown in Annex D. The proposal is in conformity with the Basic Law, including the provisions concerning human rights. It has no productivity implications.

PUBLIC CONSULTATION

23. We will brief the Legislative Council Panel on Transport and the relevant District Councils concerned. When we consulted the Legislative Council Subcommittee on Matters Relating to Railways in January 2007, members generally supported a dedicated corridor for the XRL.

PUBLICITY

24. We will issue a press release explaining clearly the considerations behind the recommendations and conduct a press conference. We will brief various District Councils on the latest development and other relevant consultative bodies on the latest development.

BACKGROUND

25. Background information on the Hong Kong section of the XRL is set out at Annex E.

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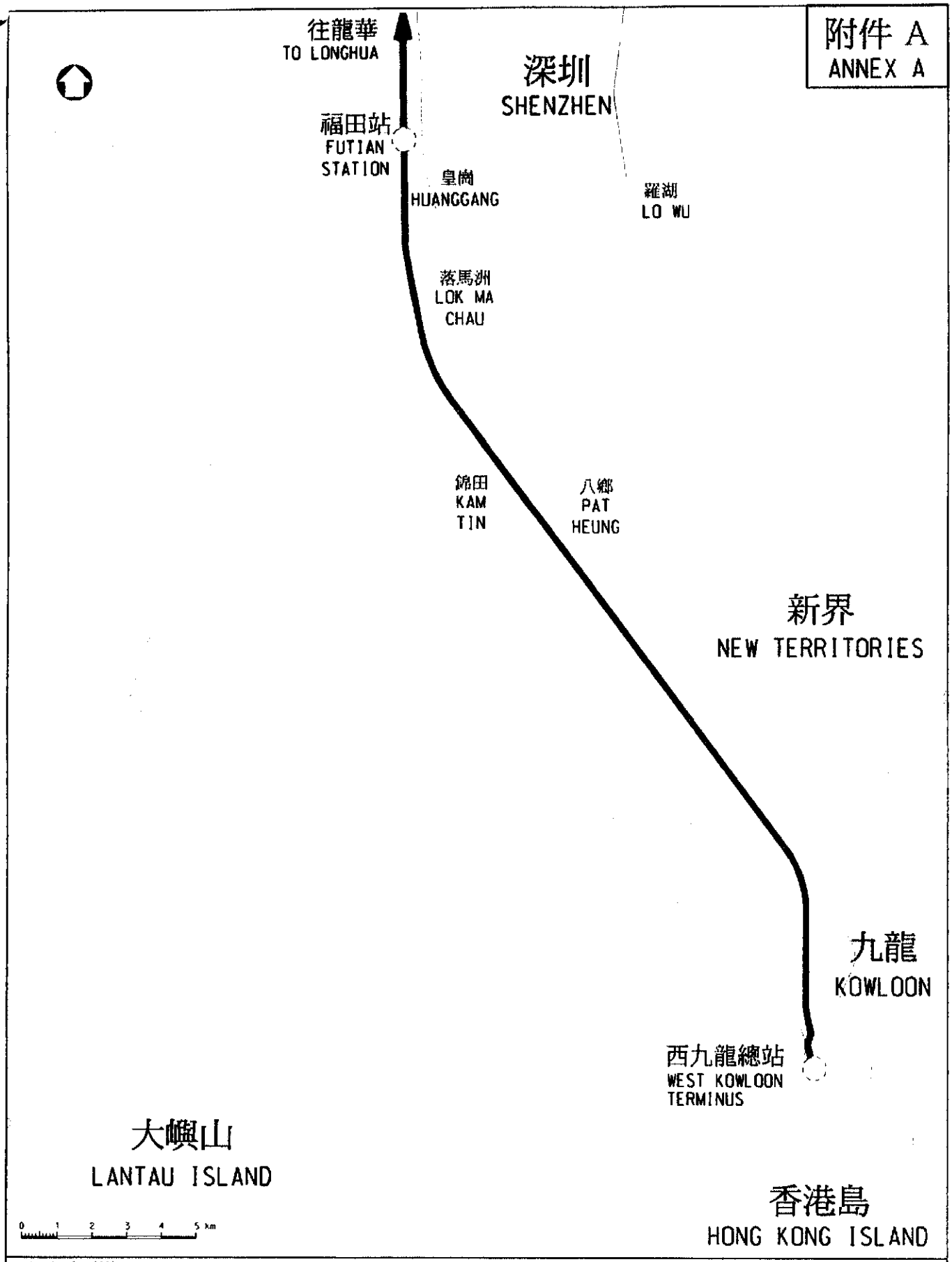
SUBJECT OFFICER

26. The subject officer is Ms Ava CHIU, Principal Assistant Secretary for Transport and Housing (Transport) (Tel. 2189 2188).

22 April 2008
(THB(T)CR 1/16/581/99)



圖則名稱 drawing title

廣深港高速鐵路香港段中線方案

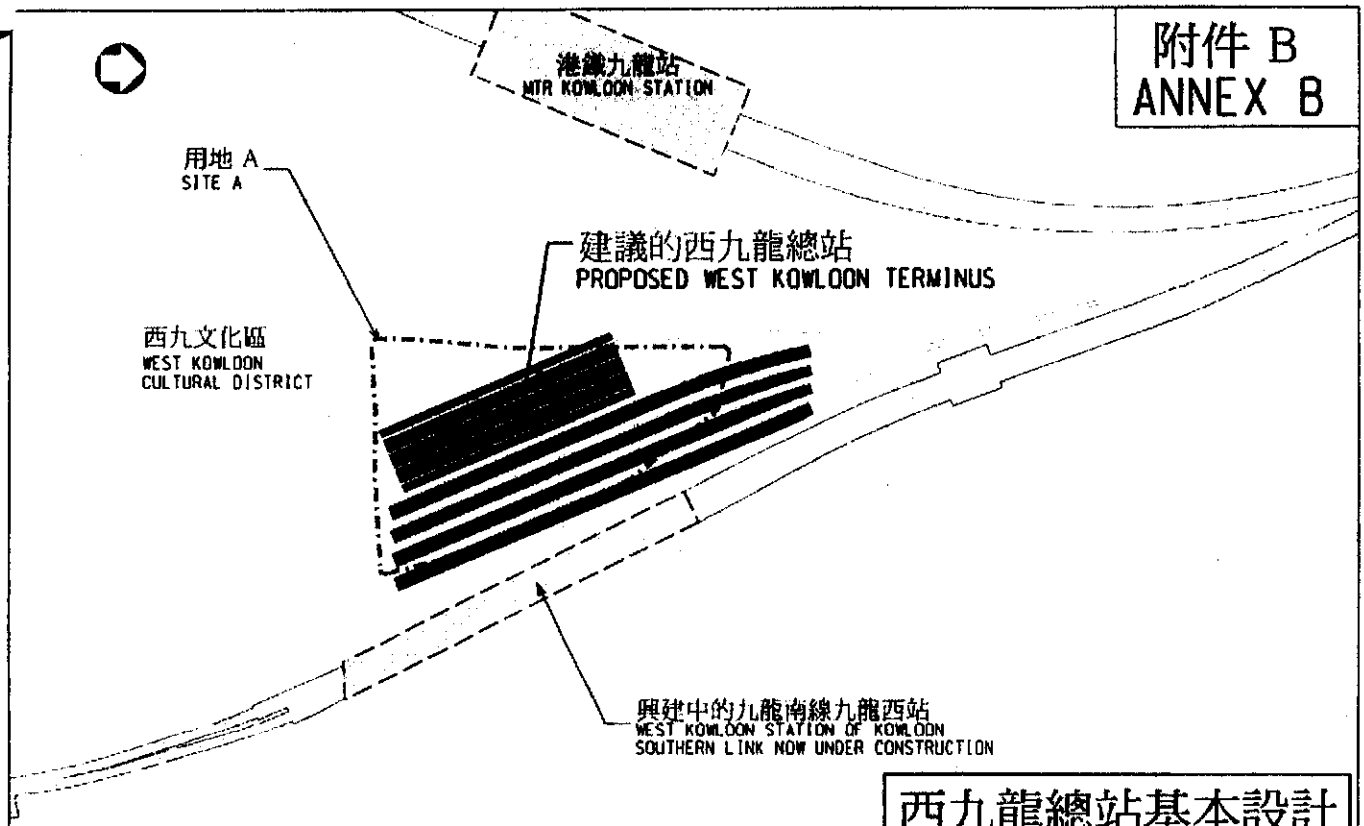
CENTRAL ALIGNMENT SCHEME FOR HONG KONG SECTION OF XRL

HR\WXRL001-SK0013.DGN

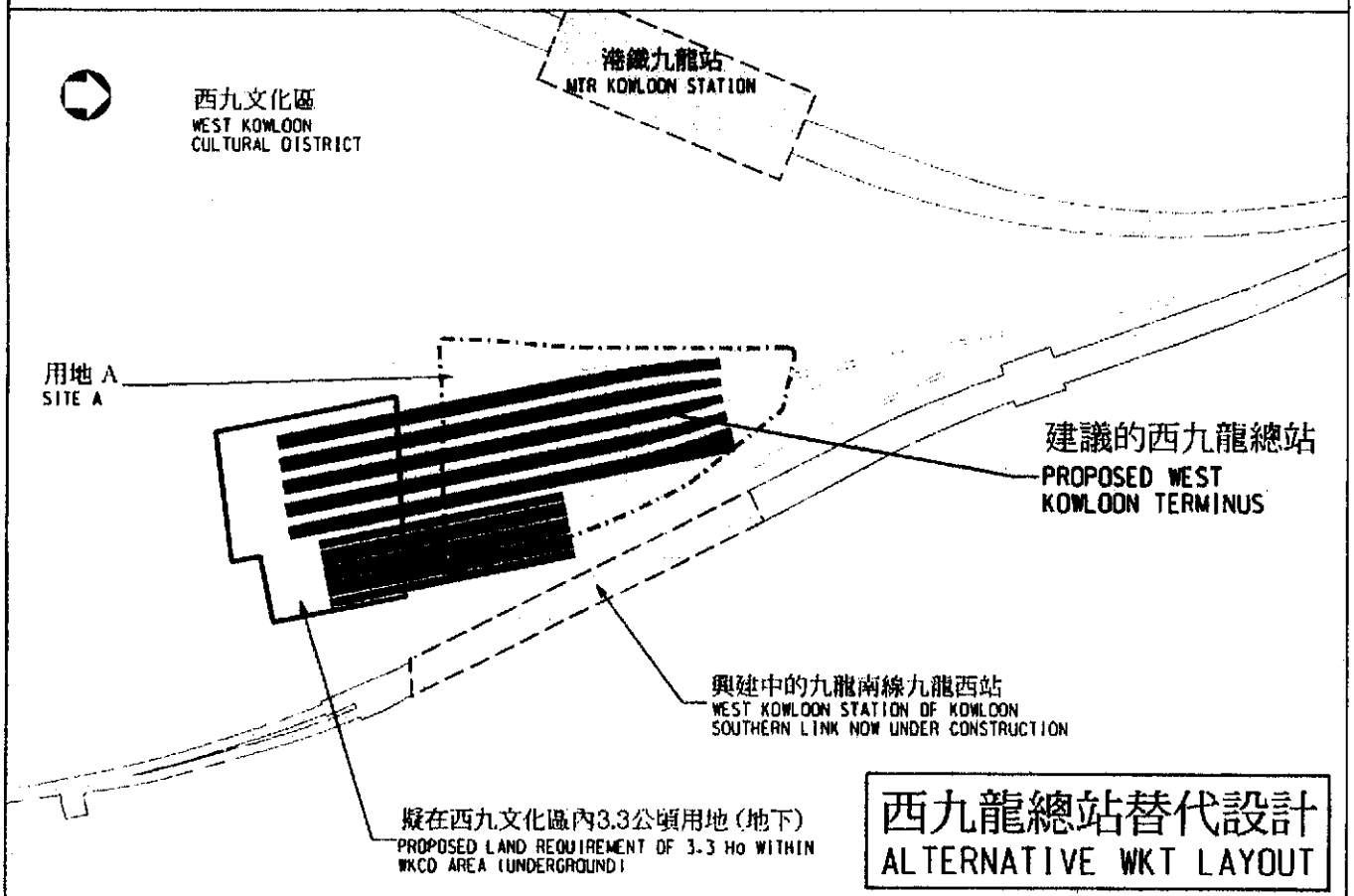
V8 HRWXRL001-SK0013.dgn 19-04-2006

A3 297X420

附件 B
ANNEX B



西九龍總站基本設計
BASE WKT LAYOUT



西九龍總站替代設計
ALTERNATIVE WKT LAYOUT

drawing title

建議的西九龍總站設計
PROPOSED WEST KOWLOON TERMINUS (WKT) LAYOUTS

HAWXRL001-SK0015.DGN

A3 297X420

Criteria for Selecting Funding Approach for Implementing New Railway projects

In choosing between the ownership or concession approach as the funding model for the XRL, the following should be considered -

(a) whether Government should take a longer term view on investment in railway infrastructure and would like to retain the ownership of the railway, thereby retaining the residual value of the railway;

(b) whether Government would be prepared to input more resources, including staff and cash outlay, to implement the railway under the concession approach;

(c) whether Government would be prepared to bear the construction risks and operating risks under the concession approach, e.g. lower revenue as a result of patronage being lower than anticipated;

(d) the financial implications for Government;

(e) whether the selected approach would allow the MTRCL to effectively co-ordinate the planning and implementation of the railway and the above station/depot property development; and

(f) whether the ownership of the new railway by the Government will facilitate the smooth implementation of the railway networks.

IMPLICATIONS OF HONG KONG SECTION OF XRL

FINANCIAL AND CIVIL SERVICE IMPLICATIONS

Upon the completion of further planning and detailed design to be undertaken by the MTRCL in 2009, the MTRCL will be able to firm up the estimated cost of the Hong Kong section of the XRL project. In the meantime, we will seek the necessary capital funding for the design and site investigation required in accordance with the established resource allocation procedures. This is estimated to be $2.6 billion (in 2007 prices), and the works are expected to be entrusted to the MTRCL. We will seek the remaining capital funding required for the railway construction works and related works (including the transfer plate) after the project cost is finalized.

2. Staffing resources[1] have been secured for the Lands Department to cope with the increased workload arising from the planning and implementation of various railway projects (including XRL.

3. Staffing resources[2] have also been secured for the Highways Department (HyD) to undertake the related duties for new railway projects including the XRL. The Chief Executive's Policy Address in 2007 announced the Government's dedication to push ahead with ten major infrastructure projects in which four of them are railway projects. As these railways projects proceed, HyD will review the workload involved and bid for additional resources in accordance with the established procedures, if necessary.

4. Additional resources will also be required for the planning and construction of boundary control facilities (BCF) at the terminus of the XRL in West Kowloon as well as the fitting-out, fixtures and furniture and equipment for cross-boundary facilities for the government portion of the Hong Kong Section of the XRL including immigration counters, customs clearance cubicles, computer/ electronic systems and other facilities for maintenance of order and security. We will work out the capital cost estimate for the BCF and bid for the required resources in accordance with the established resource allocation procedures. Moreover, annual recurrent expenditure (including staffing) will also be required by frontline departments[3] for the commissioning, operation and maintenance of the facilities. The bureaux/departments concerned will bid for the recurrent

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1 Involving 34 non civil service contract staff and ten civil service posts on a time-limited basis.

2 Involving eight civil service posts which are subject to review in 2015-16.

3 These include the Hong Kong Police Force, the Immigration Department, the Customs and Excise Department and the Fire Services Department.

costs under established procedures as necessary.

5. Other relevant bureaux / departments are expected to meet the additional resources requirements arising from the project from within their existing allocations. However, they may seek additional funding through established resources allocation procedures if deemed necessary.

ECONOMIC IMPLICATIONS

6. The greatest benefit of the proposed XRL is to connect Hong Kong to the Mainland cities and provinces further to the north via the Beijing-Guangzhou Passenger Line and to the east via the Hangzhou-Fuzhou-Shenzhen Passenger Line. This vastly improves Hong Kong's rail links with major Mainland cities along these two passenger railways, such as Beijing, Shanghai, Changsha, Hangzhou and Nanjing, etc.

7. Upon completion, the XRL will foster closer economic ties between Hong Kong and the Mainland and extending Hong Kong's reach into the Mainland hinterland and help strengthen the strategic position of Hong Kong as the southern gateway to the Mainland. Both Mainland tourists and business travellers to Hong Kong or via Hong Kong to other cities in the world will benefit from the improved connectivity. Based on the Project Proposal, the improved rail connectivity and speedier services will bring an additional 0.9-1.2 million Mainland visitors to Hong Kong by 2016. This will help enhance tourism and business in Hong Kong. As the XRL Terminus will be located at West Kowloon, this will also enhance the attractiveness and development potential of the area.

8. It should also be noted that the XRL will enable better connection with the Rapid Transit System of the Pearl River Delta (PRD), which in turn shortens the travelling time between Hong Kong and the Mainland cities in the PRD, such as Dongguan, where there is one of the largest concentration of Hong Kong investors and workers. The time savings due to more efficient cross boundary travels will enhance the value of Hong Kong and its role as a hub in the region.

9. It is estimated that the XRL will save the public 40 million hours per annum with an Economic Internal Rate of Return (EIRR) of 9% per annum in real terms. The economic benefits including time saving over 50 years of operation of XRL discounted to year 2009 are estimated to be about $83 billion in 2009 prices. The above economic benefits estimate has only taken into account time savings to cross-boundary rail passengers and other general road users, cost savings to operators, and benefits from

enhanced road safety arising from the Hong Kong section of the XRL. Hence, the entire economic benefits, including those on the other side of the boundary, should be far greater to the mutual advantages of both Hong Kong and the Mainland cities.

10. According to the Project Proposal, it was estimated that the Hong Kong section of the XRL will create about 5,500 jobs during the construction of the XRL. Over time, upon full development of the project to maturity, it is likely to spin off even more employment opportunities generally, reflecting the benefits of higher growth and expanded development potential through better connectivity with the Mainland market. During operation, it is estimated that about 10,000 jobs will be created.

ENVIRONMENTAL IMPLICATIONS

11. A Strategic Environmental Assessment (SEA) for the Second Railway Development Study was completed in 2000. The SEA concluded that rail is a more environmentally friendly form of mass transportation than road based alternatives, and that the promotion of rail would assist in achieving a sustainable transportation system.

12. An environmental study conducted by the KCRC in 2006-07 indicates that the project would give rise to potential environmental impacts including noise, air, water, waste, ecological, hazard, cultural heritage, landscape and visual impacts. Amongst these impacts, the construction and operational noise impact, and the large amount of construction waste generated from tunnel excavation, would be the major concerns. Also, as the proposed alignment may pass through sensitive habitats and water catchment zones, ecological and water quality impacts would have to be addressed.

13. However, the Hong Kong section of the XRL is a designated project under Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance. Environmental permit is required for the construction and operation of the project. The MTRCL will conduct an EIA study under the EIA Ordinance to address all potential environmental issues, and assess and evaluate the environmental acceptability of the project. Considerations would be given to best practicable construction methods and suitable mitigation measures to avoid the adverse impacts to the maximum practicable extent. Under the EIA Ordinance, the public and the Advisory Council on the Environment will be consulted on the findings of the EIA study.

SUSTAINABILITY IMPLICATIONS

14. According to a preliminary sustainability assessment, the Hong Kong section of the XRL should enable more commuters to switch from road transport to rail, and help improve mobility and air quality in the long term. However, various potential environmental and ecological problems have been identified in the sustainability assessment. They include the noise impacts during construction and operation, air pollution from works sites, waste generated from tunnel excavation and the negative impact on the natural habitat. As mentioned above, these issues would be addressed carefully and appropriate mitigation measures would be worked out in the EIA study and during the detailed project planning process.

BACKGROUND INFORMATION ON HONG KONG SECTION OF XRL

The Hong Kong Section of the Guangzhou – Shenzhen – Hong Kong Express Rail Link (XRL), formerly named regional express line (REL), will provide rapid rail transport between the boundary and urban areas. It was first recommended for implementation under the Railway Development Strategy 2000 (RDS 2000).

2. Following the completion of a joint investigative study with the State Ministry of Railways (MoR) on the feasibility of an express rail linking Guangzhou, Shenzhen and Hong Kong and the subsequent agreement to add a station in Shenzhen city centre, the XRL will have termini at West Kowloon of Hong Kong and Shibi of Guangzhou, with intermediate stations at Futian and Longhua of Shenzhen, and Humen of Dongguan. The alignment of the XRL is shown in **Enclosure**.

3. Being a part of the national high-speed rail network, the XRL will connect with the proposed Beijing-Guangzhou Passenger Line at Shibi and the Hangzhou-Fuzhou-Shenzhen Passenger Line at Longhua. In addition, it will link up with the Rapid Transit System (RTS) of the Pearl River Delta (PRD) area. Upon the completion of XRL, there will be shuttle services between Hong Kong and Guangzhou, Dongguan and Shenzhen, and also express long-haul services to major Mainland cities such as Beijing, Shanghai, Chongqing, etc. The journey time between Hong Kong and Guangzhou through XRL will be shortened to within an hour and the accessibility between Hong Kong and the various major Mainland cities will be greatly enhanced. In addition, by interchanging with the RTS network, XRL passengers can conveniently access to various major PRD cities.

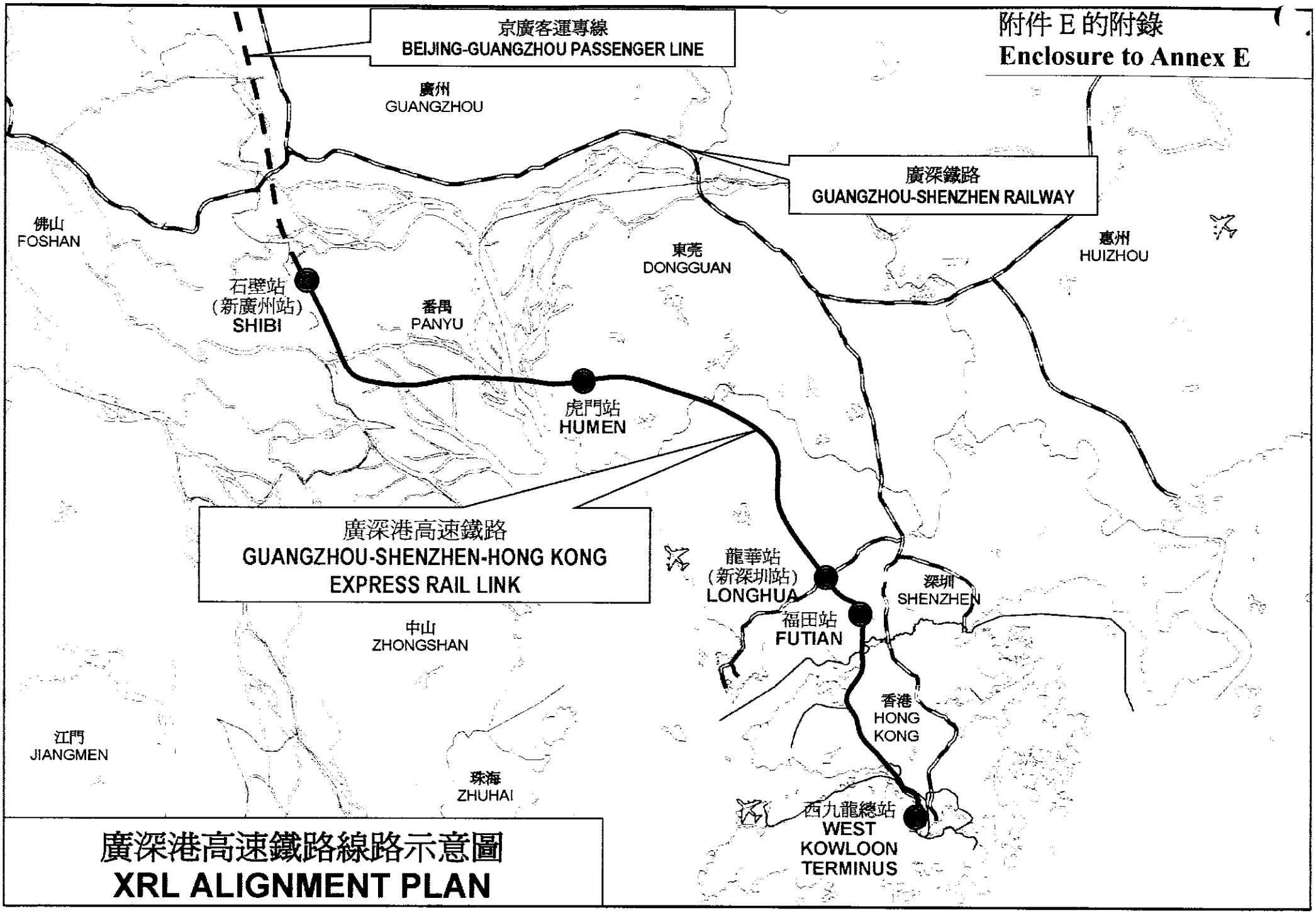
4. The KCRC in its feasibility study submitted to Government in July 2005 recommended two alignment options for the Hong Kong section of the XRL: building a new dedicated rail track from the West Kowloon Terminus to the boundary (the Dedicated Corridor Option) or sharing the tracks of the Kowloon Southern Link now under construction, the existing West Rail Line

(WRL), the proposed Northern Link (NOL) and a new rail track to the boundary (the Shared Corridor Option).

5. Having considered the financial aspect, the potential impact on WRL service and the patronage forecast based on the prevailing planning assumptions at that time, the ExCo in January 2006 advised and the Chief Executive ordered that the Hong Kong section of the XRL should proceed on the basis of the Shared Corridor Option and the NOL should be taken forward as a combined project.

6. Subsequent to the ExCo's approval in January 2006, several planning changes were made in the Mainland's section of the XRL bearing significant implications to the choice of corridor option for the Hong Kong section of the XRL. These included a substantial increase in the possible long-haul train services, addition of a new XRL station at Futian, a new proposed RTS rail line, and MoR's requirement to deploy wider train cars for the XRL. As a result of these planning changes, there will be a significant increase in the patronage for the XRL. If the Shared Corridor Option is to be adopted, the increase in XRL patronage and train frequency will aggravate the loading on the shared section of the WRL corridor, and the corridor may even become saturated shortly after the opening of the XRL. In addition, the deployment of new national standard high-speed train cars of up to 3.4m-wide for the XRL will conflict with the platform configurations of the WRL Nam Cheong, Mei Foo and Tsuen Wan West Stations, which are designed for train cars with a width of no more than 3.1m.

7. In view of the above, the Chief Executive announced after the "Tenth Plenary of the Hong Kong / Guangdong Co-operation Joint Conference" on August 2007 that the Dedicated Corridor Option should be adopted for the Hong Kong section of the XRL.



附件 E 的附錄
Enclosure to Annex E

廣深港高速鐵路線路示意圖
XRL ALIGNMENT PLAN