

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 706 – HIGHWAYS

Transport – Railways

56TR – South Island Line (East) – essential public infrastructure works

Members are invited to recommend to Finance Committee the upgrading of **56TR** to Category A at an estimated cost of \$927 million in money-of-the-day prices for the essential public infrastructure works for the South Island Line (East).

PROBLEM

We need to provide a safe, convenient and barrier free access to the MTR South Island Line (East) (SIL(E)) through enhancement of pedestrian and transport links to the railway line in order to fully realise the consequential social and economic benefits of the SIL(E) which will commence operation by 2015.

PROPOSAL

2. The Director of Highways, with the support of the Secretary for Transport and Housing, proposes to upgrade **56TR** to Category A at an estimated cost of \$927 million in money-of-the-day (MOD) prices for the construction of the essential public infrastructure works (EPIW) for the SIL(E).

/ **PROJECT**

PROJECT SCOPE AND NATURE

3. The SIL(E) scheme consists of a railway line of seven kilometres running from Admiralty to South Horizons with three intermediate stations at Ocean Park (OCP), Wong Chuk Hang (WCH) and Lei Tung Estate. Passengers can interchange at the proposed Admiralty Station for the existing Island Line, Tsuen Wan Line and the future Shatin to Central Link. The schematic layout of the SIL(E) is at Enclosure 1.

4. The scope of **56TR** comprises –

Wong Chuk Hang Station area

- (a) construction of a public transport interchange (PTI) with floor area of about 2 200 square metres (m²) underneath the proposed WCH Station including –
 - (i) a double-width bus bay of 12 metres (m) in length for accommodating eight buses;
 - (ii) a green minibus (GMB) bay for accommodating four GMBs;
 - (iii) a taxi stand for accommodating six taxis;
 - (iv) general loading/unloading bay of 30 m in length; and
 - (v) associated road, drainage, street lighting, electrical and mechanical (E&M) and landscaping works;
- (b) improvement of the existing road network in the vicinity of the proposed OCP Station and WCH Station including –
 - (i) widening of a section of Heung Yip Road, which is about 650 m in length, from one lane each way to two lanes each way;
 - (ii) realignment of a section of WCH Road which is about 310 m in length;
 - (iii) realignment of a section of OCP Road which is about 250 m in length;

/ (iv)

- (iv) realignment and widening of a section of Nam Long Shan Road which is about 150 m in length;
 - (v) realignment and widening of a section of Police School Road which is about 200 m in length;
 - (vi) modification to the road junctions at Heung Yip Road/OCP Road, Heung Yip Road/Police School Road, Heung Yip Road/Nam Long Shan Road, WCH Road/Nam Long Shan Road, and WCH Road/Tong Bing Lane; and
 - (vii) associated road, drainage, street lighting, geotechnical, slope works and landscape works;
- (c) modification of a section of existing WCH nullah which is about 650 m in length between OCP Road and Nam Long Shan Road;
- (d) construction of a covered footbridge of about 180 m in length connecting the WCH Station with the adjacent industrial area, which also includes –
- (i) a staircase and a lift at WCH Road adjacent to the Regency Centre;
 - (ii) a staircase and a lift at the existing Nam Long Shan Road sitting-out area;
 - (iii) a staircase and a lift adjacent to the Nam Long Shan Road Cooked Food Market; and
 - (iv) re-provisioning of the Nam Long Shan Road sitting-out area;

South Horizons Station area

- (e) construction of a covered footbridge of about 80 m in length crossing South Horizons Drive and linking the western part of Ap Lei Chau Estate to Yi Nam Road near the Precious Blood Primary School, which also includes –
- (i) a staircase and a lift adjacent to the Precious Blood Primary School;

/ (ii)

- (ii) re-provisioning of the existing Ap Lei Chau Estate sitting-out area; and
- (iii) associated road and drainage works;

Aberdeen Channel waterfront area

- (f) construction of a pedestrian link (the Pedestrian Link) to the Aberdeen Channel Promenade comprising –
 - (i) a covered footbridge of about 36 m in length;
 - (ii) a walkway of about 800 m in length, between the WCH Station and Kwun Hoi Path;
 - (iii) an open space of 1 140 m² and a lookout point at the Aberdeen Channel waterfront; and
 - (iv) associated drainage and landscaping works; and

Lei Tung Station area

- (g) road improvement works at the road junction of Ap Lei Chau Drive and Ap Lei Chau Bridge Road.

Layout plans of the proposed EPIW are at Enclosure 2.

5. We plan to entrust the EPIW to the MTR Corporation Limited (MTRCL) for construction in conjunction with the SIL(E) railway works. Subject to the approval of the Finance Committee, construction works for the EPIW are scheduled to commence around mid-2011 for completion in tandem with the SIL(E) in 2015.

JUSTIFICATION

6. The proposed EPIW items are necessary for enhancing accessibility to the SIL(E). The local community has expressed a strong wish to see its early completion. Without the EPIW, there will be a lack of a public transport interchange in the Wong Chuk Hang Station which is intended to serve the interchanging passengers using the SIL(E). Moreover, if no widening is made to the road network in the vicinity of the stations, the capacity of these roads will not be able to serve the future traffic demand upon commissioning of the SIL(E). If we could not construct the proposed footbridges and pedestrian links, we would not be able to provide a barrier-free, convenient and safe pedestrian link system connecting to the SIL(E) stations.

/ PTI

PTI underneath WCH Station

7. To facilitate optimum inter-modal coordination between SIL(E) and other modes of public transport, we propose to construct a PTI underneath the WCH station. The proposed PTI will serve both the local residents in the WCH area as well as the large working population of about 15 000 in the WCH industrial area.

Improvement of existing road network in the vicinity of OCP and WCH Stations

8. To cope with the anticipated traffic growth in the existing road network in the vicinity of the proposed OCP and WCH Stations upon SIL(E)'s commissioning in 2015, we propose to widen and/or realign a number of roads namely the Heung Yip Road, WCH Road, Ocean Park Road, Nam Long Shan Road, Tong Bing Lane and Police School Road as well as to modify some critical road junctions to increase traffic capacity. The existing footpaths at these roads will also be widened to enhance pedestrian flow and to provide extra space for landscaping works to create a better walking environment for pedestrians.

Modification of existing WCH nullah

9. To provide necessary space for the construction of the proposed PTI underneath the WCH station and for widening of Heung Yip Road as mentioned in paragraphs 7 and 8 above, we need to widen and modify a section of the existing WCH Nullah alongside Heung Yip Road, which is about 650 m in length, into a decked structure. This will retain the channel and enable the construction of the required transport facilities. The decked structure will continue to meet the current stormwater drainage design standard and will also help relieve the odour problem brought about by the existing open nullah.

Covered footbridge link to WCH industrial area

10. The proposed covered footbridge will provide a direct, safe and convenient connection between the WCH station and the adjacent industrial area, which has a large working population of about 15 000. Lifts will be provided at all landing areas of the footbridge to provide barrier-free access. As the works will make use of the existing Nam Ling Shan Road sitting-out area as a temporary works site, the sitting-out area will be closed off during construction of the proposed covered footbridge. It will be reprovisioned in-situ after completion of the construction works. Upon commissioning of the SIL(E), we anticipate the pedestrian flow on the proposed covered footbridge to be about 5 400 per hour in 2031.

/ Covered.....

Covered footbridge link to Ap Lei Chau Estate

11. The proposed entrance of the South Horizons Station will be located at Yi Nam Road, south of the Ap Lei Chau Bridge Road. Without the proposed covered footbridge, residents of the Ap Lei Chau Estate, located on an elevated platform at about 7 m above Yi Nam Road at the north of Ap Lei Chau Bridge Road will have to make a detour of about 300 m to reach an at-grade crossing near the junction of Ap Lei Chau Bridge Road and Yi Nam Road to reach the future South Horizons Station. This will cause great inconvenience to the residents of Ap Lei Chau Estate, in particular the elderly and the physically disabled.

12. The proposed footbridge will provide a direct, safe and convenient connection between the Ap Lei Chau Estate and the entrance of the future South Horizons Station at Yi Nam Road. A lift will be provided to link this connection for a barrier-free access. As the works will make use of the existing Ap Lei Chau Estate sitting-out area as a temporary works site, the sitting-out area will be closed off during construction of the proposed covered footbridge. It will be reprovisioned in-situ after completion of the construction works. Upon commissioning of the SIL(E), we anticipate the pedestrian flow on the proposed footbridge will be about 2 200 per hour in 2031.

Pedestrian Link to the Aberdeen Channel Promenade

13. At the strong request of Southern District residents, the Tourism Commission will carry out beautification works to enhance the Aberdeen Channel Promenade, as part of the overall beautification of the Aberdeen area. To facilitate access to the Promenade, we propose to construct the Pedestrian Link in response to a request from the Southern District Council (SDC) that there should be a direct access from the WCH Station to the Promenade.

14. In addition to a footbridge across the WCH Nullah, the Pedestrian Link will also include other facilities, such as a lookout point at the Promenade waterfront, an open space of about 1 140 m², and landscaping works underneath the Ap Lei Chau Bridge Road, which are provided in response to requests from the SDC. We anticipate that the pedestrian flow on the proposed Pedestrian Link will be about 260 per hour in 2031.

/ **Junction.....**

Junction improvement at Ap Lei Chau Drive and Ap Lei Chau Bridge Road

15. The existing road junction at Ap Lei Chau Drive and Ap Lei Chau Bridge Road will be closed off temporarily to facilitate the excavation works for the SIL(E) tunnel. We propose to widen and improve the junction taking the opportunity of reinstating the junction after the excavation works. This will help cope with anticipated traffic growth due to future residential development at Ap Lei Chau Praya Road. At the meeting held on 29 March 2010, members of the Traffic and Transport Committee of SDC strongly requested the early implementation of improvement works in question. We propose to complete these junction improvement works in end 2014 in advance of the operation of the SIL(E) in 2015.

Works to be Entrusted to the MTRCL

16. We plan to entrust the EPIW to the MTRCL to better co-ordinate the EPIW and the railway works, so as to ensure that the EPIW and the SIL(E) project will be completed in tandem.

FINANCIAL IMPLICATIONS

17. We estimate the cost of the project is to be \$927 million in MOD prices (please see paragraph 18 below), broken down as follows –

			\$ million
(a)	PTI underneath WCH Station		18.7
	(i) road, bus bays, minibus bay, taxi stand, loading/unloading bays	5.5	
	(ii) drainage, street lighting, E&M and landscaping works	13.2	
(b)	Improvement of the existing road network in the vicinity of WCH Station		73.7
	(i) junction modification	14.3	
	(ii) road, drainage, street lighting, geotechnical, slope works and landscaping works	59.4	
(c)	Modification of existing WCH nullah		415.8
	(ii) foundation	100.1	
	(ii) decking works	250.8	
	(iii) road, drainage and landscaping works	64.9	
			/\$ million.....

		\$ million
(d)	Footbridge link to WCH industrial area	69.3
	(i) footbridge	50.6
	(ii) road, drainage and landscaping works	18.7
(e)	Footbridge link to Ap Lei Chau Estate	16.5
	(i) footbridge	14.5
	(ii) drainage and landscaping works	2.0
(f)	Pedestrian link	53.0
	(i) footbridge	5.0
	(ii) road, drainage and landscaping works	48.0
(g)	Junction improvement at Ap Lei Chau Drive and Ap Lei Chau Bridge Road	5.0
(h)	On-cost payable to MTRCL ¹	107.6
(i)	Contingencies	76.0
	Sub-total	835.6 (in September 2010 prices)
(j)	Provision for price adjustment	91.4
	Total	927.0 (in MOD prices)

/ 18.....

¹ An on-cost at 16.5% of the project base cost (i.e. items (a) to (g) of paragraph 17 above) will be payable to MTRCL for undertaking the technical studies, design and construction supervision of the EPIW.

18. Subject to approval, we will phase the expenditure as follows –

Year	\$ million (Sep 2010)	Price Adjustment Factor	\$ million (MOD)
2011 – 2012	254.8	1.04250	265.6
2012 – 2013	288.3	1.09463	315.6
2013 – 2014	186.6	1.14936	214.5
2014 – 2015	79.7	1.20682	96.2
2015 – 2016	13.2	1.27169	16.8
2016 – 2017	5.0	1.34163	6.7
2017 – 2018	5.0	1.41542	7.1
2018 – 2019	3.0	1.49327	4.5
	<hr/> 835.6 <hr/>		<hr/> 927.0 <hr/>

19. We have derived the MOD estimate on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period 2011 to 2019. MTRCL will tender the EPIW as parts of the railway contracts with provision for price adjustments.

20. We estimate the annual recurrent expenditure arising from the EPIW to be \$5.3 million.

PUBLIC CONSULTATION

21. We have been keeping the Focus Group on South Island Line Scheme under the Southern District Council (SDC Focus Group) updated on the major progress of the proposed EPIW and SIL(E) project. Representatives of the Transport and Housing Bureau, Highways Department and Transport Department have attended a series of public forums organised by the SDC Focus Group members and various political parties with participation by the local community.

22. We consulted the Advisory Committee on the Appearance of Bridges and Associated Structures² (ACABAS) on 20 October 2009 for the proposed footbridge described in paragraph 4(d) above, 21 September 2010 and 16 November 2010 for the proposed footbridge described in paragraph 4(f) above, and 20 July 2010 and 17 August 2010 for the proposed footbridge in paragraph 4(e) above. The ACABAS accepted the proposed aesthetic designs of the proposed footbridges stated in paragraph 4(d), 4(e) and 4(f) above respectively.

23. We gazetted the SIL(E) scheme which comprises the proposed EPIW (the original scheme) under the Railways Ordinance (Cap. 519) (the Ordinance) on 24 July 2009 and gazetted an amendment scheme for part of the SIL(E) and the proposed EPIW under the Ordinance on 4 June 2010. We received 86 objections to the original scheme and the amendment scheme. One of these objections is partly related to the proposed EPIW. The objector was concerned about the close proximity of the proposed footbridge as mentioned in paragraph 4(e) above with some residential blocks of the South Horizons, and the possible nuisance to the residents of the concerned residential blocks, in particular those living on the lower floors. We have agreed to provide suitable mitigation measures on the footbridge to eliminate the potential nuisance.

24. Having considered the unresolved objections, the Chief Executive-in-Council authorised the SIL(E) scheme and the proposed EPIW without modifications under the Ordinance on 30 November 2010. The notice of authorisation was gazetted on 10 December 2010.

25. We consulted the Subcommittee of Matters relating to Railways of the Legislative Council Panel on Transport on the progress of the SIL(E) project including the EPIW on 16 December 2010. Members requested us to provide supplementary information on the proposed EPIW, which is provided at Enclosure 3. We also briefed the Subcommittee on the latest estimated construction cost and the progress of the property development of the project under the “Rail-plus-property” model. Please refer to Enclosure 4 for details.

/ ENVIRONMENTAL.....

² The Advisory Committee on the Appearance of Bridges and Associated Structures, which comprises representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institute of Planners, an academic institution, Architectural Services Department, Highways Department, Housing Department and Civil Engineering and Development Department, is responsible for vetting the design of bridges and other structures associated with the public highway system, including noise barriers and semi-enclosures, from the aesthetic and visual impact points of view.

ENVIRONMENTAL IMPLICATIONS

26. The proposed EPIW is not a designated project under the Environmental Impact Assessment Ordinance. The proposed pedestrian link, footbridge links and various road/junction improvements, etc. belong to the categories that have very limited potential to give rise to adverse environmental impacts. For the proposed PTI at Wong Chuk Hang Station, we completed a preliminary environmental review (PER) in November 2010. The PER concluded and the Director of Environmental Protection (DEP) agreed that because of the scale and scope of the PTI, no adverse environmental impact was envisaged during its construction and operation. We will implement the standard pollution control measures during the construction of the proposed EPIW as promulgated by the DEP and carry out environmental monitoring and audit for the construction works.

27. At the planning and design stages, MTRCL had considered measures to reduce the generation of construction waste where possible. Such measures include the use of existing northern nullah wall in the proposed modification of existing WCH Nullah stated in paragraph 4(c) above instead of full demolition resulting in lesser amount of excavation materials to be generated; and the adoption of the integrated column and corbels to eliminate individual footbridge supports and associated excavation work. In addition, MTRCL will require the contractor to reuse inert construction waste (e.g. excavated rock and soil materials) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste at public fill reception facilities³. MTRCL will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimise the generation of construction waste.

28. At the construction stage, MTRCL will also require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. MTRCL will ensure that the day-to-day operations on site comply with the approved plan. MTRCL will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. MTRCL will control the disposal of inert construction waste and non-inert construction waste to public fill reception facilities and landfills respectively through a trip-ticket system.

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³ Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

29. MTRCL estimates that the EPIW project will generate in total about 94 800 tonnes of construction waste. Of these, the MTRCL will reuse about 24 400 tonnes (25.7%) of inert construction waste on site and deliver about 63 700 tonnes (67.2%) of inert construction and demolition material to public fill reception facilities for subsequent reuse. In addition, the MTRCL will dispose of the remaining 6 700 tonnes (7.1%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be \$2.6 million for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne⁴ at landfills).

HERITAGE IMPLICATIONS

30. The proposed EPIW will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

31. Under the SIL(E) Scheme, easements and/or other permanent rights will be created in a portion of private lot affecting 407.6 m² of land for the construction of the proposed EPIW. The land acquisition cost is estimated to be \$486,000. Funds will be made available under **Head 701 – Land Acquisition** of the Capital Works Reserve Fund. We have already reviewed the design of the project to minimise the extent of land acquisition. A breakdown of the land acquisition is at Enclosure 5.

BACKGROUND INFORMATION

32. We upgraded **56TR** to Category B in May 2009.

/ 33.....

⁴ This estimate has taken into account the cost for developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at \$90 per m³), nor the cost to provide new landfills, (which is likely to be more expensive) when the existing ones are filled.

33. Of the 596 trees within the project boundary, 93 trees will be preserved. The proposed EPIW will involve the removal of 503 trees, including 443 trees to be felled (of which 155 trees are self-seeded trees⁵ of undesirable species requiring no compensation planting) and 53 trees to be transplanted. All trees to be removed are not important trees⁶. We will incorporate planting proposals as part of the project, including planting of about 450 new trees.

34. We estimate that the works in paragraph 4 will create about 365 jobs (295 for labourers and another 70 for professional/technical staff) providing a total employment of 15 000 man-months.

Transport and Housing Bureau
January 2011

⁵ Pursuant to Environment, Transport and Works Bureau Technical Circular No. 3/2006, no compensation planting is required for self-seeded trees of undesirable species such as “*Leucaena leucocephala*”, which would prevent natural succession of indigenous species.

⁶ “Important trees” refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui tree, tree as landmark of monastery or heritage monument, and trees in memory of important persons or events;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or
- (e) trees with trunk diameter equal or exceeding 1.0 metre (measured at 1.3 metre above ground level), or with height/canopy spread equal or exceeding 25 metres.

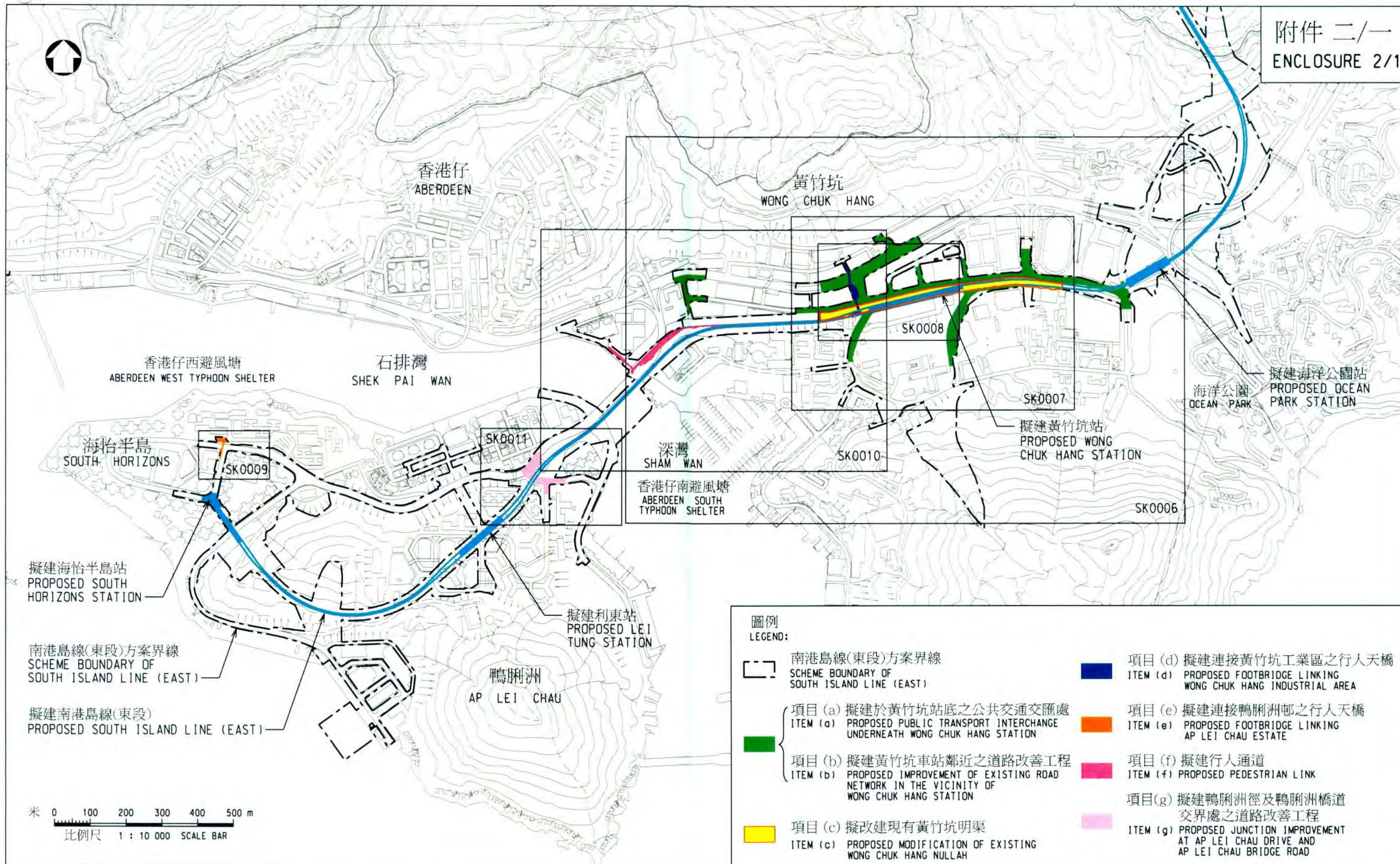
圖例
LEGEND

- 現有鐵路路線
EXISTING RAIL LINE
- 擬建南港島線（東段）
PROPOSED SOUTH ISLAND LINE (EAST)

附件一
ENCLOSURE 1



南港島線（東段）
SOUTH ISLAND LINE (SIL) (EAST)



圖例
LEGEND:

- | | | | |
|--|---|--|--|
| | 南港島線(東段)方案界線
SCHEME BOUNDARY OF SOUTH ISLAND LINE (EAST) | | 項目 (d) 擬建連接黃竹坑工業區之行人天橋
ITEM (d) PROPOSED FOOTBRIDGE LINKING WONG CHUK HANG INDUSTRIAL AREA |
| | 項目 (a) 擬建於黃竹坑站底之公共交通交匯處
ITEM (a) PROPOSED PUBLIC TRANSPORT INTERCHANGE UNDERNEATH WONG CHUK HANG STATION | | 項目 (e) 擬建連接鴨脷洲邨之行人天橋
ITEM (e) PROPOSED FOOTBRIDGE LINKING AP LEI CHAU ESTATE |
| | 項目 (b) 擬建黃竹坑車站鄰近之道路改善工程
ITEM (b) PROPOSED IMPROVEMENT OF EXISTING ROAD NETWORK IN THE VICINITY OF WONG CHUK HANG STATION | | 項目 (f) 擬建行人通道
ITEM (f) PROPOSED PEDESTRIAN LINK |
| | 項目 (c) 擬改建現有黃竹坑明渠
ITEM (c) PROPOSED MODIFICATION OF EXISTING WONG CHUK HANG NULLAH | | 項目 (g) 擬建鴨脷洲徑及鴨脷洲橋道交界處之道路改善工程
ITEM (g) PROPOSED JUNCTION IMPROVEMENT AT AP LEI CHAU DRIVE AND AP LEI CHAU BRIDGE ROAD |

圖則名稱 drawing title

工務計劃項目第56TR號 - 南港島線(東段) - 主要基建工程
位置圖

PWP ITEM NO. 56TR - SOUTH ISLAND LINE (EAST) - ESSENTIAL PUBLIC INFRASTRUCTURE WORKS
KEY PLAN

HRWSILE01-SK0005.DGN

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圖號 drawing no.

HRWSILE01-SK0005

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路政署
HIGHWAYS DEPARTMENT

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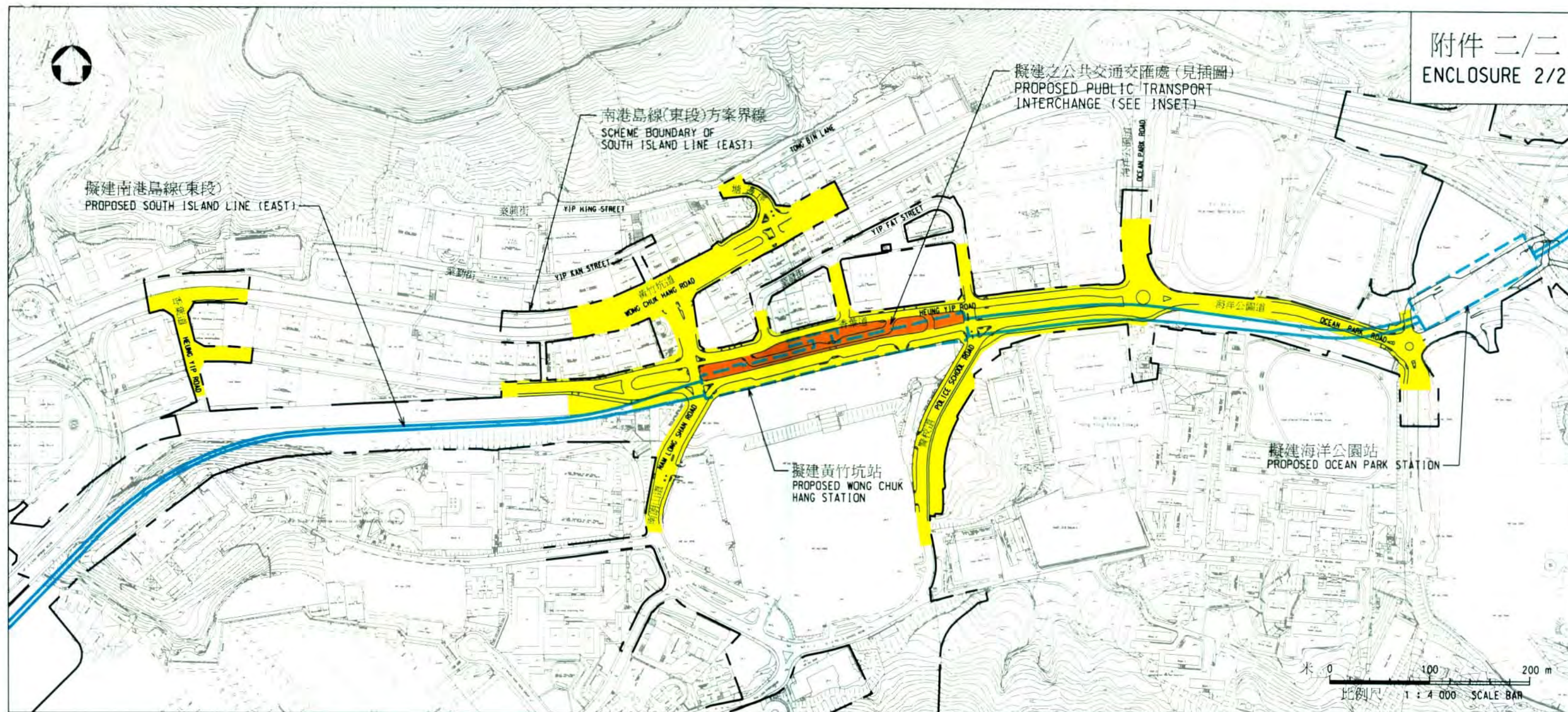
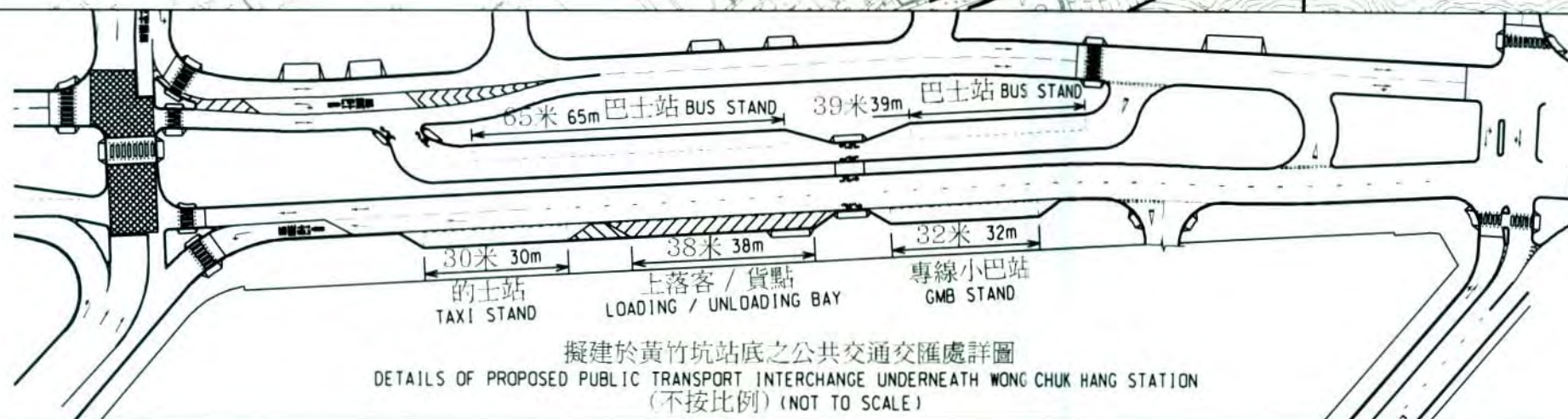


插圖 INSET



圖例
LEGEND:

- 南港島線(東段)方案界線
SCHEME BOUNDARY OF SOUTH ISLAND LINE (EAST)
- 擬修改的行車道路線
PROPOSED ROAD RE-ALIGNMENT
- 擬建之道路改善工程
PROPOSED ROAD IMPROVEMENT WORKS
- 擬建之公共交通交匯處
PROPOSED PUBLIC TRANSPORT INTERCHANGE

圖則名稱 drawing title

工務計劃項目第56TR號 - 南港島線(東段) - 主要基建工程

項目(a) 擬建於黃竹坑站底之公共交通交匯處

項目(b) 擬建黃竹坑車站鄰近之道路改善工程

PWP ITEM NO. 56TR - SOUTH ISLAND LINE (EAST) - ESSENTIAL PUBLIC INFRASTRUCTURE WORKS

ITEM (a) PROPOSED PUBLIC TRANSPORT INTERCHANGE UNDERNEATH WONG CHUK HANG STATION

ITEM (b) PROPOSED IMPROVEMENT OF EXISTING ROAD NETWORK IN THE VICINITY OF WONG CHUK HANG STATION

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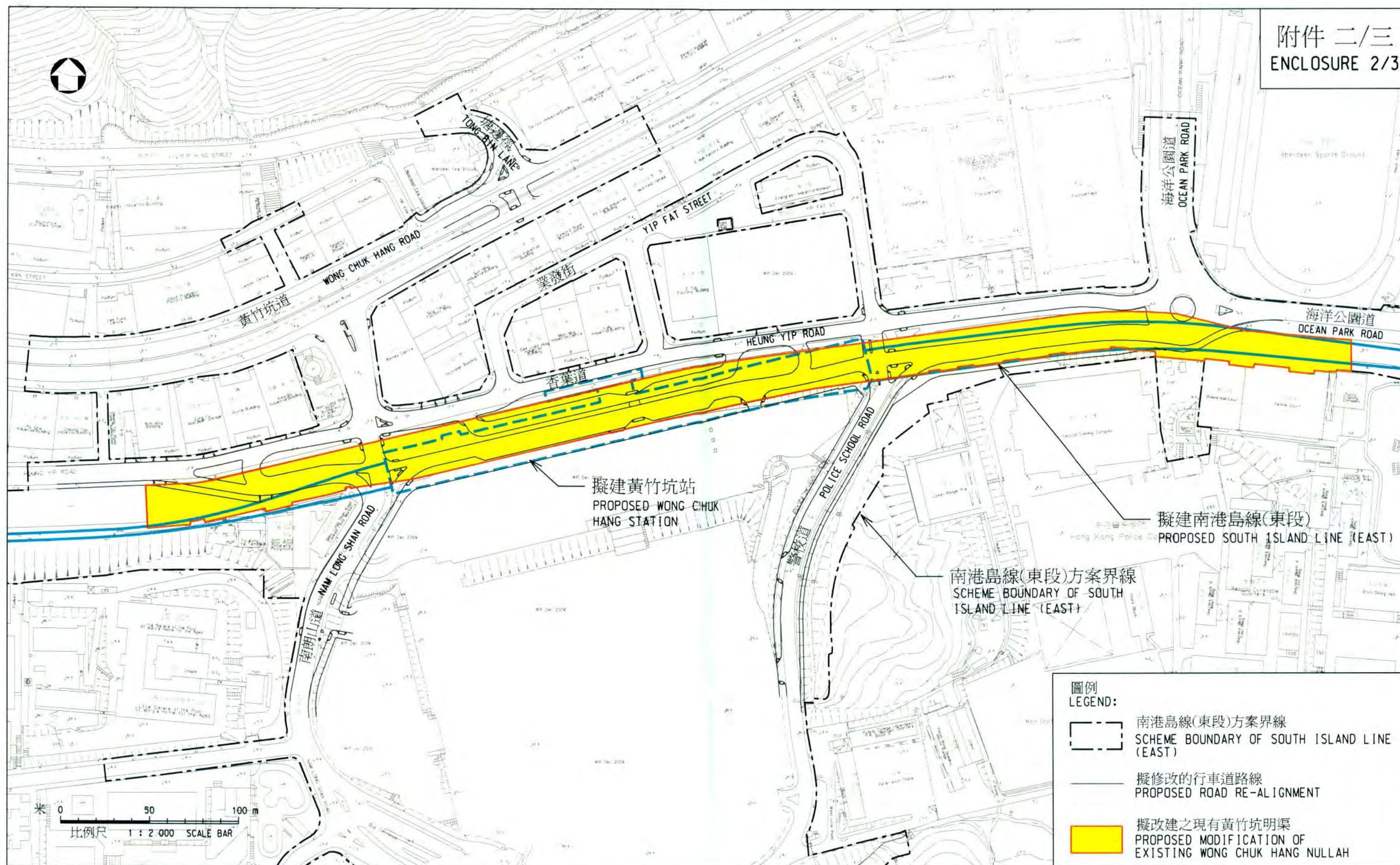
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HIGHWAYS DEPARTMENT

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圖則名稱 drawing title

工務計劃項目第56TR號 - 南港島線(東段) - 主要基建工程
項目 (c) 擬改建現有黃竹坑明渠

PWP ITEM NO. 56TR - SOUTH ISLAND LINE (EAST) - ESSENTIAL PUBLIC INFRASTRUCTURE WORKS
ITEM (c) PROPOSED MODIFICATION OF EXISTING WONG CHUK HANG NULLAH

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HIGHWAYS DEPARTMENT

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業興街 YIP HING STREET

附件 二/四
ENCLOSURE 2/4

黃竹坑工業區
WONG CHUK HANG
INDUSTRIAL AREA

YIP KAN STREET

偉晉中心
REGENCY
CENTRE

業勤街

WONG CHUK HANG ROAD

YIP FAT STREET

黃竹坑道

業發街

南港島線(東段)方案界線
SCHEME BOUNDARY OF
SOUTH ISLAND LINE (EAST)

擬建黃竹坑站
PROPOSED WONG CHUK HANG
STATION

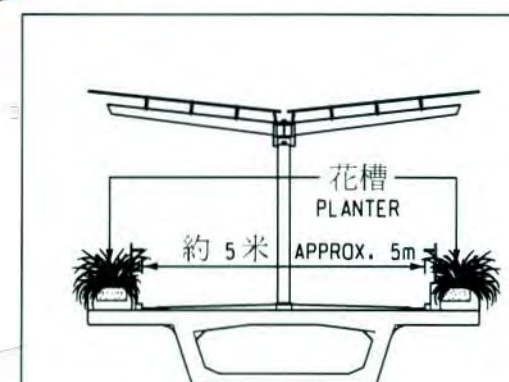
黃竹坑工業區
WONG CHUK HANG
INDUSTRIAL AREA

HEUNG YIP ROAD

擬建南港島線(東段)
PROPOSED SOUTH ISLAND LINE (EAST)

香葉道

往擬建黃竹坑站出入口
TO PROPOSED WONG CHUK HANG
STATION ENTRANCE



- 圖例
LEGEND:
- 南港島線(東段)方案界線
SCHEME BOUNDARY OF
SOUTH ISLAND LINE (EAST)
 - 擬修改的行车道路線
PROPOSED ROAD RE-ALIGNMENT
 - 擬建升降機
PROPOSED LIFT
 - 擬建行人天橋
PROPOSED FOOTBRIDGE
 - 擬重置之南朗山道休憩處
PROPOSED REPROVISIONING OF
NAM LONG SHAN ROAD SITTING-OUT AREA
 - 擬建行人路改善工程
PROPOSED FOOTPATH IMPROVEMENT WORKS

米 0 10 20 30 40 50 m
比例尺 1 : 1 000 SCALE BAR

南朗山道熟食市場
NAM LONG SHAN ROAD
COOKED FOOD MARKET

約34米
APPROX. 34m

南朗山道
NAM LONG SHAN ROAD

圖則名稱 drawing title

工務計劃項目第56TR號 - 南港島線(東段) - 主要基建工程
項目(d) 擬建連接黃竹坑工業區之行人天橋

PWP ITEM NO. 56TR - SOUTH ISLAND LINE (EAST) - ESSENTIAL PUBLIC INFRASTRUCTURE WORKS
ITEM (d) PROPOSED FOOTBRIDGE LINKING WONG CHUK HANG INDUSTRIAL AREA

HRWSILE01-SK0008.DGN

.../dms01666/HRWSILE01-SK0008.dgn 09-12-2010

圖號 drawing no.

HRWSILE01-SK0008

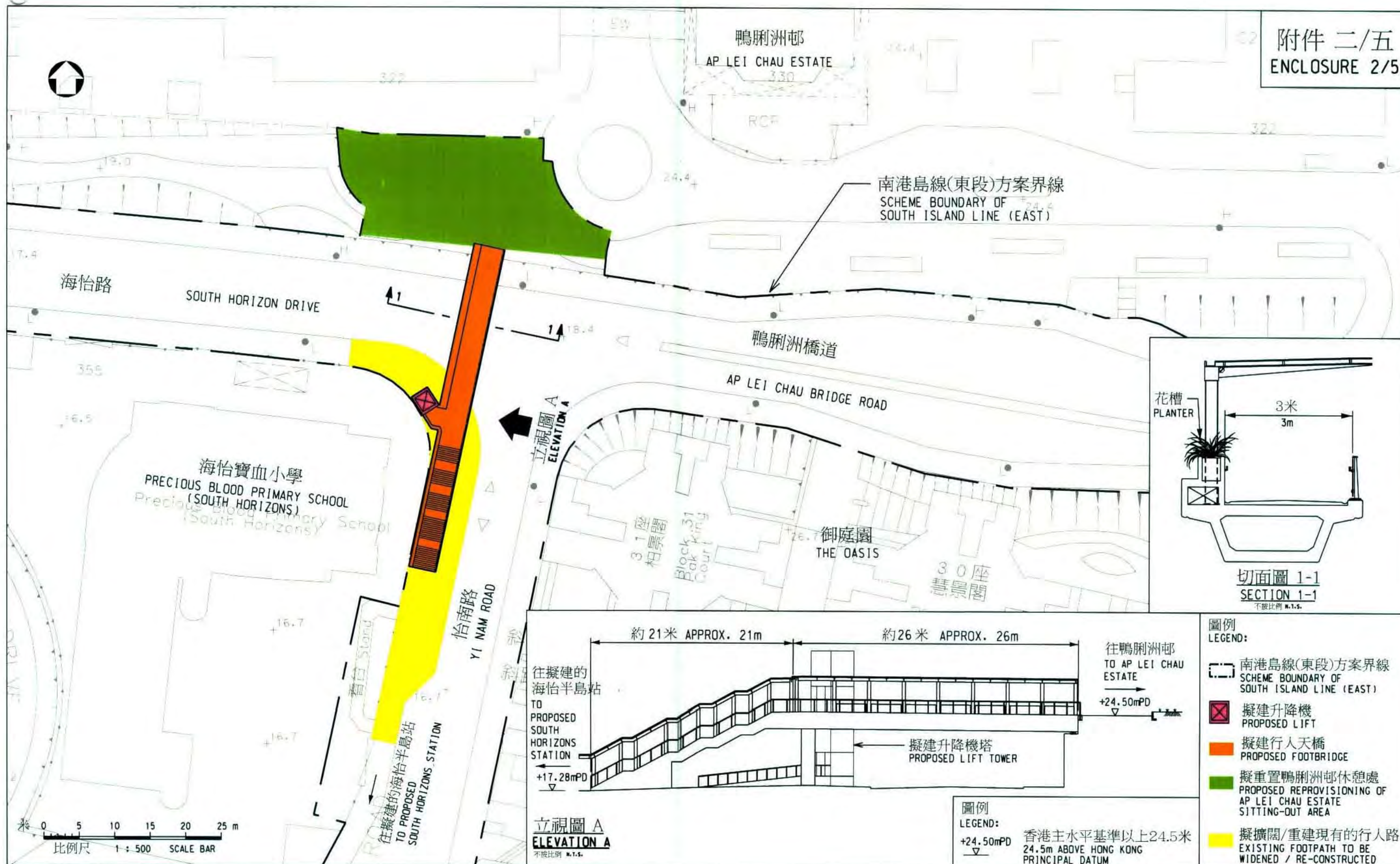
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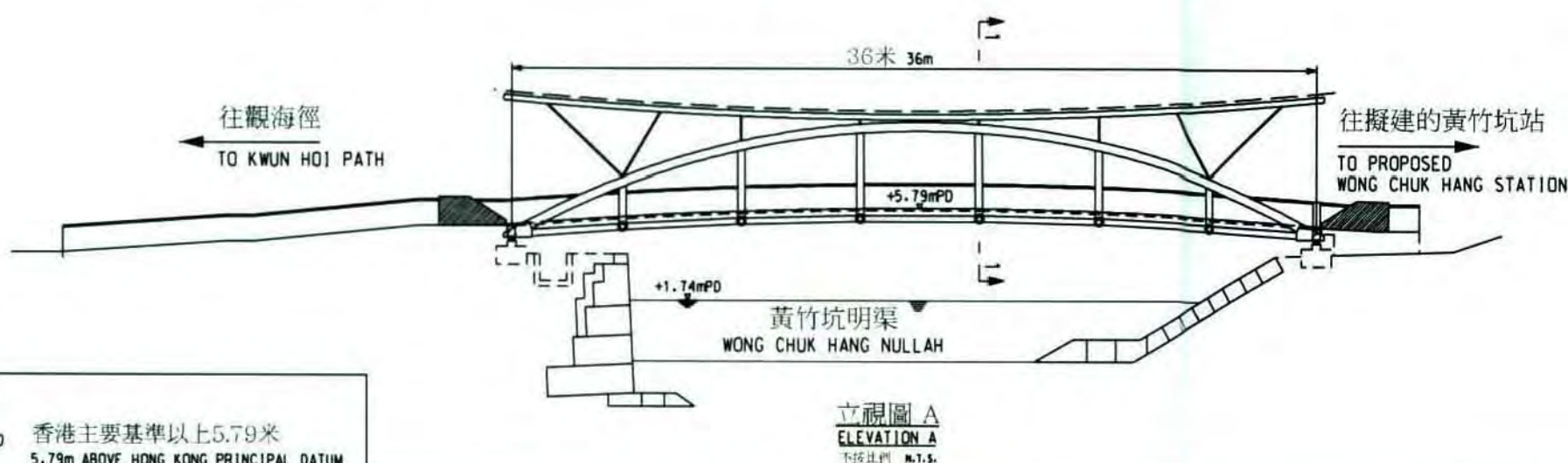
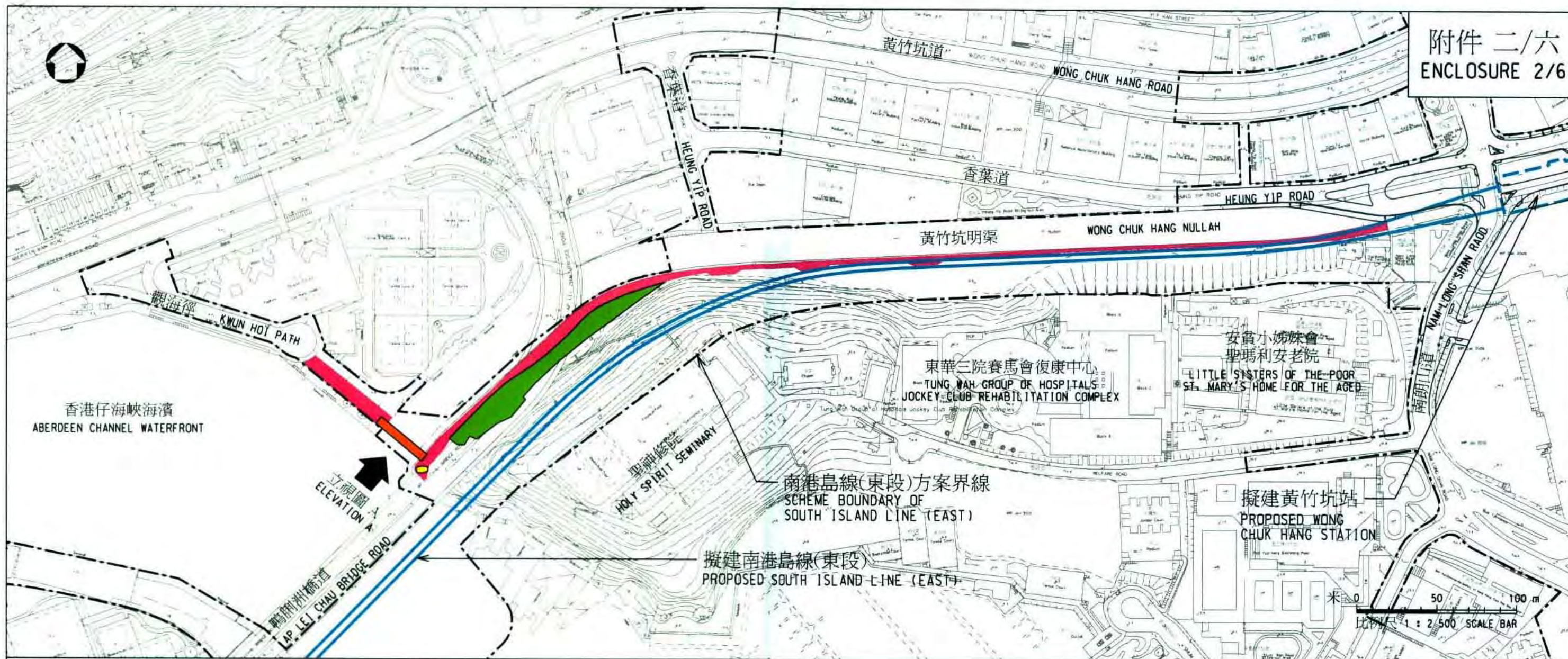
鐵路拓展處 RAILWAY DEVELOPMENT OFFICE



路政署
HIGHWAYS DEPARTMENT

A3 297X420





圖例
LEGEND:

- 南港島線(東段)方案界線
SCHEME BOUNDARY OF SOUTH ISLAND LINE (EAST)
- 擬修改的行走道路線
PROPOSED ROAD RE-ALIGNMENT
- 擬建連接南朗山道及觀海徑之行人通道
PROPOSED PEDESTRIAN LINK BETWEEN NAM LONG SHAN ROAD AND KWUN HOI PATH
- 擬建休憩用地
PROPOSED OPEN SPACE
- 擬建觀景台
PROPOSED LOOKOUT POINT
- 擬建行人天橋
PROPOSED FOOTBRIDGE

圖例
LEGEND
+5.79mPD 香港主要基準以上5.79米
5.79m ABOVE HONG KONG PRINCIPAL DATUM

圖則名稱 drawing title

工務計劃項目第56TR號 - 南港島線(東段) - 主要基建工程
項目(f) 擬建行人通道

PWP ITEM NO. 56TR - SOUTH ISLAND LINE (EAST) - ESSENTIAL PUBLIC INFRASTRUCTURE WORKS
ITEM (f) PROPOSED PEDESTRIAN LINK

HRWSILE01-SK0022.DGN

.../dms01666/HRWSILE01-SK0022.dgn 14-12-2010

圖號 drawing no.
HRWSILE01-SK0010

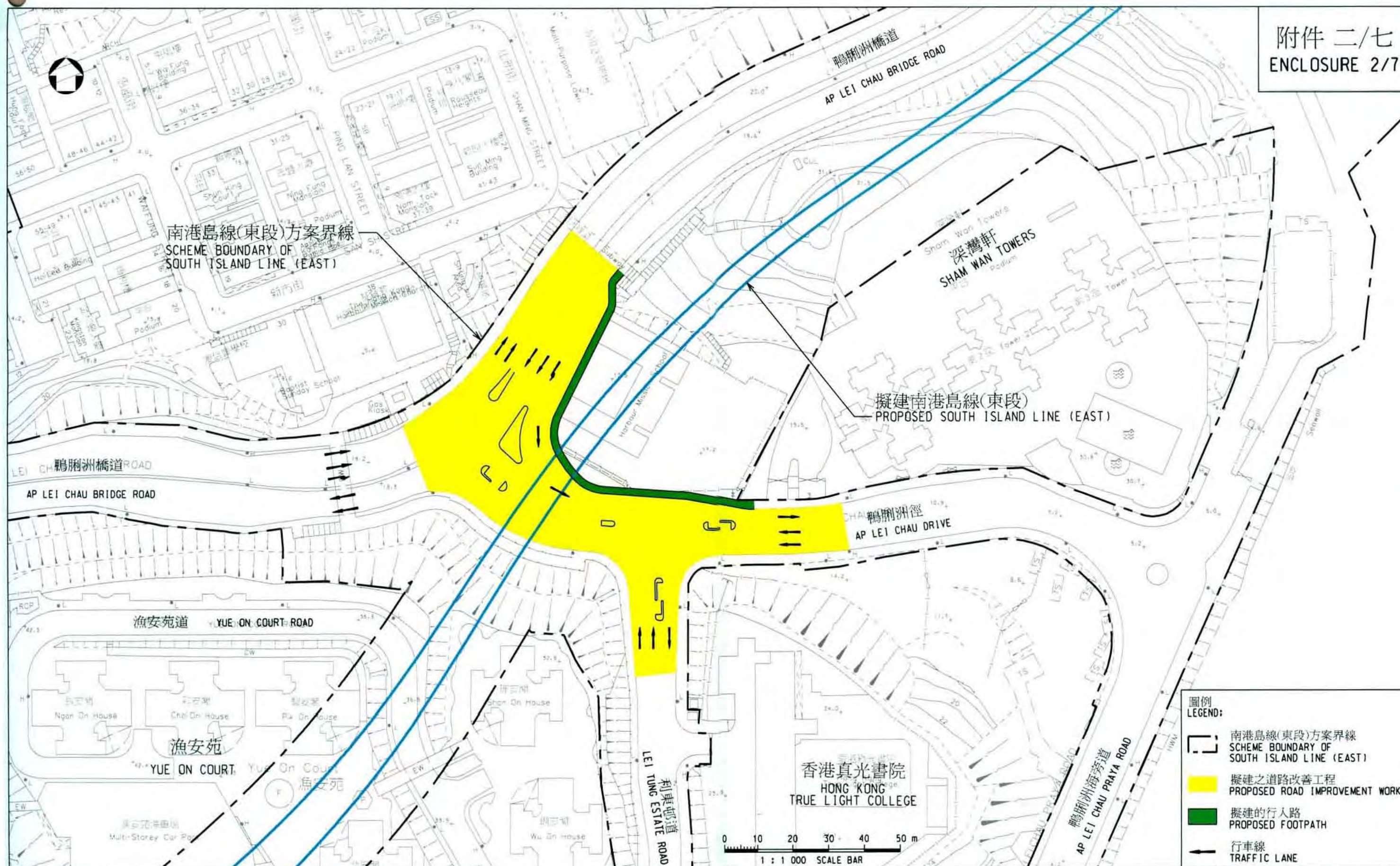
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路政署
HIGHWAYS DEPARTMENT

A3 297X420



圖則名稱 drawing title

工務計劃項目第56TR號 - 南港島線(東段) - 主要基建工程
項目(g) 擬建鴨脷洲徑及鴨脷洲橋道交界處之道路改善工程

PWP ITEM NO. 56TR - SOUTH ISLAND LINE (EAST) - ESSENTIAL PUBLIC INFRASTRUCTURE WORKS
ITEM (g) PROPOSED JUNCTION IMPROVEMENT AT AP LEI CHAU DRIVE AND AP LEI CHAU BRIDGE ROAD

圖號 drawing no.

HRWSILE01-SK0011

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路政署
HIGHWAYS DEPARTMENT

56TR – South Island Line (East) – essential public infrastructure works

At the meeting of the Subcommittee of Matters relating to Railways of the Legislative Council Panel on Transport held on 16 December 2010, Members discussed the issues relating to the progress of the South Island Line (East) (SIL(E)) and the proposed Essential Public Infrastructure Works (EPIW) under the SIL(E). Members requested the Administration to provide supplementary information of the proposed EPIW. Details of the supplementary information are as follows –

Anticipated Completion Dates for the Proposed EPIW

2. After further discussion with the MTR Corporation Limited (MTRCL), the Administration expects that the following three items of works under the proposed EPIW can be completed in advance of the operation of the SIL(E) railway scheme –

- (a) covered footbridge linking Ap Lei Chau Estate and Yi Nam Road (expected to be completed by the end of 2014) (paragraph 4(e) of the paper refers.);
- (b) road junction improvement at Ap Lei Chau Drive and Ap Lei Chau Bridge Road (expected to be completed by the end of 2014) (paragraph 4(g) of the paper refers.); and
- (c) parts of road widening works at Wong Chuk Hang Road and Police School Road (expected to be completed prior to commissioning of the SIL(E) in early 2015) (paragraph 4(b)(vi) of the paper refers.).

As these works have separate construction programmes from that for the SIL(E), they can be completed first for use by the public .

3. The remaining proposed EPIW works are scheduled for completion in tandem with the SIL(E) in 2015. The construction programmes of these works interface with that of the SIL(E). For example, construction of the proposed public transport interchange underneath the Wong Chuk Hang Station has to work in conjunction with the railway viaduct above the Wong Chuk Hang nullah. Moreover, these EPIW aims to provide safe, convenient and barrier-free access to the Wong Chung Hang, Ocean Park and South Horizons Stations. They will only be required when the SIL(E) comes into operation.

4. The Administration will closely monitor the construction progress of EPIW works so as to ensure that they can be completed in time to serve the public.

Concerns about the Pedestrian Link from Sham Wan Area to the Proposed Wong Chuk Hang Station

5. One of the Members enquired why the proposed EPIW will not include a footbridge linking the proposed Wong Chuk Hang Station and Sham Wan area. The MTRCL had carefully considered the proposal in the past and is of the view that there are now adequate and safe at-grade pedestrian crossings at the road junction of Nam Long Shan Road and Sham Wan Road. The capacity of these facilities are able to meet the pedestrians' need even when SIL(E) comes into operation. On the other hand, due to site constraint, any provision of footbridge columns will have to occupy and narrow the pedestrian access near the San Wui Commercial Society Chan Pak Sha School to an extent that the passageway will become sub-standard. If the pedestrian access is widened to accommodate the footbridge abutments, the carriageway of Nam Long Shan Road will have to be narrowed. This will cause traffic congestion to the road junction of Nam Long Shan Road and Sham Wan Road.

6. The MTRCL will provide, at its own cost, a covered walkway within the future topside property development of ex-Wong Chuk Hang Estate site to connect the Wong Chuk Hang Station to the existing Wong Chuk Hang bus terminus. This will provide convenient access to the future station for use by the residents at Sham Wan area. The design of the covered walkway and its arrangement will be carried out in conjunction with the property development of the ex-Wong Chuk Hang Estate site. Before the completion of the property development, the MTRCL will also provide a temporary covered walkway along Nam Long Shan Road connecting to the Wong Chuk Hang Station, so that residents in Sham Wan area can access to the Wong Chuk Hang Station via Nam Long Shan Road more conveniently.

56TR – South Island Line (SIL) (East) – essential public infrastructure works

Cost Estimate and Rail Plus Property Development for the SIL (East)

The Executive Council decided at the meeting on 18 December 2007 that the Wong Chuk Hang Estate site should be reserved for the SIL depot with above-depot private property development, and the site to the north of the Ocean Park Station should be reserved for private property development with associated park-and-ride facilities, both subject to rezoning approval, to enable the Government to consider the granting of the property development rights to the MTRCL to bridge the funding gap of the SIL (East). According to the preliminary estimation made at that time, the construction cost of the SIL (East) would be over \$7 billion (in 2006 prices) and the project would be financially not viable. The Government would continue to study the proposal of granting the property development rights at railway station and depot sites along SIL(East) to bridge the funding gap of the project.

2. Between 2006 and 2009, there has been an upsurge in the cost of materials. For reference, Architectural Services Department's Building Works Tender Price Index increased by 55% from 714 in the first quarter of 2006 to 1107 in the fourth quarter of 2009. Furthermore, we have considerably revised the design of the SIL(E) project so as to incorporate a number of suggestions and requests from the public as raised during the past few years of public consultation. This has led to an increase in the estimated cost of the SIL(E). The suggestions and requests incorporated include –

- (a) providing noise barriers for viaducts;
- (b) replacing a number of viaduct sections with tunnels (e.g. the section between Sham Wan Towers and Yue On Court, the section at Nam Fung Road near a school); and
- (c) relocating two-thirds of the ventilation facilities of the South Horizons Station to the Lee Nam Road industrial area, etc.

Moreover, the MTRCL has made the following amendments to the railway scheme at the planning and detailed design stages –

- (a) expanding the Admiralty Station to provide an integrated station to tie in with the interchange arrangement at Admiralty for the SIL (East) and the Shatin to Central Link;

- (b) making a number of amendments to the detailed design in light of the findings of ground investigation; and
- (c) revising the detailed design of the railway to meet the latest fire safety requirements.

3. The additional construction cost for the amendments mentioned in paragraph 2 above is estimated to be around \$1 billion. According to the current estimation made by the MTRCL, the construction cost of the SIL (East) will be between \$12.3 billion to \$12.6 billion (in 2009 prices). Although the railway scheme has been authorised for implementation and the detailed design by the MTRCL is at the final stage, fine-tuning in engineering and technical details and adjustments to the cost estimate are still expected. Therefore, the cost estimate is expected to be finalized in the first quarter of 2011. The Government will continue to monitor the project estimate in a prudent manner and ensure that the MTRCL will carefully control cost. We have also engaged an independent engineering consultant to examine the construction cost estimates and assess the funding gap.

4. As mentioned in paragraph 1 above, the Chief Executive-in-Council have agreed to reserve the site occupied by the former Wong Chuk Hang Estate and the site at the northern end of the Ocean Park Station for consideration of using the property development rights for these two sites to fill the funding gap of the project. We note that the area in the vicinity of the Ocean Park Station is predominantly occupied by Government, institution or community (GIC), recreational and tourism facilities developed in low to medium density. From the planning perspective, using the site for recreational or tourism development will be more desirable. As to the former Wong Chuk Hang Estate site, it is mainly surrounded by medium-to-high-rise developments, and the site is formerly occupied by estate buildings of about 20 storeys. The use of the site for a rail depot, above-depot residential property and shopping centre development will in general be compatible with the surrounding land uses, and will facilitate the transformation of the Wong Chuk Hang Business Area.

5. In view of the above, we propose to concentrate property development at the former Wong Chuk Hang Estate site while the site adjacent to the Ocean Park Station will be reserved for other more suitable purposes. The MTRCL proposes to build a railway station, a public transport interchange, a depot, a shopping centre and residential buildings on the former Wong Chuk Hang Estate site.

6. In May 2010, we consulted the Southern District Council on the land use of the former Wong Chuk Hang Estate site and the Council supported the proposal to concentrate development at the former Wong Chuk Hang Estate site as well as the commercial/residential development mode. The Town Planning Board (TPB) subsequently announced amendments to the Aberdeen and Ap Lei Chau Outline Zoning Plan in July 2010 and the former Wong Chuk Hang Estate site was rezoned as “Comprehensive Development Area”. The amended plan was exhibited for public inspection in accordance with section 7 of the Town Planning Ordinance. During the exhibition period of two months, a total of 12 representations were received, with ten of them supporting and two objecting to the amendments. The TPB held a hearing on the representations in December 2010. The objections were not upheld by the TPB.

7. As mentioned in paragraph 3 above, we have engaged an independent consultant to examine the financial estimates prepared by the MTRCL with respect to property development at the site occupied by the former Wong Chuk Hang Estate. The Government will handle the financial arrangements of the SIL(E) project in a prudent manner to ensure that the support provided by the Government for the railway project is fair and reasonable. Hence, the railway project can be smoothly implemented and public resources properly used without affecting the operation of railway on prudent commercial principles.

8. The Government has recently introduced a series of measures to foster a quality and sustainable built environment. Although the relevant guidelines have not been promulgated, the MTRCL has agreed to follow the new requirements. Detailed planning of the property development is underway.

56TR – South Island Line (East) – essential public infrastructure works
Breakdown of Land Acquisition Cost

	\$
a) Compensation due to creation of easement and/or other permanent rights in a private land affecting an area of 407.6 m ²	\$405,000
b) Contingency	<u>\$81,000</u>
Total	<u>\$486,000</u>