

**For Information**  
**2 March 2012**

**Legislative Council Panel on Transport**  
**Subcommittee on Matters Relating to Railways**

**Progress of the Shatin to Central Link**

**Purpose**

This paper briefs Members on the progress of the Shatin to Central Link (SCL).

**Shatin to Central Link Railway Scheme**

(I) Railway Works

2. The 17-kilometre SCL is a territory-wide strategic railway project with ten stations<sup>1</sup>. The project, linking up with a number of existing and future railways, forms two strategic railway corridors, namely the “East West Corridor” and the “North South Corridor”:

(a) The “East West Corridor”: The SCL—Tai Wai to Hung Hom

Section is an extension of the Ma On Shan Line from Tai Wai Station towards Kowloon to connect the West Rail Line at Hung Hom Station. It will allow passengers to travel direct from Wu Kai Sha Station to East Kowloon, Hung Hom, New Territories West and Tuen Mun without interchanging, providing a more direct and convenient railway service for passengers travelling between New Territories East and New Territories West.

(b) The “North South Corridor”: The SCL — Hung Hom to

Admiralty Section is an extension of the existing East Rail Line from Hung Hom Station across the harbour to Admiralty Station.

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<sup>1</sup> The ten stations of the SCL are: Tai Wai, Hin Keng, Diamond Hill, Kai Tak, To Kwa Wan, Ma Tau Wai, Ho Man Tin, Hung Hom, Exhibition and Admiralty.

It will allow passengers (using the East Rail Line) from Lo Wu and Huanggang (using the Lok Ma Chau Line) to reach the heart of Hong Kong Island directly.

The proposed alignment of the SCL is shown in **Enclosure 1**, and the “East West Corridor” and “North South Corridor” are shown in **Enclosure 2**. Upon completion the SCL will significantly reduce the journey time for passengers travelling between East Kowloon, East New Territories and Hong Kong Island. It will also increase the capacity of the railways that carry passengers from Shatin to Kowloon and across the harbour, as well as relieve the congestion on the existing railway lines.

3. The SCL will have new stations in six districts serving a wide catchment across Hong Kong Island, Kowloon and the New Territories. Of the ten stations along the SCL, six will be interchange stations<sup>2</sup> linking to a number of existing and future railway lines and bringing further enhancements to the railway service in Hong Kong. These six interchange stations are either extensions of existing stations or proposed new stations.

4. Apart from the construction of the 17-kilometre new railway tracks, since the SCL will extend to the existing East Rail Line and Ma On Shan Line, station improvement works, including mainly platform and signaling enhancements, will be carried out on these two railway lines. Stabling sidings will also have to be built for the operation of the SCL. The location plan of the stabling sidings is at **Enclosure 3**.

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<sup>2</sup> The six interchange stations are:

- (a) Tai Wai Station – interchange station for “East West Corridor” and “North South Corridor”;
- (b) Diamond Hill Station – interchange station for the Kwun Tong Line and SCL;
- (c) Ho Man Tin Station – interchange station for the Kwun Tong Line Extension and SCL;
- (d) Hung Hom Station – interchange station for the “East West Corridor” and “North South Corridor”
- (e) Exhibition Station – interchange station for the SCL and future North Island Line; and
- (f) Admiralty Station – interchange station for the SCL, Tsuen Wan Line, Island Line and South Island Line (East)

(II) Other Non-railway Complementary Works

5. To tie in with the construction of the SCL and to make it convenient for the public to travel on the SCL, we have to undertake the following non-railway works at the same time:

(a) Essential Public Infrastructure Works (EPIW)

To improve the connectivity between Tsz Wan Shan and the SCL Diamond Hill Station, we propose to improve the pedestrian links in the district by connecting existing footbridges and retrofitting lifts to facilitate barrier-free access for pedestrians. To facilitate the public to make use of the SCL to go to the Kai Tak Development Area, we propose to provide a covered pedestrian walkway between To Kwa Wan Station and the Kai Tak Development Area.

(b) Related Reprovisioning, Remedial and Improvement Works

To provide convenience for SCL passengers, public transport interchanges are proposed to be constructed and pedestrian subways and footbridges to be improved or re-provided. Some existing facilities in different developed districts, where the SCL will pass through, will inevitably be affected. To reduce the impact on the users of these facilities, we propose to allow reprovision or remedy of or make improvements to such facilities. The relevant works items are set out in **Enclosure 4**.

(c) Enabling Works in To Kwa Wan Station and Wan Chai North Site

To accommodate the future development atop To Kwa Wan Station and the Wan Chai North works site so as to ascertain that the relevant development planning will not be affected by the future operation of the SCL, we propose to carry out enabling works to strengthen the foundations and structure of To Kwa Wan Station, as well as install necessary piles on both sides of the underground railway tunnel beneath the Wan Chai North works site to preserve development potential of these two locations.

## **Public Consultation**

6. Since mid-2008, the Government and the MTR Corporation Limited (MTRCL) have conducted extensive public consultation on the SCL scheme. We consulted 11 District Councils in more than 40 meetings by introducing the SCL project, reporting on project progress and seeking the District Councils' views on the SCL project. Besides, various channels, such as web pages, leaflets, brochures, digests and newsletters, were utilised to provide information for the public. Community consultation activities, including site visits, roving exhibitions, public forums and school talks, were held to brief community groups and residents on the SCL scheme and collect their opinions that could help further improve the scheme.

7. The statutory consultation stage of the SCL project commenced as its railway scheme was gazetted on 26 November 2010 under the Railways Ordinance. During the statutory consultation period, we collected valuable opinions from community stakeholders and residents, briefed relevant stakeholders on the contents of the gazette and gazette amendments, and handled objections raised by the public according to statutory procedures. We received a total of 92 objection cases, which were mainly concerned with the overall planning of the SCL project, railway alignment, arrangements and locations of stations, entrances, pedestrian linkage facilities, ventilation facilities and stabling sidings, environmental impact, traffic and transport impact, impact on existing buildings and structures, use of explosives, setting up of temporary works areas and works sites on Government land and facilities, resumption of underground strata, railway protection zone, and reprovisioning of public facilities and public areas.

8. Taking into consideration public concerns and views, amendments to the scheme were gazetted on 15 July and 11 November 2011 respectively, with major amendments shown as follows –

### First stage scheme amendments (15 July 2011)

- (a) to amend the proposed tunnel works near Harcourt Road;  
and
- (b) to amend the temporary works area in Sha Tin.

Second stage scheme amendments (11 November 2011)

- (a) to cancel the proposed stabling sidings in Diamond Hill;
- (b) to amend the alignment of the railway tunnel to reduce resumption of underground strata of buildings;
- (c) to amend the layout of the proposed pedestrian facilities in Tsz Wan Shan;
- (d) to cancel the proposed temporary concrete batching plant in Kai Tak;
- (e) to add emergency accesses between the proposed Kai Tak and To Kwa Wan Stations;
- (f) to modify the existing freight yard in Hung Hom and the associated facilities for the SCL operation and stabling of trains; and
- (g) to construct noise barriers to the north of the existing Hung Hom freight yard.

9. Subsequent to our detailed explanations, responses to public concerns and two rounds of amendments to the railway scheme, 12 objectors have withdrawn their objections to the SCL scheme. No new objection case was received during the two stages of scheme amendments. This indicates the amendments have responded to the aspirations of the public. As regards those objections not withdrawn, a total of 12 panel hearings were held in accordance with administrative procedures between December 2011 and February 2012 such that the objectors who had not withdrawn their objections could reflect their concerns and opinions to the hearing panel which was formed by non-official, independent members. The hearing panel was satisfied with the fair, open and highly transparent manner by which the Government handled the objection cases. The hearing panel also agreed that the objectors had been given ample opportunities to voice their opinions, and that the Government, in response to the objectors' views, had reasonably reviewed the railway scheme and explained to the objectors why their opinions were not accepted.

**Major Public Concerns**

10. The SCL project has a lot of issues that concern the public,

given its large scale and the many districts it will pass through. The major public concerns are summarised below.

(I) Ventilation Facilities & Emergency Accesses

11. Ventilation facilities and emergency accesses are necessary for the operation of an underground railway system. In view of the long tunnel between one station and another, ventilation shafts and emergency accesses have to be set up at appropriate locations of a railway tunnel to ensure continual air circulation within stations and tunnels as well as safe railway operation. In the case of an emergency, the emergency accesses can enable passengers to be evacuated from the tunnel to the ground level, and allow firefighters to enter the tunnel to carry out rescue and relief work. In determining the locations of ventilation facilities and emergency accesses, various factors are taken into account, such as disturbance to residents, visual impact, technical feasibility and risks to nearby buildings. During normal railway operation, ventilation facilities only serve to bring fresh air to passengers in stations and tunnels. Furthermore, MTR trains are powered by electricity and do not generate any emission or undesired pollutants that would affect air quality.

12. During the public consultation of the SCL, residents in Wong Tai Sin expressed grave concern over the construction of such facilities in the district. We understand that the Ma Chai Hang Recreational Ground is an important recreational spot for residents in Wong Tai Sin, and the concern that the permanent occupation of the spot by ventilation facilities and an emergency access would mean a permanent loss of the precious recreational space. The MTRCL has therefore revised the original design and enhanced the appearance of these facilities to blend in with the surrounding environment. The footprint and height of these facilities have also been reduced in order to minimise the space occupied and the visual impact on residents nearby. There is considerable separation between the proposed ventilation facilities and the nearest residential units. The opening of the ventilation shaft is also directed to a slope, so as not to affect the surrounding environment. Subsequent to rounds of consultation with the Wong Tai Sin District Council, a consensus has been reached in principle that an indoor games hall will be built as a reprovisioning project to compensate for the permanent occupation of the

recreational ground by the railway facilities.

(II) Temporary Works Site and Construction Facilities

13. During the construction of the SCL, several areas along the SCL alignment will have to be used as works sites for construction, and temporary works areas be set up for storing machinery and materials. To address public concerns, we have adjusted the arrangements of the proposed works sites. For example, we have reduced the area of the temporary works area in Shatin district and revised its location. The changes have been incorporated in last year's first stage scheme amendment. The MTRCL has made further amendment on the arrangement of other construction facilities in response to local concerns. For example, the temporary barging point at Hoi Sham Park and the temporary concrete batching plant at Kai Tak have been cancelled while the size of the temporary works area at Kai Tak Development Area has been reduced from about 20 hectares to about one hectare.

(III) Station Entrances and Pedestrian Links with Nearby Areas

14. While we appreciate residents' request for additional station entrances and pedestrian links, there is, however, a number of objective factors that have to be taken into consideration in designing such facilities. They include traffic condition, existing pedestrian walkway systems and facilities, usage, geographic environment, nuisance to the community and technical feasibility. To make better use of the existing pedestrian system and avoid duplication of service, and to ensure an efficient allocation of public resources, it is recommended to utilise the existing pedestrian system at street level to access the railway station if the system has safe and appropriate road-crossing facilities and provides an appropriate environment for the public to access the station entrances in the nearby areas, and the width of the walkway is adequate to accommodate the future growth of the pedestrian flow.

15. Where the situation permits, station entrances would be provided at strategic locations with high passenger flows and close to the railway stations so as to provide a direct and convenient link between the stations and the street level. The station entrances should also be large

enough to meet the requirement for emergency evacuation. Geographic environment, technical feasibility and construction impact to traffic and pedestrians should also be considered in planning the station entrances. We are of the view that the current proposed station entrances are adequate to meet the passengers' need. The experience of other railways suggests that the construction of the SCL will add momentum to the renewal and revitalisation of old buildings along the alignment. We will conduct timely review of the pedestrian access facilities to cater for the local development and the needs of the public. We have also carefully reviewed the pedestrian walkway system and proposed to improve the connectivity between Tsz Wan Shan and the SCL Diamond Hill Station. The Tsz Wan Shan pedestrian facilities will be improved by connecting the existing footbridges and retrofitting lifts. We also suggest connecting the To Kwa Wan Station and the Kai Tak Development Area with a covered pedestrian walkway to provide a convenient access to the multi-purpose stadium complex in the area. We have reached a consensus with the concerned District Councils on the alignment of the above two pedestrian walkway systems. To facilitate persons with special needs, the MTRCL will seek to provide at least one barrier-free access in each station to allow such passengers to enter or leave a station conveniently.

#### (IV) Resumption of Underground Strata

16. In designing the SCL alignment, one of our main considerations is to avoid resumption of land, buildings and underground strata. The current proposed alignment does not require the resumption of any private buildings or land. However, as the 17-kilometre long SCL traverses many districts across the territory, some of which are among the most densely developed urban areas, it is inevitable to resume underground strata. The extent of underground stratum resumption required for the current proposed SCL alignment is much less than other railway projects (e.g. the West Island Line). In response to the community's concern over underground strata resumption and its impact on the building's structural safety and future redevelopment potential, we have explained to the concerned stakeholders that the resumption of underground strata would not affect building safety. We have also tried to minimise the extent of stratum resumption. In response to the request



of the local stakeholders, we have revised the SCL alignment to avoid resuming the underground stratum of the Tropicana Garden. This revision was promulgated in the second stage scheme amendment to the gazetted scheme announced in November last year. However, there is no room to make further revision of the SCL alignment in other areas to further reduce the extent of underground stratum resumption as the design of the SCL alignment is constrained by a number of factors, including the geographical environment, ground condition and distribution of buildings.

(V) Proposed Stabling Siding

17. A stabling siding in the urban area is required to meet the train deployment requirement for the SCL during the morning peak hours. In view of public's concern over the proposed Diamond Hill Stabling Siding, we have reviewed the plan and tried to work out a scheme which could meet the train deployment requirement in the morning while bringing the minimal impact to the community. Our idea is to lessen the impact on the public by making use of existing facilities where possible to meet the need of train stabling.

18. The Hung Hom freight yard near the SCL Hung Hom Station ceased operation in April 2011. With a view to making better use of resources, the MTRCL has conducted the feasibility study of using the former freight yard to accommodate the train stabling requirements for the SCL. Since the Hung Hom freight yard has been equipped with tracks and it is planned for the purpose of railway service, the relevant proposal could make better use of the land and conforms to existing land use and planning. We plan to implement a number of measures to optimise the utilisation of the existing facilities including rearranging tracks for train deployment and turn-around for the SCL trains.

19. Under the principle of optimising the use of land resources, additional tracks will be built at the existing and proposed railway facilities to meet the need for train stabling. Additional refuge tracks will be built at the proposed Kai Tak Station plus additional tracks at the Pat Heung Depot for SCL trains deployment during the morning peak

hours. Since the above arrangements could make better use of the existing facilities to meet the SCL train deployment requirement, we propose to delete the proposed stabling sidings at Diamond Hill. This change is incorporated in the second stage scheme amendment.

(VI) Conservation of historical structures at former Tai Hom Village

20. With the cancellation of the proposed stabling siding at Diamond Hill, the Stone House, one of the three historical structures at the former Tai Hom Village, will not be affected by the SCL works. However, the other two historical structures, namely the Old Pillbox and the Former Royal Airforce Hangar (declared as Grade 2 and Grade 3 Historic Building respectively), will need to be temporarily relocated during the construction of the SCL. We understand the public's aspiration for the preservation of the above historical structures as expressed during the public consultation. The MTRCL will submit a detailed construction stage conservation scheme of these historical structures to the Antiquities and Monuments Office. The Planning Department is currently reviewing the development scheme for the former Tai Hom Village. It will consider the suggestions of local people and other planning criteria, including the reprovision location and conservation of the abovementioned two historical structures, in order to work out the preliminary development scheme at the former Tai Hom Village. The Government will continue to consult the local community in this respect.

### **Environmental Impact Assessment**

21. The SCL project is a designated project under the EIA Ordinance and an environmental permit is required for the construction and operation of the SCL. The MTRCL has appointed an independent consultant to conduct environmental impact assessment (EIA) studies to assess the possible environmental impact due to the construction and operation of the SCL, such as water quality, landscape and visual, noise and air quality, and to recommend suitable mitigation measures. The MTRCL will ensure that the SCL project complies with relevant statutory requirements for environmental protection.

22. The MTRCL first submitted its EIA Reports to the Environmental Protection Department (EPD) in February 2011. In view of the court's judgement on the judicial review case regarding the EIA Reports of the Hong Kong-Zhuhai-Macao Bridge local projects, the MTRCL withdrew the reports in April 2011. Since the court's unanimous decision which upheld the appeal of the EPD, the Reports were re-submitted to the EPD in October 2011 and discussed in the Advisory Council of the Environment meeting in February 2012. The EIA Reports concluded that the environmental impact of the SCL project could be controlled to within the criteria under the EIA Ordinance and its Technical Memorandum. The EPD approved the EIA Reports of the SCL in February 2012. In accordance with the EIA Reports' recommendations, the MTRCL will implement mitigation measures to meet the prescribed standards and criteria.

### **SCL Works Progress**

23. Progress update of the SCL advance works and the main SCL works is as follows:-

#### **(I) Protection Works, Advance Works & Major Reprovisioning Works**

24. In taking forward the SCL project as a whole, some of the works have to interface with existing railway lines, public facilities and other public infrastructure projects, or take place in tandem with them. This includes substantial modification to existing railways, railway protection works in other public infrastructure projects, reprovisioning of affected public facilities, and provision of new essential public infrastructure to reduce the impact on the local community and ensure the timely completion of the project. The funding of these works was approved by the Finance Committee in 2010 and 2011 respectively and the construction had commenced. Progress update of the works are as below:

- (a) Funding for the protection works under Wan Chai Development Phase II Project was approved by the LegCo Finance Committee in July 2010. The construction commenced in August 2010 and

is expected to complete in mid- 2012.

- (b) Funding for the protection works under Central - Wan Chai Bypass Project was approved by the LegCo Finance Committee in June 2011. The construction commenced in November 2011. It is progressing well and is expected to complete in 2014.
- (c) Funding for the advance works at Admiralty Station was approved by the LegCo Finance Committee in February 2011. The construction commenced in May 2011 and is progressing well.
- (d) Funding for the advance works at Ho Man Tin Station was approved by the LegCo Finance Committee in February 2011. The construction commenced in May 2011 and is progressing well.
- (e) Funding for the reprovisioning of the International Mail Centre was approved by the LegCo Finance Committee in February 2011. The construction commenced in July 2011. It is progressing well and is expected to complete in 2013.

## (II) SCL Main Works

25. The detailed design of the SCL main works has been substantially completed. We are at the final stage of getting authorisation of the SCL scheme under the Railways Ordinance. We expect that the scheme authorisation procedure will be completed shortly. In the Legislative Council Brief on the SCL submitted to the Finance Committee in February 2011, we informed the Finance Committee that the cost for the entire SCL project would be over \$60 billion in September 2009 prices. The rise is mainly due to the increase in project cost by about 30% between 2007 and 2009 and the modifications to design having regard to the actual situation or needs in response to the suggestions and requests made by certain stakeholders (estimated to increase by about \$5 billion) and because of technical requirements (estimated to increase by about \$7 billion). The independent consultant appointed by the Government for examining the cost of the SCL is conducting a detailed audit of the cost estimate of the MTRCL.

26. We plan to inform the Subcommittee on Matters Relating to Railways of the cost estimate of the SCL main works within the next few

weeks and seek Members' support on the funding application for the SCL project. Because of the tight schedule, we will strive to complete the funding application process before the summer recess of the Legislative Council. Subject to the approval of the funding application for the SCL, the construction is expected to commence in mid-2012. We expect to complete the section between Tai Wai to Hung Hom in 2018 and the section between Hung Hom to Admiralty in 2020 as the latter has to interface with other infrastructure projects, including the Wan Chai Development Phase II and Central-Wan Chai Bypass.

### **Advice Sought**

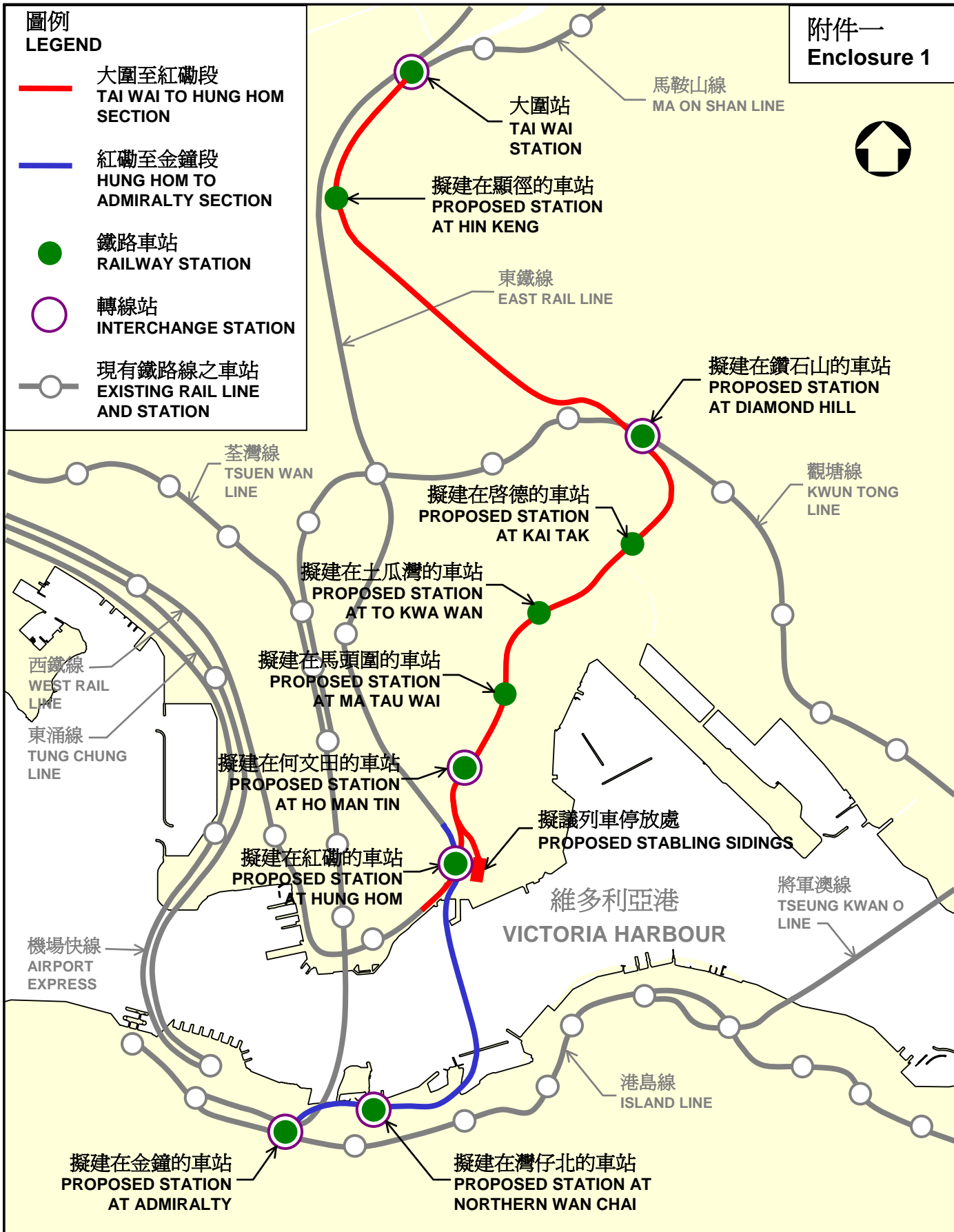
27. Members are invited to note the content of this paper.

**Transport and Housing Bureau**  
**February 2012**

圖例  
LEGEND

- 大圍至紅磡段  
TAI WAI TO HUNG HOM  
SECTION
- 紅磡至金鐘段  
HUNG HOM TO  
ADMIRALTY SECTION
- 鐵路車站  
RAILWAY STATION
- 轉線站  
INTERCHANGE STATION
- 現有鐵路線之車站  
EXISTING RAIL LINE  
AND STATION

附件一  
Enclosure 1



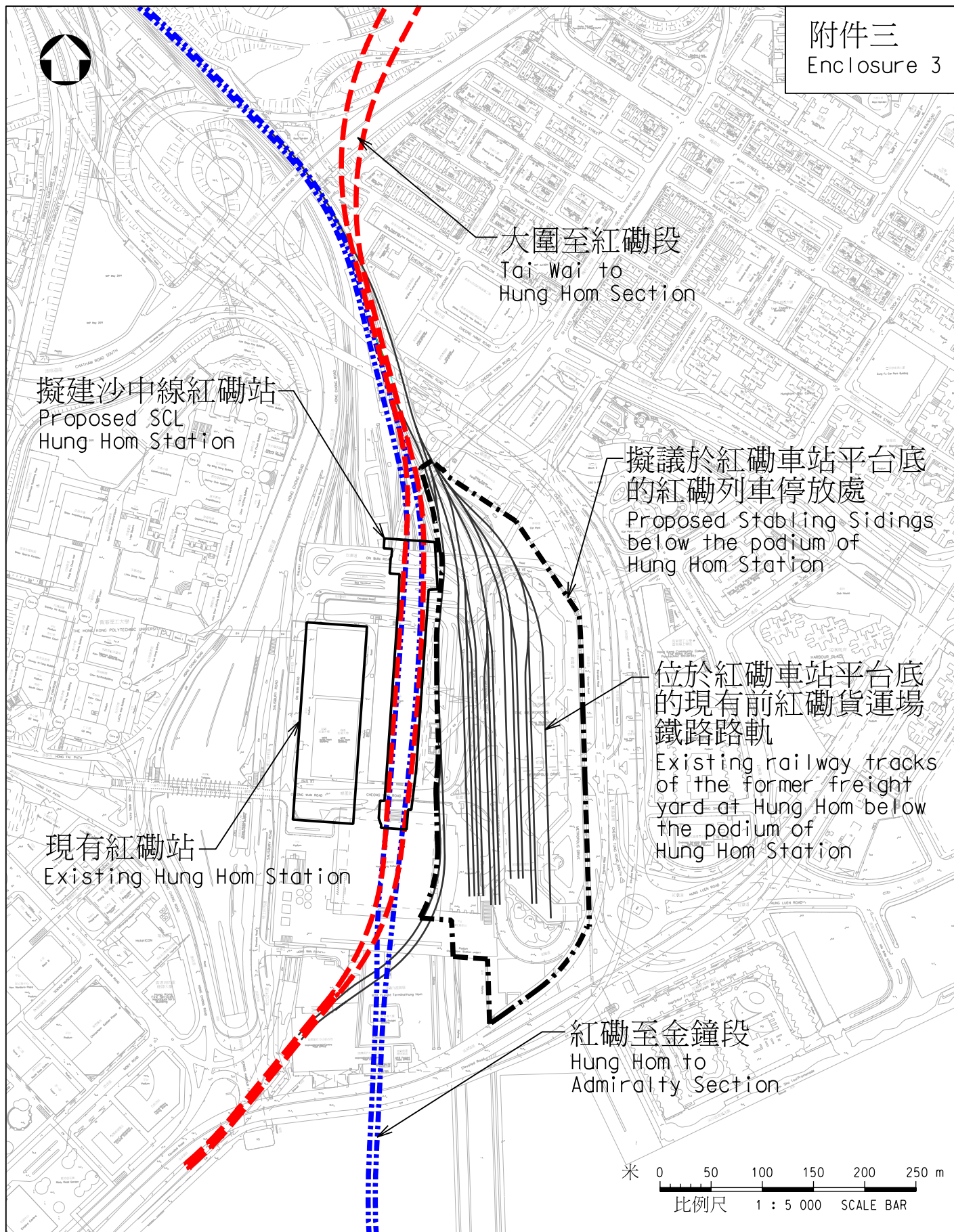
圖則名稱 drawing title

沙田至中環線  
SHATIN TO CENTRAL LINK









圖則名稱 drawing title

# 沙田至中環線 - 紅磡列車停放處 Shatin to Central Link - Stabling Sidings at Hung Hom



**Shatin to Central Link**  
**List of the Reprovisioning, Remedial and Improvement Works**

**(I) Road Facilities**

Reprovisioning of or proposed public transport interchange

1. Proposed Wan Chai North Public Transport Interchange;
2. Proposed Fung Tak Public Transport Interchange;

Reprovisioning of or proposed pedestrian facilities and flyover

3. Reprovisioning of portions of the Cheong Wan Road Flyover;
4. Reprovisioning of road facilities around Chatham Road North;
5. Reprovisioning of road facilities around To Kwa Wan and Ma Tau Wai;
6. Reprovisioning of road facilities around Lung Cheung Road near Diamond Hill Station;
7. Reprovisioning of portions of Wan Shing Street footbridge;
8. Reprovisioning of portions of Percival Street footbridge;
9. Improvement of Olympic Garden pedestrian subway;
10. Reprovisioning of Wanchai Ferry Pier footbridge;
11. Reprovisioning of Hong Wan Path;
12. Reprovisioning of fender piles at the Hong Hom Bypass;

Foundation underpinning for flyovers

13. Foundation underpinning for the following flyovers –
  - (a) North East Kowloon Corridor bridge pier;
  - (b) East Kowloon Corridor bridge pier;
  - (c) Hung Hom Bypass bridge pier;
  - (d) Caine Road Flyover; and
  - (e) Hung Hing Road Flyover;

Reprovisioning of culverts

14. Reprovisioning of the following culverts –
  - (a) the culvert at the Hung Hom Railway Station and the proposed Hung Hom Stabling Siding;
  - (b) the culvert at the sector area east of the Hung Hom Railway Station;
  - (c) the culvert at Caine Road;
  - (d) the culvert at Lung King Street;
  - (e) the culvert at Fleming Street; and
  - (f) the sewer, cooling pipeline and storm drain near Hung Hom Station;

Slope stabilization

15. Slope stabilization near Oi Sen Path;

## **(II) Government Facilities**

### Sports facilities

16. Reprovisioning of portions of the facilities of the Wan Chai Sports Ground;
17. Reprovisioning of the Wai Chai Swimming Pool and Harbour Road sports Centre;
18. Underpinning for base columns of the podium of the Hong Kong Coliseum.

### Recreational facilities

19. Reprovisioning of portions of the Ma Chai Hang Recreation Playground and the proposed indoor games hall;
20. Improvements to the Hin Tin Playground, and construction of Hin Kwai Lane sitting out area and Shek Mun garden;
21. Reprovisioning of and improvements to the Sung Wong Toi Playground;
22. Reprovisioning of and improvements to the Olympic Garden;
23. Reprovisioning of and improvements to the Ma Tau Wai Road/To Kwa Wan Road Garden;
24. Reprovisioning of and improvements to the Ma Tau Wai Road/Chi Kiang Street amenity area;
25. Reprovisioning of and improvements to the Ma Tau Wai Road/Ma Hang Chung Road Rest Garden;
26. Reprovisioning of and improvements to the Ma Tau Chung Road/Tam Kung Road amenity area;
27. Reprovisioning of and improvements to the Lok Shan Road Playground and To Kwa Wan Complex Playground;
28. Reprovisioning of and improvements to the Ma Tau Wai Road/Chatham Road North amenity area;
29. Reprovisioning of and improvements to the Tsz Wan Shan Playground and Tsz Wan Shan Road Rest Garden;
30. Reprovisioning of and improvements to the playground and amenity area at Winslow Street;
31. Reprovisioning of and improvements to the garden at Chatham Road Interchange;
32. Reprovisioning of and improvements to the playground at the junction of Fenwick Pier Street and Convention Avenue;
33. Reprovisioning of and improvements to the rest garden the Cross Harbour Tunnel Hong Kong entrance;

#### Preservation Works

34. Preservation of the Old Pillbox and the Former Royal Airforce Hangar at the former Tai Hom Village;

#### Other Government Facilities

35. Reprovisioning of the New Territories South Animal Management Centre and Sha Tin Plant Quarantine Station;
36. Reprovisioning of the Wanchai Ferry Concourse Public Toilet; and
37. Reprovisioning of Police facilities near Causeway Bay Typhoon Shelter and improvements to the Police Sports and Recreation Club at Boundary Street;

#### **(III) Other Facilities**

38. Reprovisioning of the Hin Keng Estate Refuse Collection Point;
39. Reprovisioning of the Fleet Arcade at Fenwick Pier Street; and
40. Reprovisioning of the staircase and grease trap for the Hong Kong Convention and Exhibition Centre.