SHATIN TO CENTRAL LINK STABLING SIDINGS AT HUNG HOM FREIGHT YARD PROJECT PROFILE JUNE 2011



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1 BASIC INFORMATION

1.1 PROJECT TITLE

Shatin to Central Link – Stabling Sidings at Hung Hom Freight Yard

1.2 PURPOSE AND NATURE OF THE PROJECT

The Shatin to Central Link (SCL) is one of the ten large-scale infrastructure projects announced by the Chief Executive in his 2007-2008 Policy Address. MTR Corporation Limited has been entrusted to plan and design for this project.

The SCL is divided in four sections for the purposes of the Environmental Impact Assessment (EIA), namely Tai Wai to Hung Hom Section (SCL (TAW-HUH)), Mong Kok East to Hung Hom Section (SCL (MKK-HUH)), Hung Hom to Admiralty Section (SCL (HUH-ADM)) and Protection Works at Causeway Bay Typhoon Shelter. The tentative SCL alignment is illustrated in Figure 1.

An application (No. ESB-191/2008) for an EIA Study Brief under Section 5(1)(a) of the EIAO was submitted by MTR Corporation in June 2008 with a project profile (No. PP-356/2008). A Study Brief was issued by EPD in July 2008 to provide the scope and requirements of the EIA study for SCL (TAW-HUH). In this Study Brief, the rail alignment of the SCL (TAW-HUH), 7 stations, namely Hin Keng Station, Diamond Hill Station, Kai Tak Station, To Kwa Wan Station, Ma Tau Wai Station, Ho Man Tin Station and Hung Hom Station, along with the proposed stabling sidings in Diamond Hill (DHS) were covered.

Following the cessation of the operations of various freight facilities at Hung Hom in April 2011, the feasibility and environmental acceptability of providing a stabling sidings for SCL (TAW-HUH) at the disused freight terminal in Hung Hom are now being studied.

This Project Profile provides available preliminary design information as well as an initial review of key environmental issues of the Hung Hom Stabling Sidings (HHS) for the application of Environmental Impact Assessment (EIA) Study Brief under S5(1)(a) of the Environmental Impact Assessment Ordinance (EIAO).

The ultimate suitability of using either the DHS (under the SCL (TAW-HUH) EIA) or HHS or a combination of both sites for train stabling would be subject to the findings of detailed engineering and EIA studies.

1.3 NAME OF THE PROJECT PROPONENT

MTR Corporation Limited

1.4 LOCATION AND SCALE OF PROJECT AND HISTORY OF THE SITE

The stabling sidings would be an essential element for the operation of the SCL. The major function of the stabling sidings is to accommodate trains for deployment to meet the demand during morning peak hours. In non-operational hours, the sidings would be used for train stabling. Maintenance works such as regular cleaning and inspection, but not for major repairing works would be conducted during non-operational hours as well.

The proposed HHS is located at the east of the existing Hung Hom Station (HUH), with the sidings occupying mainly the yard area formerly used for freight operations, and includes the tracks connecting to the proposed north and south approach tracks of SCL(TAW-HUH). The indicative location of the stabling sidings is shown in Figure 1.

The HHS will be located underneath the existing podium structure covering the disused freight yard, except its approach tracks which will extend outside the podium as they connect to the tracks to be constructed for the new SCL(TAW to HUH) section. It may be necessary to make appropriate changes in the Diamond Hill, Kai Tak and Hung Hom Stations and its associated alignment and facilities to suit this operational arrangement. Hence, the environmental issues in these areas will be assessed under this Project.

1.5 Number and Types of Designated Projects

The Project is a Designated Project (DP) under the EIAO falling into the following categories:

- A railway siding under Item A.4, Part I of Schedule 2 of the EIAO

1.6 NAME AND TELEPHONE NUMBER OF CONTACT PERSONS

Dr. Glenn Frommer MTR Corporation Limited Head of Sustainability Development

Tel: 2688 1552

2 OUTLINE OF PLANNING AND IMPLEMENTATION PROGRAMME

2.1 PROJECT PLANNING AND IMPLEMENTATION

The Project will be planned and implemented by MTR Corporation Limited in-house departments together with external consultants and contractors.

2.2 PROJECT PROGRAMME

The construction works is tentatively scheduled to commence in 2012 for completion in 2018.

2.3 PROJECT INTERFACE

Major committed and planned projects that may interface with the construction and operation of the Project are listed in the table below.

Location	Potential Interfacing Projects
Hung Hom	Shatin to Central Link – Tai Wai to Hung Hom Section
	Shatin to Central Link – Mong Kok East to Hung Hom
	Section
	 Shatin to Central Link – Hung Hom to Admiralty Section
	Kwun Tong Line Extension
Diamond Hill	• Comprehensive Development Area (CDA) at Diamond Hill
	(the former Tai Hom Village site)
Kai Tak	Kai Tak Development project
	Central Kowloon Route

3 POSSIBLE IMPACTS ON THE ENVIRONMENT

3.1 POTENTIAL ENVIRONMENTAL IMPACTS: CONSTRUCTION PHASE

The following sections describe the potential environmental impacts during the construction phase, which will be alleviated by effective and pragmatic mitigation measures designed according to the assessed levels of impact.

3.1.1 Air Quality

Potential air quality impacts may arise from fugitive dust emissions generated by construction activities such as excavation, cutting, filling, stockpiling and construction vehicle movements etc.

3.1.2 Noise

A considerable amount of above-ground construction works will be necessary for the Project. Activities such as demolition, excavation, backfilling, roadworks, underpinning of existing structures and construction of new structures etc, will potentially generate airborne construction noise.

Since tunnel boring machines (TBM) method will not be adopted for the works, impact associated with groundborne construction noise is therefore not anticipated.

3.1.3 Water Quality

Water quality impacts may arise due to the following potential sources during construction of the Project:

- Construction site run-off and drainage from works area;
- Groundwater seepage;
- Discharge of groundwater pumped out from potential contaminated area, if any
- Accidental spillage and
- Construction workforce sewage.

There will be no dredging works for the Project.

3.1.4 Waste Management

Construction activities will generate a variety of surplus materials including excavated materials, construction and demolition (C&D) materials and wastes, chemical wastes of residual oil and lubricating oil, and general refuse from workers. Environmental impact arising will be assessed and opportunities for reuse and potential disposal outlets will be studied. The possible presence of contaminated land based sediment that may require excavation and disposal will need to be determined.

ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE (CAP499)S.5(1)(A)

 $PROJECT \ PROFILE \ FOR \ SHATIN \ TO \ CENTRAL \ LINK-STABLING \ SIDINGS \ AT \ HUNG \ HOM \ FREIGHT \ YARD$

3.1.5 Hazard

The Project will not run into any consultation zone of Potentially Hazardous Installations. Under the current scheme, explosives would not be required for the construction of the Project. No hazard issues are anticipated.

3.1.6 Ecology

No ecological issues would be envisaged for HHS and provisions in Hung Hom and Kai Tak Stations as the works will be undertaken within the disturbed areas of Hung Hom and Kai Tak with low ecological value.

Provisions in Diamond Hill Station may cause potential disturbance of plantation habitat and associated fauna during the construction phase.

3.1.7 Historical and Cultural Heritage Impacts

No Declared Monuments or sites of historical and cultural significance are expected to be affected by the HHS and provisions in Hung Hom Station in the Hung Hom area.

For the provisions in Diamond Hill and Kai Tak Stations, potential impacts on historical and cultural heritage resources during the construction phase may arise due to activities associated with temporary and permanent landtake, excavation, change of the setting of the site and potential vibration impact.

3.1.8 Land Contamination

A site survey and desktop review have identified that the operation of the freight terminal within the Project scheme may have land contamination issues. Appropriate assessment will be conducted during the EIA stage to determine if contaminated soil or groundwater will be encountered during construction.

3.1.9 Landscape and Visual Impact

The Project involves construction at a well-developed urban environment. Potential landscape impacts may result from the permanent loss of trees. The construction of aboveground structures such as noise barriers if required, excavation, temporary noise barriers for the works sites (if necessary) and illumination within the construction sites may create short-term landscape and visual impacts.

3.2 POTENTIAL ENVIRONMENTAL IMPACTS: OPERATIONAL PHASE

3.2.1 Air Quality

Trains to be operated on the Project will be electrically powered so there will be no dust and gaseous emissions. No air quality issues during the operational phase of the proposed railway are envisaged.

ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE (CAP499)S.5(1)(A)

 $PROJECT\ PROFILE\ FOR\ SHATIN\ TO\ CENTRAL\ LINK-STABLING\ SIDINGS\ AT\ HUNG\ HOM\ FREIGHT\ YARD$

3.2.2 Noise

Train shunting, launchings and arrivals at the above-grade track sections, ventilation systems and environmental control systems may give rise to potential airborne noise impacts at sensitive receivers adjacent to the Project.

Casual maintenance may be conducted at the stabling sidings. However, since the area where the works are carried out would be under cover, airborne noise impact from this source would be expected to be minor.

Apart from airborne noise, train movements in tunnel or enclosed structures may give rise to potential groundborne noise impacts on nearby sensitive receivers.

The potential impacts from railway operations will be assessed and mitigation measures will be identified if required. With the implementation of mitigation measures, adverse impact will be minimised.

3.2.3 Water Quality

Run off from tracks may contain oil and grease as well as suspended solids. At locations where elevated levels of silt and oil are expected, surface runoff will be diverted through sedimentation basins and oil interceptors before final discharge.

3.2.4 Waste Management

Chemical waste such as lubricating oil and solvents, and municipal waste, including litter, plastics, wood and cleaning materials, will be generated during the operation of the Project.

3.2.5 Hazard

No hazard issues are anticipated during the operation of the Project.

3.2.6 Ecology

No ecological impacts are anticipated during the operation of the Project.

3.2.7 Historical and Cultural Heritage Impacts

No historical and cultural impacts are expected during operation of the Project.

3.2.8 Land Contamination

No land contamination impacts are expected during the operation of the Project.

3.2.9 Landscape and Visual

Potential landscape impacts will result from the construction of aboveground facilities such as noise barriers if required, and permanent loss of trees. The Project may

impact the physical landscape and visual amenity of surrounding areas. Appropriate greening measures will be provided as needed.

4 MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT

Key sensitive receivers and sensitive parts of the natural environment, which might be affected by the Project, are listed below. The list of sensitive receivers is not exhaustive and will be reviewed during the EIA stage.

Types	Key Sensitive Receivers
Residential	Residential buildings along Metropolis Drive, Winslow Street,
Developments	Hung Ling Street and Hung Lai Road, and future residential
	developments in Kai Tak Development project and the CDA at
	Diamond Hill (the former Tai Hom Village site).
Educational	The Hong Kong Polytechnic University
Institutions	
Sites of	Former Royal Airforce Hangar, Stone House No. 4, Old Pillbox,
Cultural	Former Tai Hom Village, Lung Tsun Stone Bridge and Former
Heritage	Kowloon City Pier

5 ENVIRONMENTAL PROTECTION MEASURES AND IMPLICATIONS

5.1 POTENTIAL MEASURES TO MINIMIZE ENVIRONMENTAL IMPACTS

Potential measures are outlined below to minimise environmental impacts. These measures will be further reviewed during the EIA process.

5.1.1 Construction Phase

Air Quality

Good site practices and relevant dust control measures set out in the Air Pollution Control (Construction Dust) Regulations will be implemented to control the dust impacts on the nearby sensitive receivers. With the mitigation measures in place, it is expected that the construction dust impact will be minimized to acceptable levels.

Noise

A package of mitigation measures will be designed to control construction noise impacts. General good site practices will help to control noise impacts. These include:

- i) Care in the placement and orientation of noisy plant away from sensitive receivers;
- ii) Careful planning of construction sequence; and
- iii) Regular maintenance of plant and equipment.

Further mitigation measures such as the use of quiet plant and noise barriers will be devised as necessary during the EIA process to help control daytime noise impacts to within the stipulated construction noise criterion.

Water Quality

Water quality impact mitigation measures such as drainage facilities to control site runoff, wheel washing facilities, proper toilet facilities and comprehensive wastewater management procedures will be implemented in accordance with the Practice Note for Professional Persons on Construction Site Drainage (ProPECC PN 1/94).

Waste Management

Standard waste management measures and good site practices in waste handling, disposal and transportation would be implemented. Potential disposal outlets and opportunities for re-use for the excavated materials will be studied in details.

Hazard

As no hazard issues are anticipated, no mitigation measures are considered necessary.

Ecology

As no ecological impact is anticipated due to the HHS and provisions in Hung Hom and Kai Tak Stations, mitigation measures are considered not necessary.

For provisions in Diamond Hill Station, potential ecological impacts will be avoided as far as practicable. If necessary, appropriate mitigation measures will be developed and implemented to mitigate the construction phase impacts.

Historical and Cultural Heritage

Since historical and cultural heritage resources are located at considerable distance from the proposed works area for the HHS and provisions in Hung Hom Station, specific mitigation measures are considered not necessary.

Historical and cultural heritage resources in the Diamond Hill and Kai Tak areas will be avoided or preserved in-situ as far as practicable. If avoidance is not possible, mitigation measures such as physical relocation or a rescue programme will be undertaken.

Land Contamination

Appropriate investigation and assessment will be conducted during the EIA stage to determine if contaminated soil or groundwater will be encountered during construction. With the implementation of remediation actions, no residual land contamination impact is expected.

Landscape and Visual Impact

Landscape mitigation measures may include avoidance of disturbance to planted slopes and avoidance of mature trees and transplantation will only be recommended where unavoidable. Tree felling will be undertaken as a last resort. Visual mitigation measures may include minimizing temporary works areas, control of night-time lighting and erection of decorative screen hoarding.

5.1.2 Operational Phase

Noise

Airborne train noise is expected to comply with the stipulated noise criteria after provision of noise barriers and enclosures as necessary. For fixed plant noise, adequate noise control treatment such as silencers, acoustic louvers and quiet plant will be adopted as necessary. Mitigation of groundborne noise will be by means of appropriate trackform design where necessary.

Water Quality

Effluent arising from the operational phase will be discharged into the communal foul sewerage system where connections can be made. At locations where elevated levels

of silt and oil are expected, surface runoff will be diverted through sedimentation basins and oil interceptors before being discharged into the nearby communal foul drainage system.

Waste Management

Waste management practices will be implemented to minimize waste generation and maximize waste recovery and recycling.

Chemical waste generated during the operational phase will be handled according to the Code of Practice on the Packaging, Handling and Storage of Chemical Waste.

Implementation of good housekeeping practices and the observation of the requirements of the Waste Disposal Ordinance will prevent adverse impacts.

Hazard

As no hazard issues are anticipated, no mitigation measures are considered necessary.

Ecology

As no ecological impact is anticipated due to the operation of the proposed HHS and provisions in Diamond Hill, Kai Tak and Hung Hom Stations, mitigation measures are considered not necessary.

Historical and Cultural Heritage

As no insurmountable impacts on the historical and cultural heritage resources would be anticipated, specific mitigation measures are considered not necessary.

Land Contamination

No land contamination issues would be envisaged. Mitigation measures are considered not necessary.

Landscape and Visual

Landscape impact mitigation measures to be incorporated within the permanent landscape design may include compensatory tree planting, reprovisioning of open space and landscape planting.

Visual impacts due to above-ground structures will be minimized as far as practicable by planting and adoption of sensitive architectural design.

5.2 POTENTIAL SEVERITY, DISTRIBUTION AND DURATION OF ENVIRONMENTAL EFFECTS

It is anticipated that the construction work will commence in 2012 and be completed by 2018. Dust, noise, and landscape and visual impacts are the main potential issues for the duration of construction of the Project while noise and landscape and visual impacts are the main potential issues associated with the operation of the Project. Their potential severity and distribution are outlined in Sections 3.1 and 3.2.

It is expected that proven means of mitigation in most instances will be sufficient to control adverse environmental impacts. Further assessment will be required to determine the severity of the potential impacts and additional mitigation as necessary.

5.3 ENVIRONMENTAL BENEFITS

Environmental benefits for either the co-existing HHS and DHS scheme or HHS alone scheme will be identified in the EIA study.

6 USE OF PREVIOUSLY APPROVED EIA REPORTS

No previously approved EIA report exists for the Project. However, reference may be made from Kowloon-Canton Railway Corporation's and MTR Corporation's EIA reports for railway projects (as listed below) which have been approved by the EPD.

Reference will be made to the following approved EIA reports:

- i) West Rail Final Assessment Report West Kowloon to Tuen Mun Centre Environmental Impact Assessment (EIA-149/BC)
- ii) East Rail Extensions Tai Wai to Ma On Shan EIA Report (EIA-027/1999)
- iii) East Rail Extension Hung Hom To Tsim Sha Tsui Environmental Impact Assessment (EIA-036/1999)
- iv) Kowloon Southern Link EIA Report (EIA-098/2004)
- v) Hong Kong Section of Guangzhou Shenzhen Hong Kong Express Rail Link EIA Report (EIA-169/2009)
- vi) Kwun Tong Line Extension EIA Report (EIA-184/2010)
- vii) South Island Line (East) EIA Report (EIA-185/2010)
- viii) Other approved EIA reports on the EIAO register for other developments that potentially interface with the Project.



沙田至中環綫 - 位於紅磡貨運站的列車停放處 SHATIN TO CENTRAL LINK - STABLING SIDINGS AT HUNG HOM FREIGHT YARD