1 Introduction

1.1 Background

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.

For the purposes of the Environmental Impact Assessment (EIA), five EIA Studies, 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)), Protection Works at Causeway Bay Typhoon Shelter and Stabling Sidings at Hung Hom Freight Yard (HHS), have been conducted to cover different sections of the SCL. They include:

- SCL Tai Wai to Hung Hom Section [SCL (TAW-HUH)] the extension of Ma On Shan Line from Tai Wai Station via Hin Keng, Diamond Hill, Kai Tak, To Kwa Wan, Ma Tau Wai and Ho Man Tin to Hung Hom, and link up with the existing West Rail Line, along with a proposed stabling sidings option in Diamond Hill (DHS);.
- SCL Stabling Sidings at Hung Hom Freight Yard [SCL (HHS)] (hereinafter referred to as "the Project", being considered in this EIA) – another stabling sidings option for SCL (TAW – HUH) proposed at the former freight yard in Hung Hom;
- SCL Mong Kok East to Hung Hom Section [SCL (MKK-HUH)] the realignment work for the existing East Rail Line tracks from the tunnel portal near Oi Man Estate (Portal 1A) to the proposed North Ventilation Building (NOV) in Hung Hom;
- SCL Hung Hom to Admiralty Section [SCL (HUH-ADM)] the section from NOV, Plant Rooms and Emergency Access in Hung Hom across the harbour to the Causeway Bay Typhoon Shelter (CBTS), Exhibition Station (EXH) and then to ADM; and
- SCL Protection works at Causeway Bay Typhoon Shelter the section of approximately 160m long of the SCL tunnel protection works at the crossing over Central-Wan Chai Bypass (CWB) tunnels, which would be constructed under the CWB project.

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 that Study Brief, the rail alignment of the SCL (TAW-HUH), 7 stations, namely Hin Keng Station (HIK), Diamond Hill Station (DIH), Kai Tak Station (KAT), To Kwa Wan Station (TKW), Ma Tau Wai Station (MTW), Ho Man Tin Station (HOM) and Hung Hom Station (HUH), along with other supporting facilities and 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, MTR Corporation Limited has started a detailed study to investigate the feasibility and environmental acceptability of utilizing the former freight yard to accommodate the train stabling requirements for SCL (TAW-HUH).

To make the former Hung Hom Freight Yard feasible for the use of stabling, in addition to providing siding tracks underneath the existing podium structure covering the freight yard, and launching/retrieval and emergency tracks and shunt neck extending outside the podium, it would be necessary to make appropriate changes to the design of SCL (TAW-HUH) and SCL (MKK-HUH) at HUH, KAT and DIH and its associated alignment and facilities. These works are collectively referred to as the Project in this EIA (**Figure 1.1**).

According to the latest programme, the construction works for the Project would commence in 2012. More detailed description of the Project is given in **Sections 2 and 3**.

Ove Arup & Partners Hong Kong Ltd (Arup) was commissioned by MTR Corporation Limited (MTR Corporation) as the EIA Consultant for the Project.

1.2 Designated Projects

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

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

1.3 EIA Study Brief

The Project would be a designated project under EIA Ordinance. An application (Application No. ESB-233/2011) for an EIAO Study Brief under Section 5(1)(a) of the EIAO was submitted by MTR Corporation in 30 June 2011. A Study Brief was issued by EPD on 10 August 2011 to provide the scope and requirements of the EIA study for the Project.

1.4 Need for the Project

The entire SCL is to form a strategic rail corridor from Shatin to Central which will bring about various benefits to the community, including:

- Redistribution of railway passenger flows to relieve the existing railway lines in urban Kowloon and on Hong Kong Island;
- Providing public transport service for Kai Tak Development;
- Relieving road-based public transport in the existing developed areas, and alleviation
 of the traffic congestion and environmental nuisance on existing road networks,
 including the demand on the Hung Hom Cross Harbour Tunnel; and
- Stimulation of the redevelopment of To Kwa Wan and Kowloon City areas.

The HHS covered in this Project or DHS covered in the SCL (TAW-HUH) would be an essential element for the operation of SCL (TAW-HUH). Either option would be needed 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. Without the support of the stabling sidings, the SCL (TAW-HUH) would not be functional.

1.5 Scenario "with" and "without" Project

The SCL (TAW-HUH) will provide a fast, reliable and convenient mode of transport between New Territories and Kowloon. Since railway will be emission free as they are powered electrically and the planning of railway will require compliance with the Noise Control Ordinance, the operation of SCL (TAW-HUH) supported by the Project providing stabling facilities will result in reductions in road traffic, leading to improvements in air quality, noise pollution, on-road safety and living quality at large. Without the support of the stabling sidings (either HHS or DHS), the SCL (TAW-HUH) would not be functional, and environmental benefits associated with railway system implementation cannot be materialised.

Inevitably, environmental impacts will be induced on the existing environment along the alignment from some of the construction activities. Environmentally friendly construction methods and appropriate mitigation measures will be implemented to ensure all the impacts are minimized (see **Sections 4 –15** for details).

When HHS and SCL (TAW-HUH) are completed, changes to the environment and controlled acceptable impacts may be experienced by individuals. However, in the absence of the Project and SCL (TAW-HUH), passengers travelling between Tai Wai and Hung Hom will mainly rely on road-based transport, which will increase road traffic and contribute to additional noise and air pollution affecting the local districts.

1.6 Concurrent Projects

According to the latest programme, the construction works for SCL (HHS) would commence in 2012 with completion in 2018. The possible potential concurrent projects in the vicinity of the Project are identified as follows. **Figure 1.2** shows the location and alignment of these concurrent projects.

1.6.1 Shatin to Central Link – Tai Wai to Hung Hom Section

SCL (TAW-HUH) is an approximately 11km long extension of the Ma On Shan Line (MOL) from Tai Wai through new stations, including Hin Keng Station (HIK), Diamond Hill Station (DIH), Kai Tak Station (KAT), To Kwa Wan Station (TKW), Ma Tau Wai Station (MTW), Ho Man Tin Station (HOM) and connects the West Rail Line at Hung Hom Station (HUH). Most of the sections would be underground except for a section at Hin Keng, and another section at Hung Hom, where the alignments need to be raised and linked with the Ma On Shan Line and the West Rail Line respectively to form a strategic east-west rail corridor. The underground sections of the alignment would be constructed by various construction methods including drill-and-blast, cut-&-cover, bored tunnelling, and mined method. Open cut/ cut-&-cover method will be employed for the tunnel portals at Hin Keng and Hung Hom North Fan area, and most of the stations and ventilation building structures, etc.

DIH will become an interchange station with the existing Kwun Tong Line (KTL). The SCL (TAW-HUH) will interchange with the Kwun Tong Line Extension (KTE) and the SCL (MKK-HUH) at HOM and HUH respectively. The HOM and HUH are to be separately implemented under KTE and SCL (MKK-HUH) respectively.

An option of having a train stabling sidings at the Diamond Hill CDA site (i.e. former Tai Hom Village) has been considered to provide stabling facilities and to allow effective train launching to meet the service requirements.

The SCL (TAW-HUH) will also form an important part of the proposed Kai Tak Development, providing mass transit service not only to the proposed new commercial and residential developments in the area, but also the Multi-Purpose Stadium Complex and other leisure facilities planned at Kai Tak.

This project is anticipated to commence in 2012 with completion in 2018. It will therefore be constructed concurrently with the proposed Project. Cumulative dust, noise, ecology, landscape and visual impacts are anticipated. These cumulative impacts will be addressed in this report.

1.6.2 Shatin to Central Link – Mong Kok East to Hung Hom Section, Hung Hom to Admiralty Section and Protection Works at Causeway Bay Typhoon Shelter

The SCL (MKK-HUH) includes the realignment and modification of the railway section from Mong Kok East to Hung Hom and station modification works at HUH with new underground platforms. According to updated information, the project is anticipated to commence in mid 2012 and the overall Project completion is anticipated to be 2018. It will therefore be constructed concurrently with the proposed Project. Cumulative construction dust, noise, landscape and visual impacts are therefore anticipated. Permanent above-ground structures (including alignment of SCL (MKK-HUH) and cooling tower), will pose cumulative railway noise and landscape and visual impacts on some receivers during operational phase.

The SCL (HUH-ADM) comprises an approximately 6 km extension of the East Rail Line including a rail harbour crossing from Hung Hom to Admiralty on Hong Kong Island. This project will also include the construction of a new station near the Hong Kong Convention and Exhibition Centre (HKCEC) i.e. the Exhibition Station. Demolition of the existing Kowloon Freight Building at the south of HUH is also required to facilitate the construction of the proposed North Ventilation Building and the associated railway tunnel section. According to updated information, the SCL (HUH-ADM) is anticipated to commence in 2012 for completion in 2020 and involves marine works such as dredging. Cumulative impacts, including construction dust, noise and landscape and visual, are expected from land-based

work sites of SCL (HUH-ADM) during construction phase. The impacts will be assessed in the report. North Ventilation Building will also pose cumulative operational noise, landscape and visual impacts on some receivers during operational phase. These cumulative impacts will be addressed separately.

Protection Works at Causeway Bay Typhoon Shelter (CBTS) involves the construction of a section of the twin track railway tunnel box (the SCL Protection Works) by cut-and-cover method at the crossing above the CWB tunnels. The length of the SCL Protection Works is approximately 160m long and it is located entirely offshore within the CBTS. Upon implementation of the SCL (HUH-ADM) in the future, the south end of the Protection Works will be extended from the temporary reclamation to connect with the South Ventilation Building at the existing Police Officers' Club and the north end of the Protection Works will be continued in cut and cover construction to connect to an Immersed Tube Tunnel beneath the harbour. Although the construction of the CBTS is anticipated to commence in 2012 and complete by 2013, separation distance between CBTS and the Project is over 500m and thus cumulative construction and operational impacts are not expected. (Ref: http://www.epd.gov.hk/eia/register/report/eiareport/eia 1872010/EIA/html/TOC-Text.htm)

1.6.3 Central Kowloon Route

The Central Kowloon Route (CKR) is a dual-3 lane trunk road across central Kowloon linking the West Kowloon in the west and the proposed Kai Tak Development (KTD) in the east. The Project will connect the West Kowloon Highway at Yau Ma Tei Interchange with the road network at Kowloon Bay and the future Trunk Road T2 at KTD which will connect to the future Tseung Kwan O – Lam Tin Tunnel (TKO-LTT). CKR, Trunk Road T2 and TKO-LTT will form a strategic highway link, connecting West Kowloon, East Kowloon and Tseung Kwan O.

The construction of CKR bored tunnel between Shanghai Street and To Kwa Wan Road will have an interface with SCL tunnel between MTW and TKW at Ma Tau Wai Road constructed under SCL (TAW-HUH) where the CKR bored tunnel will run underneath the SCL tunnel with adequate separation. It is anticipated that the section of SCL tunnel will be constructed prior to the section of CKR bored tunnel underneath.

The CKR also includes the construction of underwater tunnel between underwater Kowloon City Ferry Pier and Kai Tak Runway (adopt cut-&-cover method involving temporary reclamation), cut and cover tunnel, depressed and elevated roads between Kai Tak Runway and the Interchange with Kai Cheung Road, Kai Fuk Road and Trunk Road T2 on the proposed KTD. The project also includes construction of ventilation buildings and an administration building south to the Kai Tak Tunnel portal.

According to the latest information, CKR would commence construction by 2015 for completion by 2020. Since the Project would be completed in 2018, the construction work for the Project and CKR would overlap during 2015-2018. However, the peak for civil construction for the Project would be at 2014 and hence the impacts due to the Project would have been reduced. The cumulative impacts on dust, construction noise, visual and water quality will be addressed separately.

1.6.4 Widening of Gascoigne Road

This project aims at widening the existing Gascoigne Road Flyover, which is mainly a single 2-lane 2-way carriageway of about 1.2km, to increase its capacity. According to updated information, the Widening of Gascoigne Road Flyover is scheduled to commence after 2018 and hence would not be concurrent with the construction of the Project.

1.6.5 Kai Tak Development

According to the approved EIA Report of Kai Tak Development (KTD) (ref: AEIAR-130/2009) ^[1-3], the project is located in the south-eastern part of Kowloon Peninsula, comprising the apron and runway areas of the former Kai Tak Airport and existing waterfront areas at To Kwa Wan, Ma Tau Kok, Kowloon Bay, Kwun Tong and Cha Kwo Ling. The Project also

covers Kowloon Bay and Kwun Tong Typhoon Shelter and the adjacent water bodies. The project has commenced in early 2009 and is anticipated to complete beyond 2020.

The size of this project is approximately 328 ha and the latest development plan is shown in the Recommended Outline Development Plan (RODP) dated December 2009. Under this plan, a series of sub-districts are proposed to be created within KTD. They include a commercial belt and Station Square planned at North Apron and North Apron East which would be around the future KAT of the the Project.

According to the LegCo Papers on Kai Tak Development (LC Paper No CB(1)1919/09- $10(05)^{[1-3]}$, CB(1)396/09- $10(05)^{[1-1]}$ and CB(1)570/08-09(03) $^{[1-2]}$), the KTD projects are grouped into three packages for completion by three target years, 2013, 2016 and 2021. Development packages of KTD are described in **Table 1.1** and illustrated in **Appendix 1.1**.

Table 1.1: Development Packages of Kai Tak Development

Development	Package A	Package B	Package C
Development at North Apron	 Public housing developments Primary schools and secondary school Kai Tak Government offices 	 Sites for commercial/ residential development. Underground streets Kai Tak River Station Square and Avenue Park 	Multiple-Purpose Stadium Complex Sites for commercial / residential development Sung Wong Toi Park
Developments at Runway	 Cruise Terminal (first berth); Runway park 	 Cruise terminal building (including second berth) Tourism Node Heliport Bio-remediation of Kai Tak Approach Channel and the Kwun Tong Typhoon Shelter 	Metro park Sites for residential/ commercial developments
Development at South Apron			Sites for commercial developments
Kwun Tong Public Cargo Working Area	Waterfront promenade		
Supporting infrastructure	 District cooling system (first phase); Roadworks, pedestrian links, water supply, drainage and sewerage systems. 	 District cooling system (second phase) Roadworks, pedestrian links, water supply, drainage and sewerage systems. 	 District cooling system (final phase) Roadworks, water supply, drainage and sewerage systems.
Target completion	2013	2016	2021

The approved KTD EIA Report (ref: AEIAR-130/2009) ^[1-3] identified that construction of electricity substation, footbridge and subway enhancement, superstructure construction and concreting works are not major dusty construction activities. In addition, these facilities are located at more than 300m from the receivers of the Project, it is therefore anticipated that it would not have significant contribution on the cumulative construction noise and dust impacts on the receivers affected by the Project.

In the North Apron area, the Sung Wong Toi Park and the residential/ commercial development in Areas 2 will not be constructed before 2017. The Lung Tsun Stone Bridge remains are located underground and no residential or commercial development will be developed above the archaeological site. Cumulative impact is not anticipated for these developments during the construction phase of the Project.

The construction of some of these facilities under KTD may overlap with the construction of KAT and its associated tunnels, as described below.

Housing Authority Development Sites 1A & 1B

There are 2 housing sites (i.e. Sites 1A & 1B) within KTD that are within 300m from the Project. According to the implementation programme in KTD, the first population intake would be around 2013. Hence, its construction could possibly overlap with that of the Project during 2012. By 2013, these 2 housing sites would become environmental sensitive receivers (noise, air and visual) that need to be considered in the construction and operational phases of the Project.

Kai Tak River

The existing Kai Tak nullah at the North Apron (with a separation distance of 300m) will be transformed into a river channel as a key landscape feature of Kai Tak. The river channel will form a major green corridor in shaping the public space in the city centre. According to the implementation programme in KTD, construction of the Kai Tak River would commence by about 2011 and completed by 2015. This project contains works elements of modification of Kai Tak Nullah; construction of 2 numbers of desilting compounds; and establishment of landscape softwork on Kai Tak Nullah. Cumulative dust and visual impacts on sensitive receivers of the Project are anticipated.

Multi-Purpose Stadium Complex

Part of the Multi-Purpose Stadium Complex (with a separation distance of 300m) would be used as the temporary works area for the Project. According to the implementation programme in KTD, the construction of the Multi-Purpose Stadium Complex would tentatively commence in 2013, and completed by 2018. Cumulative dust impact is therefore anticipated.

District Cooling System

A district Cooling System (DCS) will be implemented within KTD. The DCS will constitute a seawater pumping station to be completed by 2013 and a series of pipelines to be completed in phases between 2013 and 2021. The seawater pumping station would also be constructed underground and is located approximately at the middle of the western coastline of the runway and there are no existing noise sensitive receivers within 300m and no existing air sensitive receivers within 500m. It is therefore considered that the construction of the seawater pumping station would not have significant contribution on the cumulative construction noise and dust impacts on the receivers affected by the Project.

The seawater pipework would also be implemented within KTD and be connected to the pumping stations. Most of these pipework would be buried under ground and would be constructed in sections. In addition, most of these work sites would be far away from most of the receivers in the Project. The construction noise and fugitive dust impacts from the construction of the pipework system would therefore have insignificant cumulative impacts.

The construction of both the pumping stations and the pipework would not require any dredging and hence there is no cumulative impact on construction water quality impacts.

Cumulative impact from district cooling system during operational phase is not expected.

Trunk Road T2

According to the EIA Study Brief for Trunk Road T2 (ref ESB-203/2009), it would connect the eastern connection of CKR to TKO - LTT. The Trunk Road T2 is a dual two-lane trunk road of approximately 3.6km long and about 2.6 km of the trunk road in the form of a tunnel. The alignment for Trunk Road T2 is more than 300m and 500m from the noise and air sensitive receivers respectively for the Project. It is therefore anticipated that it would not have significant contribution on the cumulative construction noise and dust impacts on the receivers affected by the Project.

Cumulative impact from Trunk Road T2 during operational phase is not expected.

Cruise Terminal

The site formation for Kai Tak Cruise Terminal will be implemented by Civil Engineering and Development Department. The scope of works comprises the construction of a sloping seawall of about 1,100m and a 35m wide and 850m long apron area for berthing of cruise vessels of different sizes and capacities, as well as the dredging of about 1.38 million cubic meters of marine sediments to allow manoeuvring and berthing of mega cruise vessels. The first berth is expected to commence operation in mid-2013.

According to the approved EIA Report for the Dredging Works for Proposed Cruise Terminal at Kai Tak (ref: AEIAR-115/2007) [1-4], there are 2 stages of dredging. The first stage of dredging would involve a total dredging volume of about 1,022,300m³. The second stage of dredging involving a lesser amount of about 680,000m³. Further liaison has been made with CEDD and the website of Tourism Commission has been reviewed. According to information available, the dredging works for the cruise terminal has commenced in 2010 and is anticipated to complete in 2015. Maintenance dredging will be carried out regularly during the construction period.

Since the Cruise Terminal is located more than 300m and 500m from the noise and air sensitive receivers respectively for the Project, cumulative noise and air quality impacts are not anticipated.

Other Infrastructure (such as Sewage Pumping Station and Roads)

Some of the infrastructures such as sewage pumping stations and roads would also be implemented concurrently with the Project. The cumulative noise, dust and visual impacts during the construction phase would need to be addressed. Cumulative visual impacts would also be anticipated during the operational phase.

Commercial Facilities Development Above KAT

The Project is located inside the Station Square within the Kai Tak Development. In accordance with the approved Outline Zoning Plan No S/K22/2 (OZP), an area of around 7,700m² above KAT is zoned "Other Specified Uses" annotated "Railway Station with Commercial Facilities" with a height limit of +15mPD.

For the development of Commercial Facilities Development on top of KAT by others, there is no solid implementation programme yet. However, as KAT will be designed to support the loading of the development and the construction of this low-rise development would commence after KAT is substantially completed. As a result, no major cumulative impact is anticipated. The commercial facilities development will be considered as visual sensitive receivers during operational phase.

1.6.6 Kwun Tong Line Extension & Associated EPIW

The project is an approximately 2.6km extension of the existing Kwun Tong Line from Yau Ma Tei Station to a new railway station at Whampoa and an interchange with SCL (TAW-HUH) at Ho Man Tin Station. The construction works of KTE has commenced in mid-2011 and is scheduled for completion in 2015 according to the approved EIA Report (ref: AEIAR-154/2010) [1-5].

The KTE includes the construction of the running line from Yau Ma Tei Station through to Ho Man Tin Station and Ho Man Tin Station to Whampoa Station, the proposed Ho Man Tin Station, Whampoa Station and their associated structures. 3 EPIWs have been assessed as concurrent projects (for potential cumulative impacts) in the approved KTE EIA Report. The 3 EPIWs for KTE are summarised below:

Oi Man Estate and Ho Man Tin Estate Connections

Oi Man Estate and Ho Man Tin Estate are situated to the west and north side respectively of the proposed Ho Man Tin Station of SCL (TAW-HUH). In order to provide and enhance better pedestrian connectivity from the station to these estates and during the public consultation process undertaken by MTR, the connectivity to the new station would be improved. This EPIW, Oi Man Estate and Ho Man Tin Estate Connections, are a network of

subways/covered walkways/covered footbridges are proposed to provide a direct, safe and barrier free pedestrian connection. The construction of these connections and their associated slope stabilisation works would interface with that for Ho Man Tin Station of SCL (TAW-HUH).

Public Transport Facilities

The public transport facilities including 3 lay-bys and 1 general pick-up/drop off facilities along Chung Hau Street at the northwest of Ho Man Tin Station. The construction of these facilities would interface with that for Ho Man Tin Station of SCL (TAW-HUH).

Chatham Road North Covered Footbridge

A new Chatham Road Footbridge is proposed to direct pedestrians from Wuhu Street to the Ho Man Tin Station. The bridge deck of the existing Chatham Road Footbridge will be demolished while the current lift shafts will remain as the vertical circulation route between the footbridge level and street level. A new escalator landing will be constructed to the south end of the footbridge at the Wuhu Street Temporary Playground; the north end of the footbridge will be connected to the covered walkway.

The new bridge is designed in 3 spans with the longest span up to 53m spanning across Chatham Road North. Provision for landscape planting will be allowed on both sides of the footbridge. Pier supports are located on the island on the side of the dual carriageway. Prebored H piles foundation will be adopted as the foundation of the new footbridge.

The demolished and construction of this footbridge would interface with that for Ho Man Tin Station of SCL (TAW-HUH).

The construction of Ho Man Tin Station and associated tunnels and EPIW would be concurrent with the construction of the Project. Cumulative noise and dust impacts during the construction phase would need to be addressed. During the operational phase, cumulative groundborne noise impact would also be anticipated.

1.6.7 HKPU Student Hostel (Phase 3) Development at Ex-Valley Road Site

The Hong Kong Polytechnic University (HKPU) Student Hostel (Phase 3) Development is located at the junction of Fat Kwong Street and Chatham Road North. The construction work was commenced in 2009 and is targeted for completion by 2012. It would therefore not be concurrent with the construction of the Project.

The HKPU Student Hostel (Phase 3) Development will be considered as a sensitive receiver on dust impact during construction phase and visual impact during construction and operational phase.

1.6.8 Ex-San Po Kong Flatted Factory

According to the approved Tsz Wan Shan, Diamond Hill & San Po Kong Outline Zoning Plan (S/K11/25), the ex-San Po Kong Flatted Factory has been rezoned from "Industrial" to "Residential (Group E)" for public housing. The design would adopt a single-aspect design facing Prince Edward Road East and would target for the completion year of 2016-2017.

Since the majority of the site formation work has been completed, the demolition work and the superstructure work would only generate insignificant construction noise, fugitive dust and visual impacts for the noise, air and visual sensitive receivers considered in the Project.

The public housing development at ex-San Po Kong Flatted Factory will be considered as a sensitive receiver on dust impact during construction phase and visual impact during construction and operational phase.

1.6.9 Tsz Wan Shan Pedestrian Link

The Project Proponent will also design and construct, as Government entrusted works, the Tsz Wan Shan Pedestrian Link which will connect to the KTL Diamond Hill Station. This walkway system would implement a number of covered walkways, pedestrian footbridges, lifts etc to provide a convenient connection system for the neighbouring community.

The construction of this walkway system would generally be concurrent with the construction of the DIH. The associated construction noise, dust and visual impacts from this walkway system would need to taken into account in the cumulative assessment. Cumulative visual impact from Tsz Wan Shan pedestrian link during operational phase has been addressed.

1.6.10 Covered Walkway at Kai Tak

A covered walkway which connected to TKW would be proposed. The walkway system would provide convenient connection system for the neighbouring community. However, there is no status for its implementation and hence its cumulative impacts would not be considered in this EIA.

1.6.11 Comprehensive Development Area (CDA) at Diamond Hill

This CDA site is bounded by Lung Cheung Road and Choi Hung Road to the south of KTL-DIH. In accordance with the approved Tsz Wan Shan, Diamond Hill & San Po Kong Outline Zoning Plan No S/K11/25, the site will be used for residential and/or commercial uses with the provision of open space and other supporting facilities.

The CDA site comprises the area occupied by the former Tai Hom Village and will not be constructed before completion of infrastructure works for the new DIH. It is therefore anticipated that CDA site would not have any contribution to cumulative construction impacts. The CDA site will be considered as sensitive receivers on noise, landscape and visual during operational phase.

1.6.12 Proposed 132kV Cable Circuits Connecting with Ho Man Tin KCRC Substation and Tsim Sha Tsui Substation (Hung Hom Side)

The proposed cable connects Ho Man Tin KCRC Substation and Tsim Sha Tsui Substation. Initially, it runs underneath the Chatham Road North Interchange and then along the Chatham Road North, Winslow Street and Cheong Tung Road and eventually to the Hung Hom Bay Substation.

The proposed cable duct along the existing footpaths and carriageways will be constructed mainly by open trenching method except for the proposed no-dig cable duct crossing underneath Chatham Road North Interchange. The section potentially causing minor and limited disturbance to the environment will be constructed by trenchless method and no potential environmental impact will be anticipated. For other sections, to minimize any disturbance to the surrounding environment, the construction works will be conducted in phases. The construction works will only involve minor and limited excavation works, and no adverse environmental impact will be expected. Therefore, it is anticipated that there will be no cumulative impact with the Project.

1.6.13 Summary of Concurrent Projects

The potential impacts of concurrent projects during the construction and operation of the proposed Project are summarised in **Table 1.2** and **Figure 1.2**.

Table 1.2: Summary of Potential Concurrent Projects

Project	Potential Cumulative Impacts	
(Construction Methodology [2])	Construction Phase [1]	Operational Phase [1]
SCL (TAW-HUH) (Bored tunnel, at grade works and cut-&-cover tunnel)	Fugitive dustAirborne noiseEcologyLandscape and visual	Airborne noise Landscape and visual
SCL (MKK-HUH) (cut-&-cover tunnel)	Fugitive dustAirborne noiseLandscape and visual	Airborne noise Landscape and visual

Project	Potential Cumulative Impacts		
(Construction Methodology [2])	Construction Phase [1]	Operational Phase [1]	
SCL (HUH-ADM) (Land-based construction activities)	Fugitive dustAirborne noiseEcologyLandscape and visual	Airborne noise Landscape and visual	
Protection Works at Causeway Bay Typhoon Shelter	• Nil	• Nil	
Central Kowloon Route	Fugitive dustAirborne noiseWater qualityVisual	Visual	
Widening of Gascoigne Road	Not concurrent	• Nil	
Kai Tak Development (Package A, B and C)	Fugitive dustAirborne noiseVisual	Visual	
Housing Authority Development Sites 1A & 1B within Kai Tak Development (superstructure construction)	Fugitive dustAirborne NoiseVisual	Visual	
Kai Tak River (Nullah modification and landscape works)	Fugitive dustVisual	Visual	
Multi-Purpose Stadium Complex within Kai Tak Development (construction method to be established by respective proponent)	Fugitive dust	• Nil	
District Cooling System within Kai Tak Development (No dredging required, pumping station is underground and away from noise and air receivers for the Project, only minor construction works required for the pipework).	• Nil	• Nil	
Trunk Road T2 within Kai Tak Development (at-grade and tunnelling work, but far away from noise and air receivers for the Project)	• Nil	• Nil	
Cruise Terminal within Kai Tak Development (concurrent dredging with that for the project, but far away from noise and air receivers for the Project)	• Nil	• Nil	
Other Infrastructure within Kai Tak Development	Fugitive dustAirborne NoiseVisual	Visual	
Commercial Facilities Development Above Kai Tak Station	Not concurrent	Visual	
Kwun Tong Line Extension & Associated EPIW (cut-&-cover station and tunnel)	Fugitive dustAirborne noise	Groundborne noise	

Project	Potential Cum	nulative Impacts
(Construction Methodology [2])	Construction Phase [1]	Operational Phase [1]
HKPU Student Hostel (Phase 3) Development at Ex-Valley Road Site (typical superstructure construction)	Fugitive dust Visual	Visual
Ex-San Po Kong Flatted factory (typical superstructure construction)	Fugitive dust Visual	Visual
Tsz Wan Shan Pedestrian Link (typical at-grade works for lift and walkway systems)	Fugitive dustAirborne noiseVisual	Visual
Covered Walkway at Kai Tak (typical walkway construction)	No status	No status
Comprehensive Development Area (CDA) at Diamond Hill	Not concurrent	Noise Landscape and Visual
Proposed 132kV Cable Circuits Connecting with Ho Man Tin KCRC Substation and Tsim Sha Tsui Substation (Hung Hom Side)	• Nil	• Nil

Note: [1] Construction phase of the Project
[2] For the section near scope of the Project

1.7 Structure of this EIA Report

The structure of this EIA report is outlined below for ease of reference.

<u>Section</u>	<u>Title</u>	Aims
1.	Introduction	Introduces the background information and the layout of the EIA Report.
2.	Considerations of Revised Scheme Alignment	Summarises the various options considered and the main reasons for adopting the scheme recommended.
3.	Project Description and Proposed Construction Methodology	Describes the project requirements covering the study area and site location, project nature and scope and the implementation programme, and describes relevant main construction/engineering aspects for the recommended scheme.
4.	Cultural Heritage Impact Assessment	Presents the legislation, methodology, assessment and recommendations for cultural heritage impacts.
5.	Ecological Impact Assessment	Presents the legislation, methodology, assessment and recommendations for ecological impacts.
6.	Landscape and Visual Impact Assessment	Presents the legislation, methodology, assessment and recommendations for landscape and visual impacts.
7.	Construction Dust Impact Assessment	Presents the legislation, methodology, assessment and recommendations for construction dust impacts.
8.	Airborne Noise Impact Assessment	Presents the legislation, methodology, assessment and recommendations for

<u>Section</u>	<u>Title</u>	<u>Aims</u>
		airborne noise impacts.
9.	Groundborne Noise Impact Assessment	Presents the legislation, methodology, assessment and recommendations for groundborne noise impacts.
10.	Water Quality Impact Assessment	Presents the legislation, methodology, assessment and recommendations for water quality impacts.
11.	Waste Management Implications	Presents the legislation, methodology, assessment and recommendations for waste management.
12.	Land Contamination	Presents the legislation, methodology, assessment and recommendations for land contamination evaluation.
13.	EM&A Requirements	Presents the EM&A requirements.
14.	Summary of Environmental Outcomes	Presents the Key Environmental Outcomes.
15.	Conclusions	Summarises the findings.

1.8 References

- [1-1] LC Paper No CB(1)396/09-10(05) Legislative Council Panel on Development, Enhancing the delivery of Kai Tak Development, 24 November 2009
- [1-2] LC Paper No CB(1)570/08-09(03) Legislative Council Panel on Development, The Implementation Plan for the Kai Tak Development, 20 January 2009
- [1-3] Environmental Impact Assessment Report, Kai Tak Development, 2008.
- [1-4] Environmental Impact Assessment Report, Dredging Works for Proposed Cruise Terminal at Kai Tak, October 2007.
- [1-5] Environmental Impact Assessment Report, Kwun Tong Line Extension, June 2010.