MTR Corporation Limited

Shatin to Central Link
Tai Wai to Hung Hom Section
(EP-438/2012/K)

Visual, Landscape, Tree Planting and Tree Protection Plan

Version H July 2019

MTR Corporation Limited

Shatin to Central Link

Tai Wai to Hung Hom Section

Visual, Landscape, Tree Planting and Tree Protection Plan

(Version H- July 2019)

Certified by: Lisa Poon

Signature: 

Position: Environmental Team Leader

Date: 10 Jul 2019

MTR Corporation Limited

Shatin to Central Link
Tai Wai to Hung Hom Section
(EP-438/2012/K)

Visual, Landscape, Tree Planting and Tree Protection Plan

Verified by: Fredrick Leong

Signature: 

Position: Independent Environmental Checker

Date: 10.7.2019

MTR Corporation Limited

Shatin to Central Link
Tai Wai to Hung Hom Section
(EP-438/2012/K)

Visual, Landscape, Tree Planting and Tree Protection Plan

Prepared by: Rachel Siu

Signature: 

Position: Certified Arborist

Date: 13 July 2019

MTR Corporation Limited

Shatin to Central Link
Tai Wai to Hung Hom Section
(EP-438/2012/K)

Visual, Landscape, Tree Planting and Tree Protection Plan

TABLE OF CONTENT

List of Tables

List of Figures

List of Annexes

Annex A Excerpt of SCL (TAW-HUH) and SCL (HHS) EIA Reports
Annex A1 - Excerpt of SCL (TAW-HUH) EIA Report
Annex A2 - Excerpt of SCL (HHS) EIA Report

Annex B Design Concept, Landscape and Visual Mitigation Measures
Annex B1 - Noise Cover at Mei Tin Road (Works Contract 1101)
Annex B2 - Hin Keng Station and Approach Structures (Works 1102)
Annex B3 - Hin Keng to Diamond Hill Tunnels (Works Contract 1103)
Annex B4 - Diamond Hill Station (Works Contract 1106)
Annex B5 - Kai Tak Station and Associated Tunnels (Works Contract 1108)
Annex B6 - Stations and Tunnels of Kowloon City Section (Works Contract 1109)
Annex B7 - Hung Hom North Approach Tunnels (Works Contract 1111) and Hung Hom Station and Stabling Sidings (Works Contract 1112)

Annex C Details of Trees to be Retained, Transplanted and Felled
Annex C1 – Hin Keng Station and Approach Structures (Works Contract 1102)
Annex C1-1 - Tree Assessment Schedules
Annex C1-2 - Tree Recommendation Plans
Annex C2 - Hin Keng to Diamond Hill Tunnels (Works Contract 1103)
Annex C2-1 - Tree Assessment Schedules
Annex C2-2 - Tree Recommendation Plans
Annex C3 – Diamond Hill Station (Works Contract 1106)
Annex C3-1 - Tree Assessment Schedules
Annex C3-2 - Tree Recommendation Plans
Annex C4 – Diamond Hill to Kai Tak Tunnels (Works Contract 1107)
Annex C4-1 - Tree Assessment Schedules
Annex C4-2 - Tree Recommendation Plans
Annex C5 - Kai Tak Station and Associated Tunnels (Works Contract 1108)
Annex C5-1 - Tree Assessment Schedules
Annex C5-2 - Tree Recommendation Plans
Annex C6 - Stations and Tunnels of Kowloon City Section (Works Contract 1109)
Annex C6-1 - Tree Assessment Schedules
Annex C6-2 - Tree Recommendation Plans
Annex C7 - Hung Hom North Approach Tunnels (Works Contract 1111) and Hung Hom Station and Stabling Sidings (Works Contract 1112)
Annex C7-1 - Tree Assessment Schedules
Annex C7-2 - Tree Recommendation Plans

Annex D Summary of Retained Trees and Method Statement for Protection of Retained Trees
Annex D1 - Summary of Retained Trees
Annex D2 - Method Statement for Protection of Retained Trees

Annex E Tree Transplanting Plans and Compensatory Tree Planting Plans
Annex E1 - Summary of Transplanted Trees
Annex E2 - Hin Keng Station and Approach Structures

1. INTRODUCTION

1.1 Background

1.1.1 The SCL is a 17km extension of the existing Ma On Shan Line (MOL) and East Rail Line (EAL) comprising (i) The East-West Corridor which extends the MOL from Tai Wai to Hung Hom via East Kowloon to connect with the West Rail Line (WRL) at Hung Hom Station (HUH) and Stabling Sidings at Hung Hom Freight Yard (HHS); and (ii) The North-South Corridor which is an extension of the EAL at Hung Hom across the harbour to Admiralty Station (ADM).

1.1.2 The SCL Tai Wai to Hung Hom Section [SCL (TAW-HUH)] included a total of 7 stations, including Hin Keng Station (HIK), Diamond Hill Station (DIH), Kai Tak Station (KAT), Sung Wong Toi Station (SUW) (formerly named as To Kwa Wan Station (TKW) in SCL(TAW-HUH) EIA), To Kwa Wan Station (formerly named as Ma Tau Wai Station (MTW) in SCL (TAW-HUH) EIA Report), Ho Man Tin Station (HOM) and Hung Hom Station (HUH).

1.1.3 Following the cessation of the operations of various freight facilities at Hung Hom in April 2011, MTR Corporation Limited 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 allow Stabling Sidings at Hung Hom Freight Yard [SCL (HHS)] 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, appropriate changes were made to the design of SCL (TAW-HUH) and SCL Mong Kok East to Hung Hom Section [SCL (MKK-HUH)] at HUH, Kai Tak Station (KAT) and Diamond Hill Station (DIH) and its associated alignment and facilities.

1.1.4 EIA Reports for SCL (TAW-HUH) (Register No.: AEIAR-167/2012) and SCL (HHS) (Register No.: AEIAR-164/2012) were approved on 17 February 2012 under the Environmental Impact Assessment Ordinance (EIAO). The alignment and associated facilities under SCL (TAW-HUH) at HUH, KAT and DIH was superseded by those proposed and assessed in SCL (HHS) EIA Report. The proposed landscape and visual measures in SCL (TAW-HUH) and SCL (HHS) EIA Reports provided in **Annex A**.

1.1.5 Following the approval of the EIA Reports, the Environmental Permit (EP) (EP No: EP-438/2012), covering the construction of both SCL (TAW-HUH) and SCL (HHS), was granted on 22 March 2012. Variations of Environmental Permit (VEP) were subsequently applied for EP-438/2012 and the latest Environmental Permit (EP No: EP-438/2012/K) was issued by Director of Environmental Protection (DEP) on 4 October 2016. Due to the overlapping of project area in Hung Hom under EP-437/2012/A for SCL(MKK-HUH) and EP-438/2012/K for SCL(TAW-HUH) and SCL(HHS), area to be covered by EP-438/2012/K is clearly shown in **Figure 1.1**.

1.2 Construction and Implementation Programme

1.2.1 To facilitate management and implementation of the Project, the Project will be implemented in the works contracts (**Figure 1.2**) including the corresponding landscape and visual mitigation measures as presented in **Table 1.1**.

Table 1.1 Summary of Works Contracts

Project Area	Contract No. (1)	Tentative Construction Programme(2)
Noise Cover at Mei Tin Road	1101(3)	End 2015
Hin Keng Station and Approach Structures	1102	End 2018
Hin Keng to Diamond Hill Tunnels	1103	End 2018
Diamond Hill Station	1106	End 2018
Diamond Hill to Kai Tak Tunnels	1107	End 2018
Kai Tak Station and Associated Tunnels	1108	End 2018
Stations and Tunnels of Kowloon City Section	1109	Q2 2019
Hung Hom North Approach Tunnels	1111	End 2018
Hung Hom Station and Stabling Sidings	1112	Q1 2019

Notes:
(1) Works contract 1108A - Kai Tak Barging Point Facilities is not included in the Plan since no trees will be affected under this works contract and it does not involve any above ground structures as stated under SCL (TAW-HUH) EP Condition 2.13 (a).
(2) Please refer to Annex B for the implementation programme of landscape and visual measures.
(3) The noise cover at Mei Tin Road under works contract 1101 is included in the Plan. No trees would be affected during the construction of the noise cover and hence the tree planting and protection plan as stated under SCL (TAW-HUH) EP Conditions 2.13 (b) to (g) is not required.

1.3 Scope of this Plan

1.3.1 In accordance with Conditions 2.13 of EP-438/2012/K, the Permit Holder shall submit a Visual, Landscape, Tree Planting and Tree Protection Plan (the Plan) to the Environmental Protection Department (EPD) detailing the visual, landscape, tree planting and tree protection measures of the Project with the following information:

(a) Aesthetic landscape and architectural treatment for above ground structures;
(b) Tree protection proposal showing locations, size, number and plant species of trees to be retained; and detailed working method statement for protection of retained trees;
(c) Transplantation proposal showing locations, size, number and tree species to be transplanted and the final locations for transplantation;
(d) Tree felling proposal showing locations, size, number and plant species to be felled;
(e) Tree compensation proposal showing locations, size, number and plant species to be provided or compensated;
(f) Post-planting care proposal showing the proposed establishment period and associated maintenance care requirements and frequency of transplanted trees and trees planted as compensation; and
(g) Implementation programme, maintenance and management schedules for measures proposed in (a) to (f) above.

1.3.2 Based on latest engineering design due to operation requirements and site constraints, there have been changes in the number of affected trees, design and mitigation measures at aboveground structures. This Plan is therefore prepared according to the best available information at the time of submission and the above requirements of the EP Condition 2.13.

1.4 Structure of The Plan

1.4.1 Following this introductory section, the remainder of this Plan is arranged as follows:

- **Section 2** presents the proposed aesthetic landscape and architectural treatment, and the corresponding implementation programme, maintenance and management schedules.
- **Section 3** presents details of tree protection measures, and transplantation, felling and compensation proposals.

2. LANDSCAPE AND VISUAL MITIGATION MEAURES

2.1 Proposed Landscape and Visual Mitigation Measures

2.1.1 The design concept of the aboveground structures and their proposed aesthetic landscape and architectural treatment are discussed and illustrated in **Annex B**.

2.1.2 The proposed Landscape and Visual Mitigation Measures (LVMM) as annotated in **Annex B** are summarized in **Table 2.1**, while the corresponding OMs to be adopted at each of aboveground structures are presented in **Table 2.2**. The proposed LVMM at each area, together with the management and maintenance responsibilities, and the implementation schedule for the respective mitigation measures are discussed in **Annex B**. Detailed discussion on mitigation measures related to tree protection, transplantation and compensation are provided in **Section 3**.

Table 2.1 Landscape and Visual Mitigation Measures Annotated in This Plan

ID No.	Landscape and Visual Mitigation Measures
CM1(1)	Decorative Hoarding Erection of decorative screen during construction stage to screen off undesirable views of the construction site for visual and landscape sensitive areas. Hoarding should be designed to be compatible with the existing urban context.
CM2(1)	Management of facilities on work sites To provide proper management of the facilities on the sites, give control on the height and disposition/ arrangement of all facilities on the works site to minimize visual impact to adjacent VSRs.
CM3(2)	Tree Transplanting Trees of medium to high survival rate would be affected by the works shall be transplanted where possible and practicable. Tree transplanting proposal including final location for transplanted trees shall be submitted separately to seek relevant government department's approval, in accordance with ETWB TCW No 3/2006(3).
OM1	Compensation Tree Planting Compensatory tree planting should be provided to compensate for felled trees as far as practicable. Compensatory tree planting proposal including location of compensation shall be submitted separately to seek relevant government department's approval, in accordance with ETWB TCW No 3/2006(3).
OM2a(4)(5)	Screen Planting Buffer tree planting including shrub and climber plants shall be incorporated to provide screening to ventilation shafts/plant, engineering structures and associated facilities.
OM2b(4)	Landscape Re-instatement All hard and soft landscape areas temporarily disturbed during construction phase shall be reinstated to equal or better quality, to the satisfaction of the relevant government departments.
OM3	Aesthetic landscape and architectural treatment on Station / Entrance / ventilation shaft / portal All station entrances, ventilation shafts and all above ground structures shall be sensitively designed to ensure that suitable architectural design and the element with

ID No.	Landscape and Visual Mitigation Measures
	colour, texture and tonal quality being compatible to the existing urban and future urban context, which shall include tree planting where space permits, to minimize the potential adverse landscape and visual impacts. For example, roof greening and vertical greening would be applied where possible subject to technical, operational and maintenance constraints.
OM4	Aesthetic design of viaduct and the at-grade box section at Hin Keng Viaduct and the at-grade box section at Hin Keng shall be sensitively designed to minimize visual impact upon adjacent VSRs. To reduce the solidness of the fully enclosed viaduct and the at-grade box structure, chromatic treatment for the viaduct and the at-grade box structure should be used as far as practical. The solid noise enclosure should have neutral colours of non-reflective material with aesthetic treatment that blend into the landscape and do not attract the eye. To mitigate the bulky noise enclosure, roof/vertical greening to be applied where possible subject to technical, operational and maintenance constraints. Foundation planting to be provided adjacent and below viaduct and the at-grade box section, which shall include tree planting where space permits, to minimize the potential adverse landscape and visual impacts.
OM5	Re-instatement of excavated area All excavated area and disturbed area for temporary works utilities diversion, temporary road diversion, and pipeline works shall be reinstated to former conditions or better, to the satisfaction of the relevant Government departments.
OM6	Re-provision of public open spaces Every effort should be made so that no public open space would be unnecessarily affected by the Project and if affected, they should be re-provided. Sensitive design and re-provision of the affected Public Open Space incorporating replacement facilities for those provided at present, using materials of quality suitable for long term use and acceptable to relevant Government authority. Relevant government departments including LCSD should be consulted on the design of the reprovisioned public open spaces at the early stage of the design process.
OM7	Aesthetic landscape and architectural treatment for DIH The above ground structures shall be designed to ensure the element with colour, texture and tonal quality being compatible to the existing urban context.
OM8(4)(5)(6)	Roof greening of large built structures Roof greening to mitigate the visual impact of the large roof area of aboveground structures on the VSRs at high level.
OM9	Aesthetic design on Noise Barrier Noise barrier shall be sensitively designed to minimize visual impact upon adjacent VSRs. Transparent noise barrier panel should be used as far as practical. If use of transparent panel material is not possible due to technical concerns, solid noise barrier panel of non-reflective material in neutral colours will be adopted together with aesthetic treatment to minimise any potential visual impact.

Notes:

(1) Mitigation Measures have been adopted on site within the works area of the Project. Implementation status is recorded in Monthly EM&A Report for the Project (https://x.dantemanager.net/scl/report.jsp).

(2) Detailed tree surveys were conducted and the survey findings are incorporated in the various Tree Removal Applications (TRAs). The TRAs have been submitted to relevant government departments for approval according to ETWB TCW No 3/2006 or DEVB TCW No. 7/2015, subject to the applicable technical circular during the time of application. Details of Tree Transplanting Plans and Compensatory Tree Planting Plans are provided in **Annex E**.

(3) Proposal on tree preservation, transplantation and felling in TRAs would be subject to the applicable technical circular during the time of application.
(4) Both adequate vegetation maintenance access at height and adequate water points and irrigation system will be provided to sustain the landscape mitigation measures.
(5) Minimum planter width and soil depth can vary between few hundreds to a thousand of millimetres subject to different plant species and area. All amenity planting in small area was avoided during the design stage and all planting will be undertaken in accordance with good horticultural practice. A typical drawing showing minimum planter width and soil depth is provided in Annex Figure H-4 for reference.
(6) A typical section on roof greening above the Station is shown in Annex Figure H-1 for reference.

Table 2.2 List of Aboveground Structures and Corresponding OMs Adopted

Project Area	Contract No. (1)	Aboveground Structures	Corresponding OMs Adopted
Noise Cover at Mei Tin Road	1101(2)	• Noise Cover at Mei Tin Road	• OM3
Hin Keng Station and Approach Structures	1102	• Hin Keng Station	• OM2a, OM2b, OM3, OM8
		• Viaduct and at-grade box structure	• OM2a, OM4, OM8
		• Noise Barriers	• OM9
Hin Keng to Diamond Hill Tunnels	1103	• Ma Chai Hang Ventilation Building (MCV)	• OM2a, OM2b, OM3, OM8
		• Emergency Access/ Emergency Escape Access (EA/EEA) at Wong Tai Sin	• OM2a, OM3, OM8
Diamond Hill Station	1106	• Entrance A2	• OM2a, OM3, OM7, OM8
		• West Ventilation Shaft	• OM2a, OM3, OM7, OM8
		• East Ventilation Shaft	• OM2a, OM3, OM7, OM8
		• Means of Escape (MOE)	• OM2a, OM3, OM7, OM8
Diamond Hill to Kai Tak Tunnels	1107	• Nil	• Nil
Kai Tak Station and Associated Tunnels	1108	• Entrance A and Supplementary Emergency Entrance (S.E.E)	• OM3
		• Entrance B	• OM3
		• Entrance D and Designated Emergency Entrance (D.E.E)	• OM3
		• South Ventilation Shaft	• OM3
		• Northern Ventilation Shaft	• OM3
Stations and Tunnels of Kowloon City Section	1109	*Sung Wong Toi Station(3)(4) (SUW) (formerly named as To Kwa Wan Station in EIA)*	
		• Entrance A with Ventilation Shaft and Designated Emergency Entrance	• OM2a, OM3
		• Entrance D	• OM3
		• Ventilation Shaft B	• OM2a, OM3

Project Area	Contract No. (1)	Aboveground Structures	Corresponding OMs Adopted
		• Disabled Lift and Ventilation Shaft	• OM2a, OM3
		• Pedestrian Subway/Entrance B	• OM3
		To Kwa Wan Station (TKW) (formerly named as Ma Tau Wai Station in EIA)	
		• Entrance A	• OM2a, OM3
		• Ventilation Shaft	• OM2a, OM3
		• Entrance B	• OM3
		• Entrance C	• OM3
		• Entrance D with Ventilation Shaft	• OM2a, OM3
		• Tam Kung Road EEP (TKW Ancillary Building)	• OM2a, OM3
Hung Hom North Approach Tunnels	1111(5)	• Noise barriers at south of Chatham Road North and north of new aligned Cheong Wan Road	• OM9
Hung Hom Station and Stabling Sidings	1112(5)	• HHS Semi Noise Enclosure	• OM3, OM9

Notes:

(1) Works contract 1108A - Kai Tak Barging Point Facilities is not included in the Plan since no trees will be affected under this works contract and it does not involve any above ground structures as stated under SCL (TAW-HUH) EP Condition 2.13 (a).

(2) The noise cover at Mei Tin Road under works contract 1101 is included in the Plan. No trees would be affected during the construction of the noise cover and hence the tree planting and protection plan as stated under SCL (TAW-HUH) EP Conditions 2.13 (b) to (g) is not required.

(3) Arrangement of Entrance C of SUW is subject to the findings of further archaeological study. Supplementary information of Entrance C will be provided as necessary.

(4) Landscape and visual measures at SUW were updated according to Environmental Review Report – To Kwa Wan Design Change (September 2015) (ERR-TKW Design Change) which was submitted to EPD on 18 September 2015 for supporting variation of Environmental Permit (VEP Application No.: VEP-484/2015). As such, Figure 6.9.5(G) of the approved SCL(TAW-HUH) EIA Report should be read in conjunction with Figure No. C11033/C/SCL/ACM/M63/151 of ERR-TKW Design Change (Annex Figure H-3 refers). As shown in Figure No. C11033/C/SCL/ACM/M63 /151 of ERR-TKW, only OM3 and OM5 would be adopted at SUW. Nevertheless, there would be additional OM2a to be adopted at Entrance A with Ventilation Shaft and Designated Emergency Entrance, Ventilation Shaft B and Ventilation Shaft of SUW. Locations of landscape and visual measures at SUW are shown in Annex Figure B6-1.

(5) Please refer to **Figure No. 1.1** for the area in Hung Hom covered by EP-438/2012/K for SCL(TAW-HUH) and HHS. Other permanent aboveground structures in Hung Hom area, including CLP Transformer Plant, Trackside Ventilation Plant, North Side Ventilation Shafts (NSVS) and South Side Ventilation Shafts (SSVS) are covered by EP-437/2012/A for SCL(MKK-HUH).

3. TREE PLANTING AND TREE PROTECTION MEASURES

3.1 Affected Trees

3.1.1 Detailed tree surveys were conducted to identify all affected trees within project site boundary. Trees located within those areas within project site boundary that would be not affected by construction works will be retained on site and will be protected from construction works in its vicinity as far as possible. Trees unavoidably affected by the construction works will be either fell or transplanted according to relevant guidelines.

3.1.2 With the proposed tree transplanting and compensation proposal as mitigation measures, a summary of affected trees at the corresponding Landscape Resource (LR) is presented in **Table 3.1**. Details of tree assessment schedules and recommendation plans are provided in **Annex C**, while the details of tree protection measures, and transplantation, felling and compensation proposals in accordance with EP Condition 2.13 are presented in the following sections.

Table 3.1 Summary of Affected Trees

ID No.	Landscape Resources	No. of Trees				
		Retain	Affected	Transplant(2)	Fell(1)	Compensatory Planting(2)
Hin Keng Station						
HIK/LR1.2	Hin Tin Playground	176	287	152	135	874
HIK/LR2.1	AFCD N.T. South Animal Management Centre and Shatin Plant Quarantine Area	-	30	6	24	
HIK/LR4.1	Vegetation on East Rail Embankments opposite to Hin Keng Playground	71	501	-	501	
HIK/LR4.3	Vegetation on slopes south of Tai Wai Tunnel	270	208	-	208	
HIK/LR5.3	Trees on slopes adjacent to Shatin Water Treatment Works	52	37	4	33	
HIK/LR6.3	Trees in Hin Keng Estate (South)	8	-	-	-	-
Other	Out of Landscape resources boundaries	-	-	-	-	107
Ma Chai Hang Ventilation Building						
MCH/LR 1.1	Ma Chai Hang Road Playground	45	109	47	62	44(7)
MCH/LR 3.6	Trees at Wong Tai Sin Road (east)	-	-	-	-	-
MCH/LR 3.9	Trees in Wong Tai Sin Road Open Space Carpark	7	19	1	18	12(7)
Diamond Hill Station						
DIH &	Street trees along Lung	-	-	-	-	-(3)

ID No.	Landscape Resources	No. of Trees				
		Retain	Affected	Transplant(2)	Fell(1)	Compensatory Planting(2)
KAT/LR 3.1	Cheung Road					
DIH & KAT/LR 6.3	Trees in Lung Poon Court	5	3	-	3	
DIH & KAT/LR 9.1	Trees in Diamond Hill CDA Site	108	383	2(4)	381	
Kai Tak Station						
DIH & KAT/LR 8.6	Trees in Kai Tak Site	1	61	6	55	528
Sung Wong Toi Station (formerly named as To Kwa Wan Station)						
TKW/LR 1.2	Sung Wong Toi Playground	55	50	2	48	62(8)
TKW/LR 1.4	Olympic Garden	14	38	11	27	
TKW/LR 2.1	Trees at Hong Kong Aviation Club & Far East Flying Tech. School	-	17	-	17	
Other	Out of Landscape resources boundaries	39	18	3	15	17
To Kwa Wan Station (formerly named as Ma Tau Wai Station)						
MTW/LR 1.1	Lok Shan Road Playground	-	10	4	6	73
MTW/LR1.2	To Kwa Wan Complex Playground	-	1	-	1	
MTW/LR1.4	Ma Tau Wai Road/To Kwa Wan Road Garden	17	84	28	56	
MTW/LR1.6	Sitting out area at junction of Ma Tau Wai Road and Tam Kung Road	-	2	-	2	
MTW/LR3.3	Trees in Parking Lot at Shansi Street	-	-	-	-	
Other	Out of Landscape resources boundaries	-	-	-	-	34
Hung Hom						
HUH/LR 1.1	Public Open Space at Chatham Road North	-	12	2	10	70(7)
HUH/LR 1.2	Trees in Undeveloped Open Space at Chatham Road North	4	85	-	85	
HUH/LR 4.1	Wooded slope at Chatham Road North	8	53	1	52	
HUH/LR 1.4	Winslow Street Playground	-	12	2	10	
HUH/LR 2.2	Amenity Area at Hong Kong Coliseum	6	-	-	-	-
HUH/LR 3.2	Trees in MTR track area north of Hung Hom and	-	27	-	27	

ID No.	Landscape Resources	No. of Trees				
		Retain	Affected	Transplant(2)	Fell(1)	Compensatory Planting(2)
	around the South Approach Tunnel (SAT)					
HUH/LR 3.3	Roadside Amenity Areas along Cheong Wan Road	-	5	-	5	
Other	Out of Landscape resources boundaries	-	-	-	-	94
	Total(5)	886	2052	271	1781	1915(6)

Notes:

(1) Fell trees would be compensated on-site within the landscape area as far as practicable. Trees that cannot be compensated on-site would be compensated off-site as far as practicable.

(2) Compensatory tree planting shall be provided to compensate for felled trees as far as practicable. Compensatory tree planting proposal including location of compensatory shall be submitted separately to seek relevant government department's approval, in accordance with the applicable technical circular during the time of application. Revised VLTTP / Addendum to VLTTP incorporating the final location of transplanted trees and compensatory trees, when available, will be documented and submitted under EP Condition 2.13 for record.

(3) As discussed in Annex B4, compensatory tree planting for Diamond Hill Station (DIH) would be provided at Kai Tak Station Square, which will be designed and provided by Architectural Services Department (ArchSD), due to programme mismatch between the trees planting works at DIH and CDA site development.

(4) Refer to the latest Tree Removal Application for 1106 – Part 1 (C) Rev. H, among the 22 trees proposed to be transplanted, 19 of them would be subsequently removed due to unrecoverable health problem or found failure. Also, recommendation of DT 2390 will be amended from transplant to retain.

(5) Information presented in this table is based on the latest available TRAs. The final tree transplanting and compensation proposals should refer to final approved TRAs or subject to approval from Lands Department.

(6) Total nos. of compensatory tree planting as stated in approved SCL (TAW-HUH) and SCL (HHS) EIA Reports is 1,380.

(7) Shortfall of compensatory trees will be provided in Kai Tak Station Square. Details of the corresponding Compensatory Tree Planting Plans are provided in **Annex E6**.

(8) Shortfall of compensatory trees will be provided in To Kwa Wan Station. Details of the corresponding Compensatory Tree Planting Plans are provided in **Annex E7.**

3.2 Tree Protection

3.2.1 Based on the tree assessment schedule (**Annex C** refers), there would be a total of 885 trees to be retained on site. Majority of the retained trees are mainly *Melaleuca quinquenervia*, *Erythrina variegata* and *Ficus rumphii*. All these species are commonly found in Hong Kong. About 87% of all the retained trees are in fair to good health condition while about 55% of them have fair to good tree form. In addition, about 95% of all the retained trees are of low to medium amenity value. The quantity, species and general conditions of retained trees are summarized in **Annex D**. The trees to be retained on site will be protected by appropriate working method statement as detailed in **Annex D**.

3.2.2 The requirements as detailed in the working method statement have been included in the civil works contract specification and the Civil Works Contractors shall implement the tree protection measures accordingly.

3.3 Tree Transplantation

Assessment Approach

3.3.1 Trees that are unavoidably affected by the Project have been evaluated for transplantation based on the principles in ETWB TCW No. 3/2006[1], DEVB TCW No. 7/2015[2] and Lands Department (LandsD) Practice Note No. 7/2007[3]. Factors considered for reviewing the feasibility for transplanting the affected trees include the location of the tree, the species, form, health and amenity value of the tree, survival rate after transplanting, ease of transplanting and safety of transplanting operation, etc. The assessments have been submitted to Lands Department (LandsD) together with Tree Removal Applications (TRAs). Final tree transplanting arrangement is subject to the approval of TRAs.

3.3.2 All tree pruning and transplanting works will be carried out by approved specialist contractor who is on the List of Approval Supplies of Materials and Specialist Contractor for Public Works under the category of Landscaping.

3.3.3 All transplanted trees are proposed to be transplanted directly to their permanent receptor sites as far as possible. In the event that their permanent receptor sites are unavailable for caring them, the Contractor will transport those trees to a nursery site and then transplant them to their permanent receptor sites when the receptor sites are available.

Proposal

3.3.4 Trees selected to be transplanted commonly have direct conflicts with construction works. Trees with good health, sound structural condition, reasonable sized of practical rootball preparation, accessible by transplanting machinery, feasible for transportation on public roads, as well as accessible to tree transplanting and final receptor sites would be considered to be transplanted. Corresponding parameters in the tree assessment such as tree forms and amenity value are presented in Annex C.

3.3.5 A total of 271 trees are proposed to be transplanted. Majority of the transplanted trees are *Melaleuca leucadendra*, *Lagerstroemia speciosa* and *Livistona chinensis.* About 87% of them are in good and fair health condition and over 96% are having fair to good tree form. In addition, approx. 85% of the transplanted trees are of medium to high amenity value.

3.3.6 The locations of proposed transplanted trees are presented in **Annex C**, while a summary of the quantity, species and general conditions of transplanted trees are provided in **Annex E**. Annexes C and E have been prepared according to the latest available TRAs. The final tree transplanting and compensation proposals should refer to final approved TRAs or subject to approval from Lands Department.

3.4 Tree Felling

1 ETWB TC(W) 3/2006 - Tree Preservation
2 DEVB TC(W) No 7/2015 - Tree Preservation
3 Lands Department Practice Note No. 7/2007 - Tree preservation and tree removal application for building development in private projects

Assessment Approach

3.4.1 The tree felling proposal is prepared in accordance with ETWB TCW No. 3/2006, DEVB TCW No. 7/2015 and LandsD Practice Note No. 7/2007. Under the Project, the trees to be felled are of common species found locally and they are proposed to be felled by the following reason(s):

(a) No irreplaceable rare species of tree is involved.
(b) Felling of the existing trees found on site would not cause serious environmental impact.
(c) A genuine construction works is required which cannot be reasonably overcome.
(d) The tree is not one of the specimens registered as “Old and Valuable Trees” kept by the Leisure and Cultural Services Department.
(e) The tree is not one of the “Fung Shui Trees”, or of similar community status.
(f) Undesirable species (self-seeded tree) that prevent natural succession of indigenous species.
(g) The health, form and condition of tree does not indicate value of preservation against necessary construction works.
(h) The tree is ineligible for transplanting on or off site because of its low conservation and amenity value, or its low chance of surviving or recovering to its normal form after transplanting.
(i) The tree is in direct conflict with the proposed works.
(j) The tree is dead, hazardous or diseased.
(k) A tree that has been rendered unstable because of the removal of neighbouring trees may be considered for felling.

Proposal

3.4.2 For trees having direct conflicts with construction works, they would be considered to be either transplanted or felled. Consideration factors for tree transplantation have been discussed in **Section 3.3.4** above. Trees with poor health, high potential for tree failure due to weak structure, grown on slope with unbalance rootball would be considered to be felled. Corresponding parameters during tree assessment such as tree forms and survival rate after transplantation are presented in **Annex C**.

3.4.3 The locations of trees to be felled are presented in **Annex C**, while a summary of the quantity, species and general conditions of these trees of such proposal, are provided in **Annex F**. It should be noted that the tree felling proposal would be updated upon the approval of the TRAs, where necessary.

3.4.4 The locations, size, number and plant species of trees to be felled are summarized in **Annex C**. The tree felling proposal would be updated upon the approval of the TRAs, where necessary.

3.4.5 Based on the latest TRAs, there are 1,781 numbers of trees to be removed. Majority of the felled trees are *Macaranga tanarius var. tomentosa*, *Bauhinia variegata* and *Casuarina equisetifolia*. About 96% of them are poor to fair in health and 97% of them are poor to fair in form, while over 75% of all felled trees are of low amenity value.

3.5 Tree Compensation

General Principle

3.5.1 Upon completion of the construction works, which will take place in stages according to the Contractor's working methods, the felled trees would be compensated on-site within the reinstated landscape area as far as practicable. The remaining trees that cannot be located on-site would be compensated off-site as far as possible. The tree compensation proposal is prepared with reference to ETWB TCW No. 3/2006, DEVB TCW No. 7/2015 and LandsD Practice Note No. 7/2007.

Proposal

3.5.2 The compensatory tree planting plans as illustrated in **Annex E** include the following information:

- the existing trees that have been recommended to be retained;
- the approximate locations of the proposed compensatory trees; and
- size, number and plant species of the proposed compensatory trees.

3.5.3 The sizes of compensatory tree planting may be varied subject to planting objectives, without jeopardizing the landscape and visual performance. In case any species of tree could not be compensated in accordance with approved TRAs due to site constraints, another tree with similar landscape and visual performance in size of heavy standard (75mm – 150mm) would be provided as alternative.

3.5.4 The locations of the planting would be varied subject to the final engineering design and site constrains, without jeopardizing the landscape and visual performance requirements. The exact number of compensatory trees at each location is subject to approval of the TRAs, and where necessary, the tree compensation proposal would be updated accordingly.

3.6 Post-planting Care Proposal

3.6.1 The Contractor should provide a 12-month Establishment Period[4] for the transplanted/ compensatory trees including their care and maintenance. The tentative Establishment Period of transplantation and compensation works for the works contracts is summarised in **Table 3.2**, while **Table 3.3** provides a breakdown summary of compensatory trees in each area. The associated maintenance care requirements and frequency of transplanted and compensated trees are also detailed in **Annex G**.

Table 3.2 Tentative Implementation and Establishment Period of Transplantation and Compensation Works

Project Area	Contract No.	Tentative Establishment[(1)] Period	Responsible Party During Establishment Period[(2)]

4 "Establishment Period" means the period from the date of the Certificate of Completion of the Works, from the date of transplanted trees to final receptor locations or from the date of handover to the MTRCL or the relevant Government departments/relevant authorities.

Project Area	Contract No.	Tentative Establishment[(1)] Period	Responsible Party During Establishment Period[(2)]
Hin Keng Station and Approach Structures	1102	2018 to 2019	MTR
Hin Keng to Diamond Hill Tunnels	1103	2018 to 2019	MTR
Diamond Hill Station	1106	2022 to 2023	MTR/Relevant Departments
Diamond Hill to Kai Tak Tunnels	1107	2022 to 2023	MTR/Relevant Departments
Kai Tak Station and Associated Tunnels	1108	2022 to 2023	MTR/Relevant Departments
Stations and Tunnels of Kowloon City Section	1109	2019 to 2020	MTR
Hung Hom North Approach Tunnels	1111	2018 to 2019	MTR
Hung Hom Station and Stabling Sidings	1112	2021 to 2022	MTR

Note:

(1) Establishment period subject to change for the completion of works, from the date of transplanted trees to final receptor locations or from the date of handover to the MTRCL or the relevant Government departments/relevant authorities.

(2) For long-term maintenance parties after establishment period, please refer to the details in **Annex B**.

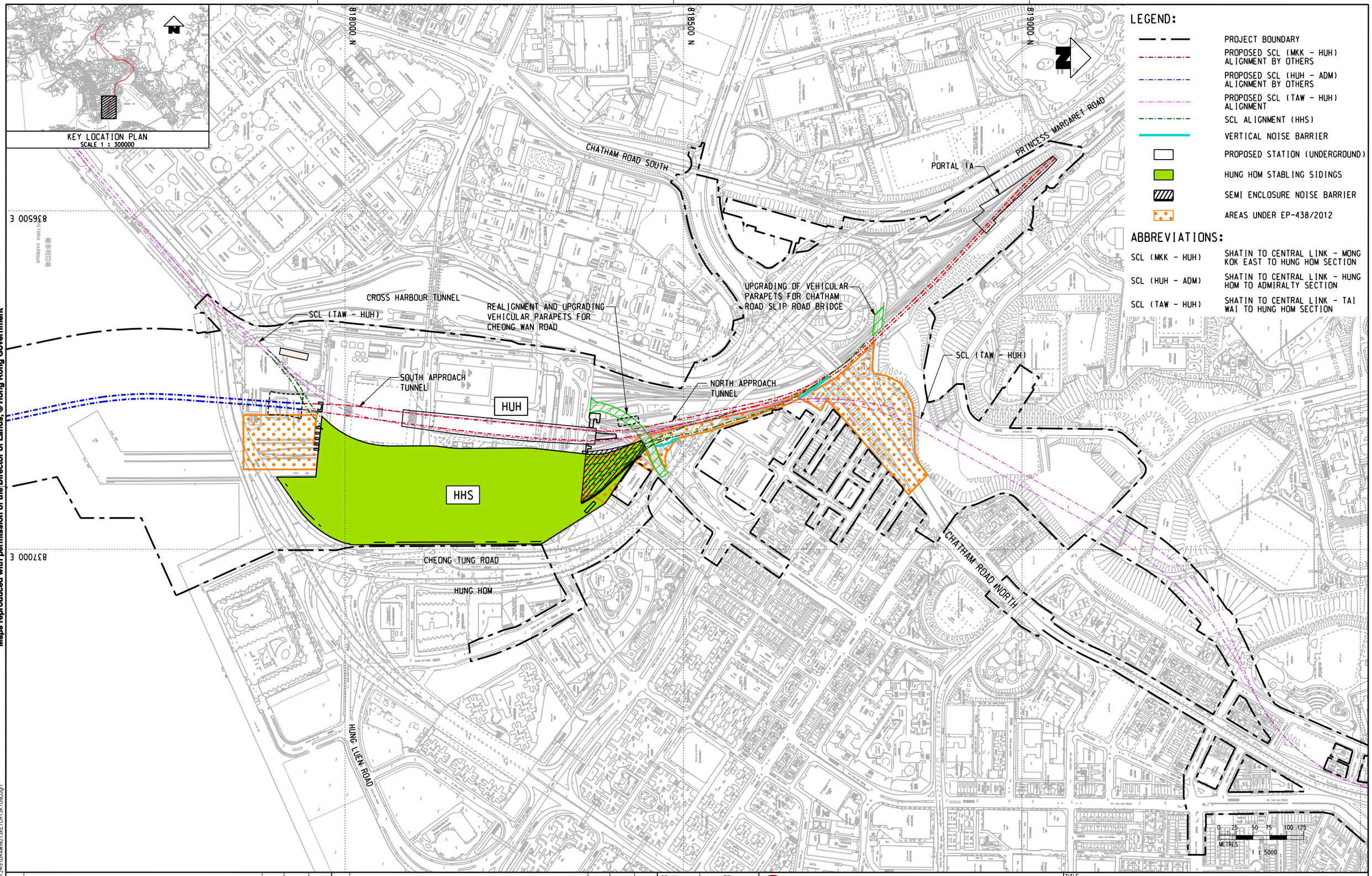
Table 3.3 Breakdown Summary for Compensatory Trees

ID No.	Works Contract	Landscape Resources	No. of Compensation Trees	Time of Completion[1]	Works Agent	Tree management/ maintenance departments[2]
Hin Keng Station						
HIK/LR1.2	1102	Hin Tin Playground	150	2019 Q1	MTR	LCSD
HIK/LR2.1		AFCD N.T. South Animal Management Centre and Shatin Plant Quarantine Area	3			MTR
			15			
HIK/LR4.1		Vegetation on East Rail Embankments opposite to Hin Keng Playground	313			MTR
			75			
			101			
HIK/LR4.3	1103	Vegetation on slopes south of Tai Wai Tunnel	71			Hing Keng Estate
			15			MTRC
			131			
Other	1102	Out of Landscape resources boundaries	86			LCSD[3]
			18			
			3			AFCD[3]
Ma Chai Hang Ventilation Building						
MCH/LR 1.1	1103	Ma Chai Hang Road Playground	44	2019 Q1	MTR	MTRC
						LCSD[4]
MCH/LR 3.9		Trees in Wong Tai Sin Road Open Space Carpark	10			HyD
			2			MTRC
Kai Tak Station						
DIH & KAT/LR 8.6	1107 & 1108	Trees in Kai Tak Site	112	2022 Q4	ArchSD	LandsD, LCSD and ArchSD
			338			
			78			
Sung Wong Toi Station (formerly named as To Kwa Wan Station)						

ID No.	Works Contract	Landscape Resources	No. of Compensation Trees	Time of Completion[1]	Works Agent	Tree management/ maintenance departments[2]
TKW/LR 1.2	1109	Sung Wong Toi Playground	15	2019 Q3	MTR	LCSD
TKW/LR 1.4		Olympic Garden	47	2019 Q3		
Other		Out of Landscape resources boundaries	4	2018 Q3		
			4	2019 Q3		
			3	2019 Q3		
			6	2019 Q3		
To Kwa Wan Station (formerly named as Ma Tau Wai Station)						
MTW/LR 1.1	1109	Lok Shan Road Playground	8	2019 Q3	MTR	LCSD and ArchSD
MTW/LR 1.2		To Kwa Wan Complex Playground	6			LCSD
MTW/LR 1.4		Ma Tau Wai Road/To Kwa Wan Road Garden	46	2020 Q1		
			11			
MTW/LR 1.6		Sitting out area at junction of Ma Tau Wai Road and Tam Kung Road	2	2019 Q3		
Other		Out of Landscape resources boundaries	14	2019 Q3		
			2			
			9	2019 Q3		
			9			
Hung Hom						
HUH/LR 1.1	1111&1112	Public Open Space at Chatham Road North	28	2020 Q1	MTR	LCSD
HUH/LR 1.4		Winslow Street Playground	42			
Other		Out of Landscape resources boundaries	94	2021 Q2		MTRC
		Total	**1915[5]**			

Notes:

(1) Completion of tree planting is subject to actual construction program, availability of planting location and acceptance of the relevant government department. As-built drawings of trees would be submitted to relevant government departments after completion of planting.
(2) Information provided was based on maintenance matrix in discussion with relevant government departments.
(3) Information provided was based on Tree Compliance Report or Handover Information (Letter, email, etc) submitted to relevant government departments.
(4) Information provided was based on latest discussion with relevant government departments.
(5) Total nos. of compensatory tree planting as stated in approved SCL (TAW-HUH) and SCL (HHS) EIA Reports is 1,380.



PLOT DRV: V:\ustnse1\MTR\PLOTDRIVER\WINDOWS\A3_COLOUR.plt
MODEL NAME: Default PRINTED BY: ZENGFX 2018/2/11 11:39:38
FILENAME: P:\projects\602734\SUBMING\SKETCH\SK7018.dgn

REV	DESCRIPTION	BY	DATE	APPROVED	REV	DESCRIPTION	BY	DATE	APPROVED

DRAWN	ZFX
DESIGNED	LCLL
CHECKED	LCLL
APPROVED	IMW
DATE	08/FER/2018

MTR

SHATIN TO CENTRAL LINK

ORIGINATOR

AECOM

CADD REF. SK7018.dgn

TITLE

C11033

SCL (TAW - HUH)

AREAS COVERED BY EP-438/2012 IN HUNG HOM

SCALE	FIGURE NO.	REV.
1 : 5000 (A3)	FIGURE 1.1	–

832000 E
836000 E
840000 E
844000 E
824000 N
820000 N

1101
1102
HIN KENG STATION (HIK)
1103
1103
1106
DIAMOND HILL STATION (DIH)
1107
KAI TAK STATION (KAT)
1108
SUNG WONG TOI STATION (SUW)
(FORMERLY NAMED AS TO KWA WAN STATION (TKW))
TO KWA WAN STATION (TKW)
(FORMERLY NAMED AS MA TAU WAI STATION (MTW))
1109
HO MAN TIN STATION (HOM)
1111
1112
HUNG HOM STATION (HUH)
HUNG HOM STABLING SIDINGS (HHS)

KOWLOON BAY
NORTH POINT
VICTORIA HARBOUR
KWUN TONG TYPHOON SHELTER

0 200 400 600 800 1000
METRES
1 : 40000

LEGEND :

- PROPOSED ALIGNMENT
- PROPOSED STATION
- HUNG HOM STABLING SIDINGS
- HHS TRACKS (UNDER SCL(HHS) EIA REPORT)

PLOT DRV: v:\ustnset\MTR\PLOTDRIVER\WINDOWS\A3 COLOUR.plt
MODEL: PRINTED BY: CAOPA 2008/2/9 16:40:04
MODELNAME: P:\projects\60273491\DRAWING\SKETCH\SK7017.dgn
FILENAME:

REV	DESCRIPTION	BY	DATE	APPROVED
B	SECOND ISSUE	GL	06/12	ST
A	FIRST ISSUE	GL	02/12	ST

DRAWN	GL
DESIGNED	LK
CHECKED	FC
APPROVED	ST
DATE	JUN/2012

MTR

SHATIN TO CENTRAL LINK

ORIGINATOR
AECOM

CADD REF.
SK7017.dgn

TITLE
C11033
SCL (TAW - HUH)
WORKS CONTRACT OF THE PROJECT

SCALE	FIGURE NO.	REV.
1:40000 (A3)	FIGURE 1.2	B