Agreement No. CE 7/2011(HY)

Tuen Mun – Chek Lap Kok Link – Design and Construction

Landscape and Visual Plan
(Ref. A37-04B) Rev.A

HIGHWAYS DEPARTMENT
MAJOR WORKS PROJECT MANAGEMENT OFFICE
(SPECIAL DUTIES)

Agreement No. CE 7/2011(HY)
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Landscape and Visual Plan

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1 INTRODUCTION

1.1 This Assignment

1.1.1 In accordance with Agreement No. CE 7/2011 (HY), signed on 28 November 2011, AECOM Asia Co. Ltd. (the Consultants) will provide design and construction services for the Tuen Mun – Chek Lap Kok Link Project.

1.2 Background

1.2.1 Based on the Northwest New Territories (NWNT) Traffic and Infrastructure Review conducted by Transport Department, the existing traffic corridor comprising Tuen Mun Road, Ting Kau Bridge, Lantau Link and North Lantau Highway (NLH) will be operating beyond capacity after 2016 due to the increase in cross boundary traffic, and projected developments in the NWNT and North Lantau, including the Airport developments and the Hong Kong-Zhuhai-Macao Bridge (HZMB). It is therefore necessary to provide a new connection between NWNT and North Lantau to cope with the anticipated increase in traffic demand.

1.2.2 The road link comprising the proposed Tuen Mun – Chek Lap Kok Link (TM-CLKL) and Tuen Mun Western Bypass (TMWB) was one of the possible highway infrastructure options identified under the NWNT Traffic and Infrastructure Review. The TM-CLKL will also serve as an alternative route to the HKBCF, the HKIA and Tung Chung independent of North Lantau Highway (NLH).

1.2.3 In November 2005, HyD engaged Messrs. Ove Arup & Partners Hong Kong Limited to undertake an engineering feasibility study (CE28/05) to evaluate the feasibility and impact of the proposed TM-CLKL and TMWB. The feasibility study recommended that the TM-CLKL should be a dual 2-lane road with a total length of about 9km including subsea tunnel and elevated structures.

1.2.4 In May 2008, HyD engaged Messrs. AECOM Asia Co. Ltd. to undertake the investigation and preliminary design of the TM-CLKL under CE52/07 (referred to hereinafter as the Investigation Assignment). The main tasks under the Investigation Assignment included review of the previous feasibility study, formulation and evaluation of alignment options, carrying out preliminary design of the proposed works, conducting EIA and other various impact assessments (including the TIA, MIA, DIA, SIA, WIA, natural terrain hazard assessment, geotechnical assessment, utilities impact assessment, etc.), engineering studies and site investigation works. The preliminary design of the TM-CLKL was substantially completed.

1.2.5 In the Investigation Assignment, constraints which have been taken into consideration in the selection of the TM-CLKL alignment option include, but not limited to, the following:

(a) the existing and future widening of Urmston Road;

(b) the FSD Fireboat Station and the associated berths at Tuen Mun River Trade Terminal;

(c) the proposed crematorium and columbarium funeral services centre at Tuen Mun Area 46;

(d) the Tuen Mun Immigration Anchorage and Sham Shui Kok Anchorage;

(e) the existing and planned marine borrow pits and mud disposal pits (including the three proposed contaminated mud pit at south of the Brothers);

(f) the existing and planned submarine utilities connecting HKIA and Tuen Mun;

(g) the existing & future Tung Chung Navigation Channel;

(h) the future development at North Lantau (including Tung Chung east development, Lantau Logistics Park and its extension, Road P1 and Tai Ho Interchange, etc.);

(i) the Designated Area of Northshore Lantau;

(j) the Airport Railway;

(k) the Pak Mong Site of Archaeological Interest and Tai Ho Site of Archaeological Interest;

(l) the Hong Kong International Airport Approach Areas around Airport Island;

(m) the Airport Height Restriction;

(n) the Hong Kong Observatory's aviation beacons and meterological equipment; and

(o) the interface with other projects including HKBCF, TMWB, Further Landscape Enhancement to NLH; proposed Tuen Mun Western Trunk Sewerage projects, etc

1.2.6 Compared with the recommendations given in the feasibility study (CE 28/05), the Investigation Assignment (CE 52/07) has the following major changes:

(a) The southern landfall of the subsea tunnel was proposed to be integrated with the HKBCF located at the northeast water off the Airport Island, instead of adjacent to Tai Mo To. This arrangement helps reducing substantial amount of dredging works and seawall construction. With TM-CLKL located at east of the HKBCF, traffic from HZMB can go directly to NWNT via TM-CLKL Northern Connection (i.e. which comprises mainly the subsea tunnel, cut-and-cover tunnels at the landfalls and viaducts, at-grade roads and a toll plaza at Tuen Mun side) or to the urban area via TM-CLKL Southern Connection (which comprises mainly the sea viaduct and link roads at Lantau) and NLH. Traffic to/from the HKBCF will not need to route through Tung Chung and the Airport Island, thus minimizing the environmental and traffic impacts to Tung Chung New Town.

(b) The subsea tunnel was proposed to be constructed by TBM instead of the traditional immersed tube method. The construction method avoids dredging and disposal of substantial amount of marine sediment, diversion of the submarine power cables currently serving the HKIA and reducing the impact on the marine traffic on the busy Urmston Road. It also minimizes the impacts on the marine ecology.

(c) A combined toll plaza at Tuen Mun Area 46 was proposed to serve both TM-CLKL and TMWB, assuming that both TM-CLKL and TMWB would be tolled (the tolling strategy of TMWB is also subject to review under TMWB project).

Above major changes were incorporated into the EIA Report for the TM-CLKL project, and the Report was approved by EPD (Register No. AEIAR-146/2009) under the EIAO on 23 October 2009, and an Environmental Permit (reference No. EP-354/2009) was issued by EPD on 4 November 2009 with a set of conditions to be followed.

1.2.7 On 12 June 2009, the draft Chek Lap Kok Outline Zoning Plan (OZP) No. S/I-CLK/11, with the southern landfall of TM-CLKL together with HKBCF shown, was gazetted under the Town Planning Ordinance (Chapter 131) (G.N.3600). This draft OZP was approved and subsequently renumbered as S/I-CLK/12 on 18 October 2011. On 21 August 2009, the road and scheme of TM-CLKL was gazetted under the Roads (Works, Use and Compensation) Ordinance (Chapter 370) (G.N. 5157). The statutory process is complete. Furthermore, the new draft OZP No. S/I-CLK/13 was released in Gazette on 8 May 2015.

1.2.8 In July 2009, HyD commissioned a consultancy (CE25/09) for the ground investigation works for the HKBCF reclamation (including TM-CLKL southern reclamation) and was completed.

1.2.9 In September 2009, HyD commissioned a design and construction consultancy (CE28/09) for the HKBCF reclamation works (including TM-CLKL southern reclamation). The scope of this consultancy includes the review, detailed design, tender preparation/assessment and construction supervision for the reclamation works (total about 150 hectares). The reclamation detailed design was substantially completed and the works contact has been awarded in November 2011.

1.2.10 In November 2009, HyD commissioned a ground investigation works Contract No. HY/2009/23 under CE25/09 providing essential geotechnical data for the reclamation detailed design under CE28/09. The ground investigation works was completed in 2010.

1.2.11 The TM-CLKL project is a designated project under Schedule 2 of the EIAO (Cap. 499) and an EP is required for the construction and operation of the TM-CLKL. The EIA Report for the TM-CLKL project was approved by EPD (Register No. AEIAR-146/2009) under the EIAO on 23 October 2009 and an EP (Reference No. EP-354/2009) was issued by DEP on 4 November 2009 with a set of conditions to be followed. The EIA studied the impacts of the TM-CLKL project on noise, air quality, water quality, waste management, land contamination, ecology, fisheries, landscape and visual, cultural heritage and landfill gas hazard during construction and operation stages. A comprehensive EM&A programme has been recommended for the construction and operation of the TM-CLKL. Details of the recommended environmental mitigation measures were given in the approved EIA Report and EM&A Manual.

1.2.12 In the Investigation Assignment, priority was given to adopt the drained-reclamation (instead of full-dredging) over the majority of reclamation areas, except seawall base and other areas where underground structures are located, so as to minimize the dredging and disposal of marine sediments. Nevertheless, full dredging was proposed for forming seawall base so as to ensure the stability of seawalls and minimize their settlement, and this was assumed in the EIA study of TM-CLKL.

1.2.13 In the GI and laboratory testing conducted in end 2008, most of the marine sediment was classified as Category L with some classified as Category Mp (i.e. Category M sediment passing the biological tests) according to ETWB TC(W) No. 34/2002. These results were used for the EIA study of TM-CLKL.

1.2.14 In the further GI and laboratory testing carried out in early 2010 under HY/2009/23, more Category M_p and M_f (i.e. Category M sediment failing the biological tests) marine sediment was found at the southern landfall of TM-CLKL (refer to hereinafter as Southern Landfall). Under CE28/09, the seawall design for the Southern Landfall and HKBCF were reviewed and revised to the non-dredged method where the seawall structure is in the form of circular cells formed by interlocking of steel sheet piles. On 15 November 2010, application for variation of EP (Application No. VEP-331/2010) was made for the design change of the Southern Landfall and an amended Environmental Permit (No. EP-354/2009/A) was issued by DEP on 8 December 2010.

1.2.15 In the further GI and laboratory testing conducted for northern landfall of TM-CLKL (referred to hereinafter as Northern Landfall) and along the marine viaducts of Southern Connection in 2010, more Category M_p and M_f sediment was found. The Sediment Quality Report was submitted to EPD for approval in April 2011.

1.2.16 As more Category M marine sediment was found, there is a need to review the reclamation design of the Northern Landfall, with a view to minimize the dredging and disposal of marine sediments as far as practicable, and to derive suitable method to handle the marine sediment. In addition, as these marine sediments will be excavated during the construction of the cut-and-cover tunnels and tunnel shafts of TM-CLKL, it is necessary to assess and recommend measures to handle these materials and apply for the subsequent variation of EP for the Project. In view of the above circumstances, a VEP-426/2014 was submitted to EPD in January 2014 and an EP (Reference No. EP-354/2009/B) was issued by DEP on 28 January 2014.

1.2.17 In October 2010, HyD commissioned an independent expert review on geotechnical design and construction of the proposed subsea TBM tunnel under Agreement No. HHZMB3/10. The review was completed in January 2011. The principal objectives of the Independent Review are:-

(a) to review the working papers, reports and documents about the geotechnical design of the subsea TBM tunnel prepared under the Investigation Assignment and those prepared under CE28/09, and to advise on whether areas of concerns that would have significant adverse impact on the Project have been adequately addressed; and

(b) to advise on the constructability of the large diameter TBM tunnels and the cross-passages; risk mitigation measures; and recommend any necessary further ground investigation, based on the outcome of the review.

1.2.18 In December 2010, HyD engaged Messrs. AECOM Asia Co. Ltd. under CE13/10 to undertake the detailed design, tendering and construction supervision of the superstructures and infrastructures of HKBCF as well as the TCSS of the HKLR and TM-CLKL Southern Connection for achieving a coherent, consistent and efficient system-wide TCSS design for the closely related HKBCF, HKLR and TM-CLKL Southern Connection.

1.2.19 According to the EPs of the HKLR, HKBCF and TM-CLKL projects, an independent Environmental Project Office (ENPO) is required to oversee the cumulative environmental impacts arising from the projects and other concurrent projects in the adjoining area and to liaise closely with the Mainland project teams for the HZMB Main Bridge next to Hong Kong Territory within Mainland waters. The duties of ENPO and Independent Environmental Checker (IEC) of the HKLR, HKBCF and TM-CLKL projects would be undertaken and performed by a separate consultancy.

1.2.20 To facilitate the first construction contract for HKBCF reclamation and the TM-CLKL advance southern reclamation works, HyD commissioned a consultancy to undertake a baseline environmental monitoring as required in the EPs for HZMB Hong Kong projects before the award of the first contract.

1.2.21 A further baseline Pitcher Plant survey was conducted in September 2013 and confirmed the construction of the future Toll Plaza at Tuen Mun will affect the existing Pitcher Plant. As a result, it was proposed to transplant the affected Pitcher Plants. A VEP-456/2014 was submitted to EPD and an EP (Reference No. EP-354/2009/C) was issued by DEP on 10 December 2014.

1.2.22 Grouting trial for stone column was to be carried out at the designated areas. A VEP-469/2015 was submitted to EPD and an EP (Reference No. EP-354/2009/D) was issued by DEP on 13 March 2015.

1.2.23 The 2019 Policy Address has required that "… *waiving the tolls of the new TM-CLKL Subsea Tunnel and the Lantau Link upon the commissioning of the TM-CLKL Subsea Tunnel scheduled for the end of 2020* …" In response to this Policy Address requirement, no toll would be constructed for the TM-CLKL project. It was also decided to free up the areas for gainful use, and the site would be allocated to the bus company through short term tenancy (STT) for bus depot/ parking sites. There would not be new road/ road widening/ additional road lanes, and the project site area would only be reduced. HyD applied for surrender of part of the TM-CLKL EP relating to the scope of the Toll Plaza. The future bus company depot/ parking site would be excluded from the scope of the EP.

1.3 The Project

1.3.1 The scope of the whole TM-CLKL project comprises the followings:

(a) Construction of a dual 2-lane road tunnel (in two tubes) of approximately 5.0km long between Tuen Mun and the proposed HKBCF at northeast of HKIA;

(b) Construction of sections of seawalls of approximately 4.2km long and Government foreshore and/or sea-bed to be reclaimed to form approximately 35.6hectares of land for the construction of the proposed TM-CLKL and the proposed associated tunnel portals, buildings, carriageways, footpaths, central reserve/refuge islands and the ancillary works.;

(c) Construction of approach roads to the subsea tunnel including cut-and-cover tunnels at both the Southern Landfall and the Northern Landfall;

(d) Construction of maintenance access roads on the Northern and Southern Landfalls;

(e) Construction of a dual 2-lane marine viaduct of approximately 1.6km long across the sea between the proposed HKBCF and NLH;

(f) Construction of four slip roads connecting the marine viaduct with the NLH;

(g) Construction of a single 2-lane viaduct and a single 3-lane viaduct, each of approximately 500m long, connecting the associated roads in Tuen Mun and the Northern Landfall;

(h) Site formation for construction of the road deck, including construction of associated slope works with natural terrain hazard mitigation measures and retaining structures at Tuen Mun Area 46;

(i) Construction of the associated carriageways and a footbridge at Tuen Mun Area 46;

(j) Construction of a vehicular underpass to connect the road deck and the roundabout at Lung Mun Road / Lung Fu Road;

(k) Modification and realignment of existing Lung Mun Road and Lung Fu Road including reconstruction/modification of sections of existing carriageways, footpaths and cycle tracks, utility diversion works to facilitate the construction of the substructure of the road deck;

(l) Construction of administration building, main control building, maintenance depot and ancillary buildings, control points and facilities at the compound area (such as workshops, garage, training ground, petrol filling station, etc.), satellite control building, ventilation buildings and associated building services works to serve the proposed tunnel;

(m) Extension of the existing 4-cells box culvert adjacent to Tuen Mun River Trade Terminal;

(n) Construction of a temporary pontoon and re-provisioning of existing government berths and associated facilities at Tuen Mun River Trade Terminal;

(o) Realignment of the seawall maintenance road at the seafront of North Lantau, including modification of the existing seawall for construction of the foundation works of the proposed elevated carriageway;

(p) Modification and realignment of sections of NLH and Cheung Tung Road including construction of associated slope works with natural terrain hazard mitigation measures and utility diversion works;

(q) Laying of a fire main along Cheung Tung Road (this works element is identified after finalizing the road scheme for gazette);

(r) Relocation of two public lighting substations along Cheung Tung Road as agreed with relevant management and maintenance authorities;

(s) Construction of route-wide E&M works, TCSS and facilities for the TM-CLKL, including ventilation, street lighting and tunnel lighting, fire services system, tunnel operation and control systems, communication systems, security and access control system, supervisory control and data acquisition system, power supply, central monitoring and control system power supply and distribution systems; and

(t) Construction of associated works including civil, structural, geotechnical, marine, drainage, sewerage, environmental protection and mitigation, landscaping, traffic aids including sign gantries, traffic signs, directional signs and road markings, water works and utilities works.

1.3.2 Under the Investigation Assignment, the works of TM-CLKL are recommended to be constructed under six packages by either "Design and Build" (D&B) approach or conventional "Designer-Led" approach. Both the detailed design and construction of the first package for advance work of TM-CLKL (i.e. the Southern Landfall reclamation) has been entrusted to the HKBCF project. Subject to the review under this Assignment on the contract strategy and packaging, the remaining works of the Project will be constructed by five works contracts. The scope and the assumed approach for each of the works contracts are listed below.

Contract 1 - Southern Connection including all viaducts and slip roads connecting the HKBCF and NLH and associated re-alignment of Cheung Tung Road, slopeworks, natural terrain hazard mitigation works and laying of a fire main along Cheung Tung Road (D&B approach, except the landscaping works).

Contract 2 - Tunnel Section including Northern Landfall reclamation (including temporary pontoon for berthing and re-provisioning of government berths), extension of box culvert, subsea TBM tunnel (two tubes and some cross passages), cut-and-cover tunnels, approach roads, at-grade roads, North Ventilation Building and South Ventilation Building at the Northern Landfall and Southern Landfall respectively (D&B approach, except Northern Landfall reclamation and extension of box-culvert).

Contract 3 - The associated connections including viaducts connecting with Northern Landfall, a footbridge, a vehicular underpass, Lung Mun Road and Lung Fu Road junction modification works, slip roads, roundabout and realignment of a section of Lung Mun Road ("Designer-Led" approach).

Contract 4 - All Tunnel Buildings and Route-wide E&M works including the main control building, maintenance depot and training ground, administration building, petrol filling station, ventilation buildings, satellite control building, control points and facilities, re-provision of C&ED and FSD Buildings (excluding North Ventilation Building and South Ventilation Building which are included in Contract 2 above), including building services.

Contract 5 - Route-wide TCSS system (Design, supply and installation of a traffic control and surveillance system for the TM-CLKL Northern Connection).

The extent and scope of the above Contracts 1 to 5, including the responsibility of implementation of landscape works are shown on Figures 1.1 – 1.6.

1.3.3 The works will be implemented according to the following anticipated schedules:

<u>Contract 1 – Contract No. HY/2012/07 – Southern Connection Viaduct Section</u>

Design and Construction Period June 2013 to 1st half of 2019 at the earliest

<u>Contract 2 – Contract No. HY/2012/08 – Northern Connection Sub-sea Tunnel Section</u>

Design and Construction Period August 2013 to 2020 at the earliest

<u>Contract 3 – Contract No. HY/2013/12 – Northern Connection Toll Plaza and Associated Works</u>

Construction Period July 2014 to 1st half of 2019

<u>Contract 4 – Contract No. HY/2017/10 – Northern Connection Tunnel Buildings, Electrical and Mechanical Works</u>

Construction Period May 2018 to 2020 at the earliest

<u>Contract 5 – Contract No. HY/2014/10 – Northern Connection Traffic Control and Surveillance System</u>

Design and Construction Period May 2018 to 2020 at the earliest

1.3.4 Under Contract No. HY/2012/07, part of the landscape softworks has been entrusted to Contract No. DC/2016/01, *Construction of an Additional Sewage Rising Main between Tung Chung and Siu Ho Wan and Associated Works*. A new rising main is needed to be constructed in order to free the existing rising main conveying sewage from the Airport and Tung Chung to Siu Ho Wan Sewage Treatment Works for rehabilitation. The major benefit of this project is to enhance the operation reliability of the sewerage. In view of the importance of the project, part of the landscape softworks has been entrusted to this project so that sewage works could commence as soon as possible. It would be most undesirable if the plantings completed in Contract No. HY/2012/07 are to be removed shortly after for construction of the proposed sewer. The EP requirements on the landscape softworks still apply to the entrusted works. The anticipated completion of the entrusted landscape softworks is by June 2021 at the earliest. The portion of the entrusted landscape softworks is demarcated in the landscape master plans in **Appendix D**.

1.4 Scope of this Landscape and Visual Plan

1.4.1 The Landscape and Visual Plan (LVP) is prepared in accordance with Condition 2.9 of the prevailing EP No. EP-354/2009/D. The LVP for the Project shall cover the aesthetic design of the viaduct, building structures and streetscape elements, detailed tree preservation, transplanting and felling proposal, compensatory planting proposals to provide at least 33 ha of landscape planting, and other measures including night-time lighting control.

1.4.2 The proposed General Layout and the limit of site boundary for the Project are illustrated in **Appendix A**. The scope and extent of the five contracts involved in the TM-CKLK Project is also tabulated and illustrated in **Appendix A** of this Plan.

1.4.3 With reference to Para 1.2.6(c) of this LVP, a combined toll plaza strategy to serve both the TM-CLKL and TMWB was considered and adopted in the approved EIA Report (AEIAR-146/2009). The latest design and the road alignment of TM-CLKL exclude the road layout of TMWB and its associated buildings, roadside planting and streetscape treatment. Subsequently the scope of this LVP does not include the layout and works of TMWB and the recommended mitigation measures for their associated landscape and visual impact.

1.4.4 With reference to Para 1.2.23, this LVP will not include the toll plaza, the toll collection facilities and the future bus company bus depot/ parking site.

1.4.5 Following this introductory section, the remainder of this LVP is arranged as follows:

- Section 2 describes design considerations for the Project;
- Section 3 describes the detail implementation of the mitigation measures in reference to the approved EIA Report;
- Section 4 summarizes the findings.

1.5 Abbreviations

1.5.1 The following abbreviations are used in this LVP:

1.5.2 Government Departments

CEDD	Civil Engineering and Development Department
C&ED	Customs and Excise Department
DevB	Development Bureau
DSD	Drainage Services Department
EMSD	Electrical and Mechanical Services Department
EPD	Environmental Protection Department
FSD	Fire Services Department
GLTMS	Greening, Landscape and Tree Management Section
HyD	Highways Department
HyD/Lighting	Highways Department/Lighting Division
LandsD	Lands Department
TD	Transport Department
WSD	Water Supplies Department

Others

ACABAS	Advisory Committee on the Appearance of Bridges and Associated Structures
HKIA	Hong Kong International Airport
MTRC	Mass Transit Railway Corporation

1.5.3 Road/Places

CTR	Cheung Tung Road
HKBCF	Hong Kong Boundary Crossing Facilities
HZMB	Hong Kong – Zhuhai – Macao Bridge
LFR	Lung Fu Road
LMR	Lung Mun Road
LLP	Lantau Logistics Park
NLH	North Lantau Highway
PDA	Potential Development Area
TM-CLKL	Tuen Mun – Chek Lap Kok Link
TMWB	Tuen Mun Western Bypass

2 DESIGN CONSIDERATIONS

2.1 Landscape Design Considerations

2.1.1 In Section 10.9 of the approved EIA Report, design measures are proposed as landscape and visual mitigation measures during detailed design stage. The measures are considered and will be adopted in the construction as far as practical.

2.1.2 In the development of the design for landscape works, the followings pose constraints on tree planting and greening provision on the TM-CLKL project.

- **Public Lighting Design Manual (PLDM) (3rd Edition: October 2016)**
  As stipulated in the PLDM (3rd Edition: October 2016), *"In general, the trees shall be planted at least 10m away from the road lighting columns and 15m away from high mast lighting column. To avoid obstruction to maintenance access, no planting of bushes shall be allowed in an area of at least 1m radius from the lamp post."* Tree plantings are about 10m offset from the street lighting in TM-CLKL.

- **Structures Design Manual for Highways and Railways (2013 Edition)**
  As stipulated in the SDM (2013 Edition, *"Placement of soft and hard landscape elements shall not obstruct the motorists' sight lines and visibility splays as recommended in the Transport Planning and Design Manual (TPDM) Volume 3, Section 3."* A balance will be seeked between the area suitable for tree planting and the safety of motorists.

- **Hong Kong International Airport**
  Planting at the Southern Landfall is required to follow the guidelines described in the Hong Kong International Airport Approved Plant Species List (Revision 4.0.1: October 2015) [APSL]. Relevant restrictions of the planting design shall follow the APSL. The planting area fall within Zone 1 and Zone 2 of the APSL. Basically, Zone 1 is a no-tree zone and tree planting restrictions applied in Zone 2. However, to maximize tree planting to meet the compensatory tree quantity under the tree removal applications, an alternative tree planting proposal was submitted to the HKIA and "no adverse comment" was received from the perspective of birdstrike risk management.

- **Potential Development Area**
  There are areas within the TM-CLKL that are potential development areas under the "Planning and Engineering Study for Tuen Mun Areas 40 and 46 and the Adjoining Areas". Tree planting is not recommended for the potential development area (PDA) as the trees will likely to be removed for the development of the PDA. Planting within the PDA is considered short term and is also not counted towards the compensatory planting area for the EP condition in order not to jeopardize the future land uses. Government lots will be fenced off and will be returned to LandsD in condition to their satisfaction.

- **Areas under Shade**
  Areas under shade includes places under the cover of the road deck and viaducts and in general not favorable for tree planting for the healthy development of trees.

- **Slope Planting**
  The types of planting on man-made slopes are subject to the angles, the locations and substrate conditions of the slopes. Reference is made to "GEO Publication No. 1/2011 Technical Guidelines on Landscape Treatment for Slopes" in the planting proposal for man-made slopes. Slopes with rocky substrate condition limited the size and quantity of tree planting. Compensatory tree planting proposals for slopes under the maintenance of HyD have been reviewed and commented by HyD/Landscape Division on the tree species, sizes, spacing and locations.

- **Underground Utilities**
  There are existing underground utilities within some of the planting areas and a considerable amount of land area is reserved for accommodation of new underground utilities and underground structures, especially for roadside areas and areas near tunnel entrances/exists. Tree planting is avoided in these areas as they may obstruct the necessary maintenance and inspection works of underground utilities and structures.

- **Mass Transit Railway Protection**
  MTRC has raised concern of planting within the MTR protection boundary, in particular areas near the track in North Lantau. From railway protection point of view, MTRC considers that climber planting for piers near the track is unacceptable as it will impose fire hazard to the operating railway. Trees will hit the MTR structure, fence or overhead power lines in case of collapse. Compliance of the railway protection requirement is required.

- **'Right Tree for the Right Place'**
  While all available areas within the project boundary are to be exhausted to identify suitable sites for tree planting, the basic principle of 'right tree for the right place' has to be observed, and as such sufficient space for the proper growth of trees have to be provided. Tree density should not be increased without compromising the appropriate and proper spacing for tree growth and resulting in more vegetation maintenance efforts.

  Furthermore, compensatory tree planting should be provided in locations that would bring benefits to the community and public enjoyment, and the sites should be permanent instead of temporary to avoid future transplanting/ removal. The fenced-off drainage reserve area in the Northern Landfall is not accessible to the public and thus diminishing the amenity value of the greening works. Also the fenced-off area is considered not suitable for implementing long term greening strategy due to uncertain but potential programme of development of the land. The alternative compensatory planting at the seaward side of the Northern Landfall facing towards the Butterfly Beach would bring better public enjoyment, thus enhancing the amenity value of the greening and compensatory planting works. The locations and photos of the alternative planting at the seaward side of the Northern Landfall are illustrated in **Figure 5.7** of **Appendix F**.

2.1.3 The constraints on planting pose a challenge to the landscape design. To minimize the potential landscape and visual impact, other than maximizing greening opportunities, aesthetic architectural design on the above-ground structures and buildings also serve to provide a harmonized effect. The mitigation measures proposed in the approved EIA Report and a summary of achievement of the proposed mitigation measures in different stages are consolidated in **Table 3.1** of **Section 3**.

3 MITIGATION MEASURES

3.1 Landscape and Visual Mitigation Measures

3.1.1 In Section 10.9 of the approved EIA Report, landscape and visual mitigation measures are proposed for design, construction and operation phases.

3.1.2 Implementation details and the corresponding contract of the landscape and visual mitigation measures under TM-CLKL project are summarized in **Table 3.1** below.

Table 3.1 Summary of Achievement of Mitigation Measures

ID No.	Design Measures	Summary of Achievement of the Proposed Mitigation Measures	Relevant Contract(s)
DM1	The large surface of the retaining wall along the toll plaza area shall adopt a patterned/smoother finishes and texture design to break the large surface. Climber treatment is proposed to soften the structures.	Rib pattern to break the large surface has been incorporated in the detail design of the retaining walls. In particular, for the highly visible retaining wall along Lung Mun Road below the road deck, retaining wall RW_B, there will be a graphic art design on vitreous enamel (VE) cladding panels, enhancing the roadside aesthetics and reducing the apparent height and bulkiness of the wall. Due to the under shade location of the retaining wall, greenery and sinuous pattern is adopted instead of climber treatment. The VE cladding panels and the graphic design for RW_B were accepted by ACABAS. The graphic art and the VE cladding panel sample are shown in **Figure 4.1** of **Appendix F**.	**C3**
DM2	The colour and shape of the toll control buildings, ventilation building and administration building shall adopt a design which could blend it into the vicinity elements, and the details will be developed in detailed design stage.	The design of the buildings, including North and South Ventilation Buildings, Main Control Building, Maintenance Depot, Administration Building, Satellite Control Building, the reprovisioned C&ED Building and the reprovisioned FSD Building, have been incorporated in the Aesthetic Design Submission Stage 2 reports submitted to the Design Advisory Panel of Architectural Services Department. Drawing of the North Ventilation Building under Contract 2 is shown in **Figure 3.3** of A**ppendix F**. Drawings of the buildings to be constructed under Contract 4 are shown in **Figures 5.1 to 5.6** of **Appendix F**.	**C2, C4**
DM3	Round angle, patterned finishes, and oval shaped pier were considered in the viaduct design, and further details will be developed under ACABAS submission.	The marine viaduct in North Lantau was of particular concern for the Southern Connection. Proposed aesthetic design measures incorporated in the proposed scheme of the viaduct were submitted to and accepted by ACABAS. Inherited from the schematic design, the "Seagull" scheme was taken as the design theme for the TM-CLKL Southern Connection Viaduct Section. Aesthetically, the seagull form piers are envisaged to collectively compose a picture of a group of seagulls flying across the sea channel. This conceptual design of seagull piers was accepted by ACABAS in the 341st meeting. A further ACABAS submission was made on the latest design and aesthetics enhancement for the Southern Connection Viaduct Section. Extracted ACABAS drawing is in **Figure 2.2** of **Appendix F**. For the bridge viaducts and deck in Tuen Mun, improvement designs were submitted to and accepted by ACABAS. The improvements involved reducing the bulkiness of the deck and increasing the headroom. Extracted ACABAS drawing is in **Figure 4.5** of **Appendix F**.	**C1, C3**
DM4	Details of the street furniture will be developed in the detailed design stage.	Typical street furniture mainly comprises of roadside safety railings, beam barriers, road kerbs, standard chain link fence, tactile and traffic bollard which were developed based on the standards of HyD and TD. Herringbone pattern with contrasting colour bands of concrete paving block was adopted at the footpaths on the road deck in Contract 3. The paving pattern is illustrated in **Figure 4.6** of **Appendix F**. Herringbone pattern with contrasting colour trim of concrete paving block was adopted for the footpaths in the Northern and Southern Landfalls in Contract 2. The paving pattern is shown in **Figure 3.2** of **Appendix F**.	**C1, C2, C3, C4**

ID No.	Design Measures	Summary of Achievement of the Proposed Mitigation Measures	Relevant Contract(s)
DM5	Aesthetic design of the viaduct, retaining wall and other structures will be developed under ACABAS submission.	The proposed aesthetic design for the TM-CLKL Southern Connection Viaduct Section was accepted by ACABAS in the 342nd Meeting. Further ACABAS submission was made under Contract 1 in the detailed design stage on the latest design and aesthetics enhancement for the 356th Meeting and the submission on designs of the bridge was accepted. Extracted ACABAS drawing is shown in **Figure 2.2** of **Appendix F**. Aesthetic designs of the North and South Tunnel Portals have been developed and submitted to ACABAS under Contract 2. Extracted ACABAS drawing is shown in **Figure 3.1** of **Appendix F**. For Contract 3, the aesthetic designs for the highway structures were accepted by ACABAS in the investigation assignment, in the 317th and 319th meetings. Subsequently, design amendments to some sections of the viaduct and road deck structure were submitted to ACABAS and were accepted. An extracted drawing on a section of the bridge is shown in **Figure 4.5** of **Appendix F**. Also under Contract 3, the aesthetic design for the following elements were submitted to and accepted by ACABAS: • Graphic art design on VE cladding panel for retaining wall RW_B (**Figure 4.1**) • East and West vehicular underpass portals (**Figure 4.2** and **Figure 4.3**) • Footbridge (**Figure 4.4**)	**C1, C2, C3**

ID No.	Construction Phase Mitigation Measures	Summary of Achievement of the Proposed Mitigation Measures	Relevant Contract(s)
CM1	Existing trees on boundary of the Project Area shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas.	The retained trees are preserved and protected according to the Contract Specification. As required under the Contract, the Contractors submitted the method statement for the protection of trees for approval. Photo record of typical tree protection on site is shown in **Appendix H**, **Figure 8.1** for Contract 1 and **Figure 8.7** for Contract 3.	**C1, C3**
CM2	Trees unavoidably affected by the works shall be transplanted where practical. Trees will be transplanted straight to their final receptor site and not held in a temporary nursery. A detailed Tree Transplanting Specification shall be provided in the Contract Specification. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.	Under the Contract Specification for Contract 1, 'Transplanted trees shall be relocated to the specified locations under single handling where possible. If it not possible, the Contractor shall make provision for the relocation of the transplanted trees temporarily to a holding nursery and replanting back of the transplanted trees to the specified locations.' Tree transplanting are carried out according to the Contract Specification for both Contract 1 and Contract 3. Sufficient time was reserved for root pruning. Photo record of the tree transplant process is shown in **Appendix G**, **Figure 7.1** for Contract 1 and **Figure 7.2** for Contract 3. Trees under Contract 3 are transplanted straight to their final receptor site. The final receptor sites for the transplant trees are within the project boundary and have been agreed with the relevant maintenance departments, i.e. HyD and LCSD.	**C1, C3**
CM3	Hillside and roadside screen planting to proposed roads, associated structures and slope works.	The following measures have been taken by the Contractor to allow vegetation as screening for the works during construction phase: • Vegetation not affected by works is not cleared under site clearance; • Vegetation to be affected by works will be cleared under site clearance according to phases of work. Hillside and roadside screen planting are implemented in Contract 1 and Contract 3. While there are no slope works in Contract 4, only roadside screen planting is implemented.	**C1, C3, C4**

		Photo record in **Appendix H** illustrate some locations for the implementation of CM3. Contract 1: **Figure 8.2** Contract 3: **Figure 8.7** Contract 4: **Figure 8.10**	
CM4	Hydroseeding or sheeting of soil stockpiles with visually unobtrusive material (in earth tone).	Slope works would be hydroseeded and soil stockpiles would be covered by tarpaulins to minimize dust generation in dry or windy condition. The soil stockpiles were covered by visually unobtrusive material in green tone. Photo record in **Appendix H** illustrate some locations for the implementation of CM4. Contract 1: **Figure 8.2** Contract 2: **Figure 8.4** Contract 3: **Figure 8.8** Contract 4: **Figure 8.10**	**C1, C2, C3, C4**
CM5	Screening of construction works by hoardings around works area in visually unobtrusive colours, to screen works.	Typical HyD standards have been adopted for the hoarding (i.e. HyD Standard drawing no. H6110C and H6111D) and fencing (i.e. HyD Standard drawing no. H6121B and H6122A) for works areas. For a particular demolition works on Ho Yeung Street (Portion 6), the Contractor of Contract 2 adopted an approximately 4.5m height hoarding with a sliding and folder door system to screen the demolition works. The hoarding arrangement for this demolition works area is included in **Figure 8.6i and Figure 8.6ii** in **Appendix H**. Barriers with visually unobtrusive colours were used to screen works. Photo record in **Appendix H** illustrate some locations for the implementation of CM5. Contract 1: **Figure 8.3** Contract 3: **Figure 8.8**	**C1, C2, C3**
CM6	Control night-time lighting and glare by hooding all lights.	In normal situation, the site will close at 6:00 pm and only necessary lighting installations for safety and security will be switched-on. In the course of night-time operation (beyond 6:00 pm), suitable and adequate lighting would only be fit close to the actual works area for safe working and access. No excessive lighting would be switched on. The control of lighting would also fulfil the Requirement on Aviation Aspects.	**C1, C2, C3, C4**
		• At any time, all lights shall not form a source of glare or in any way affect pilots in flight and air traffic controllers in the Air Traffic Control Tower. • All lights shall not be arranged in a way which may be mistaken as aeronautical ground lights by pilots. • All lights shall not project skyward. For those lighting that may spill out into the sky, they should be capped at the top to avoid causing glare or any misleading signals to pilots or air traffic controller. Photo record in **Appendix H** illustrate some locations for the implementation of CM6. Contract 1: **Figure 8.3** Contract 2: **Figure 8.5** Contract 3: **Figure 8.8** Contract 4: **Figure 8.11**	
CM7	Ensure no run-off into water body adjacent to the Project Area.	The measures for prevention of run-off into water body has been incorporated in the Site Drainage Management Plan that has been submitted to EPD. The measures are summarized as below: • Implementation of temporary drainage system; • Provision of wastewater treatment facilities to ensure proper treatment of wastewater generated on site; • Diversion of run-off using sand traps, silt traps, sediment basins and/or U-channels; • Provision of sand bag and earth bunds to divert run-off for wastewater treatment; • Covering of open stockpiles to prevent silty run-off. Photo record in **Appendix H** illustrate some locations for the implementation of CM7. Contract 1: **Figure 8.3** Contract 2: **Figure 8.4, Figure 8.5** Contract 3: **Figure 8.9** Contract 4: **Figure 8.11**	**C1, C2, C3, C4**
CM8	Avoidance of excessive height and bulk of buildings and structures.	The design of viaducts and associated structures were designed with consideration in aesthetics and were accepted by ACABAS.	**C1, C2, C3, C4**

		The aesthetic design of buildings was submitted to Architectural Services Department for approval under Aesthetic Design Submission Stage 2. For the North and South Ventilation Buildings under Contract 2, E&M equipment was arranged in the basement as much as practicable. The design intention in respect of building height for both buildings is to comply with the height limit under EIA (+24.25mPD).	
CM9	Recycle/Reuse all felled trees and vegetation, e.g. mulching	With reference to Development Bureau's *Guidelines on Yard Waste Reduction and Treatment*, the following measures are taken. <u>Reduce</u> • Tree stumps will be left after tree felling for natural decomposition at areas that are inaccessible to the general public and have no safety concern. <u>Recycle</u> • Yard waste are taken to areas that are inaccessible to the general public, such as vegetated areas on slopes and within expressway boundary, for natural degradation over time. <u>Reuse</u> • Wood without suspected pest and disease will be reused, e.g. soil conditioner, mulching.	**C1, C3**
CM10	Compensatory tree planting shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Felling Application process under ETWBTC 3/2006.	The Tree Removal Application report for Agreement No. CE/7/2011(HY) was approved in Year 2013 and supplementary tree removal applications have been submitted subsequently. As commented in the approval memo in Year 2013, the design of the compensatory planting proposal within the approved application requires further review and amendment. Tree planting proposals under Contract 1, Contract 3 and Contract 4 have been progressively agreed with the relevant maintenance authorities, i.e. HyD and LCSD. A summary of tree compensation to show the quantity of the required compensatory tree quantity and the tree planting quantity on the agreed planting proposals is shown in **Table E.1** in **Appendix E**.	**C1, C3, C4**

		The tree planting quantity meet the compensatory tree quantity required from the Tree Removal Applications.	
ID No.	**Operation Phase Mitigation Measures**	**Summary of Achievement of the Proposed Mitigation Measures**	**Relevant Contract(s)**
OM1	Re-vegetation of affected woodland/shrubland with native species	A mix of natives and exotic species will be provided to achieve a balance of the ornamental and ecological effect. Planting species for Contract 1 and Contract 3 with planting on slopes are shown in **Figure 6.1** and **Figure 6.2** in **Appendix F**.	**C1, C3**
OM2	Tall buffer screen tree / shrub / climber planting should be incorporated to soften hard engineering structures and facilities.	The provision of tall planting has been maximized based on site constraints such as underground utilities, the protection railway boundary of MTRC to ensure the safe operation of the railway, airport bird strike control at HKBCF, sightline and visibility requirement and the proper planting practices and guiding principles promulgated by GLTMS of DevB for the purpose to improve the growing quality of trees. Rock slopes are provided with climbers for greening. At some locations, such as the back lane of the Maintenance Depot and the planter at the Administration Building adjacent to the wall of the tunnel portal, low buffer planting is preferred over tall buffer planting for keeping an open view of the site for safety, security and operational needs. Photo record in **Figure 5.8 and Figure 5.9** in **Appendix F** illustrate some low buffer planting in the Northern Landfall.	**C1, C3, C4**
OM3	Streetscape elements (e.g. paving, signage, street furniture, lighting etc.) shall be sensitively designed in a manner that responds to the local context, and minimises potential negative landscape and visual impacts. Lighting units should be directional and minimise unnecessary light spill.	Streetscape elements are designed in accordance to HyD standard drawings and relevant manuals for the purpose of road safety. Signage is of standard designs according to standard drawings published by HyD. Lighting units are standard designs which meet the requirements set out in the Public Lighting Design Manual and HyD standard drawings. The paving pattern for the road deck and for Southern and Northern Landfalls uses light grey and dark grey concrete blocks to form simple banding pattern and simple colour trims which harmonize the grey tones of the buildings.	**C1, C2, C3, C4**

ID No.	Operation Phase Mitigation Measures	Summary of Achievement of the Proposed Mitigation Measures	Relevant Contract(s)
OM4	Structure, ornamental tree/ shrub/ climber planting should be provided along roadside amenity strips, central dividers and newly formed slopes to enhance the townscape quality and further greenery enhancement.	The provision of ornamental planting has been maximized based on site constraints such as underground utilities, the protection railway boundary of MTRC to ensure the safe operation of the railway, airport bird strike control at HKBCF, the substrate conditions and gradient of slopes, traffic sight lines, clearance from street lighting and signage, operational and security needs of the operator(s), and the proper planting practices and guiding principles promulgated by GLTMS of DevB for the purpose to improve the growing quality of trees. For prominent area such as the new roundabout area at the junction of Lung Mun Road and Lung Fu Road in Tuen Mun, the goal is to enhance the visual amenity at this junction to create a focal node. Ornamental flowering tree species (*Delonix regia* 鳳凰木 and *Tabebuia impetiginosa* 風鈴木) with lush shrub planting (*Ixora* spp. 龍船花) are proposed to enhance the visual amenity value of the area. The tree planting arrangement at this node is illustrated in **Figure 4.2** of **Appendix F**.	**C1, C3, C4**
OM5	Aesthetically pleasing design (visually unobtrusive and non-reflective) as regard to the form, material and finishes shall be incorporated to all buildings, engineering structures and associated infrastructure facilities.	The aesthetic designs of the proposed viaducts and associated structures were submitted to and accepted by the ACABAS. The aesthetic designs of all buildings were submitted to Architectural Services Department under Aesthetic Design Submission Stage 2.	**C1, C2, C3, C4**
OM6	Avoidance of excessive height and bulk of buildings and structures.	The design of viaduct and associated structures were designed with consideration in aesthetics and submissions were accepted by ACABAS. For buildings, the aesthetic designs were submitted to Architectural Services Department under Aesthetic Design Submission Stage 2. To reduce the building height for the Northern and Southern Ventilation Buildings, the E&M equipment is arranged into the basement as much as practicable. The design intention in respect of building height for both buildings is to comply with the height limit under EIA (+24.25mPD).	**C1, C2, C3, C4**

3.2 Compensatory Landscape Planting

3.2.1 According to the Condition 2.9 of Environmental Permit No. EP-354/2009/D, at least 33 ha of landscape planting are required for the whole TM-CLKL Project. The compensatory landscape planting areas for different contracts under this Project are tabulated in **Table 3.2** and shown in **Appendix D**.

3.2.2 A total of **approximately 34.13 ha** of landscape planting area will be achieved.

Table 3.2 Summary of Compensatory Planting Areas proposed for the Project

Contract	Location	Landscape Planting Area
Contract No. HY/2012/07 (Contract 1)	North Lantau Highway Section, Cheung Tung Road Section and the southern portion of the Southern Landfall	Approx. 14.41 ha
Contract No. HY/2013/12 (Contract 3)	Tuen Mun Section	Approx. 5.35 ha
Contract No. HY/2017/10 (Contract 4)	Northern Landfall at Tuen Mun and the northern portion of the Southern Landfall	Approx. 14.37 ha
	Total Landscape Planting Area:	Approx. 34.13 ha

3.3 Tree Compensation

3.3.1 Compensatory tree planting shall meet the higher quantity as stated in the approved EIA Report, i.e. 6,300 heavy standard trees and light standard trees as compared to the compensatory tree quantity from tree removal applications (mitigation measure CM10) which is 5,108. The summary of tree compensation in **Table E.1** summarized the tree compensation including transplant trees required in the approved EIA Report, in the tree removal applications and presented in this LVP.

3.3.2 Based on the approved planting proposals with the relevant maintenance departments/ agents, 5,353 heavy standard trees to light standard trees could be accommodated within the project boundary in consideration of the landscape design constraints described in **Section 2** of this LVP. As such, mitigation measure CM10 is satisfied by the tree planting within the project boundary. However, to meet 6,300 trees, compensatory tree planting outside the project boundary is necessary.

3.3.3 Compensatory tree planting on slopes of HyD have been agreed with the relevant maintenance department, i.e. HyD/Landscape Division ascertained the practicality of the proposed tree planting works. The location, extent, average slope angles, tree species, size and spacing of the compensatory tree planting on each of the slope within the project boundary for compensatory tree planting are illustrated in **Appendix E.2**.

3.3.4 Proposal was made to EPD on compensatory tree planting outside the project boundary. The proposal was to meet the quantity as stated in the approved EIA Report while the tree planting on suitable and permanent slopes of HyD could also facilitate better public enjoyment and bring benefits to the community. Though out of the project boundary, the identified HyD slopes are within the same districts as the project site, i.e. Tuen Mun, Tung Chung and Penny's Bay. The location of the identified slopes, their average slope angles, quantity of compensatory trees for each slope and tentative tree schedules which have been advised by HyD/Landscape Division are

in **Appendix E.3**. Locations of tree planting shall be verified on site to suit the actual slope condition, and trees may be planted in other nearby slopes in the same districts. EPD has no comment on the proposed compensatory tree planting locations from the EIAO compliance perspective.

3.3.5 The compensatory tree planting outside the project boundary will be implemented by the TM-CLKL Project. The subsequent monitoring on the planting works will comply with the requirements in the Environmental Monitoring and Audit (EM&A) Manual as in the planting works implemented in the other contracts of TM-CLKL Project.

Table 3.3 Summary of Tree Compensation

Description	Approved EIA Report	Compensatory Tree Planting			
		Within Project Boundary	Outside Project Boundary – Tuen Mun	Outside Project Boundary – Tung Chung	Outside Project Boundary – Penny's Bay
Nos. of Compensatory Tree Planting	6,300 (approx.)	5,353	375	330	335
			375	665	
			1,040		
Total	**6,300 nos. (approx.) (Tree Size: Light Standard, Heavy Standard)**	**6,393 nos. (Tree Size: Light Standard to Heavy Standard)**			

4 CONCLUSION

4.1.1 The LVP is prepared in fulfilment of Condition 2.9 of Environmental Permit No. EP-354/2009/D. This LVP submission covers the whole TM-CLKL project site.

4.1.2 This LVP for TM-CLKL is prepared based on the latest engineering information.

4.1.3 All relevant mitigation measures listed in Section 10.9 of the approved EIA Report (Register No.:AEIAR-146/2009) have been considered and incorporated into the landscape design and construction as far as practicable.

4.1.4 The 33 ha compensatory planting area as required under Condition 2.9 of Environmental Permit No. EP-354/2009/D is achieved.

4.1.5 Compensatory tree planting 6300 nos. as required in the approved EIA Report is achieved.

Appendix A

General Layout and Scope of Contracts for TM-CLKL Project

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

RAMSTON ROAD

N

LEGEND:

PROPOSED TUNNEL

PROPOSED VIADUCT

TM-CLKL NORTHERN RECLAMATION

TM-CLKL SOUTHERN RECLAMATION (UNDER THE SAME D&C CONSULTANCY AND WORKS CONTRACT OF HKBCF RECLAMATION)(UNDER OTHER ASSIGNMENT)

TUEN MUN WESTERN BYPASS (UNDER OTHER ASSIGNMENT)

TUEN MUN

Contract 3
Contract No. HY/2013/12
(Refer to Figure 1.4)

NORTHERN LANDFALL

Contract 2
Contract No. HY/2012/08
(Refer to Figure 1.3)

TUEN MUN-CHEK LAP KOK LINK

NORTHERN CONNECTION

SUBSEA TBM TUNNEL

Contract 4
Contract No. HY/2017/10
(Refer to Figure 1.5)

THE BROTHERS

HONG KONG BOUNDARY CROSSING FACILITIES (UNDER OTHER ASSIGNMENT)

SOUTHERN LANDFALL

Contract 5
Contract No. HY/2014/10
(Refer to Figure 1.6)

HONG KONG INTERNATIONAL AIRPORT

SOUTHERN CONNECTION

NORTH LANTAU HIGHWAY

Contract 1
Contract No. HY/2012/07
(Refer to Figure 1.2)

HONG KONG LINK ROAD (UNDER OTHER ASSIGNMENT)

TUNG CHUNG

TAI HO WAN

Plot File by: kathnhawong 20/11/2020
PATH: V:\TO\To RSS\CD\Landscape Master Plan\20201029\dgn\FIGURE 1.1.dgn

AECOM

PROJECT
項目

TUEN MUN - CHEK LAP KOK LINK DESIGN AND CONSTRUCTION

CLIENT
業主

路政署
HIGHWAYS DEPARTMENT
主要工程管理處(專責事務)
Major Works Project Management Office (Special Duties)

CONSULTANT
工程顧問公司

AECOM Asia Company Ltd.
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分判工程顧問公司

ISSUE/REVISION
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I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核
A	SEP 20	LAYOUT UPDATE	CL

STATUS
開段

SCALE 比例
A1 1 : 1000 A3 1:2000

DIMENSION UNIT 尺寸單位
MILLIMETRES

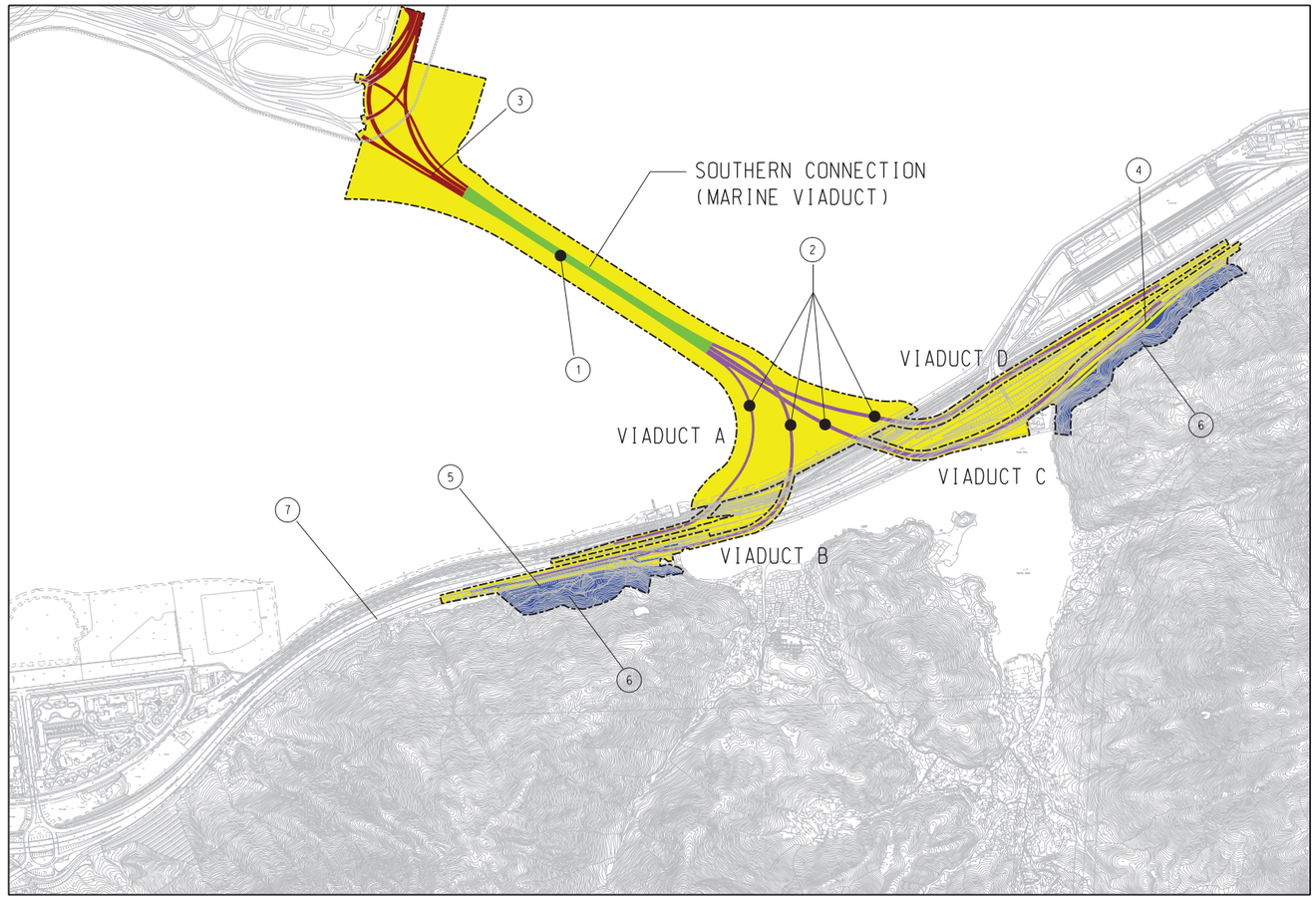
KEY PLAN
索引圖

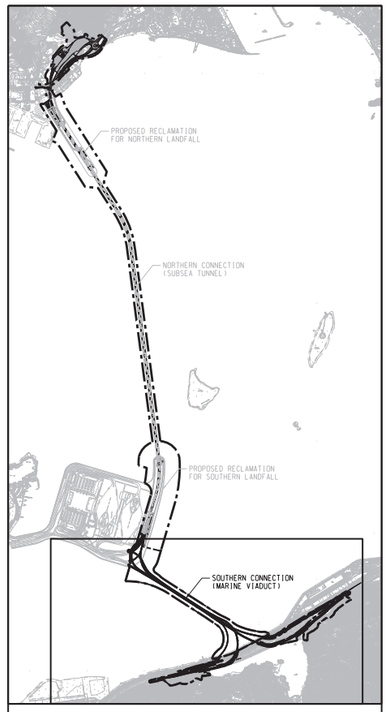
PROJECT NO. 項目編號
60240249

CONTRACT NO. 合約編號
HY/2017/10

SHEET TITLE
圖紙名稱
PROJECT LOCATION PLAN

SHEET NUMBER
圖紙編號
FIGURE 1.1





KEY PLAN

① SOUTHERN CONNECTION - A DUAL 2-LANE SEA VIADUCT OF APPROXIMATELY 1.6km LONG BETWEEN THE HZMB HKBCF AND NLH

② SOUTHERN CONNECTION - SLIP ROAD VIADUCT

- VIADUCT A
- VIADUCT B
- VIADUCT C
- VIADUCT D

③ CONNECTIONS TO HKBCF

④ RE-ALIGNMENT OF CHEUNG TUNG ROAD

⑤ SLOPEWORKS ALONG CHEUNG TUNG ROAD

⑥ NATURAL TERRAIN HAZARD MITIGATION WORKS AT CHEUNG TUNG ROAD

⑦ LAYING OF FIREMAIN ALONG CHEUNG TUNG ROAD

⑧ DRAINAGE, SEWERAGE, WATERWORKS, UTILITIES AND LANDSCAPING WORKS

⑨ LANDSCAPING WORKS IN NORTH LANTAU AND SOUTHERN LANDFALL (PORTION)

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

Plot File by: kaithnaworg 20/11/2020
PATH K:\TO\DRAWINGS\DRAFT\DF1107\Figure 1.2.dgn

AECOM

PROJECT
項目

TUEN MUN -
CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK -
SOUTHERN CONNECTION VIADUCT
SECTION

CLIENT
業主

路 政 署
HIGHWAYS DEPARTMENT
主要工程管理處(專責事務)
Major Works Project Management Office
(Special Duties)

CONSULTANT
工程顧問公司

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分判工程顧問公司

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A	SEP 20	LAYOUT UPDATE	CL

STATUS
階段

SCALE 比例
N.T.S.: 1000 A3 1:2000

DIMENSION UNIT 尺寸單位
MILLIMETRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60240249

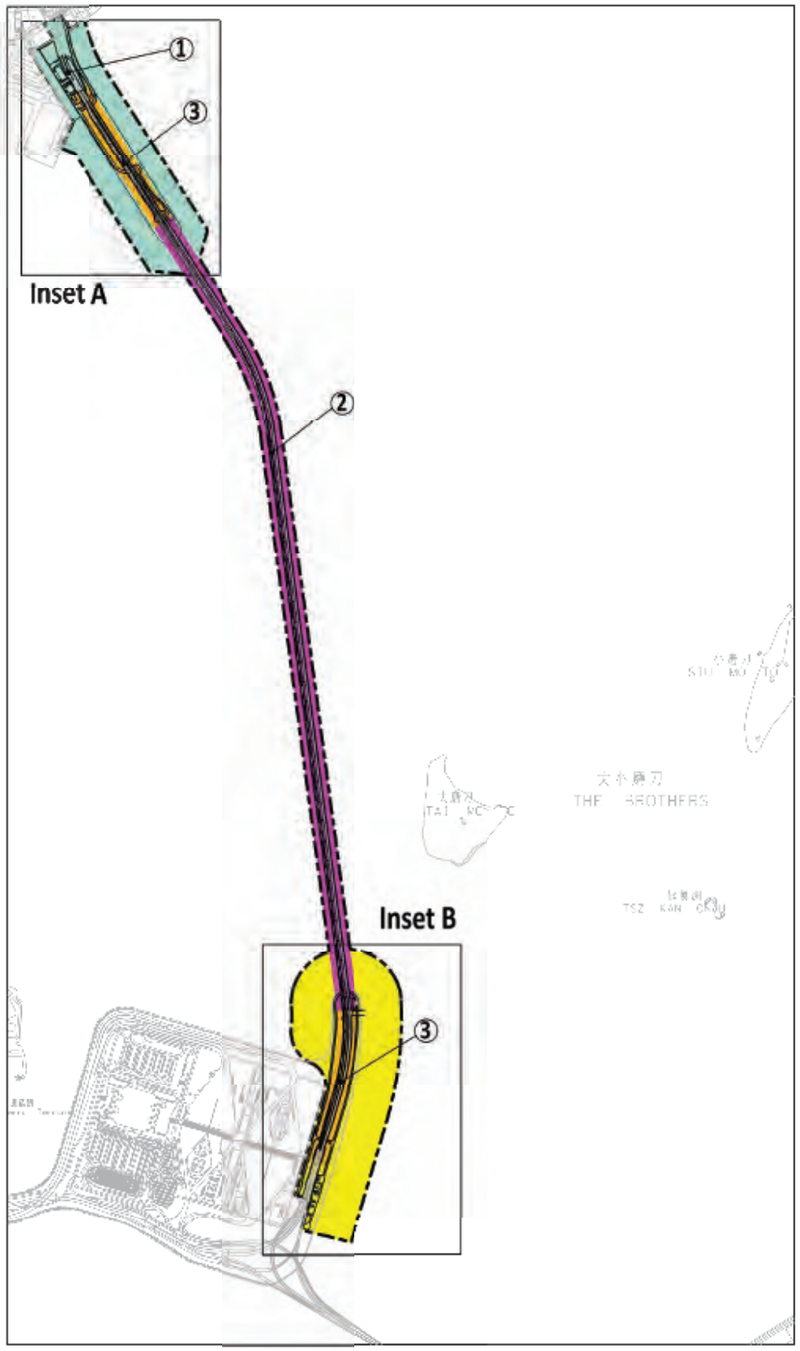
CONTRACT NO. 合約編號
HY/2012/07

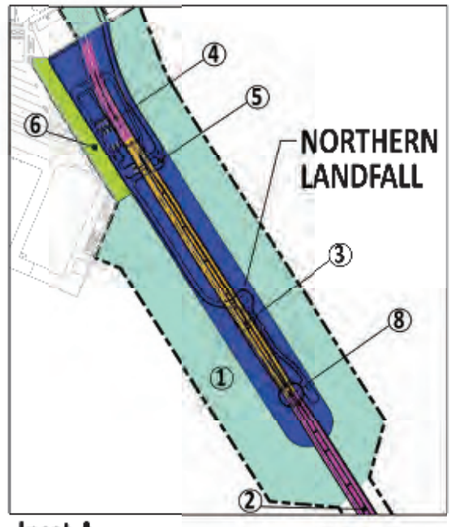
SHEET TITLE
圖紙名稱

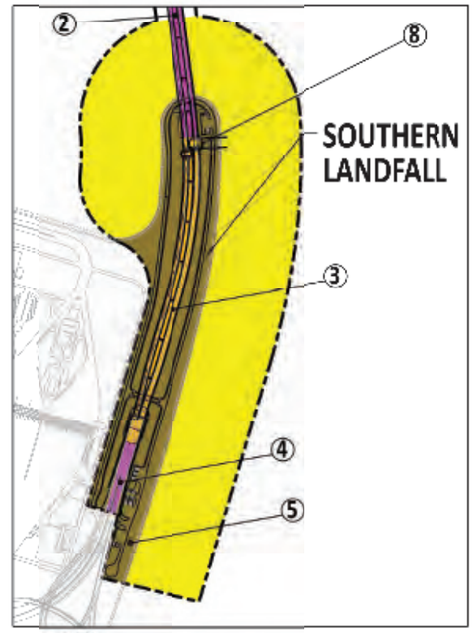
CONTRACT 1- SOUTHERN
CONNECTION VIADUCT
SECTION

SHEET NUMBER
圖紙編號

FIGURE 1.2







① Northern Reclamation of around 16.5ha with 2.10km seawall (including temporary portion for berthing and reprovisioning of Government berths)

② TBM Tunnel (2 tubes) - around 4km

③ Tunnels at Southern and Northern Landfalls - around 1.6km

④ Approach Ramp Structures and Retaining Walls

⑤ At-grade roads at Southern and Northern Landfall

⑥ Box Culvert Extension at Northern Landfall

⑦ Drainage, sewerage, waterworks, utilities at Southern and Northern Landfalls

⑧ North Ventilation Building and South Ventilation Building

AECOM

PROJECT
項目

TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION SUB-SEA TUNNEL SECTION

CLIENT
業主

路政署 HIGHWAYS DEPARTMENT
港珠澳大橋香港工程管理處 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office

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I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核對
A	SEP 20	LAYOUT UPDATE	CL

STATUS
狀況

WORKING DRAWING

SCALE 比例: N.T.S

DIMENSION UNIT 尺寸單位

KEY PLAN
索引圖

PROJECT NO. 項目編號: 60240249

CONTRACT NO. 合約編號: HY/2012/08

SHEET TITLE
圖紙名稱

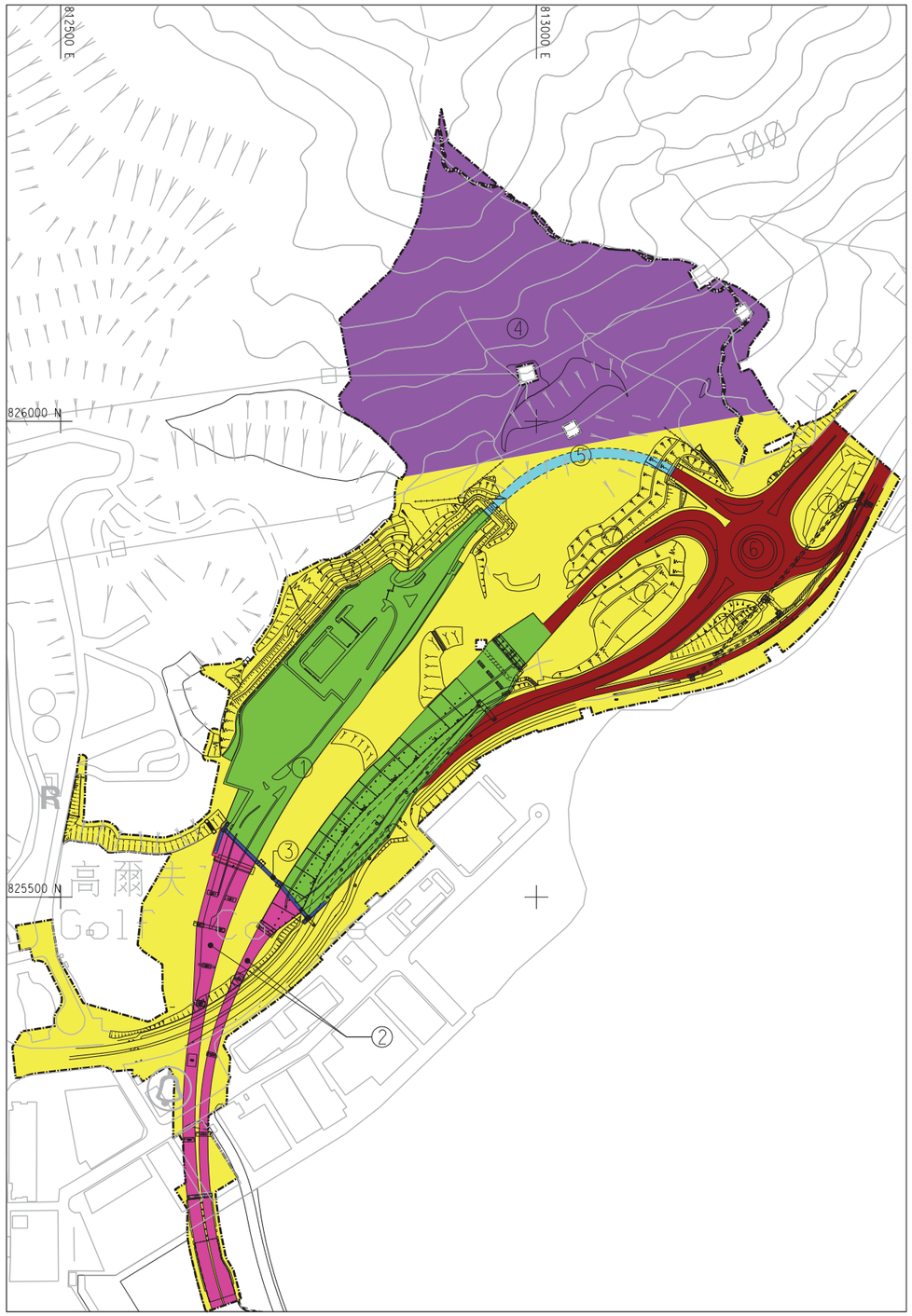
CONTRACT 2 - NORTHERN CONNECTION SUB-SEA TUNNEL SECTION

SHEET NUMBER
圖紙編號

FIGURE 1.3

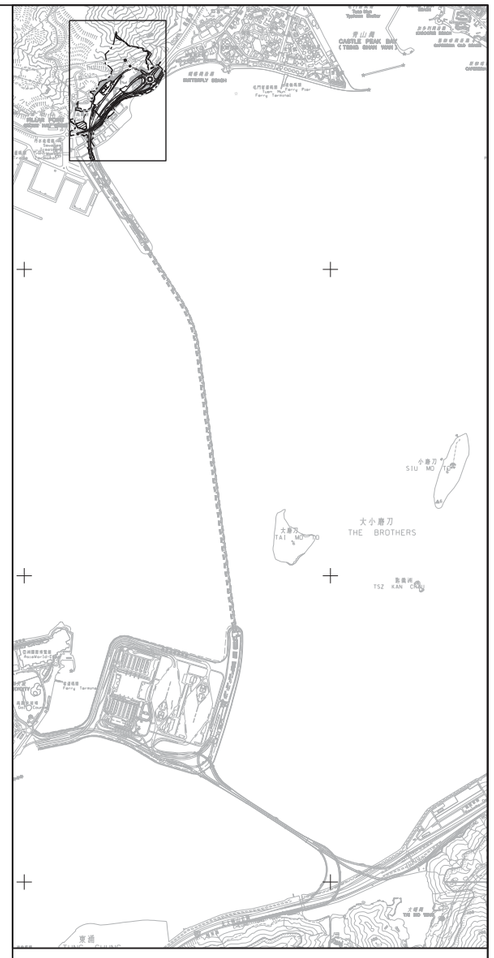
Project Management Initials: PLCK Designer: SLYY Checked: CWN Approved: ISO A1 594mm x 841mm

Plot File by: kathrinawong 10/11/2020
PATH: V:\TOTo RSS\CDL\Landscape Master Plan\20201029\C4\dgn\FIGURE 1.3.dgn



SCALE A1 1 : 3000

1. APPROACH ROAD TO VEHICULAR UNDERPASS AND TO VIADUCT
2. ASSOCIATED CONNECTIONS INCLUDING VIADUCT CONNECTING NORTH PORTAL AREA
3. FOOTBRIDGE
4. NATURAL TERRAIN HAZARD MITIGATION WORKS
5. DRILL AND BLAST TUNNEL - AROUND 230m (VEHICULAR UNDERPASS)
6. LUNG MUN ROAD AND LUNG FU ROAD JUNCTION MODIFICATION WORKS, SLIP ROADS AND ROUNDABOUT
7. SLOPE WORKS
8. DRAINAGE, SEWERAGE, WATERWORKS AND UTILITIES
9. LANDSCAPING WORKS ALONG APPROACH ROADS AND ALONG LUNG MUN ROAD AND LUNG FU ROAD



KEY PLAN
SCALE A1 1 : 30000

AECOM

PROJECT
項目

TUEN MUN -
CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TOLL PLAZA AND ASSOCIATED WORKS

CLIENT
業主

路政署
HIGHWAYS DEPARTMENT
主要工程管理處(專責事務)
Major Works Project Management Office (Special Duties)

CONSULTANT
工程顧問公司

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ISSUE/REVISION
修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核核
A	SEP 20	LAYOUT UPDATE	CL

STATUS
狀況

PRELIMINARY

SCALE 比例 — **DIMENSION UNIT** 尺寸單位

A1 1 : 3000

KEY PLAN 索引圖 A1 1 : 30000

PROJECT NO. 項目編號 — **CONTRACT NO.** 合約編號

60240249 — HY/2013/12

SHEET TITLE
圖紙名稱

CONTRACT 3 - NORTHERN CONNECTION TOLL PLAZA AND ASSOCIATED WORKS

SHEET NUMBER
圖紙編號

FIGURE 1.4

Project Management Initials: Designer: JT Checked: ALCF Approved: CWN ISO A1 594mm x 841mm

Plot File by: rtoc1 09/Nov/2020 15:11:58
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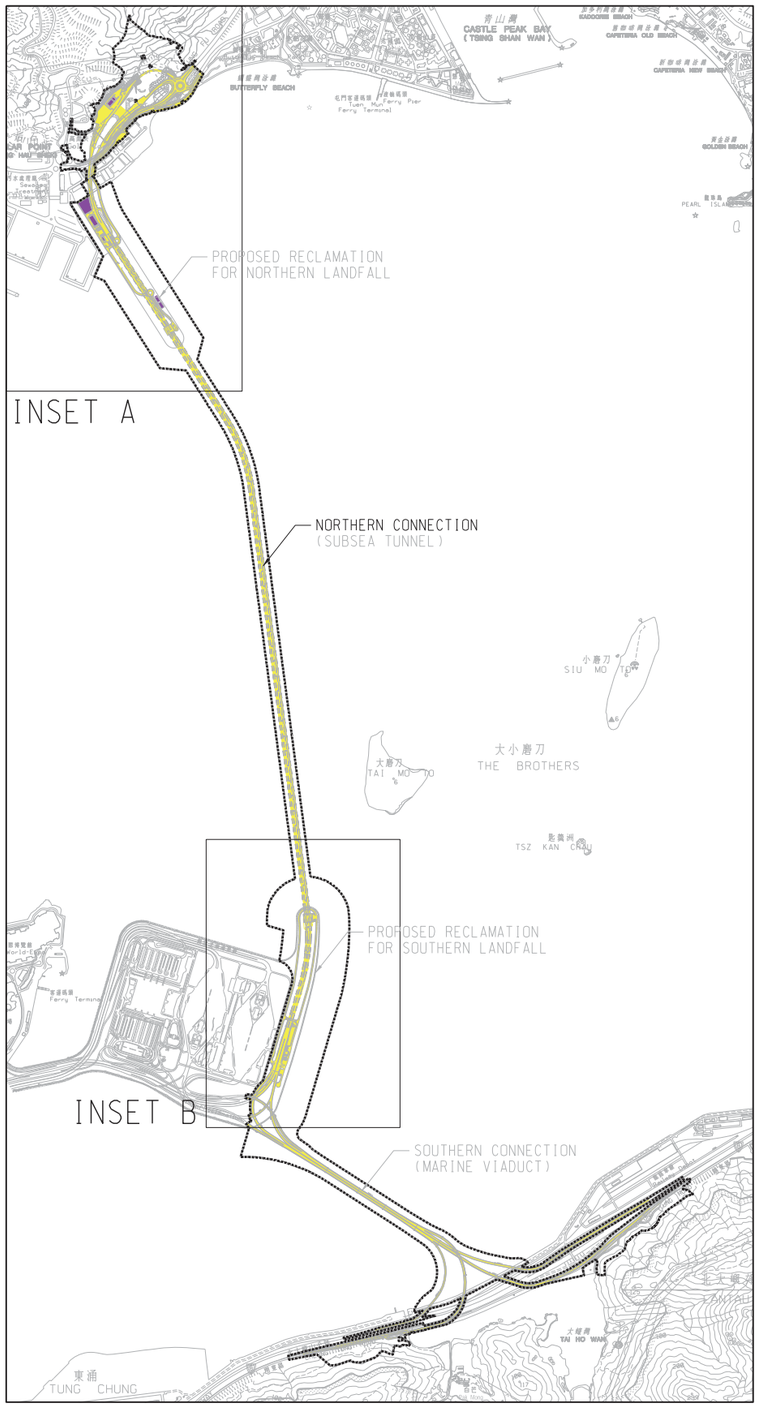
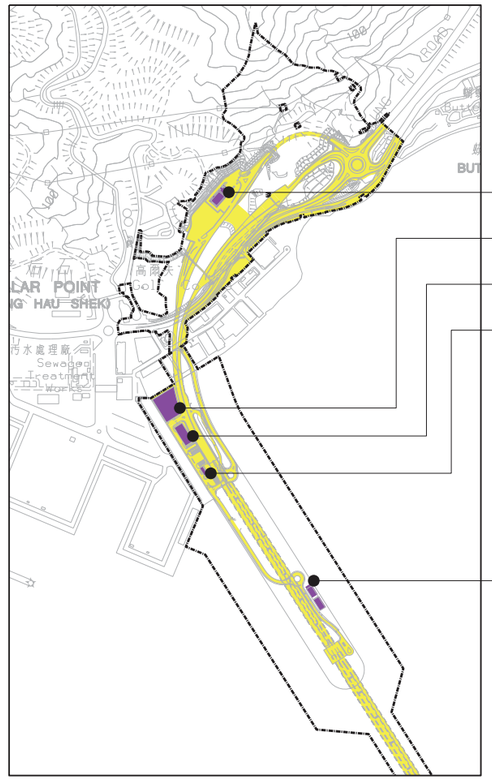
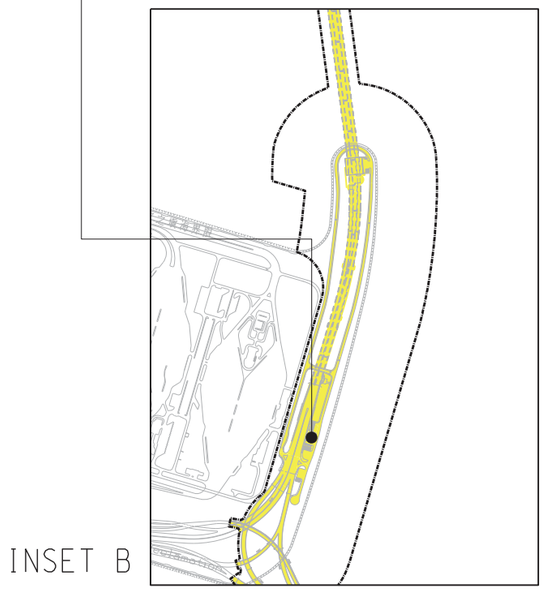




1. E & M WORKS FOR THE NORTHERN CONNECTION
2. BUILDINGS
   - MAIN CONTROL BUILDING
   - MAINTENANCE DEPOT & TRAINING GROUND
   - ADMINISTRATION BUILDING
   - PETROL FILLING STATION
   - REPROVISIONED CUSTOMS AND EXCISE DEPARTMENT AND FIRE SERVICES DEPARTMENT BUILDING AND BERTH
   - SATELLITE CONTROL BUILDING



3. LANDSCAPING WORKS IN SOUTHERN LANDFALL (PORTION) AND NORTHERN LANDFALL

Project Management Initials: JT Designer: CWN Checked: ALCF Approved: CWN ISO A1 594mm x 841mm

Plot File by: rtoc1 20/Nov/2020
PATH T:\Drawing\DRAFT\DP2016\DP2016_dgn

AECOM

PROJECT
項目
TUEN MUN -
CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

CLIENT
業主
路政署
HIGHWAYS DEPARTMENT
主要工程管理處(專責事務)
Major Works Project Management Office (Special Duties)

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I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核
A	SEP 20	LAYOUT UPDATE	CL

STATUS
階段

SCALE 比例 / DIMENSION UNIT 尺寸單位
A1 1:1000 A3 1:2000

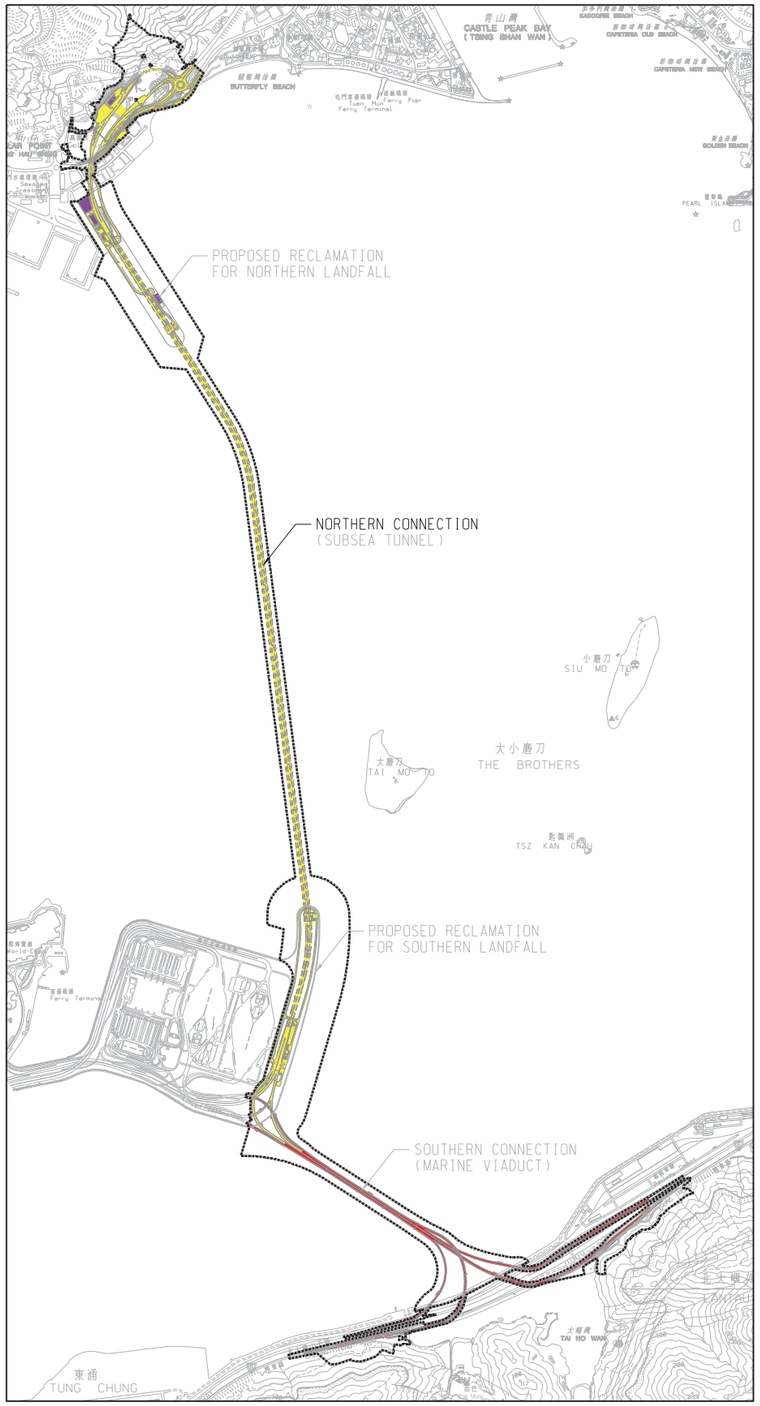
PROJECT NO. 項目編號: 60240249
CONTRACT NO. 合約編號: HY/2017/10

SHEET TITLE
圖紙名稱
CONTRACT 4 - NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

SHEET NUMBER
圖紙編號
FIGURE 1.5

Project Management Initials: Designer: JT Checked: ALCF Approved: CWN ISO A1 594mm x 841mm

(1) ROUTE-WIDE TCSS SYSTEM
- TM-CLKL (DESIGN, SUPPLY AND INSTALLATION FOR NORTHERN CONNECTION)



AECOM

PROJECT
項目
TUEN MUN -
CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TRAFFIC CONTROL AND SURVEILLANCE SYSTEM

CLIENT
業主
路政署
HIGHWAYS DEPARTMENT
主要工程管理處(專責事務)
Major Works Project Management Office (Special Duties)

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修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容修改	CHK. 複核
A	SEP 20	LAYOUT UPDATE	CL

STATUS
階段

SCALE 比例 | **DIMENSION UNIT** 尺寸單位
A1 1:1000 A3 1:2000

PROJECT NO. 項目編號: 60240249
CONTRACT NO. 合約編號: HY/2014/10

SHEET TITLE
圖紙名稱
CONTRACT 5 - NORTHERN CONNECTION TRAFFIC CONTROL AND SURVEILLANCE SYSTEM

SHEET NUMBER
圖紙編號
FIGURE 1.6

Plot File by: rtoc1 20/Nov/2020
PATH T:\Drawing\DRAFT\DF2017\DF2017.dgn

Appendix B

Letter of Certification from Environmental Team Leader and Verification Letter from Independent Environmental Checker

Environmental Resources Management

2509, 25/F
One Harbourfront
18 Tak Fung Street
Hung Hom, Kowloon
Hong Kong

Telephone: (852) 2271 3000
Facsimile: (852) 2723 5660
E-mail: post.hk@erm.com
http://www.erm.com

24 March 2021

Our ref: 0215660_57_ETL_Certification_L&V Plan_24_03_2021.docx

By Email

Mr Roy Leung
Environmental Officer
Gammon Construction Limited
28/F Devon House
Taikoo Place
979 King's Road
Hong Kong

Dear Sir,

Contract No. HY/2012/07
Tuen Mun – Chek Lap Kok Link – Southern Connection Viaduct Section
Landscape and Visual Plan

Reference is made to the *Landscape and Visual Plan* (*Ref. A37-04B*) submitted by AECOM by email on 22 March 2021.

I hereby certify that the captioned *Landscape and Visual Plan* is in compliance with *Condition 2.9* of the *Environmental Permit No. EP-354/2009/D*.

Yours faithfully
For ERM-Hong Kong, Ltd

Dr Jasmine Ng
Environmental Team Leader
Direct Tel: (852) 2271 3311
E-mail: jasmine.ng@erm.com

Registered Office
2509, 25/F
One Harbourfront
18 Tak Fung Street
Hung Hom, Kowloon
Hong Kong

Offices worldwide

Environmental Resources Management

2509, 25/F One Harbourfront
18 Tak Fung Street
Hunghom, Kowloon
Hong Kong
Telephone 2271 3000
Facsimile 2723 5660
http://www.erm.com

24 March 2021

Our ref: 0212330_39_ETL Certification_LV Plan_24_03_21.docx

By Email

Mr Bryan Lee
Environmental Officer
Dragages – Bouygues Joint Venture
3/F Island Place Tower
510 King's Road
North Point
Hong Kong

Dear Sir,

Contract No. HY/2012/08
Tuen Mun – Chek Lap Kok Link –
Northern Connection Sub-sea Tunnel Section

Landscape and Visual Plan

Reference is made to the *Landscape and Visual Plan (Ref. A37-04B)* submitted by AECOM through email on 22 March 2021.

I hereby certify that the captioned *Landscape and Visual Plan* is in compliance with *Condition 2.9* of the *Environmental Permit No. EP–354/2009/D*.

Please do not hesitate to contact me should you have any queries.

Yours faithfully
For ERM-Hong Kong, Ltd

Dr Jasmine Ng
Environmental Team Leader
Direct Tel: (852) 2271 3311
E-mail: Jasmine.Ng@erm.com

Registered Office
ERM-Hong Kong, Ltd
2509, 25/F One Harbourfront
18 Tak Fung Street
Hunghom, Kowloon
Hong Kong

Offices worldwide

AUES 安順聯合環境服務及顧問
Action-United Environmental Services & Consulting

Our Ref: TCS00715/14/300/L0736

AECOM
8/F Grand Central Plaza
Tower 2, 138 Shatin Rural Committee Road
Shatin

Attn: Mr. Roger Man

23 March 2021
By Email

Dear Sir,

Re: Contract No. HY/2013/12
Tuen Mun - Chek Lap Kok Link - Northern Connection Toll Plaza and Associated Works
Environmental Permit No.: EP-354/2009/D
Landscape and Visual Plan

With reference to the revised Landscape and Visual Plan (ref. A37-04B) Rev.A submitted by AECOM via e-mail, please note that we have no adverse comments on this submission. We herewith certify the captioned submission in accordance with Condition 2.9 of the Environmental Permit (EP) No. EP-354/2009/D.

Should you have any queries or require further information, please feel free to contact us or the undersigned at Tel: 2959-6059 or Fax: 2959-6079.

Yours sincerely,
For and on Behalf of
Action-United Environmental Services & Consulting (AUES)

T. W. Tam
Environmental Team Leader

c.c. Ramboll (IEC) Mr. Manson Yeung By email
CRBC - Kaden JV (Contractor) Mr. John Wong By email

香港新界屯門大欖涌大圍排道35-41號金基工業大廈20樓A室
Unit A, 20/F, Gold King Industrial Building,
35-41 Tai Lin Pai Road, Kwai Chung, New Territories, Hong Kong
Tel (852) 2959-6059
Fax (852) 2959-6079
Email info@fordbusiness.com

Ford Business International Ltd.

Environmental Resources Management

2509, 25/F
One Harbourfront
18 Tak Fung Street
Hung Hom, Kowloon
Hong Kong

Telephone: (852) 2271 3000
Facsimile: (852) 2723 5660
E-mail: post.hk@erm.com
http://www.erm.com

ERM

24 March 2021

Our ref: 0463091_10_ETL_L&V Plan_24 March 2021.docx

By Email

Mr Roy Leung
Senior Environmental Engineer
Gammon Construction Limited
28/F Devon House
Taikoo Place
979 King's Road
Hong Kong

Dear Sir,

Contract No. HY/2017/10
Tuen Mun – Chek Lap Kok Link – Northern Connection Tunnel Buildings, Electrical and Mechanical Works

Landscape and Visual Plan

Reference is made to the *Landscape and Visual Plan* (*Ref. A37-04B*) submitted by AECOM by email on 22 March 2021.

I hereby certify that the captioned *Landscape and Visual Plan* is in compliance with *Condition 2.9* of the *Environmental Permit No. EP-354/2009/D*.

Yours faithfully
For ERM-Hong Kong, Ltd

Dr Jasmine Ng
Environmental Team Leader
Direct Tel: (852) 2271 3311
E-mail: jasmine.ng@erm.com

Registered Office
2509, 25/F
One Harbourfront
18 Tak Fung Street
Hung Hom, Kowloon
Hong Kong

Offices worldwide

RAMBOLL

Ref.: HYDHZMBEEM00_0_8425L.21

30 March 2021

By Fax (2293 6300) and By Post

AECOM Asia Co. Ltd.
Supervising Officer's Representative Office
No. 8 Mong Fat Street
Tuen Mun, N.T.

Attention: Mr. S. W. Fok

Dear Mr. Fok,

Re: Agreement No. CE 48/2011 (EP)
Environmental Project Office for the
HZMB HKLR, HZMB HKBCF, and TM-CLKL – Investigation

Agreement No. CE 7/2011 (HY)
Tuen Mun-Chek Lap Kok Link – Design and Construction
Verification of Landscape and Visual Plan (Ref. A37-04B) for Tuen Mun-Chek Lap Kok Link

Reference is made to the submission of revised Landscape and Visual Plan (Ref. A37-04B) (Rev. A) dated 22 March 2021 and provided by the Resident Landscape Architect to us via e-mail on 26 March 2021 with certification letters signed by various ET Leaders for the TM-CLKL contracts:

- Contract No. HY/2012/07 – ET's ref.: "0215660_57_ETL_Certification_L&V Plan_24_03_2021.docx" dated 24 March 2021;
- Contract No. HY/2012/08 – ET's ref.: "0212330_39_ETL Certification_LV Plan_24_03_21.docx" dated 24 March 2021;
- Contract No. HY/2013/12 – ET's ref.: "TCS00715/14/300/L0736" dated 23 March 2021; and
- Contract No. HY/2017/10 – ET's ref.: "0463091_10_ETL_L&V Plan_24 March 2021.docx" dated 24 March 2021.

We are pleased to inform you that we have no adverse comments on the captioned plan. We write to verify the captioned plan in accordance with Condition 2.9 of the Environmental Permit No. EP-354/2009/D.

Thank you very much for your attention and please feel free to contact the undersigned should you require further information.

Yours sincerely,
For and on behalf of
Ramboll Hong Kong Limited

pp.

Manson Yeung
Independent Environmental Checker
TM-CLKL

Q:\Projects\HYDHZMBEEM00\02_Proj_Mgt\02_Corr\HYDHZMBEEM00_0_8425L.21.doc

c.c.

HyD	Mr. Patrick Ng	(By Fax: 3188 6614)
HyD	Mr. Alan Ip	(By Fax: 3188 6614)
AECOM	Mr. Daniel Ip / Ms. Candy Lau (HY/2012/07)	(By Fax: 3691 2899)
AECOM	Mr. Roger Man (HY/2012/08 & HY/2013/12)	(By Fax: 2293 6300)
AECOM	Mr. Desmond Fung (HY/2017/10)	(By Fax: 2783 0155)
AECOM	Mr. Conrad Ng	(By Fax: 3922 9797)
ERM	Dr. Jasmine Ng (HY/2012/07, HY/2012/08, HY/2017/10)	(By Fax: 2723 5660)
AUES	Mr. T. W. Tam (HY/2013/12)	(By Fax: 2959 6079)
GCL	Mr. Roy Leung (HY/2012/07 & HY/2017/10)	(By Fax: 3520 0486)
DBJV	Mr. Bryan Lee (HY/2012/08)	(By Fax: 2293 7499)
CKJV	Mr. John Wong (HY/2013/12)	(By Fax: 2253 8399)

Internal: DY, YH, ENPO Site

Ramboll Hong Kong Limited 英環香港有限公司
21/F, BEA Harbour View Centre, 56 Gloucester Road, Wan Chai, Hong Kong Tel: 852.3465 2888 Fax: 852.3465 2899
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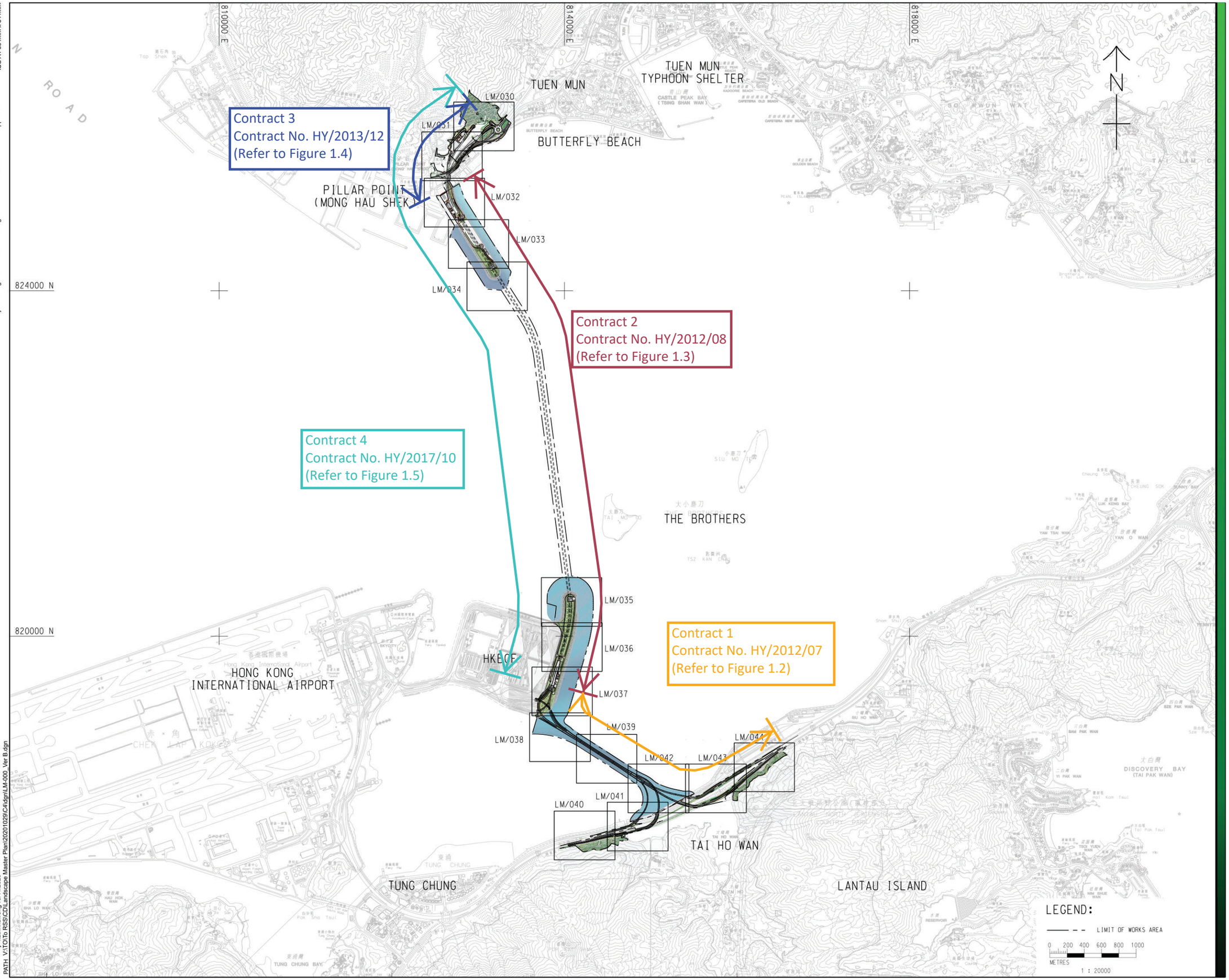
Appendix C

Mitigation Measures Plan (Operation Phase) and Landscape Sections



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Plot File by: kathrinawong 10/11/2020
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AECOM

PROJECT
項目

TUEN MUN - CHEK LAP KOK LINK DESIGN AND CONSTRUCTION

CLIENT
業主

路政署
HIGHWAYS DEPARTMENT
主要工程管理處(專責事務)
Major Works Project Management Office (Special Duties)

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A	SEP 20	LAYOUT UPDATE	CL

STATUS
現段

SCALE 比例
A1 1 : 20000

DIMENSION UNIT 尺寸單位
MILLIMETRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60240249

CONTRACT NO. 合約編號
CE7/2011(HY)

SHEET TITLE
圖紙名稱

LANDSCAPE MASTER PLAN
- KEY PLAN

SHEET NUMBER
圖紙編號

LM/029

812800 E
813000 E
813200 E
826000 N
825800 N

N

Pitcher plant receptor site

Toe planter for trees and shrubs (OM2, OM4, CM10)

Toe planter for shrubs (OM2, OM4)

Roadside tree planting (OM2, OM4, CM10)

Shrub and climber on slope; short term (OM1, OM4) (Potential Development Area)

Berm planter for shrub and climber (OM1, OM2, OM4)

Berm planter for shrub and climber (OM1, OM2, OM4)

Roadside planting (OM2, OM4, CM10)

Shrub, hydroseeding and tree planting on slope (OM1, OM4, CM10)

Vehicular Underpass Portal (OM5)

Roadside tree planting and Transplant tree (OM4, CM2,CM10)

Footpath pavement Streetscape elements treatment (OM3)

Existing trees and shrubs around Grave retained for screening (CM3)

Aesthetically pleasing design for Main Control Building (OM5, OM6, CM8) (Contract No. HY/2017/10)

Shrub planting along roadside/ footpath; short term (OM4) (Potential Development Area)

Underground utilities disrupt the continuous row of tree planting Shrub planting along roadside (OM4)

Feature planting for roundabout (OM4, CM10)

Graves

Shrub planting on slope (OM1, OM4)

Roadside tree planting (OM4, CM10)

Concrete pavement at verge to match existing paving Streetscape elements treatment (OM3)

Shrub and tree planting on slope (OM1, OM4, CM10)

Roadside tree planting (OM4, CM10)

Flow control facilities; Fenced-off area

Roadside tree planting (OM2, OM4, CM10)

Shrub screening at retaining wall (OM2, OM4)

Tree and shrub planting on slope (OM1, OM4, CM10)

Sewer culverts below; Fenced-off area

CUT LINE 1-1

SEE DRAWING NO. LM/031

LEGEND

- Site Boundary
- New Tree Planting
- Transplanted Trees
- Existing Trees and Shrubs (at-grade)
- Proposed Expressway Boundary
- Proposed Shrub, Ground cover, Grass Planting
- Existing Woodland Tree Groups
- Proposed Tree planting for Slope
- Proposed Tree and Shrub Mix Planting

Plot File by: kathrinawong 09/11/2020
PATH: V:\TO\To RSS\CD\Landscape Master Plan\2020\1029\C3\dgn\LM-030.dgn

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TOLL PLAZA AND ASSOCIATED WORKS

CLIENT
路政署 HIGHWAYS DEPARTMENT 主要工程管理處(專責事務) Major Works Project Management Office (Special Duties)

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B	SEP 20	LANDSCAPE UPDATE	CL
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1:1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

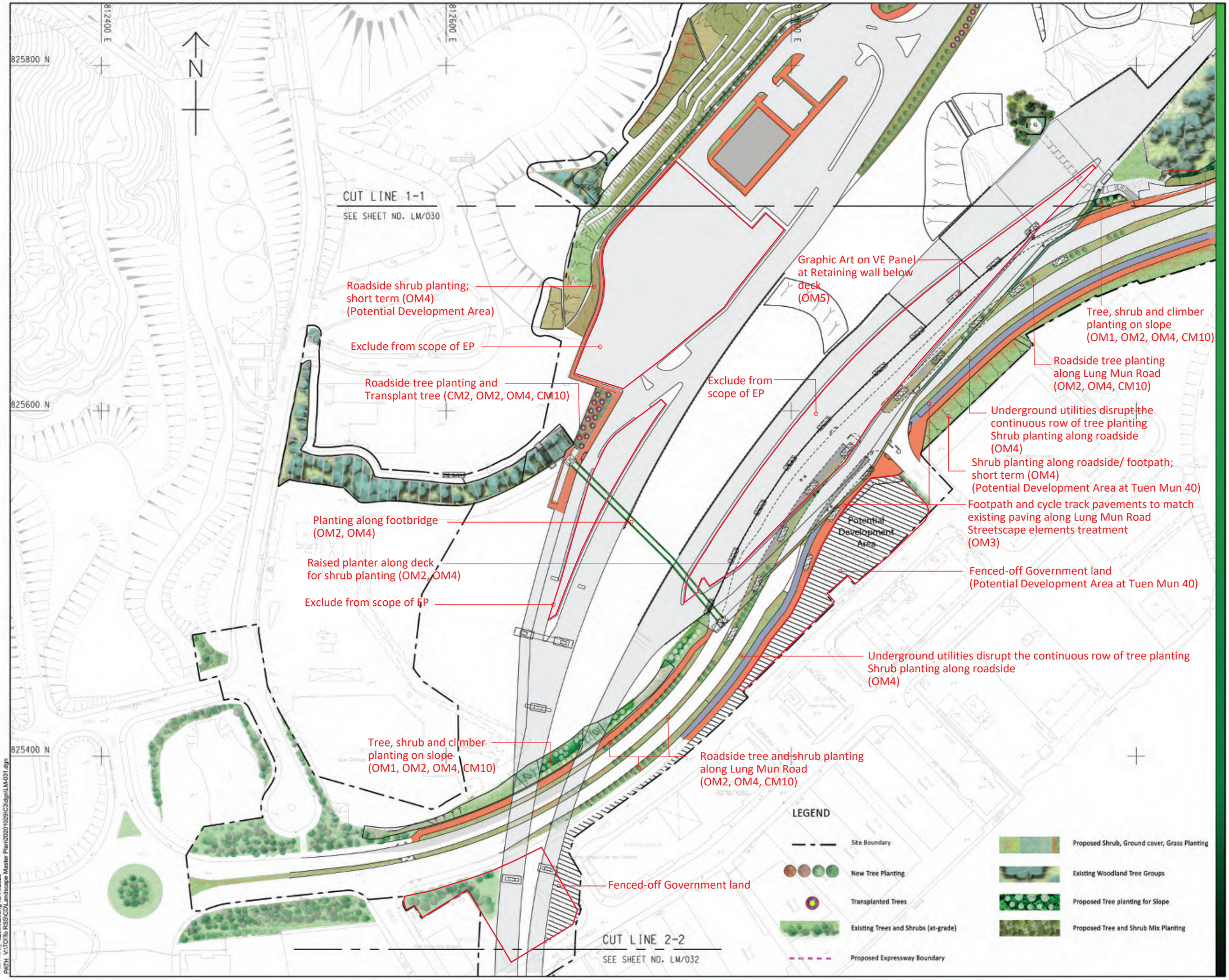
KEY PLAN

PROJECT NO.: 60240249
CONTRACT NO.: HY/2013/12

SHEET TITLE
MITIGATION MEASURES PLAN

SHEET 1 OF 15

SHEET NUMBER
C3/LM/030



Plot File by: kathrinawong 10/11/2020
PATH: V:\TO\To RSS\C2\Landscape Master Plan\20201029\C3\dgn\LM-031.dgn

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TOLL PLAZA AND ASSOCIATED WORKS

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Major Works Project Management Office (Special Duties)

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I/R	DATE	DESCRIPTION	CHK.
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B	SEP 20	LANDSCAPE UPDATE	CL
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE
A1 1:1000 A3 1:2000

DIMENSION UNIT
MILLIMETRES

KEY PLAN

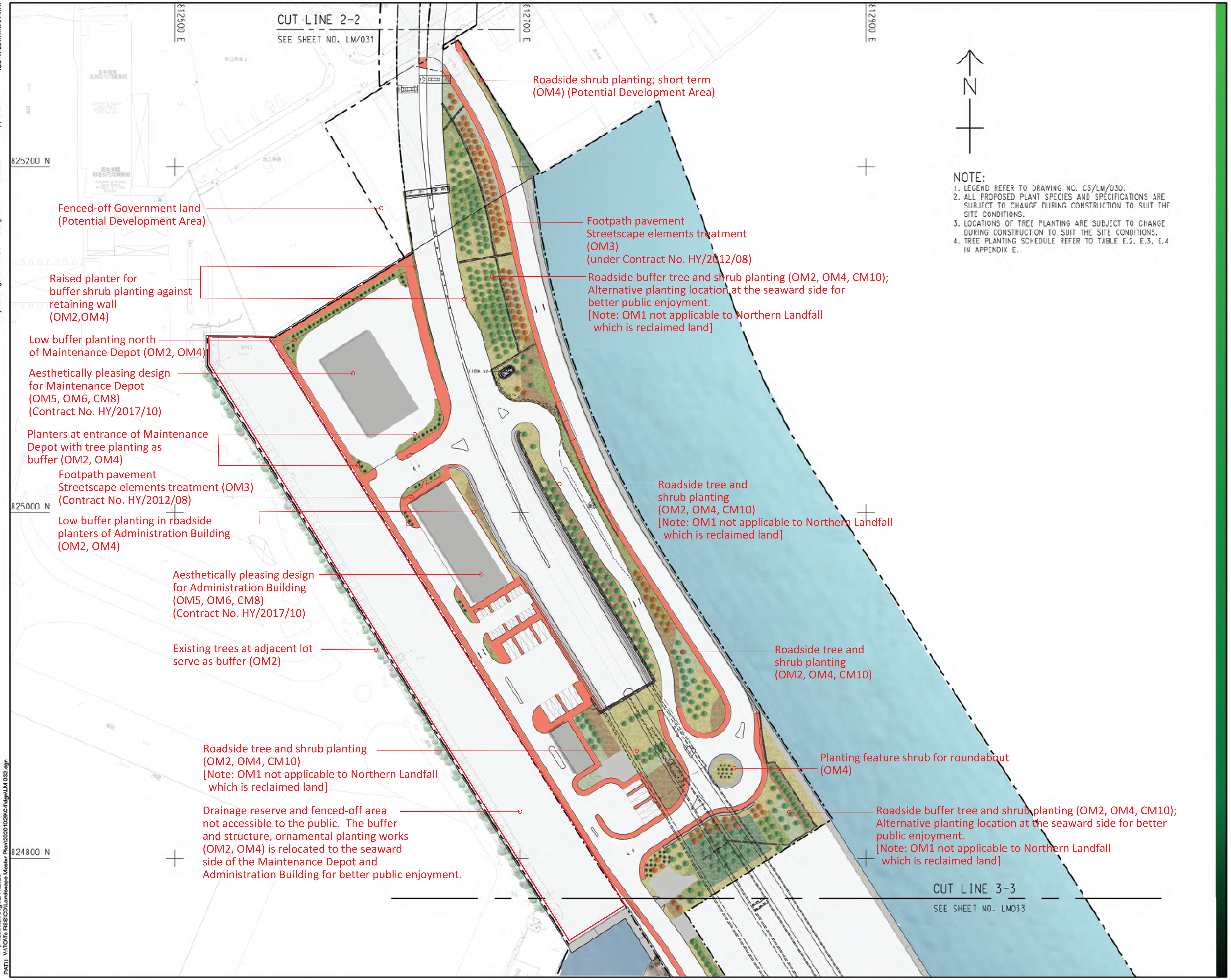

PROJECT NO.
60240249

CONTRACT NO.
HY/2013/12

SHEET TITLE
MITIGATION MEASURES PLAN

SHEET 2 OF 15

SHEET NUMBER
C3/LM/031



AECOM

PROJECT

TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE

TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

CLIENT

HIGHWAYS DEPARTMENT
Major Works Project Management Office (Special Duties)

CONSULTANT

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C	MAR 21	ANNOTATION UPDATE	CL
B	SEP 20	LANDSCAPE UPDATE	CL
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1:1000 A3 1:2000

DIMENSION UNIT: MILLIMETRES

KEY PLAN

PROJECT NO.: 60240249

CONTRACT NO.: HY/2017/10

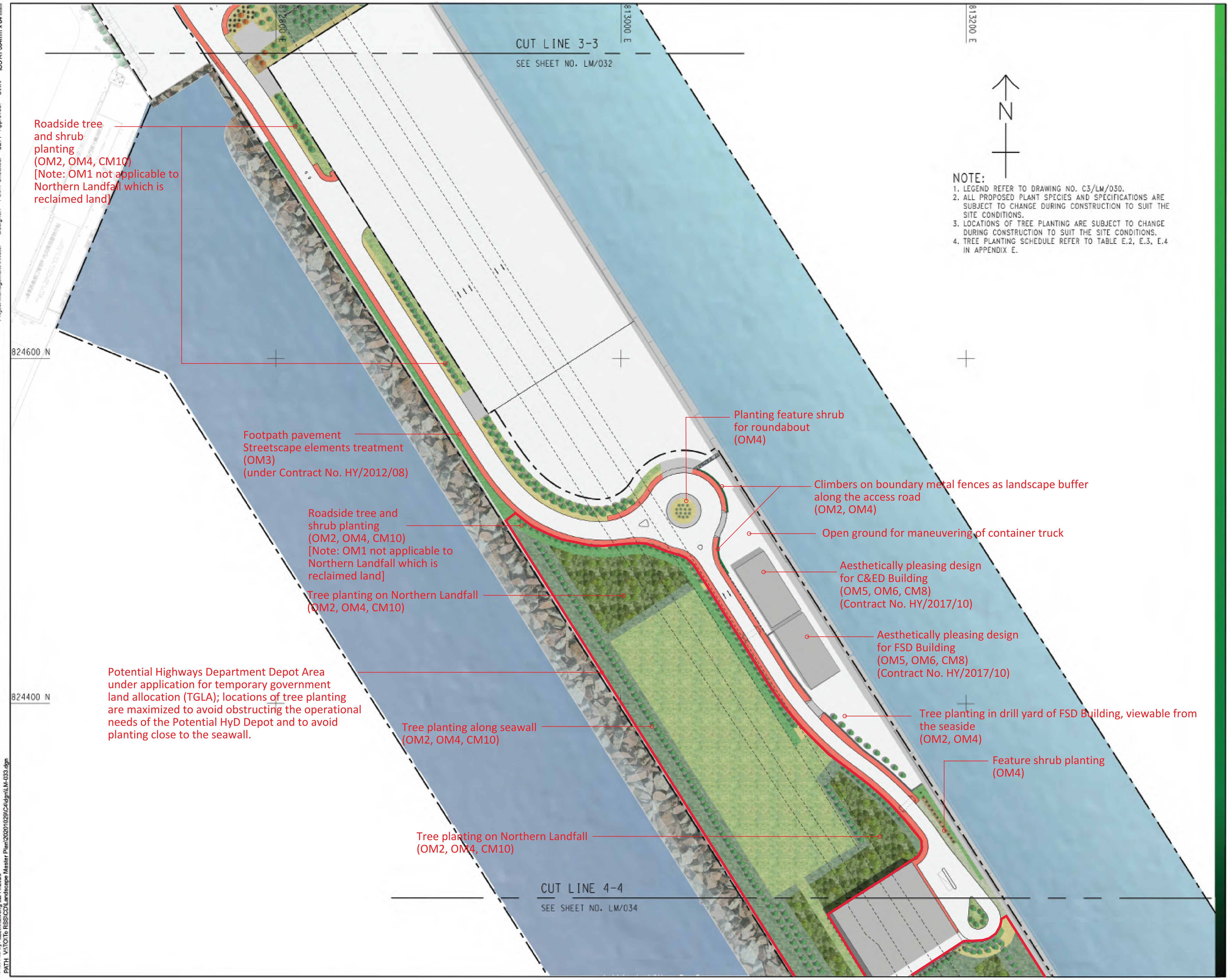
SHEET TITLE: MITIGATION MEASURES PLAN

SHEET 3 OF 15

SHEET NUMBER: C4/LM/032

ISO A1 594mm x 841mm Approved: Checked: Designer: Project Management Initials:

Plot File by: kathrinewong 02/11/2020 PATH: V:\TO\To RSS\CD\Landscape Master Plan\20201029\C4\dgn\LM-032.dgn



NOTE:
1. LEGEND REFER TO DRAWING NO. C3/LM/030.
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

AECOM

PROJECT

TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE

TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

CLIENT

路政署 HIGHWAYS DEPARTMENT
主要工程管理處(專責事務)
Major Works Project Management Office (Special Duties)

CONSULTANT

AECOM Asia Company Ltd.
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B	SEP 20	LANDSCAPE UPDATE	CL
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1 : 1000 A3 1:2000

DIMENSION UNIT: MILLIMETRES

KEY PLAN

PROJECT NO.: 60240249

CONTRACT NO.: HY/2017/10

SHEET TITLE

MITIGATION MEASURES PLAN

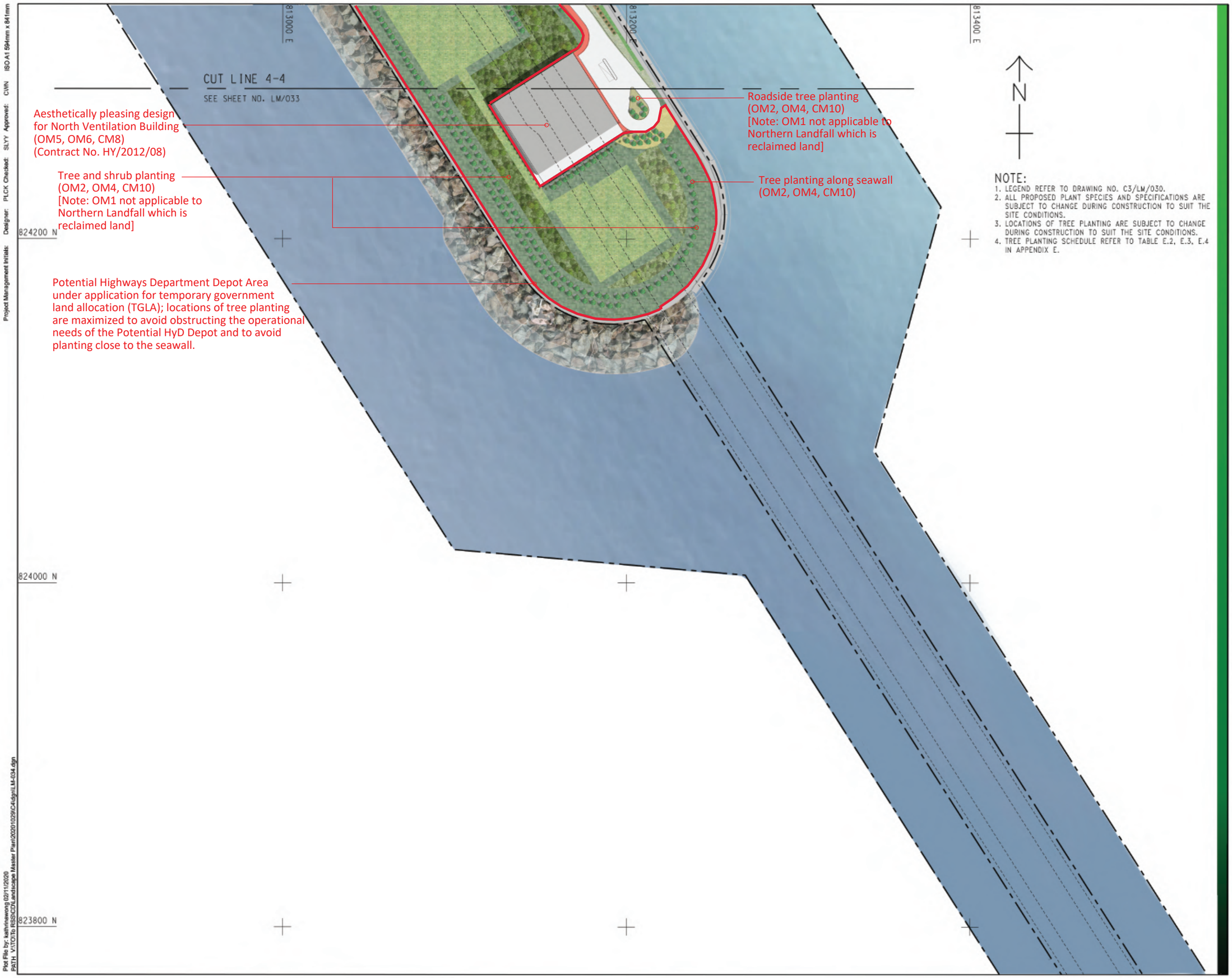
SHEET 4 OF 15

SHEET NUMBER

C4/LM/033

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

Plot File by: kathrinawong 02/11/2020 PATH: V:\TOTe RSS\CD\Landscape Master Plan\20201029\C4\dgn\LM-033.dgn



Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

Plot File by: kathnewong 02/11/2020
PATH: V:\TO\To RSSNCDK\Landscape Master Plan\20201029\C4\dgn\LM-034.dgn

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PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

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STATUS

SCALE: A1 1 : 1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

KEY PLAN

PROJECT NO.: 60240249
CONTRACT NO.: HY/2017/10

SHEET TITLE
MITIGATION MEASURES PLAN

SHEET 5 OF 15

SHEET NUMBER
C4/LM/034

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

813800 E
814000 E
814200 E
814400 E
820600 N
820400 N
820200 N

Aesthetically pleasing design
for South Ventilation Building
(OM5, OM6, CM8)
(Contract No. HY/2012/08)

Footpath pavement
Streetscape elements treatment
(OM3)
(under Contract No. HY/2012/08)

Tree planting on HKBCF (OM4, CM10)
- avoid fruit trees to attract birds
- species under the Hong Kong International Airport Plant Species List
- [Note: OM1 not applicable to HKBCF which is reclaimed land]

HKIA PLANTING ZONE 2

HKIA PLANTING ZONE 1

CUT LINE 1-1
SEE SHEET NO. LM/036

NOTE:
1. LEGEND REFER TO DRAWING NO. C3/LM/030.
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

Plot File by: kathrinawong 02/11/2020
PATH: V:\TOWS RSS\CO\Landscape Master Plan\20201029\C4\dgn\LM-035.dgn

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PROJECT
TUEN MUN -
CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN – CHEK LAP KOK LINK – NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

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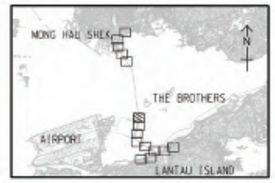
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE
A1 1:1000 A3 1:2000

DIMENSION UNIT
MILLIMETRES

KEY PLAN



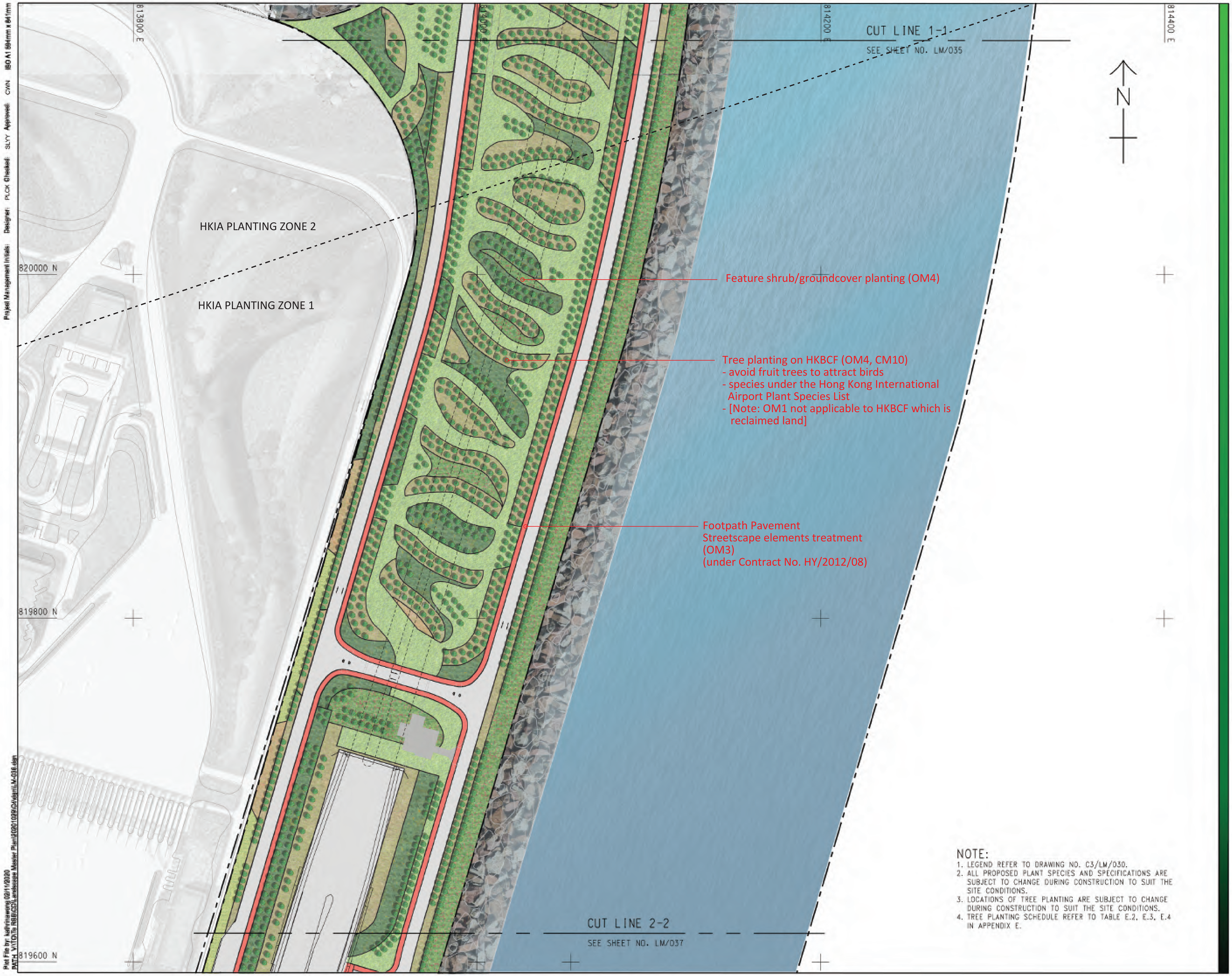
PROJECT NO.
60240249

CONTRACT NO.
HY/2017/10

SHEET TITLE
MITIGATION MEASURES PLAN

SHEET 6 OF 15

SHEET NUMBER
C4/LM/035



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PROJECT

TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE

TUEN MUN – CHEK LAP KOK LINK – NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

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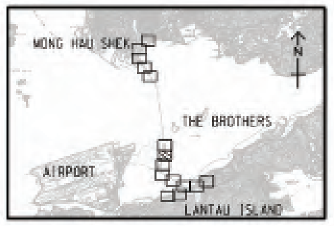
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1:1000 A3 1:2000

DIMENSION UNIT: MILLIMETRES

KEY PLAN



PROJECT NO.: 60240249

CONTRACT NO.: HY/2017/10

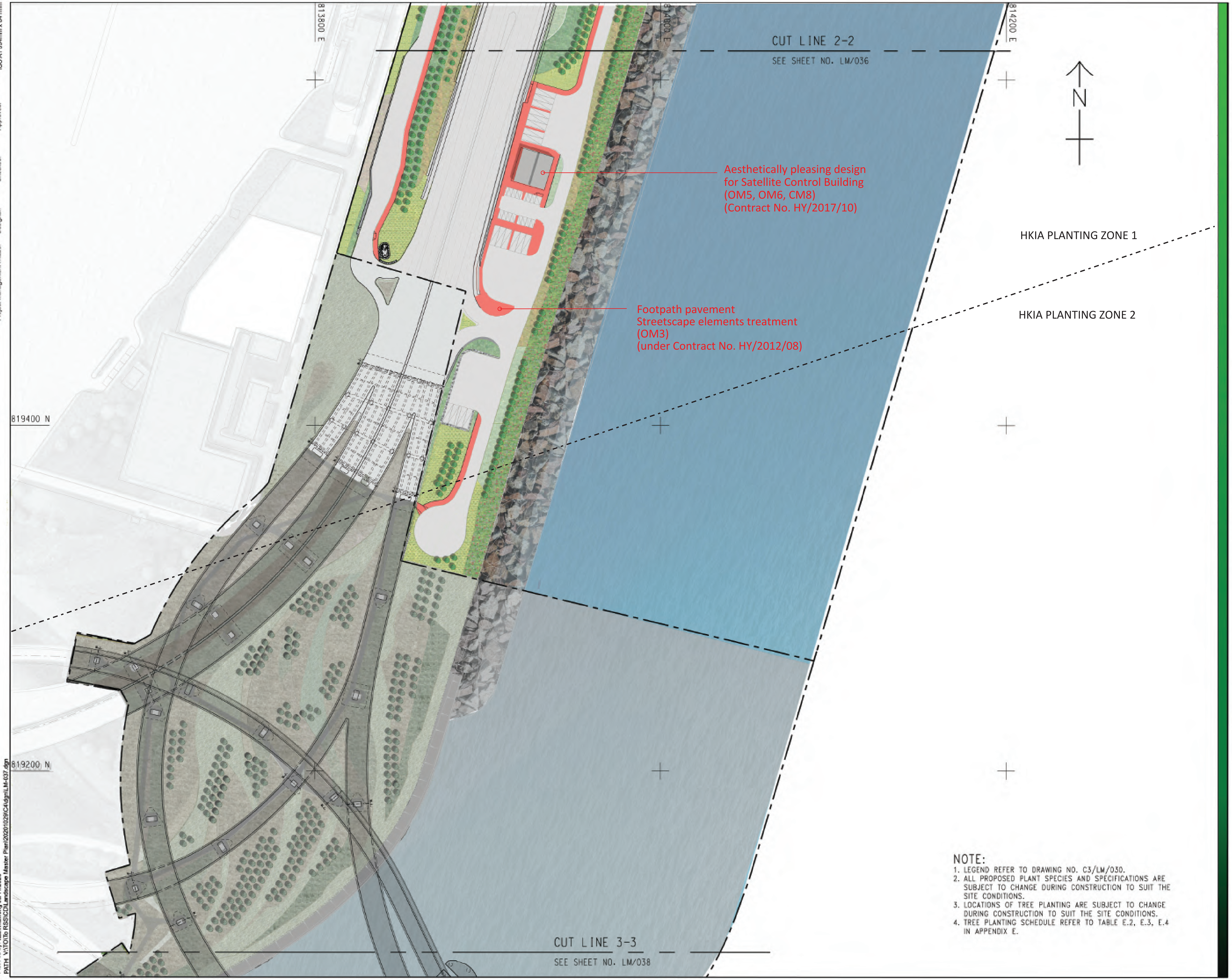
SHEET TITLE

MITIGATION MEASURES PLAN

SHEET 7 OF 15

SHEET NUMBER

C4/LM/036



NOTE:
1. LEGEND REFER TO DRAWING NO. C3/LM/030.
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
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4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

AECOM

PROJECT

TUEN MUN -
CHEK LAP KOK LINK

CONTRACT TITLE

TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

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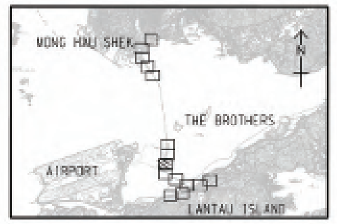
STATUS

SCALE: A1 1:1000 A3 1:2000

DIMENSION UNIT: MILLIMETRES

KEY PLAN



PROJECT NO.: 60240249

CONTRACT NO.: HY/2017/10

SHEET TITLE

MITIGATION MEASURES PLAN

SHEET 8 OF 15

SHEET NUMBER

C4/LM/037i

ISO A1 594mm x 841mm Approved: Checked: Designer: Project Management Initials:

Plot File by: kathrinewong 03/11/2020
PATH: V:\TO\To RSS\CD\Landscape Master Plan\20201029\C4\dgn\LM-037.dgn

ISO A1 594mm x 841mm
Approved:
Checked:
Designer:
Project Management Initials:

813800 E
814000 E
814200 E

CUT LINE 2-2
SEE SHEET NO. LM/036

N

819400 N
819200 N

HKIA PLANTING ZONE 1
HKIA PLANTING ZONE 2

Feature shrub/ groundcover planting (OM4)

Aesthetically pleasing design for the viaduct structures (OM5, OM6)

Tree planting on HKBCF (OM4, CM10)
- avoid fruit trees to attract birds
- species under the Hong Kong International Airport Plant Species List
- [Note: OM1 not applicable to HKBCF which is reclaimed land]

CUT LINE 3-3
SEE SHEET NO. LM/038

NOTE:
1. LEGEND REFER TO DRAWING NO. C3/LM/030.
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

Plot File by: kathrinawong 03/11/2020
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PROJECT
TUEN MUN -
CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN – CHEK LAP KOK LINK – SOUTHERN CONNECTINO VIADUCT SECTION

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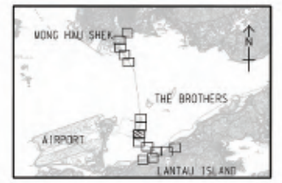
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1 : 1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

KEY PLAN

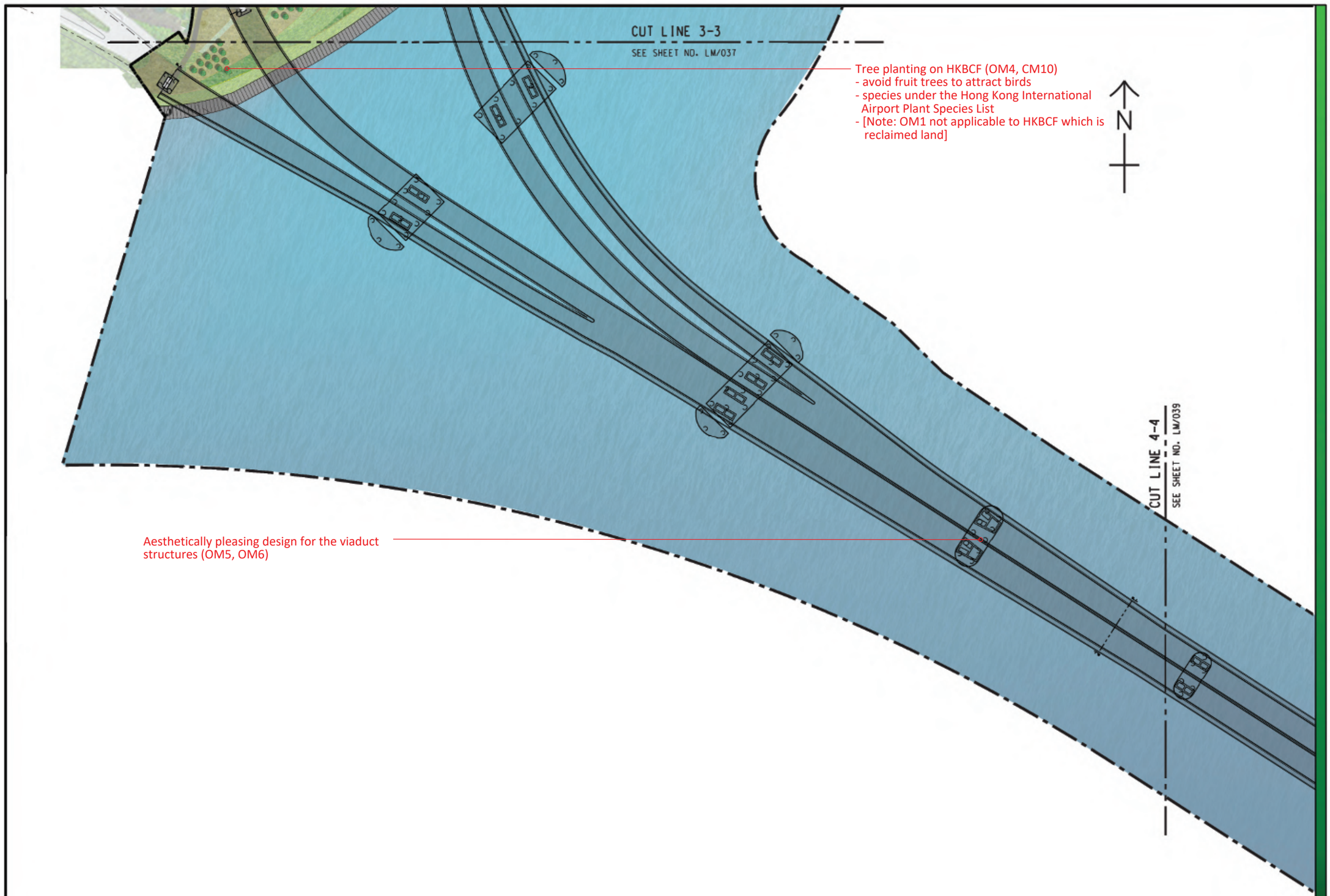


PROJECT NO.: 60240249
CONTRACT NO.: HY/2012/07

SHEET TITLE
MITIGATION MEASURES PLAN

SHEET 8 OF 15

SHEET NUMBER
C1/LM/037ii



NOTE:
1. LEGEND REFER TO DRAWING NO. C3/LM/030.
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

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PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION

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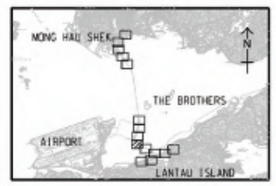
A	SEP19	LANDSCAPE UPDATE	CWN

STATUS

SCALE A1 1:1000 A3 1:2000
DIMENSION UNIT MILLIMETRES

KEY PLAN

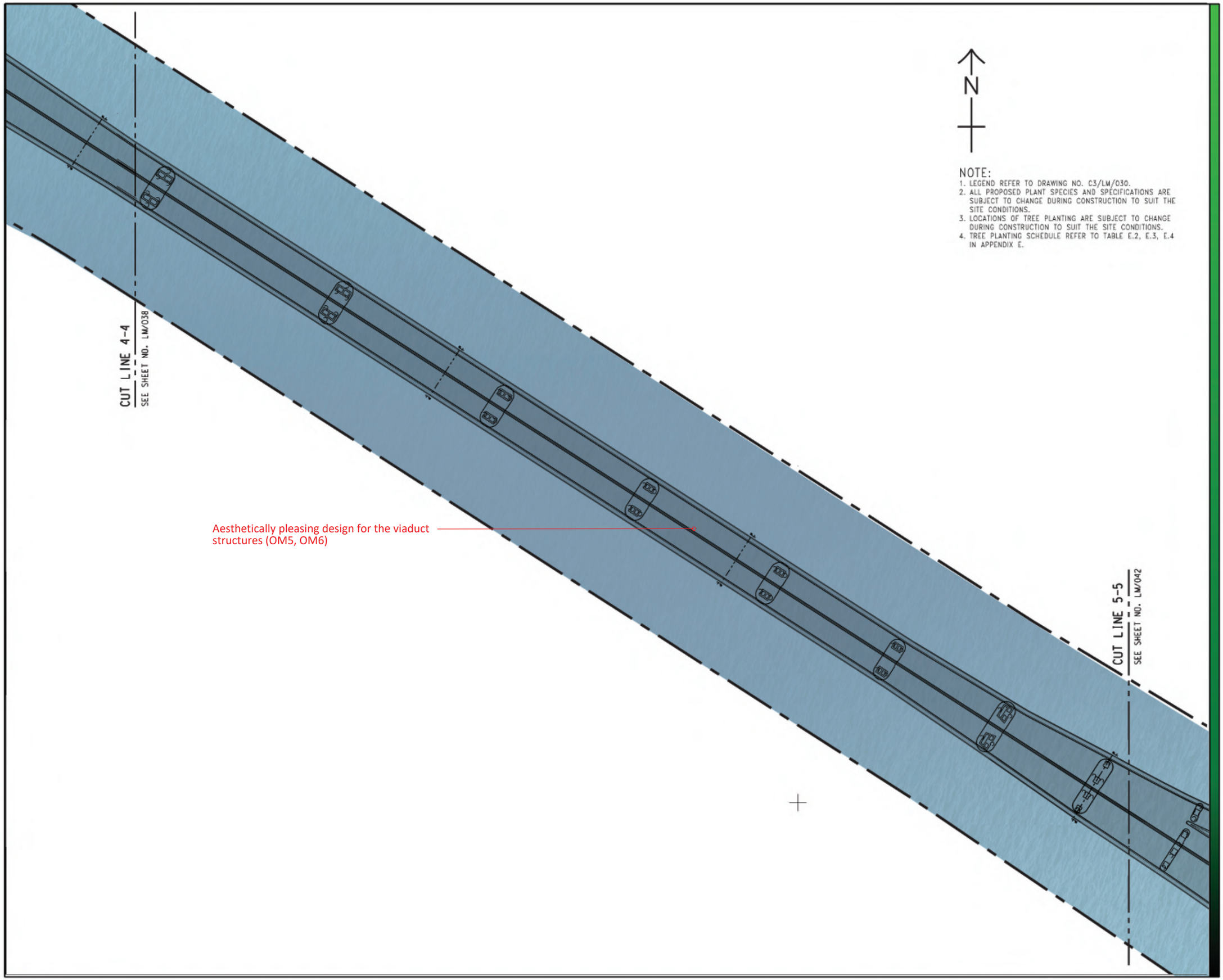


PROJECT NO. 60240249
CONTRACT NO. HY/2012/07

SHEET TITLE
MITIGATION MEASURES PLAN

SHEET 9 OF 15

SHEET NUMBER
C1/LM/038



Aesthetically pleasing design for the viaduct structures (OM5, OM6)

NOTE:
1. LEGEND REFER TO DRAWING NO. C3/LM/030.
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

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PROJECT

TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE

TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION

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A	SEP19	LANDSCAPE UPDATE	CWN

STATUS

SCALE A1 1:1000 A3 1:2000

DIMENSION UNIT MILLIMETRES

KEY PLAN

PROJECT NO. 60240249

CONTRACT NO. HY/2012/07

SHEET TITLE

MITIGATION MEASURES PLAN

SHEET 10 OF 15

SHEET NUMBER

C1/LM/039

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

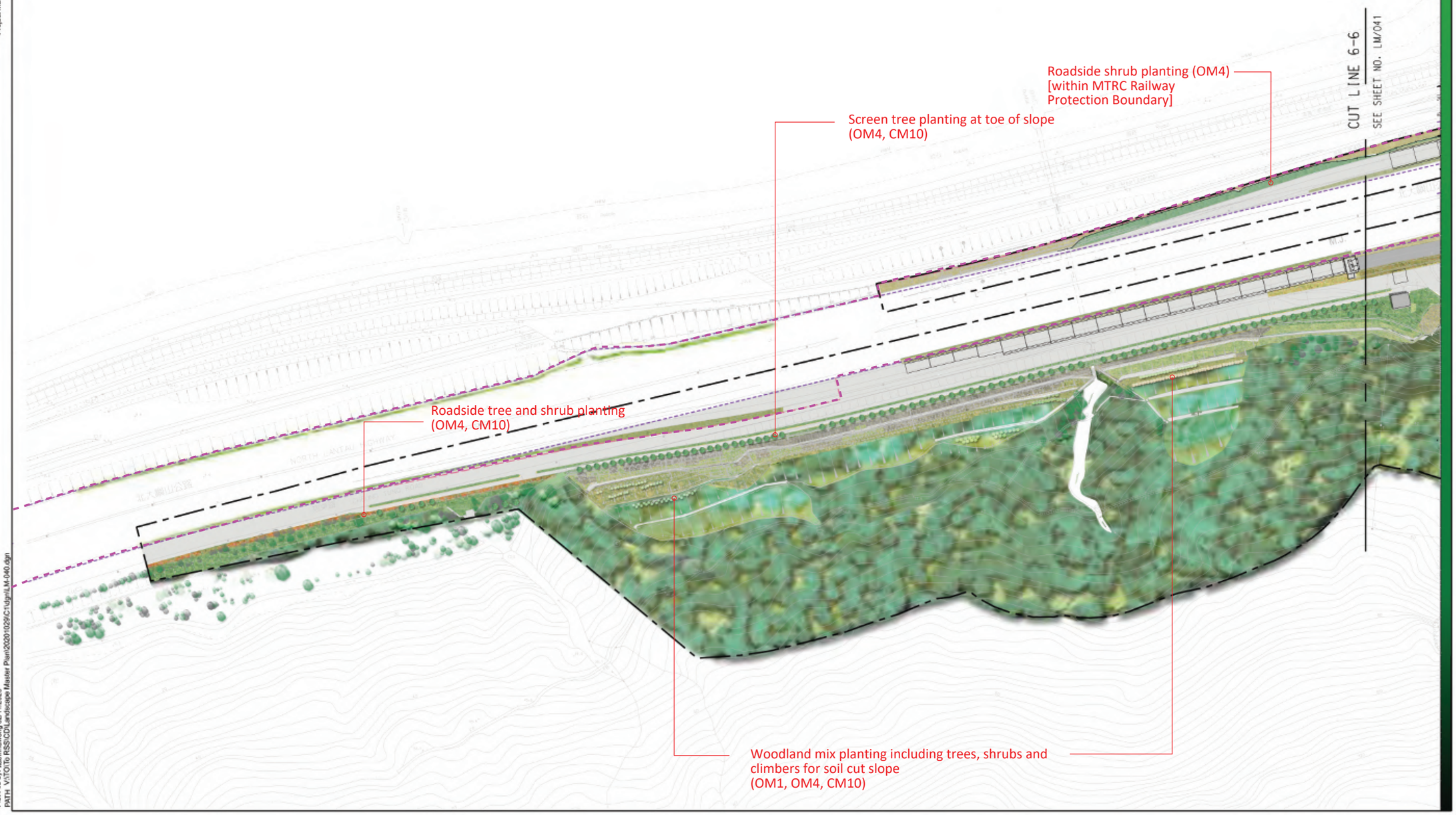
LEGEND

- Site Boundary
- New Tree Planting
- Transplanted Trees
- Existing Trees and Shrubs (at-grade)
- Proposed Expressway Boundary
- Proposed Shrub, Ground cover, Grass Planting
- Existing Woodland Tree Groups
- Proposed Tree planting for Slope
- Proposed Tree and Shrub Mix Planting

N

NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
2. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.



Plot File by: kathrinswong 02/11/2020
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PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK SOUTHERN CONNECTION VIADUCT SECTION

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STATUS

SCALE: A1 1 : 1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

KEY PLAN

PROJECT NO.: 60240249
CONTRACT NO.: HY/2012/07

SHEET TITLE
MITIGATION MEASURES PLAN

SHEET 11 OF 15

SHEET NUMBER
C1/LM/040

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

CUT LINE 7-7
SEE SHEET NO. LM/042

Aesthetically pleasing design for viaduct structures (OM5, OM6)

Existing trees

Roadside tree planting (OM2, OM4, CM10) [within MTRC Railway Protection Boundary]

Existing trees

Shade tolerant shrub planting (OM4) [within MTRC Railway Protection Boundary]

Existing trees

Existing shrubs

Shrub planting (OM2, OM4) [within MTRC Railway Protection Boundary]

[Mass Transit Railway Lot No.2 (Portion)]

Roadside shrub planting and hydroseeding on slope (OM4) [within MTRC Railway Protection Boundary]

Existing trees

Shade tolerant shrub/groundcover planting (OM4)

CUT LINE 6-6
SEE SHEET NO. LM/040

Shade tolerant shrub/ groundcover planting (OM4)

Shrub/groundcover planting (OM4)

Tree and shrub planting on slope with shade tolerant species under viaduct (OM4, CM10)

Roadside tree planting and Transplant Tree (CM2, CM10, OM4)

N

NOTE:
1. LEGEND REFER TO DRAWING NO. C1/LM/040.
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4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

Plot File by: kathmwong 02/11/2020
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PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK SOUTHERN CONNECTION VIADUCT SECTION

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A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

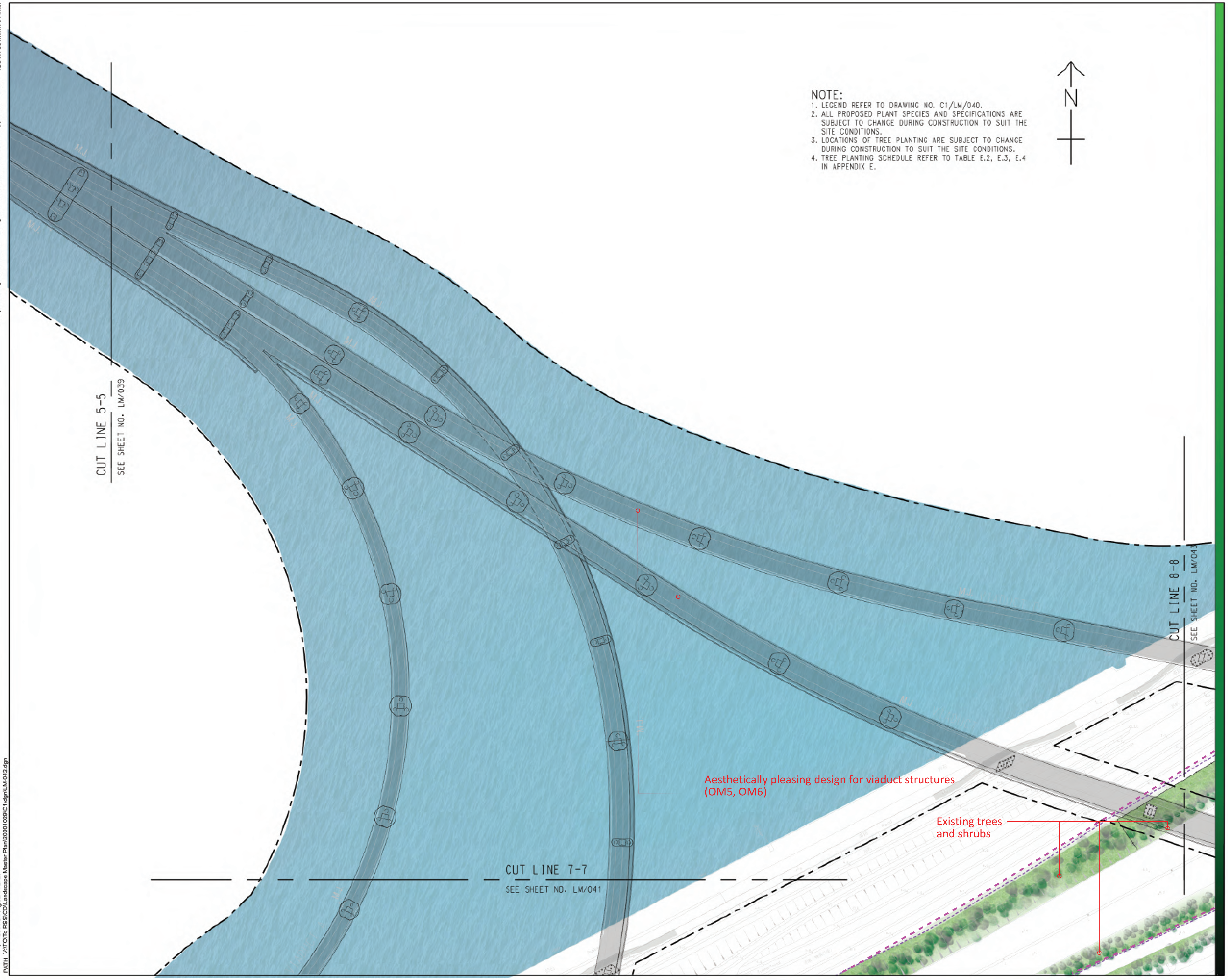
SCALE: A1 1 : 1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

KEY PLAN

PROJECT NO.: 60240249
CONTRACT NO.: HY/2012/07

SHEET TITLE
MITIGATION MEASURES PLAN

SHEET NUMBER
C1/LM/041



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PROJECT

TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE

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A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1 : 1000 A3 1:2000

DIMENSION UNIT: MILLIMETRES

KEY PLAN

PROJECT NO.: 60240249

CONTRACT NO.: HY/2012/07

SHEET TITLE: MITIGATION MEASURES PLAN

SHEET 13 OF 15

SHEET NUMBER: C1/LM/042

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

Plot File by: kathrinawong 02/11/2020
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Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

Tree planting (OM2, OM4, CM10)
[within MTR Railway Protection Boundary]

Shrub planting (OM4)
[within MTR Railway Protection Boundary]

Buffer tree and shrub planting
on slope (OM2, OM4, CM10)
[within MTR Railway
Protection Boundary]

Roadside tree planting
(OM2, OM4, CM10)

Shade tolerant shrub/groundcover planting (OM4)
[within MTR Railway Protection Boundary]

Roadside tree planting
Transplant Tree
(CM2, CM10, OM4)

Shrub planting on slope (OM4)
[within MTR Railway Protection Boundary]

Roadside shrub planting
Shade tolerant shrub/groundcover planting (OM4)
[within MTR Railway Protection Boundary]

Aesthetically pleasing design for viaduct structures
(OM5, OM6)

CUT LINE 8-8
SEE SHEET NO. LM/042

CUT LINE 9-9
SEE SHEET NO. LM/044

Shade tolerant shrub/
groundcover planting (OM4)

Roadside tree and shrub planting
(OM2, OM4, CM10)

Existing trees

Existing trees

Roadside shrub/groundcover planting
(OM1, OM4)

Roadside shrub planting (OM4)

Roadside tree planting on slope
(OM1, OM4, CM10)

Existing trees

Roadside tree and shrub
planting (OM1, OM4, CM10)

Existing trees

Roadside shade tolerant tree and shrub/
groundcover planting (OM4, CM10)

Roadside tree planting (OM4, CM10)
and shrub (OM1) planting

N

NOTE:
1. LEGEND REFER TO DRAWING NO. C1/LM/040.
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

Plot File by: kathrinwong 02/11/2020
PATH: Y:\TO\To RSS\CDI\Landscape Master Plan\20201028\C1\dgn\LM-043.dgn

AECOM

PROJECT
TUEN MUN -
CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK
SOUTHERN CONNECTION VIADUCT
SECTION

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Major Works Project Management Office
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STATUS

SCALE
A1 1 : 1000 A3 1:2000

DIMENSION UNIT
MILLIMETRES

KEY PLAN

PROJECT NO.
60240249

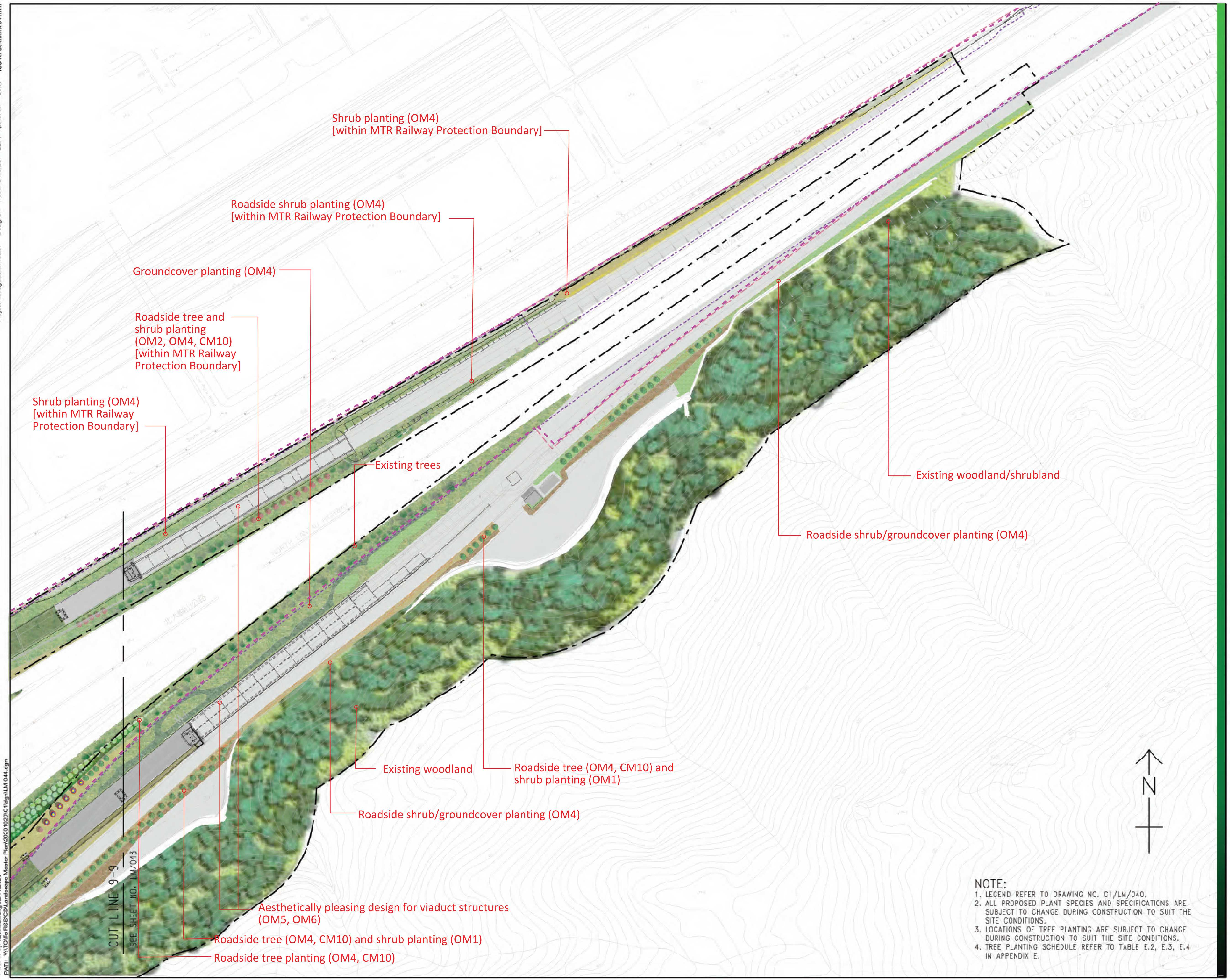
CONTRACT NO.
HY/2012/07

SHEET TITLE
MITIGATION MEASURES PLAN

SHEET 14 OF 15

SHEET NUMBER
C1/LM/043

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm



NOTE:
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3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

Plot File by: kathrinnewong 02/11/2020
PATH: V:\TO\To RSS\C09\Landscape Master Plan\20201029\C1\dgn\LM-044.dgn

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK SOUTHERN CONNECTION VIADUCT SECTION

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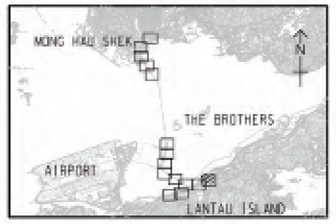
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1:1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

KEY PLAN

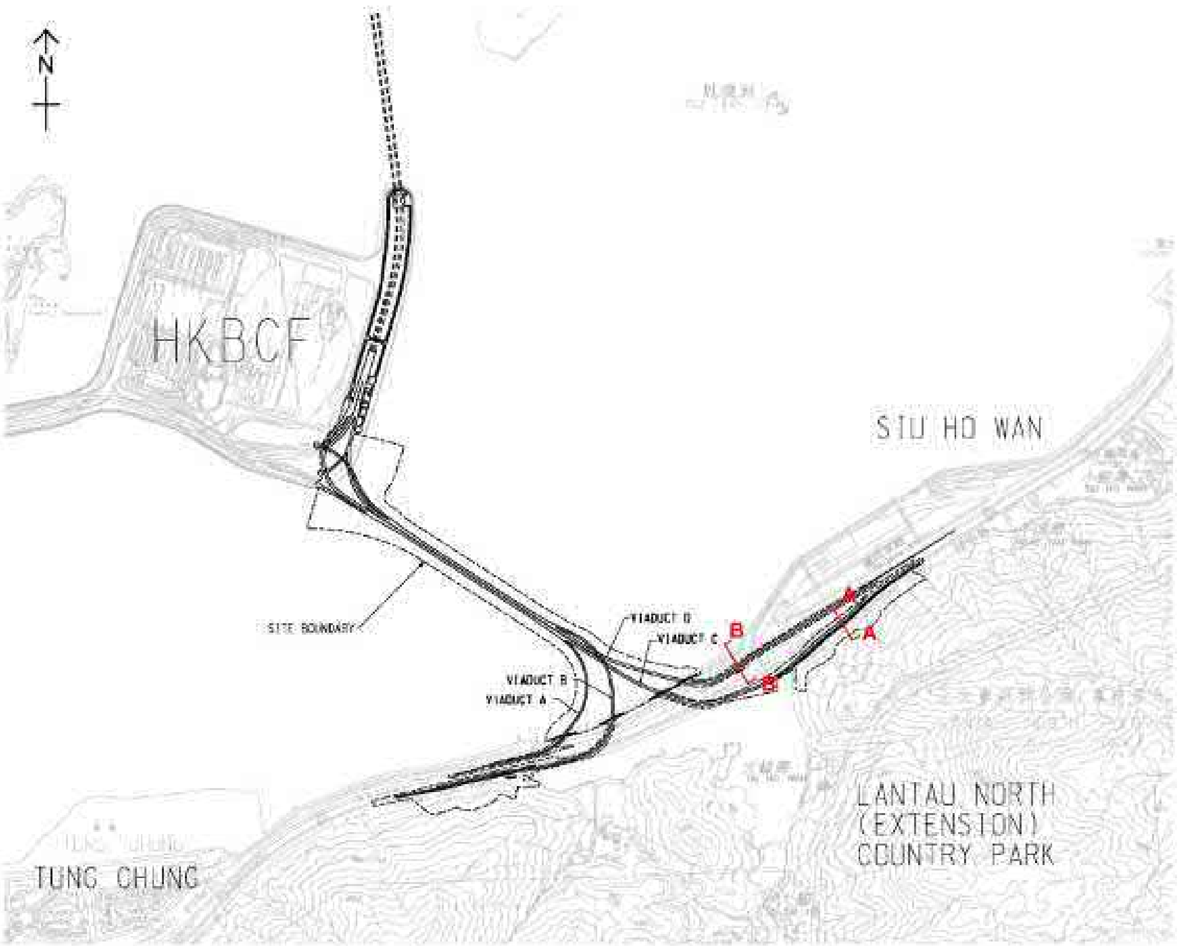


PROJECT NO.: 60240249
CONTRACT NO.: HY/2012/07

SHEET TITLE
MITIGATION MEASURES PLAN

SHEET 15 OF 15

SHEET NUMBER
C1/LM/044



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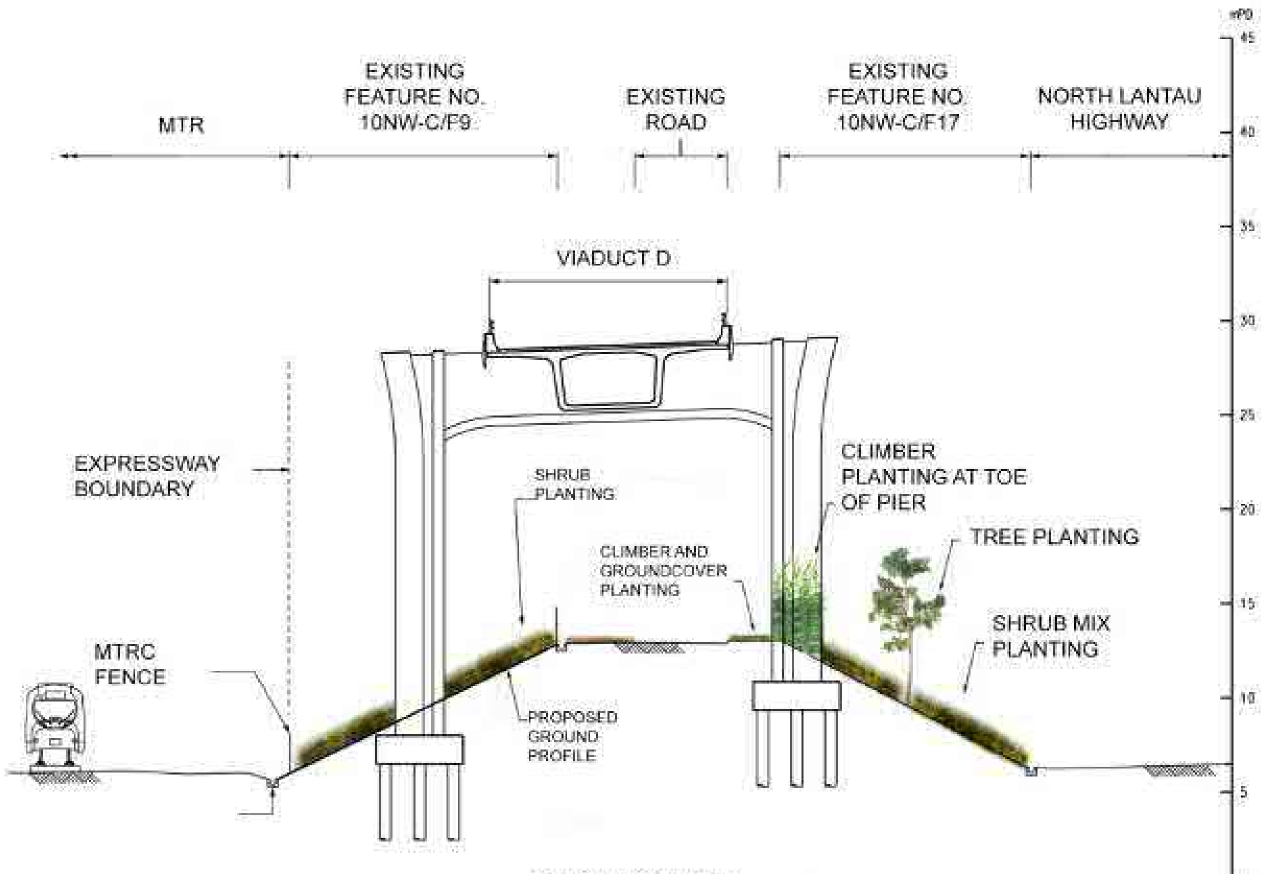
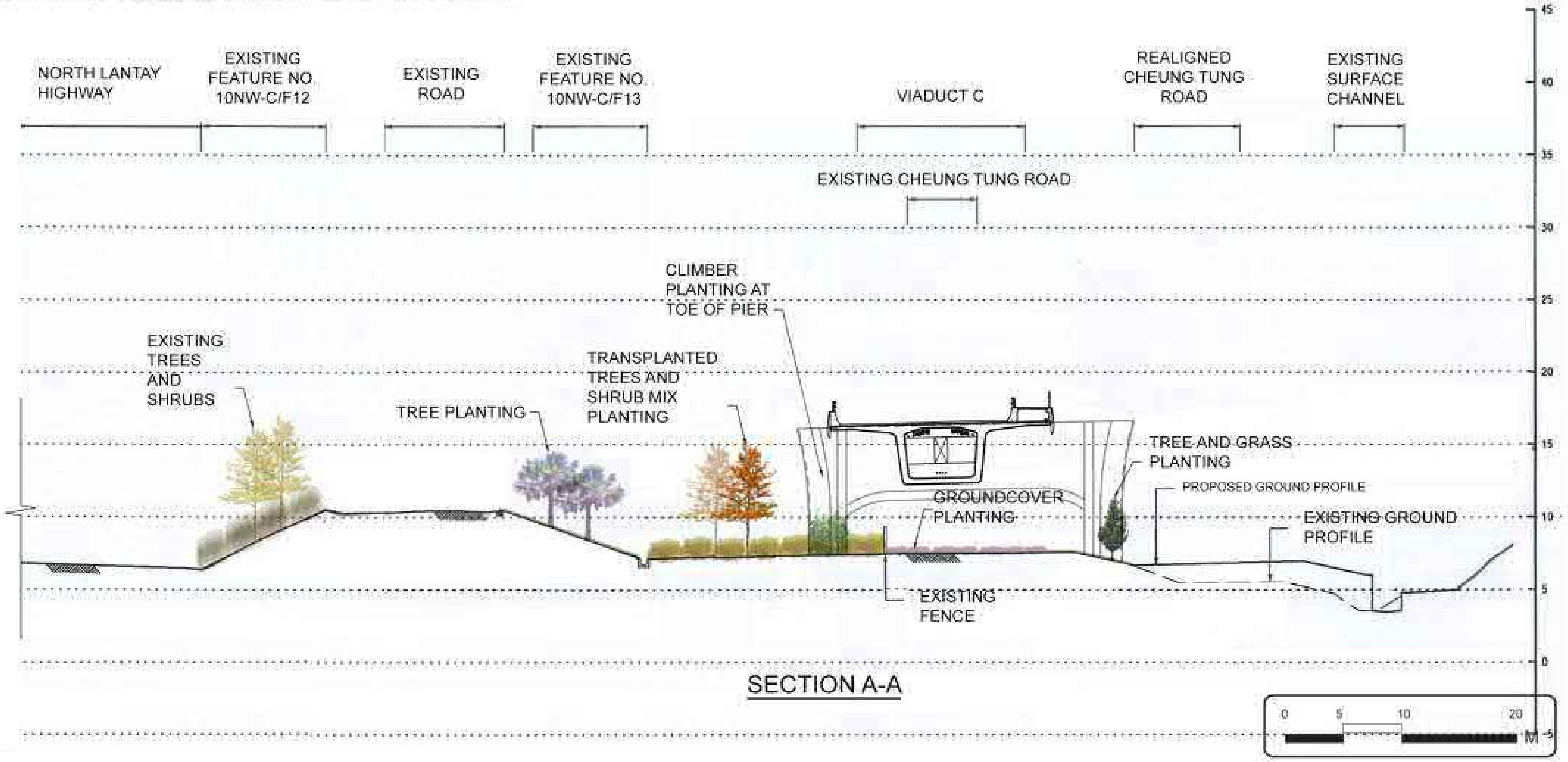


SECTION B-B



SECTION A-A

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PROJECT

TUEN MUN - CHEK LAP KOK LINK DESIGN AND CONSTRUCTION

CLIENT

路政署
HIGHWAYS DEPARTMENT
主要工程管理處(專責事務)
Major Works Project Management Office (Special Duties)

CONSULTANT

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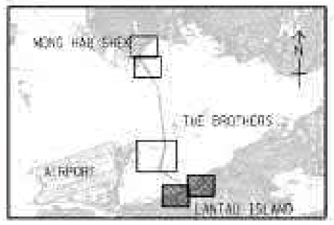
A	SEP 20	LAYOUT UPDATE	CL

STATUS

SCALE: A1 1:250

DIMENSION UNIT: MILLIMETRES

KEY PLAN



PROJECT NO.: 60240249

CONTRACT NO.: HY/2012/07

SHEET TITLE

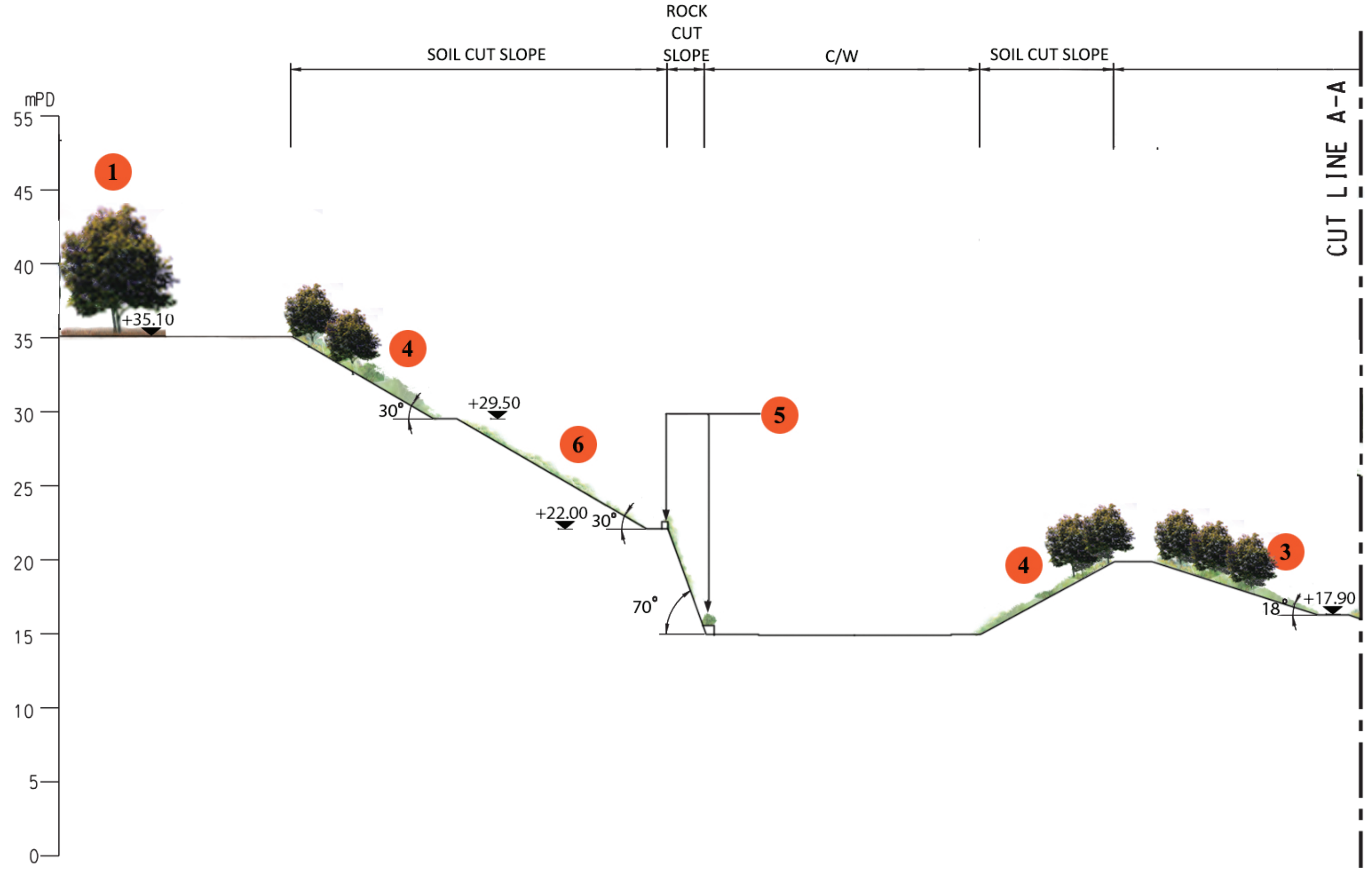
LANDSCAPE SECTIONS

SHEET NUMBER

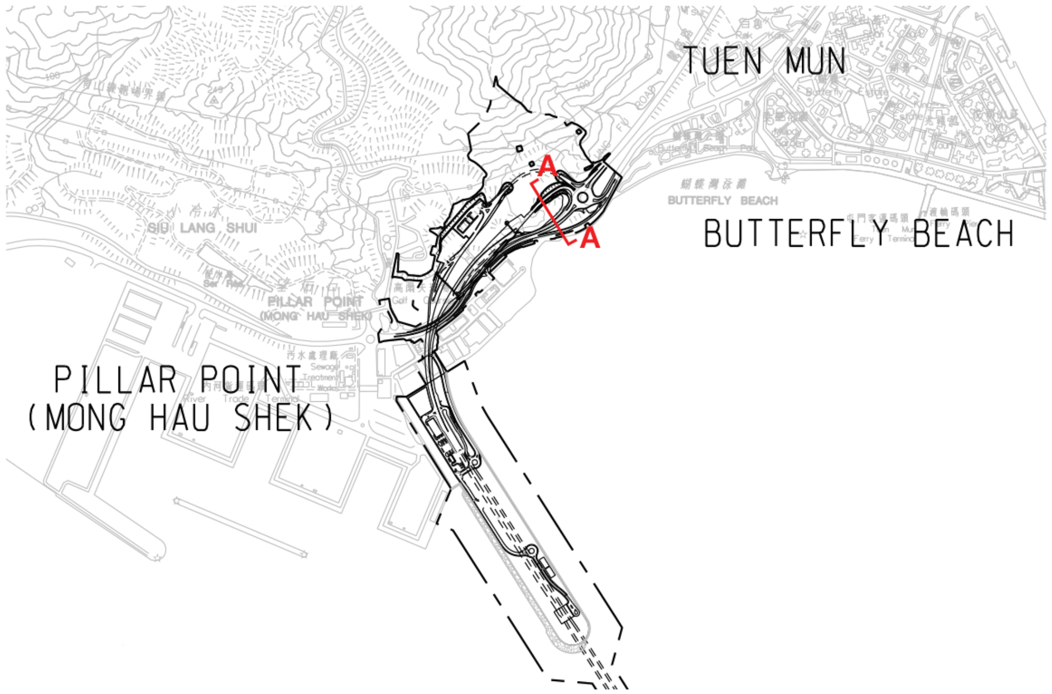
C1/LM/045

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

Plot File by: kaifaiswong 10/11/2020
PATH: V:\TOHTs RSS\CD\Landscape Master Plan\20201029\Cdrs\LM-045.dgn



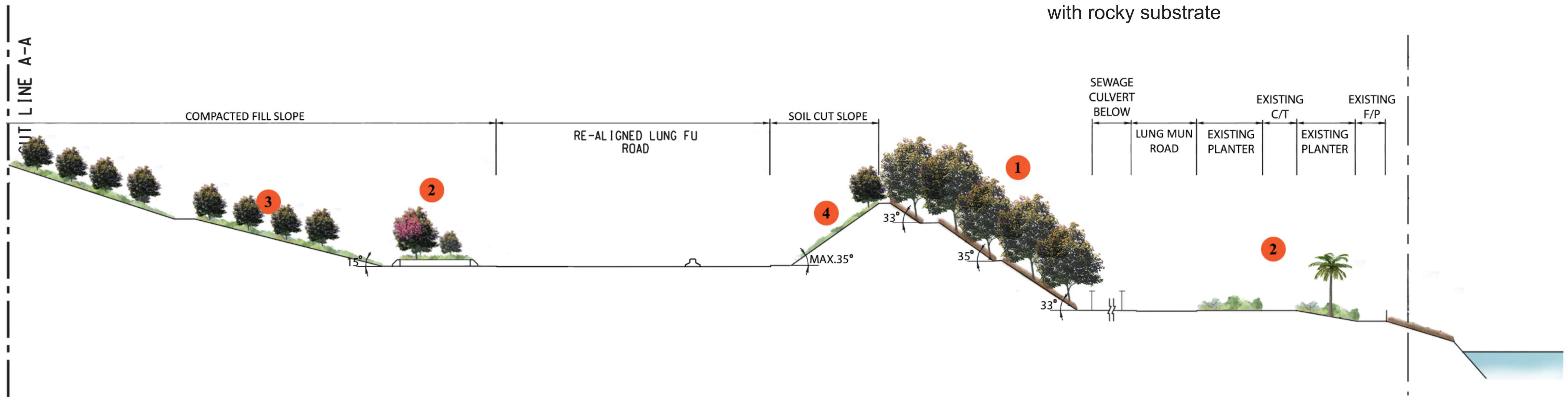
Section AA-1



KEY PLAN

KEYS FOR TUEN MUN AND NORTHERN LANDFALL SECTION

1. Existing Woodland/Tree Groups to be retained
2. Proposed Roadside Amenity Planting
3. Proposed Trees and Shrubs Mix Planting for Compacted Fill Slope
4. Proposed Trees and Shrubs Mix Planting for Soil Cut Slope
5. Proposed Shrubs and Climbers on Toe and Berm Planters to soften the Rock Cut Slope
6. Proposed Hydroseeding and Climbers Planting for Soil Cut Slope with rocky substrate



Section AA-2

0 5 10 20
M

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PROJECT

TUEN MUN - CHEK LAP KOK LINK DESIGN AND CONSTRUCTION

CLIENT

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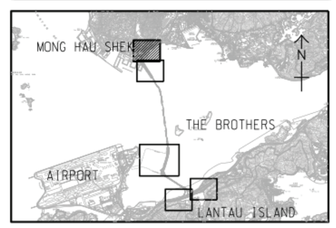
A	SEP 20	LANDSCAPE UPDATE	CL

STATUS

SCALE: A1 1:250

DIMENSION UNIT: MILLIMETRES

KEY PLAN



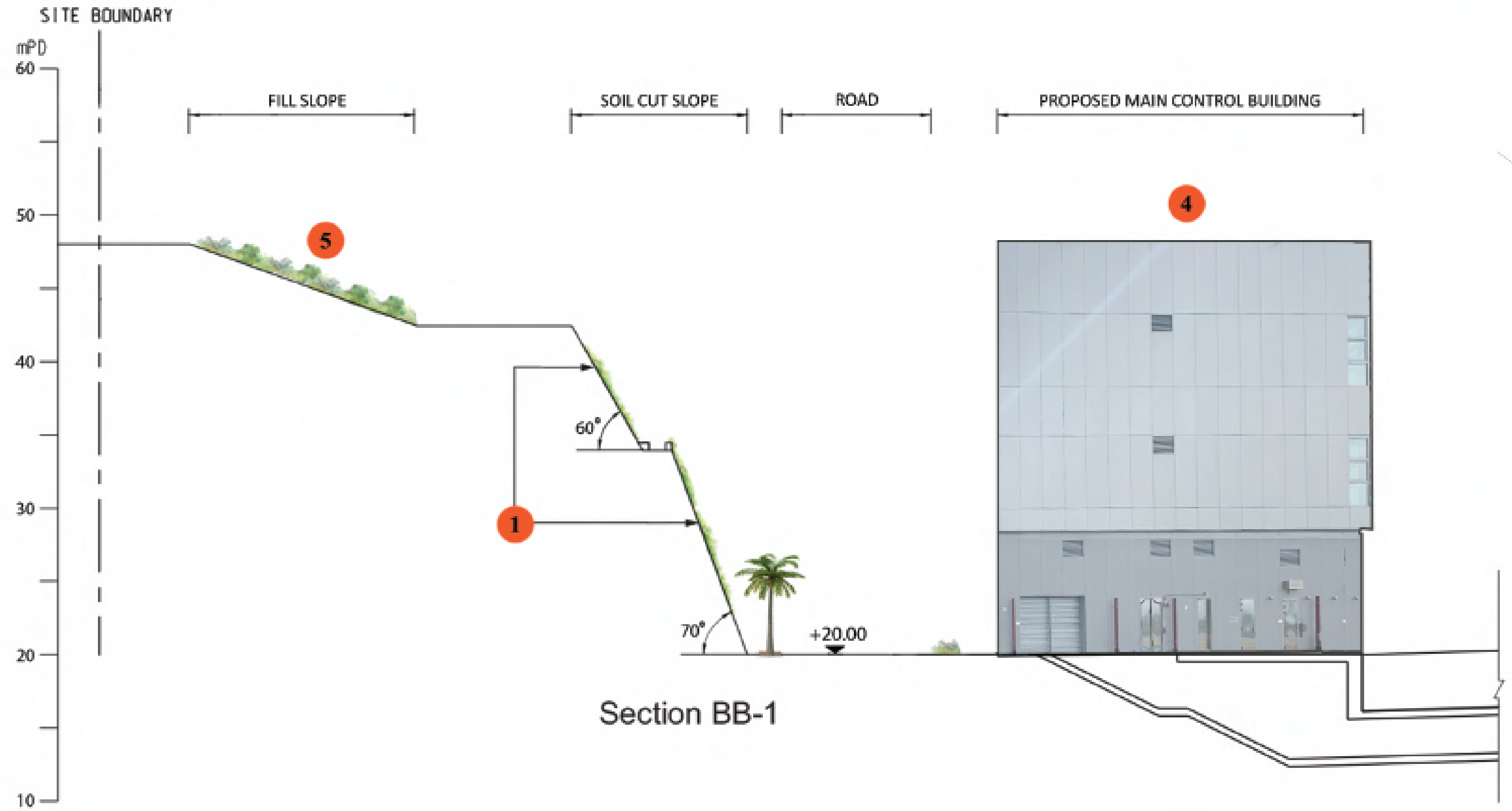
PROJECT NO.: 60240249

CONTRACT NO.: HY/2013/12

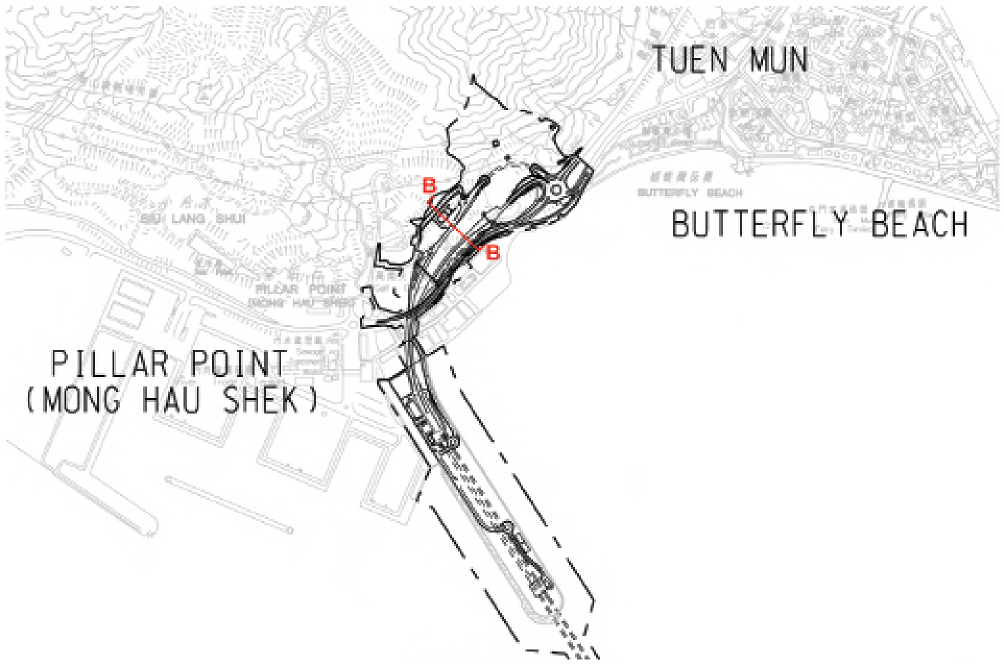
SHEET TITLE: LANDSCAPE SECTIONS

SHEET NUMBER: C3/LM/046

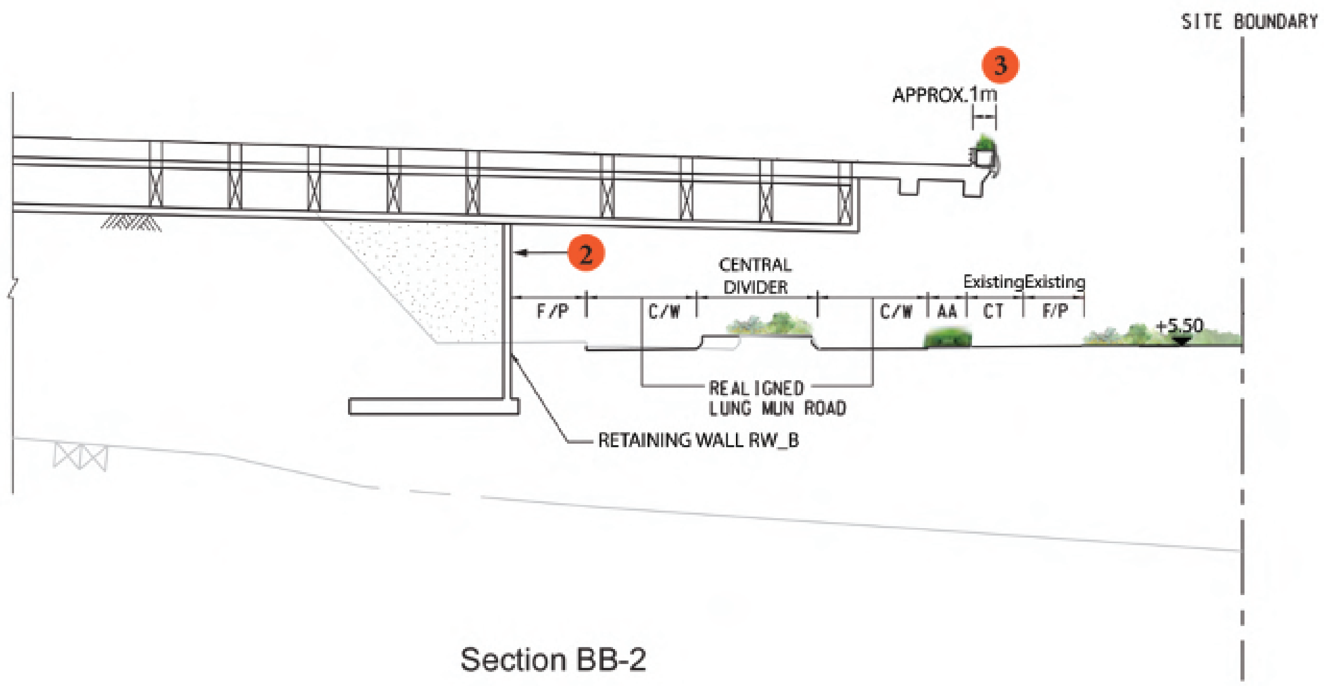
Plot File by: kathrinawong 03/11/2020
PATH: V:\TO\To RSS\CD\Landscape Master Plan\20201029\C3\dgn\LM-001.dgn



Section BB-1



KEY PLAN



Section BB-2

KEYS FOR TUEN MUN AND NORTHERN LANDFALL SECTION

1. Proposed Shrubs and Climbers on Berm Planters to soften the Rock Cut Slope. Proposed trees and shrubs for toe planter.
2. Proposed Graphic Design on VE Panel at Retaining Wall RW_B
3. Proposed Parapet Planter with Shrub Planting to soften the hard edge of the concrete deck
4. Aesthetic Design for Main Control Building (Contract No. HY/2017/10)
5. Proposed Shrub Planting on Fill Slope

0 5 10 20 M

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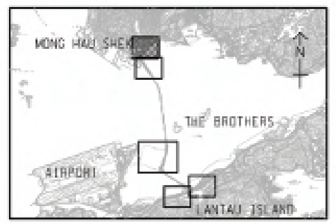
A	SEP 20	LANDSCAPE UPDATE	CL

STATUS

SCALE: A1 1:250

DIMENSION UNIT: MILLIMETRES

KEY PLAN



PROJECT NO.: 60240249

CONTRACT NO.: HY/2013/12

SHEET TITLE: LANDSCAPE SECTIONS

SHEET NUMBER: C3/LM/047

Appendix D

Proposed Compensatory Planting Areas

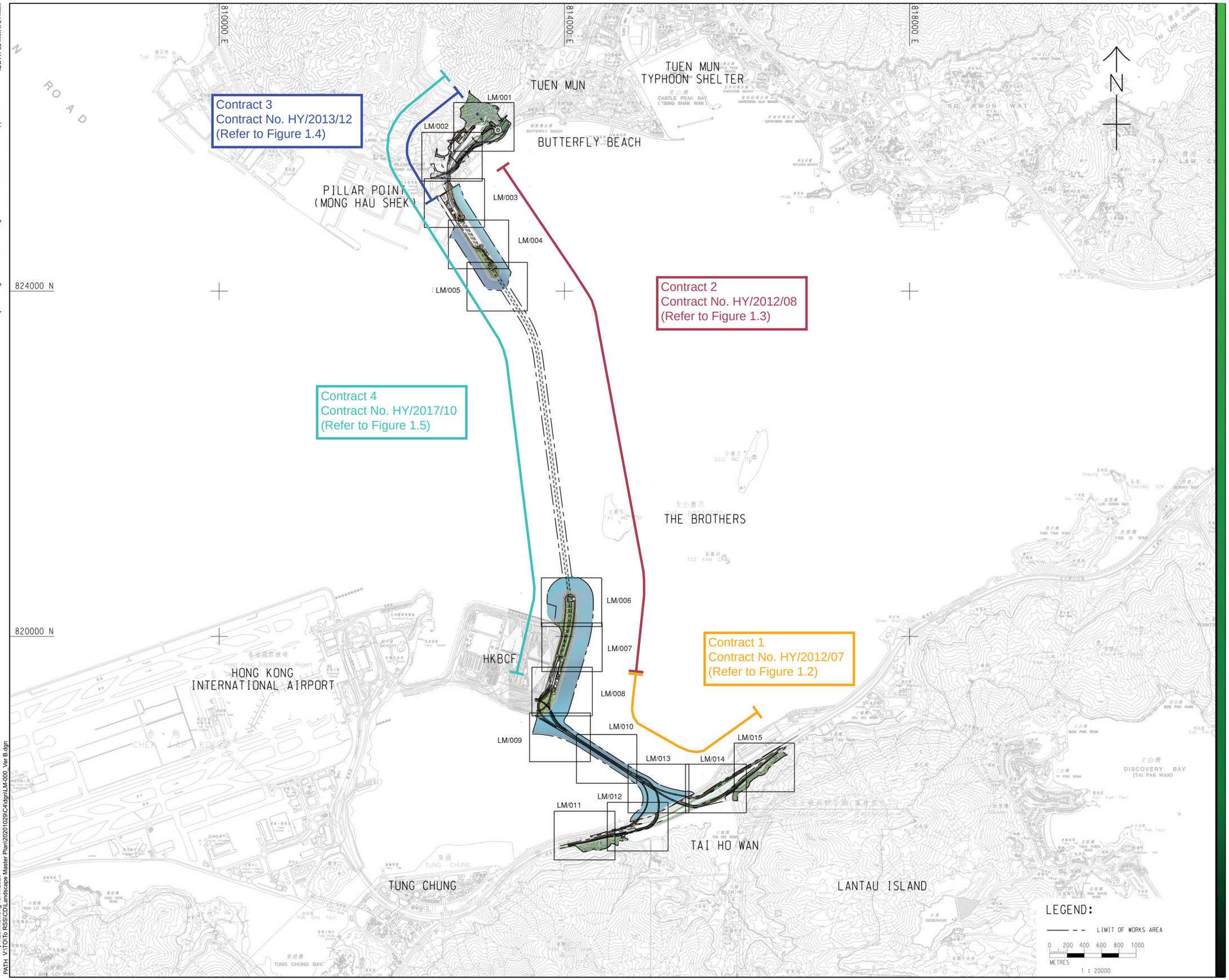
ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:



Plot File by: kathrinawong 10/11/2020
PATH: V:\TOTo RSS\CDL\Landscape Master Plan\20201029\C4d\gn\LM-000_Ver B.dgn

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TUEN MUN -
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I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核
A	SEP 20	LAYOUT UPDATE	CL

STATUS
階段

SCALE 比例
A1 1 : 20000

DIMENSION UNIT 尺寸單位
MILLIMETRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60240249

CONTRACT NO. 合約編號
CE7/2011(HY)

SHEET TITLE
圖紙名稱

LANDSCAPE MASTER PLAN
- KEY PLAN

SHEET NUMBER
圖紙編號

LM/000

Legend:
Compensatory Planting Area (in ha)
- HY/2012/07 (C1)
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)
HY/2012/07 : Approx. 14.41 ha
HY/2012/08 : Nil
HY/2013/12 : Approx. 5.35 ha
HY/2017/10 : Approx. 14.37 ha
Total : Approx. 34.13 ha

Number of Compensatory Trees (CM10):

Identification No. for Planting Area in C3:	Nos.	Identification No. for Planting Area in C4:	Nos.
C3_PA01	127	C4_PA01	4
C3_PA02	-		
C3_PA03	19		
C3_PA04	-		
C3_PA05	-		
C3_PA06	32		
C3_PA07	66		
C3_PA09	210		
C3_PA10	819		
C3_PA11	5		
C3_PA13	18		
C3_PA14	103		
Subtotal	1399 nos.	Subtotal	4 nos.

813000 E
813200 E
825800 N
N
C3_PA03 0.2385 ha
C3_PA04 0.0544 ha
C3_PA09 0.9267 ha
C3_PA01 0.4474 ha
C3_PA02 0.0126 ha
C3_PA14 1.3131 ha
C4_PA01 0.0025 ha
C3_PA11 0.0103 ha
C3_PA10 0.9820 ha
C3_PA05 0.1059 ha
C3_PA06 0.2981 ha
C3_PA13 0.0820 ha
C3_PA07 0.1461 ha
CUT LINE 1-1
SEE DRAWING NO. C3/LM/002

LEGEND
- Site Boundary
- New Tree Planting
- Transplanted Trees
- Existing Trees and Shrubs (at-grade)
- Proposed Shrub, Ground cover, Grass Planting
- Existing Woodland Tree Groups
- Proposed Tree planting for Slope
- Proposed Tree and Shrub Mix Planting

Plot File by: kathrinawong 09/11/2020
PATH: V:\TO\To RSS\CD\Landscape Master Plan\2020\1029\C3dgn\LM-030.dgn

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TOLL PLAZA AND ASSOCIATED WORKS

CLIENT
路政署 HIGHWAYS DEPARTMENT
主要工程管理處(專責事務) Major Works Project Management Office (Special Duties)

CONSULTANT
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A	SEP 19	LANDSCAPE UPDATE	CWN
I/R	DATE	DESCRIPTION	CHK.

STATUS

SCALE: A1 1:1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

KEY PLAN


PROJECT NO.: 60240249
CONTRACT NO.: HY/2013/12

SHEET TITLE
LANDSCAPE MASTER PLAN

SHEET 1 OF 15

SHEET NUMBER
C3/LM/001

Legend:
Compensatory Planting Area (in ha)
- HY/2012/07 (C1)
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)
HY/2012/07 : Approx. 14.41 ha
HY/2012/08 : Nil
HY/2013/12 : Approx. 5.35 ha
HY/2017/10 : Approx. 14.37 ha
Total : Approx. 34.13 ha

Number of Compensatory Trees (CM10):

Identification No. for Planting Area in C3:	Nos.	Identification No. for Planting Area in C4:	Nos.
C3_PA01	127	C4_PA01	4
C3_PA02	-		
C3_PA03	19		
C3_PA04	-		
C3_PA05	-		
C3_PA06	32		
C3_PA07	66		
C3_PA09	210		
C3_PA10	819		
C3_PA11	5		
C3_PA13	18		
C3_PA14	103		
Subtotal	1399 nos.	Subtotal	4 nos.
C3_PA08	-		
C3_PA12	12		
C3_PA15	7		
C3_PA16	-		
C3_PA17	-		
C3_PA18	20		
C3_PA19	43		
C3_PA20	16		
C3_PA21	23		
C3_PA22	-		
Subtotal	121 nos.		
C3 Total	1520 nos.		

812600 E

CUT LINE 1-1
SEE DRAWING NO. C3/LM/001

C3_PA15
0.0325 ha

C3_PA12
0.1019 ha

C3_PA08
0.1124 ha

C3_PA16
0.0300 ha

Potential Development Area

C3_PA17
0.0208 ha

C3_PA19
0.1356 ha

C3_PA20
0.0536 ha

C3_PA18
0.0606 ha

825400 N

C3_PA21
0.1660 ha

CUT LINE 2-2
SEE DRAWING NO. C4/LM/003

LEGEND

- Site Boundary
- New Tree Planting
- Transplanted Trees
- Existing Trees and Shrubs (at-grade)
- Proposed Expressway Boundary
- Proposed Shrub, Ground cover, Grass Planting
- Existing Woodland Tree Groups
- Proposed Tree planting for Slope
- Proposed Tree and Shrub Mix Planting

Plot File by: kathrinawong 10/11/2020
PATH: V:\TO\to RSS\C2\Landscape Master Plan\20201029\C3\dgn\LM-031.dgn

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PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TOLL PLAZA AND ASSOCIATED WORKS

CLIENT
HIGHWAYS DEPARTMENT
Major Works Project Management Office (Special Duties)

CONSULTANT
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B	SEP 20	LANDSCAPE UPDATE	CL
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE
A1 1:1000 A3 1:2000

DIMENSION UNIT
MILLIMETRES

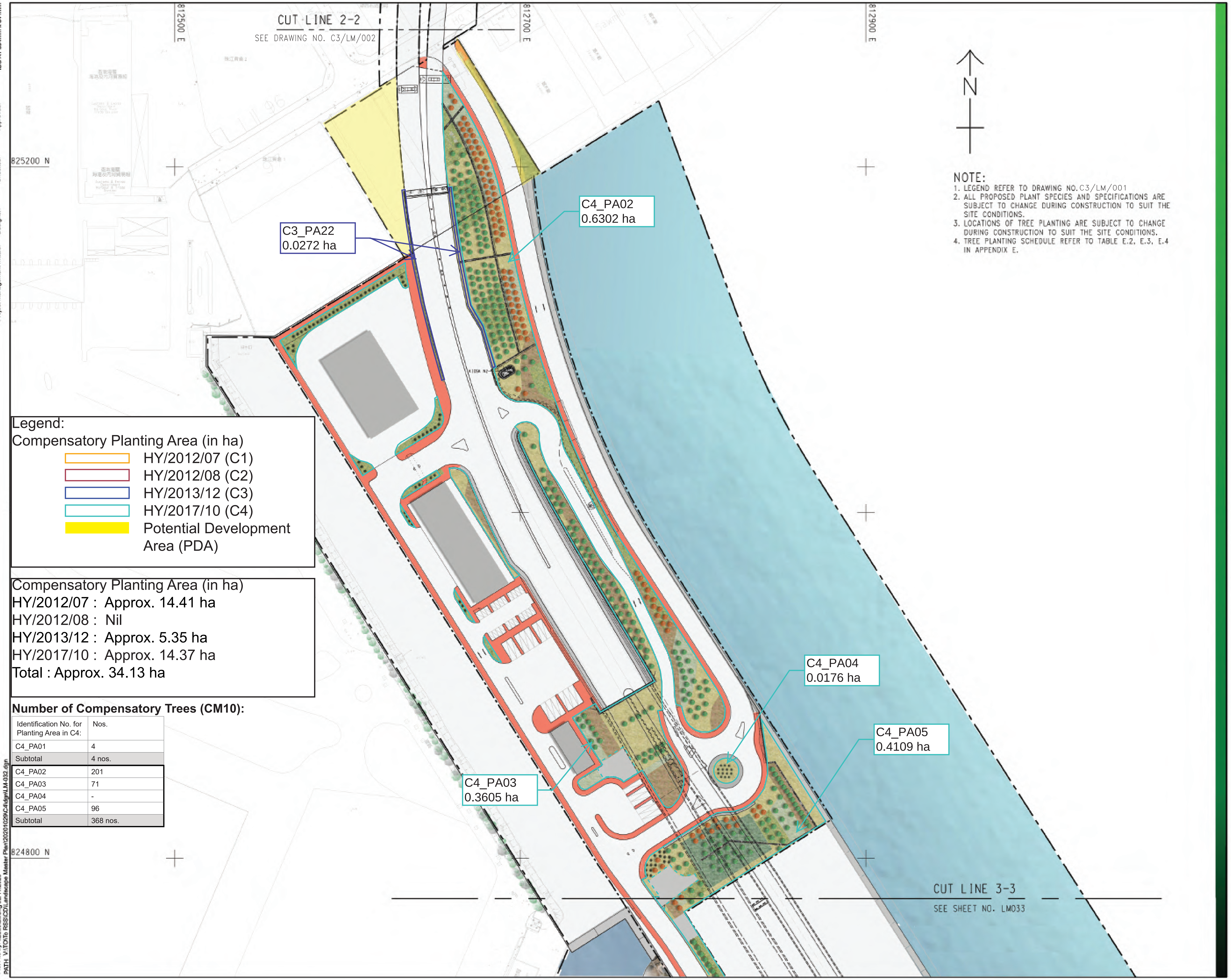
KEY PLAN


PROJECT NO.
60240249

CONTRACT NO.
HY/2013/12

SHEET TITLE
LANDSCAPE MASTER PLAN

SHEET NUMBER
C3/LM/002



NOTE:
1. LEGEND REFER TO DRAWING NO. C3/LM/001
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

Legend:
Compensatory Planting Area (in ha)
- HY/2012/07 (C1)
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)
HY/2012/07 : Approx. 14.41 ha
HY/2012/08 : Nil
HY/2013/12 : Approx. 5.35 ha
HY/2017/10 : Approx. 14.37 ha
Total : Approx. 34.13 ha

Number of Compensatory Trees (CM10):

Identification No. for Planting Area in C4:	Nos.
C4_PA01	4
Subtotal	4 nos.
C4_PA02	201
C4_PA03	71
C4_PA04	-
C4_PA05	96
Subtotal	368 nos.

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

CLIENT
路政署 HIGHWAYS DEPARTMENT
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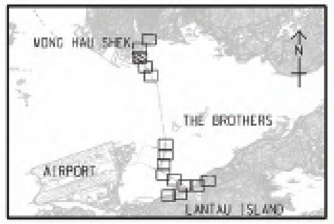
B	SEP 20	LANDSCAPE UPDATE	CL
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1:1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

KEY PLAN



PROJECT NO. 60240249
CONTRACT NO. HY/2017/10

SHEET TITLE
LANDSCAPE MASTER PLAN

SHEET 3 OF 15

SHEET NUMBER
C4/LM/003

ISO A1 594mm x 841mm
Approved:
Checked:
Designer:
Project Management Initials:
Plot File by: kathrinewong 02/11/2020
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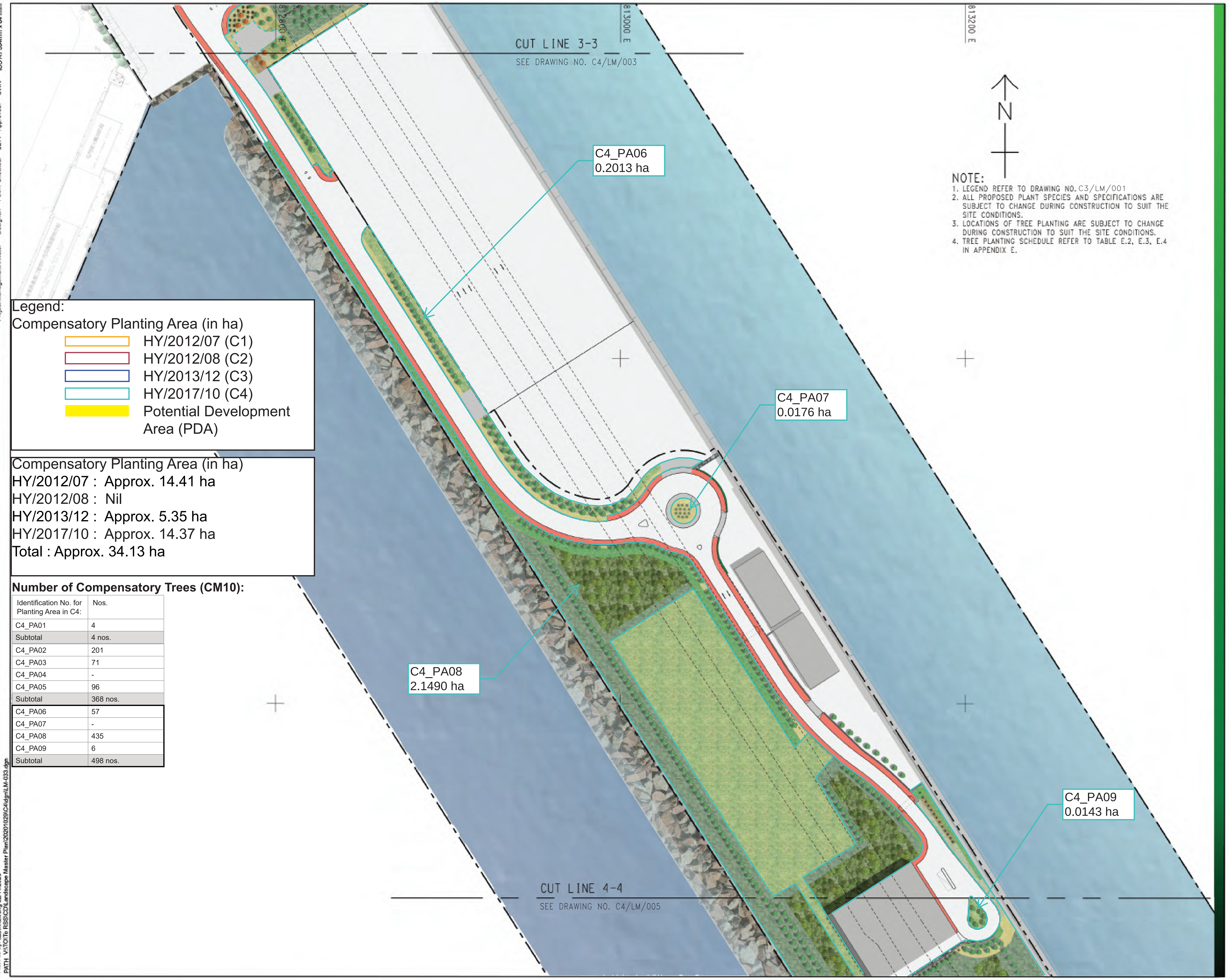
Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm



NOTE:
1. LEGEND REFER TO DRAWING NO. C3/LM/001
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

Legend:
Compensatory Planting Area (in ha)
- HY/2012/07 (C1)
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)
HY/2012/07 : Approx. 14.41 ha
HY/2012/08 : Nil
HY/2013/12 : Approx. 5.35 ha
HY/2017/10 : Approx. 14.37 ha
Total : Approx. 34.13 ha

Number of Compensatory Trees (CM10):

Identification No. for Planting Area in C4:	Nos.
C4_PA01	4
Subtotal	4 nos.
C4_PA02	201
C4_PA03	71
C4_PA04	-
C4_PA05	96
Subtotal	368 nos.
C4_PA06	57
C4_PA07	-
C4_PA08	435
C4_PA09	6
Subtotal	498 nos.

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

CLIENT
路政署
HIGHWAYS DEPARTMENT
主要工程管理處(專責事務)
Major Works Project Management Office (Special Duties)

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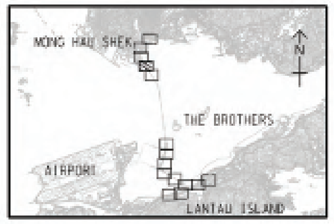
B	SEP 20	LANDSCAPE UPDATE	CL
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1 : 1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

KEY PLAN



PROJECT NO.: 60240249
CONTRACT NO.: HY/2017/10

SHEET TITLE
LANDSCAPE MASTER PLAN

SHEET 4 OF 15

SHEET NUMBER
C4/LM/004

Plot File by: kathrinawong 02/11/2020
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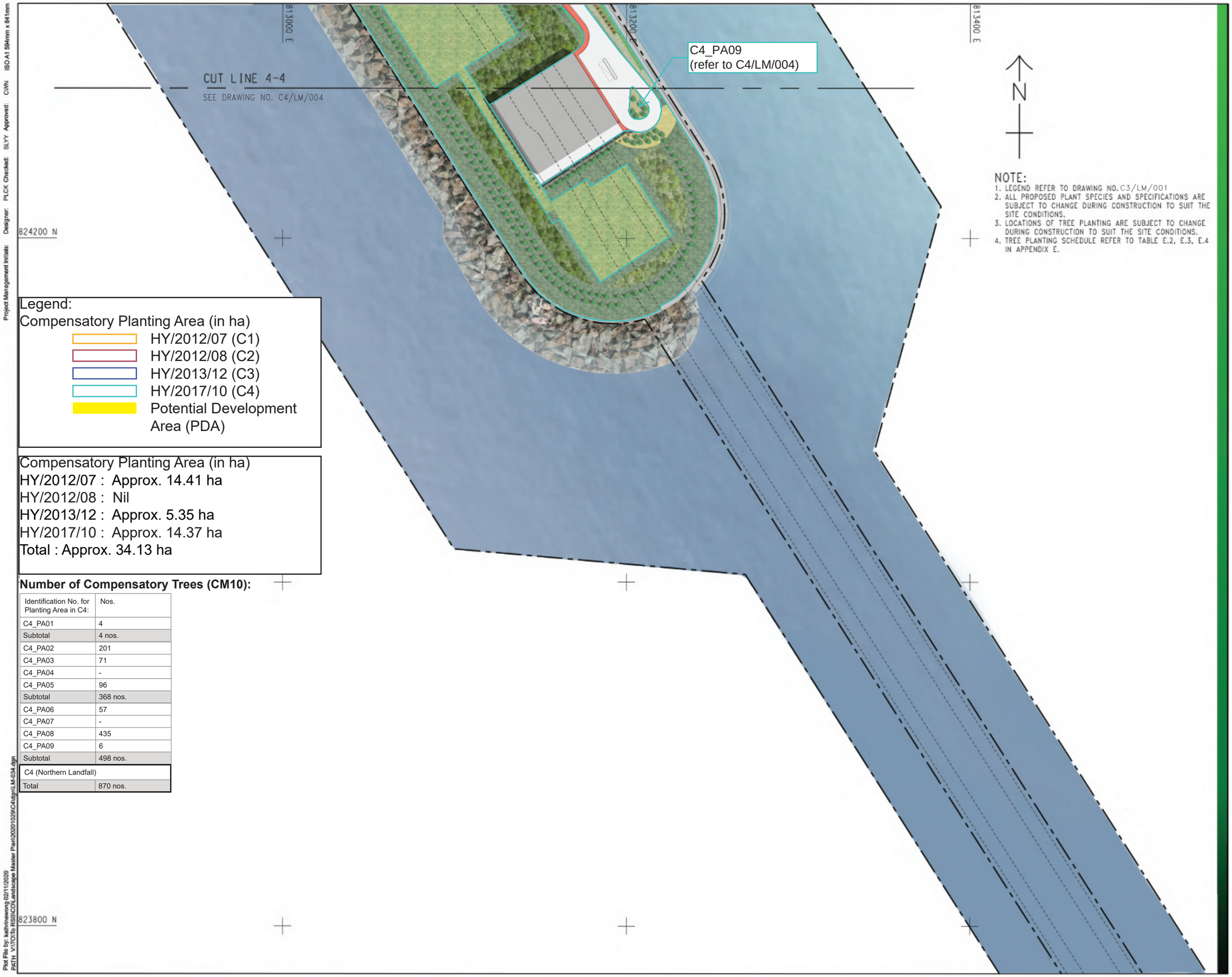

Legend:
Compensatory Planting Area (in ha)
- HY/2012/07 (C1)
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)
HY/2012/07 : Approx. 14.41 ha
HY/2012/08 : Nil
HY/2013/12 : Approx. 5.35 ha
HY/2017/10 : Approx. 14.37 ha
Total : Approx. 34.13 ha

Number of Compensatory Trees (CM10):

Identification No. for Planting Area in C4:	Nos.
C4_PA01	4
Subtotal	4 nos.
C4_PA02	201
C4_PA03	71
C4_PA04	-
C4_PA05	96
Subtotal	368 nos.
C4_PA06	57
C4_PA07	-
C4_PA08	435
C4_PA09	6
Subtotal	498 nos.
C4 (Northern Landfall)	
Total	870 nos.

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

CLIENT
HIGHWAYS DEPARTMENT
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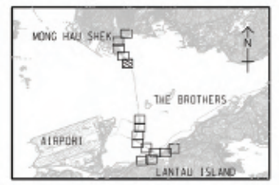
B	SEP 20	LANDSCAPE UPDATE	CL
A	SEP 19	LANDSCAPE UPDATE	CWN
I/R	DATE	DESCRIPTION	CHK.

STATUS

SCALE: A1 1 : 1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

KEY PLAN


PROJECT NO.: 60240249
CONTRACT NO.: HY/2017/10

SHEET TITLE
LANDSCAPE MASTER PLAN

SHEET 5 OF 15

SHEET NUMBER
C4/LM/005

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

Plot File by: kathrinewong 02/11/2020
PATH: V:\TOT\To RSS\CDM\Landscape Master Plan\20201029\C4\dgn\LM-004.dgn

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

813800 E
814000 E
814200 E
814400 E
820600 N
820400 N
820200 N

N

C4_PA10
10.5759 ha
(Note: the area of roads, footpath, buildings not included)

Legend:
Compensatory Planting Area (in ha)
- HY/2012/07 (C1)
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)
HY/2012/07 : Approx. 14.41 ha
HY/2012/08 : Nil
HY/2013/12 : Approx. 5.35 ha
HY/2017/10 : Approx. 14.37 ha
Total : Approx. 34.13 ha

Number of Compensatory Trees (CM10):

Identification No. for Planting Area in C4:	Nos.
C4_PA10	2127
Subtotal	2127 nos.

CUT LINE 1-1
SEE DRAWING NO. C4/LM/007

NOTE:
1. LEGEND REFER TO DRAWING NO.C3/LM/001
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

Plot File by: kathrinwong 02/11/2020
PATH: V:\TDTs RSS\CD\Landscape Master Plan\20201029\C4\dgn\LM-035.dgn

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN – CHEK LAP KOK LINK – NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

CLIENT
路政署 HIGHWAYS DEPARTMENT
土木工程拓展處(專責事務)
Major Works Project Management Office (Special Duties)

CONSULTANT
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I/R	DATE	DESCRIPTION	CHK.
B	SEP 20	LANDSCAPE UPDATE	CL
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

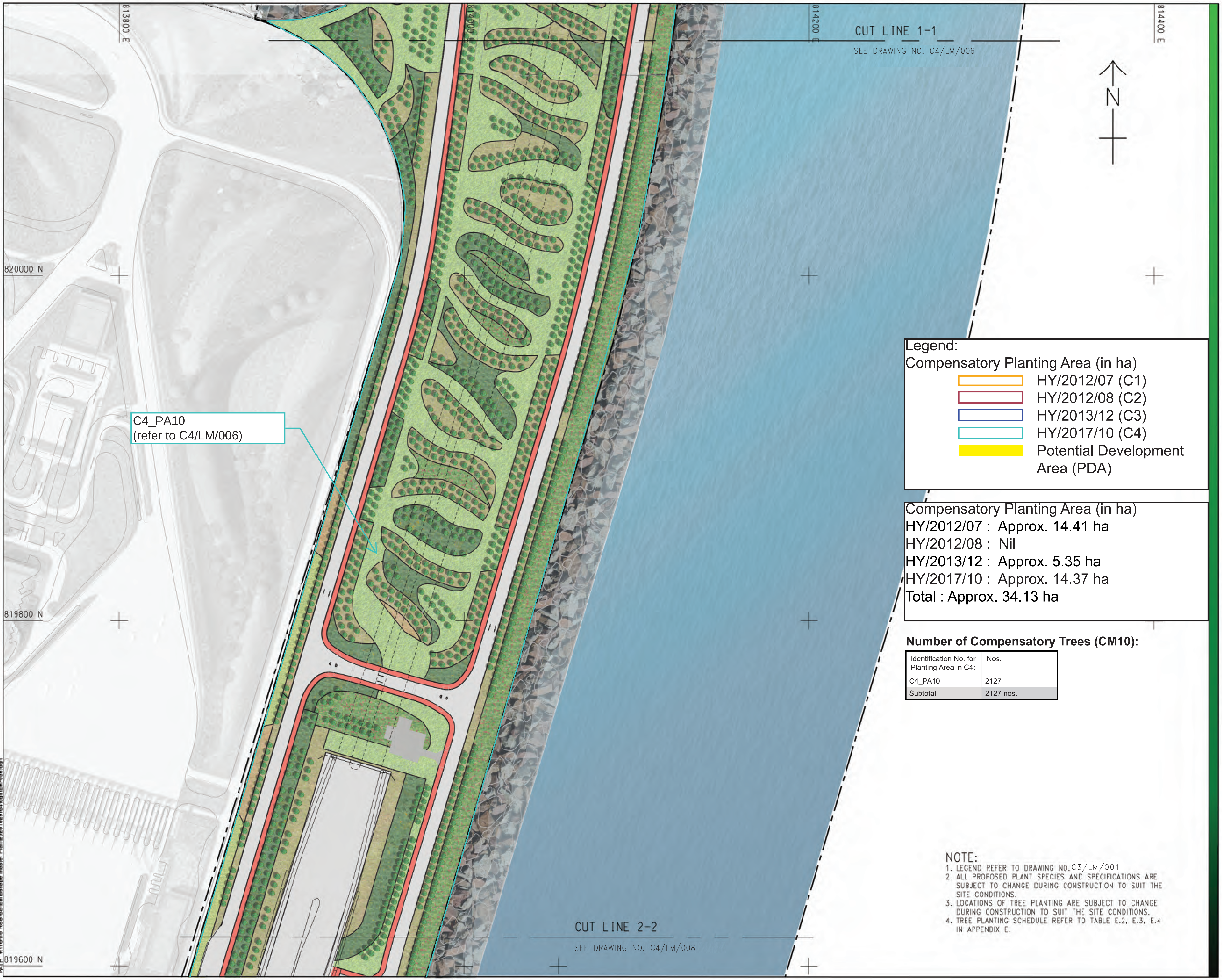
SCALE: A1 1:1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

KEY PLAN


PROJECT NO.: 60240249
CONTRACT NO.: HY/2017/10

SHEET TITLE
LANDSCAPE MASTER PLAN

SHEET NUMBER
C4/LM/006



Legend:

Compensatory Planting Area (in ha)

- HY/2012/07 (C1)
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)

HY/2012/07 : Approx. 14.41 ha
HY/2012/08 : Nil
HY/2013/12 : Approx. 5.35 ha
HY/2017/10 : Approx. 14.37 ha
Total : Approx. 34.13 ha

Number of Compensatory Trees (CM10):

Identification No. for Planting Area in C4:	Nos.
C4_PA10	2127
Subtotal	2127 nos.

NOTE:
1. LEGEND REFER TO DRAWING NO. C3/LM/001
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

AECOM

PROJECT

TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE

TUEN MUN – CHEK LAP KOK LINK – NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

CLIENT

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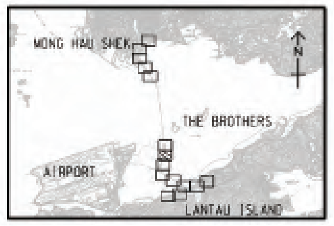
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1:1000 A3 1:2000

DIMENSION UNIT: MILLIMETRES

KEY PLAN



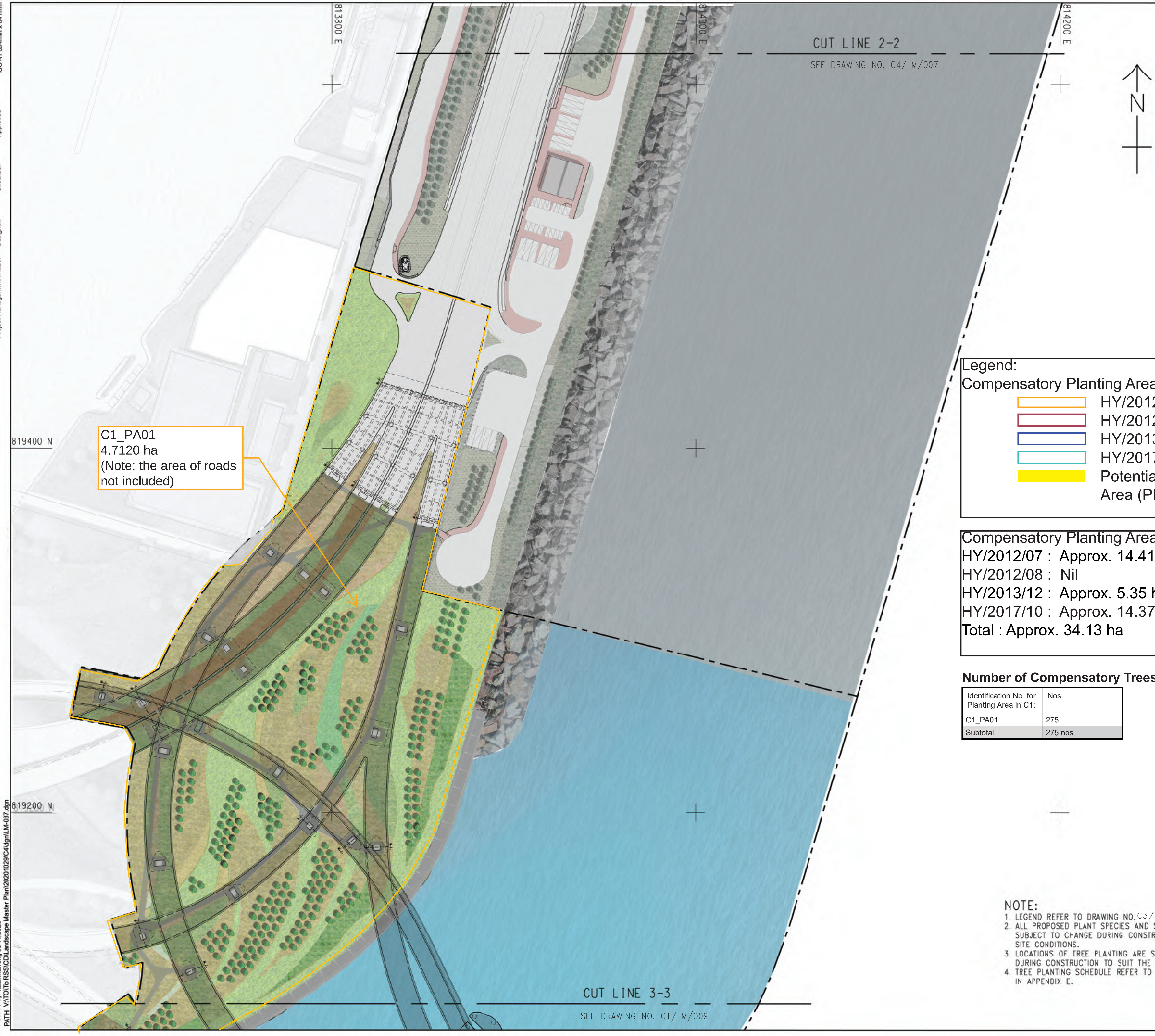
PROJECT NO.: 60240249

CONTRACT NO.: HY/2017/10

SHEET TITLE: LANDSCAPE MASTER PLAN

SHEET 7 OF 15

SHEET NUMBER: C4/LM/007



Legend:

Compensatory Planting Area (in ha)

- HY/2012/07 (C1) (orange outline)
- HY/2012/08 (C2) (red outline)
- HY/2013/12 (C3) (blue outline)
- HY/2017/10 (C4) (cyan outline)
- Potential Development Area (PDA) (yellow fill)

Compensatory Planting Area (in ha)

HY/2012/07 : Approx. 14.41 ha
HY/2012/08 : Nil
HY/2013/12 : Approx. 5.35 ha
HY/2017/10 : Approx. 14.37 ha
Total : Approx. 34.13 ha

Number of Compensatory Trees (CM10):

Identification No. for Planting Area in C1:	Nos.
C1_PA01	275
Subtotal	275 nos.

NOTE:
1. LEGEND REFER TO DRAWING NO. C3/LM/001
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

AECOM

PROJECT

TUEN MUN -
CHEK LAP KOK LINK

CONTRACT TITLE

TUEN MUN – CHEK LAP KOK LINK – SOUTHERN CONNECTINO VIADUCT SECTION

CLIENT

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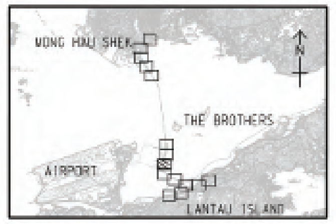
B	SEP 20	LANDSCAPE UPDATE	CL
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1 : 1000 A3 1:2000

DIMENSION UNIT: MILLIMETRES

KEY PLAN



PROJECT NO.: 60240249

CONTRACT NO.: HY/2012/07

SHEET TITLE

LANDSCAPE MASTER PLAN

SHEET 8 OF 15

SHEET NUMBER

C1/LM/008ii

ISO A1 594mm x 841mm
Approved:
Checked:
Designer:
Project Management Initials:
Plot File by: kathrinawong 03/11/2020

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

813800 E

814000 E

814200 E

CUT LINE 2-2

SEE DRAWING NO. C4/LM/007

N

C4_PA 10
(refer to C4/LM/006)

819400 N

819200 N

CUT LINE 3-3

SEE DRAWING NO. C1/LM/009

Legend:
Compensatory Planting Area (in ha)
- HY/2012/07 (C1)
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)
HY/2012/07 : Approx. 14.41 ha
HY/2012/08 : Nil
HY/2013/12 : Approx. 5.35 ha
HY/2017/10 : Approx. 14.37 ha
Total : Approx. 34.13 ha

Number of Compensatory Trees (CM10):

C4 (Northern Landfall)	
Total	870 nos.
C4 (Southern Landfall)	
Total	2127 nos.
C4 Total	2997 nos.

NOTE:
1. LEGEND REFER TO DRAWING NO. C3/LM/001
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

Plot File by: kathrinawong 03/11/2020
PATH: V:\TO\To RSS\CD\Landscape Master Plan\2020\1029\C4\dgn\LM-007.dgn

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TUNNEL BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

CLIENT
路政署 HIGHWAYS DEPARTMENT
主要工程管理處(專責事務) Major Works Project Management Office (Special Duties)

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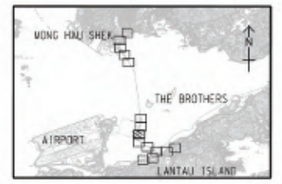
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1:1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

KEY PLAN

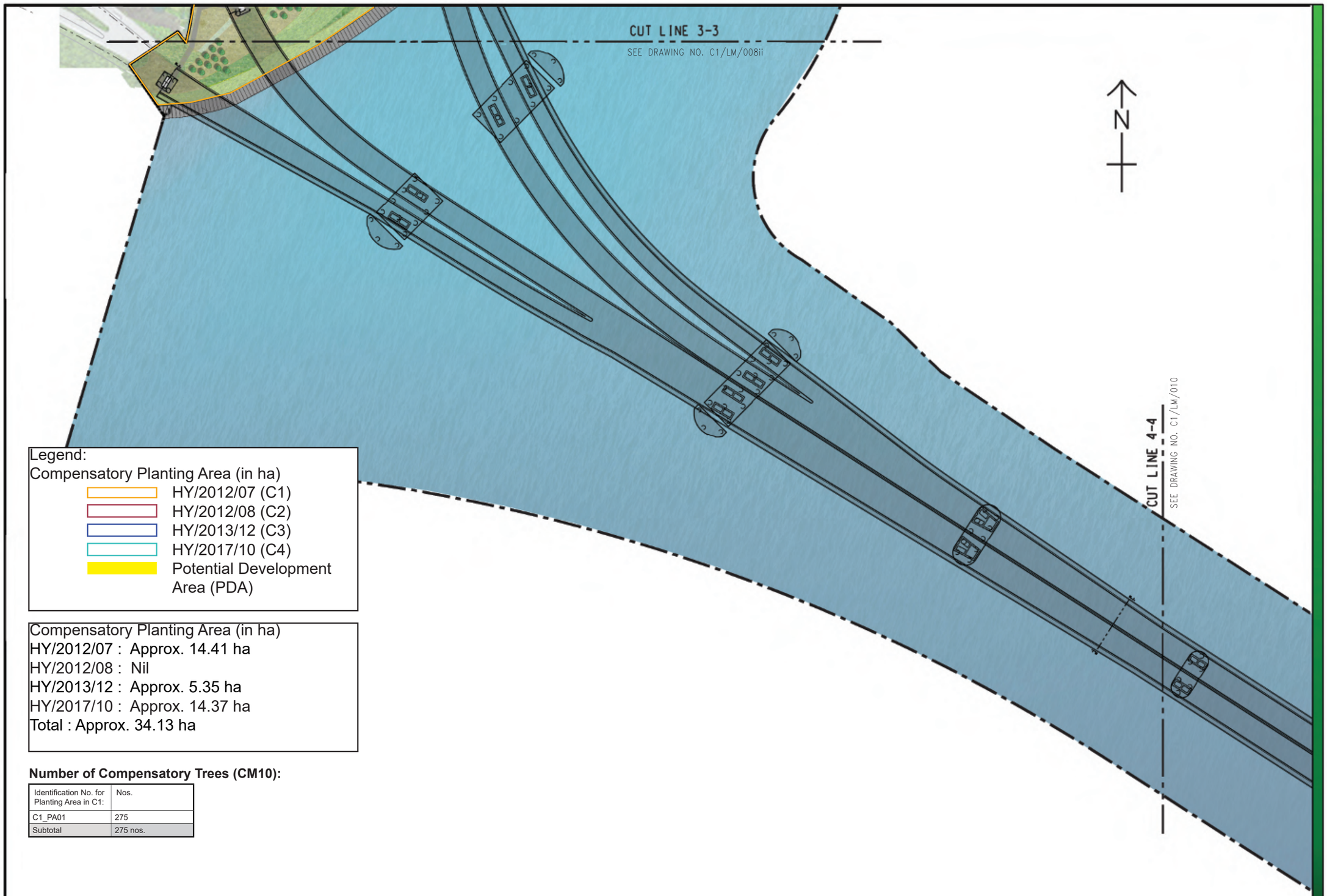


PROJECT NO.: 60240249
CONTRACT NO.: HY/2017/10

SHEET TITLE
LANDSCAPE MASTER PLAN

SHEET 8 OF 15

SHEET NUMBER
C4/LM/008i



Legend:
Compensatory Planting Area (in ha)
- HY/2012/07 (C1)
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)
HY/2012/07 : Approx. 14.41 ha
HY/2012/08 : Nil
HY/2013/12 : Approx. 5.35 ha
HY/2017/10 : Approx. 14.37 ha
Total : Approx. 34.13 ha

Number of Compensatory Trees (CM10):

Identification No. for Planting Area in C1:	Nos.
C1_PA01	275
Subtotal	275 nos.

NOTE:
1. LEGEND REFER TO DRAWING NO. C3/LM/001
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION

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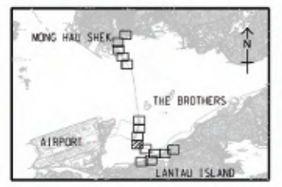
A	SEP19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1:1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

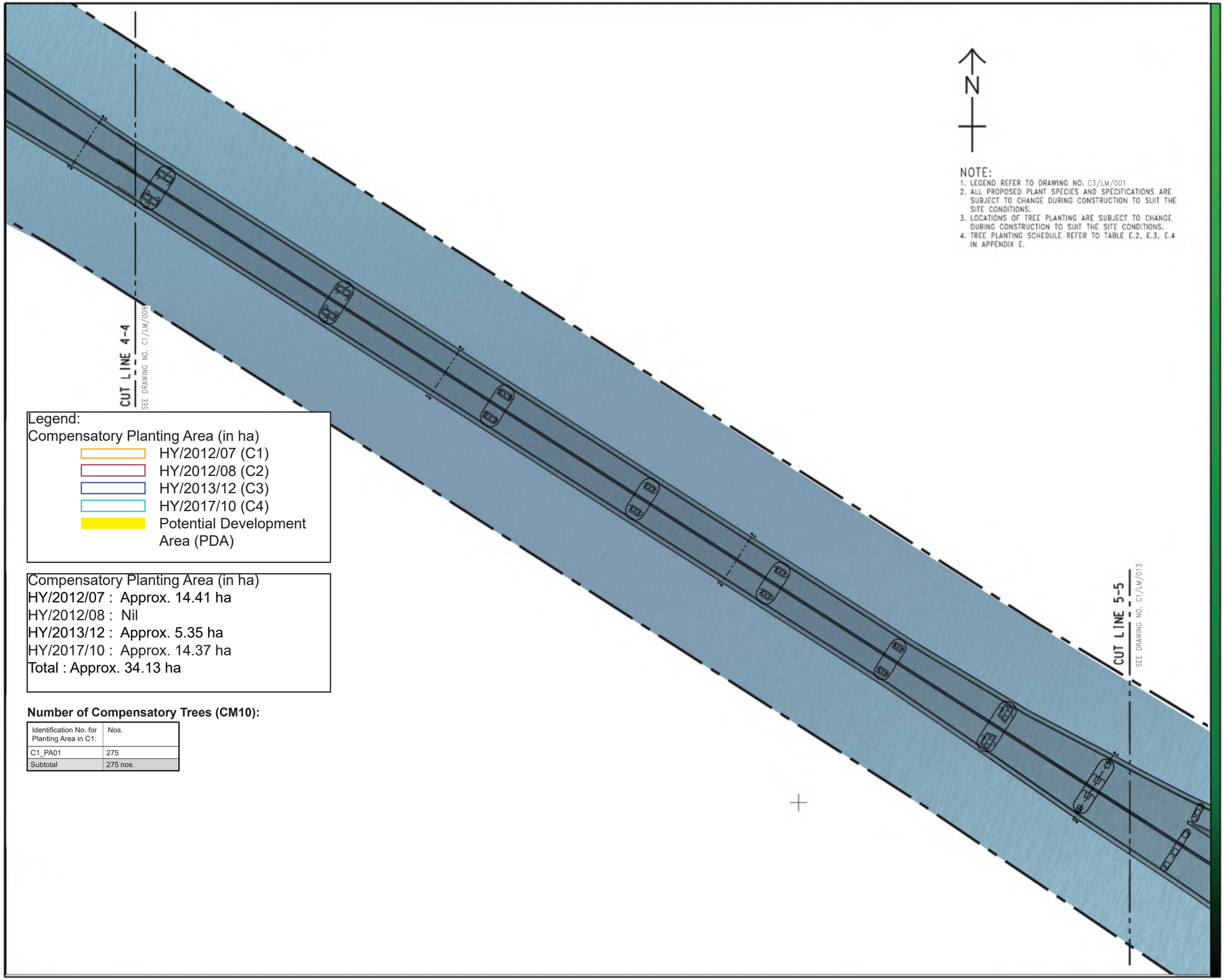
KEY PLAN


PROJECT NO.: 60240249
CONTRACT NO.: HY/2012/07

SHEET TITLE
LANDSCAPE MASTER PLAN

SHEET 9 OF 15

SHEET NUMBER
C1/LM/009



NOTE:
1. LEGEND REFER TO DRAWING NO. C3/LM/001
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

Legend:
Compensatory Planting Area (in ha)
- HY/2012/07 (C1)
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)
HY/2012/07 : Approx. 14.41 ha
HY/2012/08 : Nil
HY/2013/12 : Approx. 5.35 ha
HY/2017/10 : Approx. 14.37 ha
Total : Approx. 34.13 ha

Number of Compensatory Trees (CM10):

Identification No. for Planting Area in C1:	Nos.
C1_PA01	275
Subtotal	275 nos.

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION

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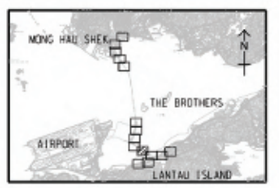
A	SEP19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1:1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

KEY PLAN



PROJECT NO.: 60240249
CONTRACT NO.: HY/2012/07

SHEET TITLE
LANDSCAPE MASTER PLAN

SHEET 10 OF 15

SHEET NUMBER
C1/LM/010

Legend:
Compensatory Planting Area (in ha)
- HY/2012/07 (C1)
- HY/2012/07 (C1*)
  Entrusted Landscape Works to Contract No. DC/2016/01
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)
HY/2012/07 : Approx. 14.41 ha
HY/2012/08 : Nil
HY/2013/12 : Approx. 5.35 ha
HY/2017/10 : Approx. 14.37 ha
Total : Approx. 34.13 ha

Number of Compensatory Trees (CM10):

Identification No. for Planting Area in C1:	Nos.
C1_PA01	275
Subtotal	275 nos.
C1*_PA02	91
C1_PA03	-
C1_PA04	-
C1_PA05	143
Subtotal	234 nos.

LEGEND

- Site Boundary
- New Tree Planting
- Transplanted Trees
- Existing Trees and Shrubs (at-grade)
- Proposed Expressway Boundary
- Proposed Shrub, Ground cover, Grass Planting
- Existing Woodland Tree Groups
- Proposed Tree planting for Slope
- Proposed Tree and Shrub Mix Planting

N

NOTE:
1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
2. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK SOUTHERN CONNECTION VIADUCT SECTION

CLIENT
HIGHWAYS DEPARTMENT
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STATUS

SCALE: A1 1 : 1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

KEY PLAN

PROJECT NO. 60240249
CONTRACT NO. HY/2012/07

SHEET TITLE
LANDSCAPE MASTER PLAN

SHEET 11 OF 15

SHEET NUMBER
C1/LM/011

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

Plot File by: kathrinswong 02/11/2020
PATH : V:\TOTe RSS\CD\Landscape\ Master Plan\20201029\C1\dgn\LM-040.dgn

Legend:

Compensatory Planting Area (in ha)

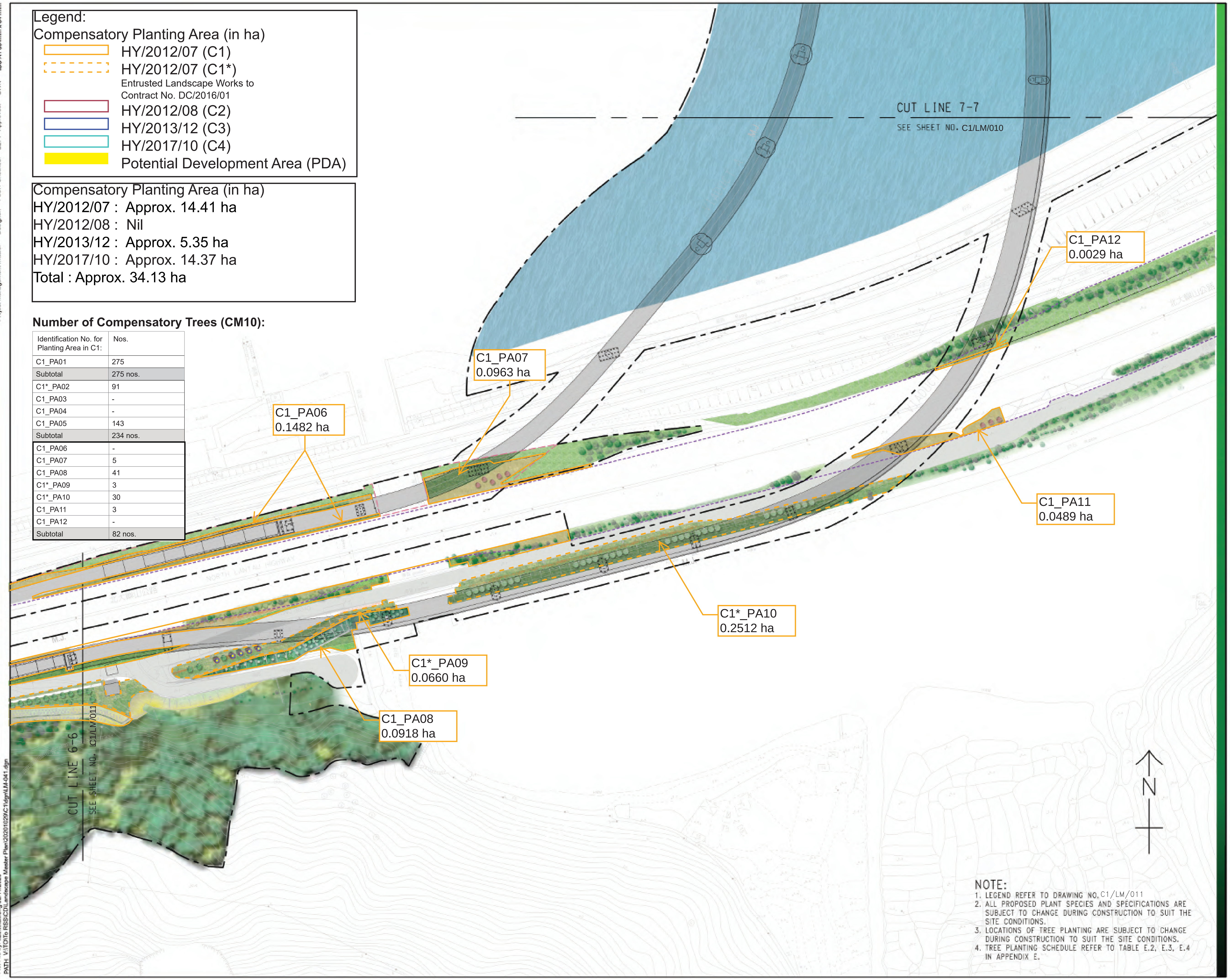
- HY/2012/07 (C1)
- HY/2012/07 (C1*) Entrusted Landscape Works to Contract No. DC/2016/01
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)

HY/2012/07 : Approx. 14.41 ha
HY/2012/08 : Nil
HY/2013/12 : Approx. 5.35 ha
HY/2017/10 : Approx. 14.37 ha
Total : Approx. 34.13 ha

Number of Compensatory Trees (CM10):

Identification No. for Planting Area in C1:	Nos.
C1_PA01	275
Subtotal	275 nos.
C1*_PA02	91
C1_PA03	-
C1_PA04	-
C1_PA05	143
Subtotal	234 nos.
C1_PA06	-
C1_PA07	5
C1_PA08	41
C1*_PA09	3
C1*_PA10	30
C1_PA11	3
C1_PA12	-
Subtotal	82 nos.



NOTE:
1. LEGEND REFER TO DRAWING NO. C1/LM/011
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK SOUTHERN CONNECTION VIADUCT SECTION

CLIENT
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主要工程管理處(專責事務) Major Works Project Management Office (Special Duties)

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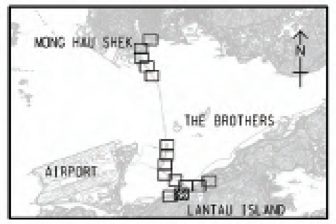
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1 : 1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

KEY PLAN



PROJECT NO. 60240249
CONTRACT NO. HY/2012/07

SHEET TITLE
LANDSCAPE MASTER PLAN

SHEET 12 OF 15

SHEET NUMBER
C1/LM/012

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

Plot File by: kathrinewong 02/11/2020
PATH: V:\TO\T6 RSS\CD\Landscape Master Plan\2020\1029\C1\dgn\LM-041.dgn

Legend:
Compensatory Planting Area (in ha)
- HY/2012/07 (C1)
- HY/2012/07 (C1*)
  Entrusted Landscape Works to Contract No. DC/2016/01
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)
HY/2012/07 : Approx. 14.41 ha
HY/2012/08 : Nil
HY/2013/12 : Approx. 5.35 ha
HY/2017/10 : Approx. 14.37 ha
Total : Approx. 34.13 ha

Number of Compensatory Trees (CM10):

Identification No. for Planting Area in C1:	Nos.
C1_PA01	275
Subtotal	275 nos.
C1*_PA02	91
C1_PA03	-
C1_PA04	-
C1_PA05	143
Subtotal	234 nos.
C1_PA06	-
C1_PA07	5
C1_PA08	41
C1*_PA09	3
C1*_PA10	30
C1_PA11	3
C1_PA12	-
Subtotal	82 nos.

NOTE:
1. LEGEND REFER TO DRAWING NO. C1/LM/011
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

N

CUT LINE 8-8
SEE SHEET NO. C1/LM/014

CUT LINE 7-7
SEE SHEET C1/LM/012

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK SOUTHERN CONNECTION VIADUCT SECTION

CLIENT
路政署 HIGHWAYS DEPARTMENT
主要工程管理處(專責事務) Major Works Project Management Office (Special Duties)

CONSULTANT
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A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1 : 1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

KEY PLAN


PROJECT NO.: 60240249
CONTRACT NO.: HY/2012/07

SHEET TITLE
LANDSCAPE MASTER PLAN

SHEET 13 OF 15

SHEET NUMBER
C1/LM/013

ISO A1 594mm x 841mm CWN Approved: SLYY Checked: PLCK Designer: Project Management Initials:

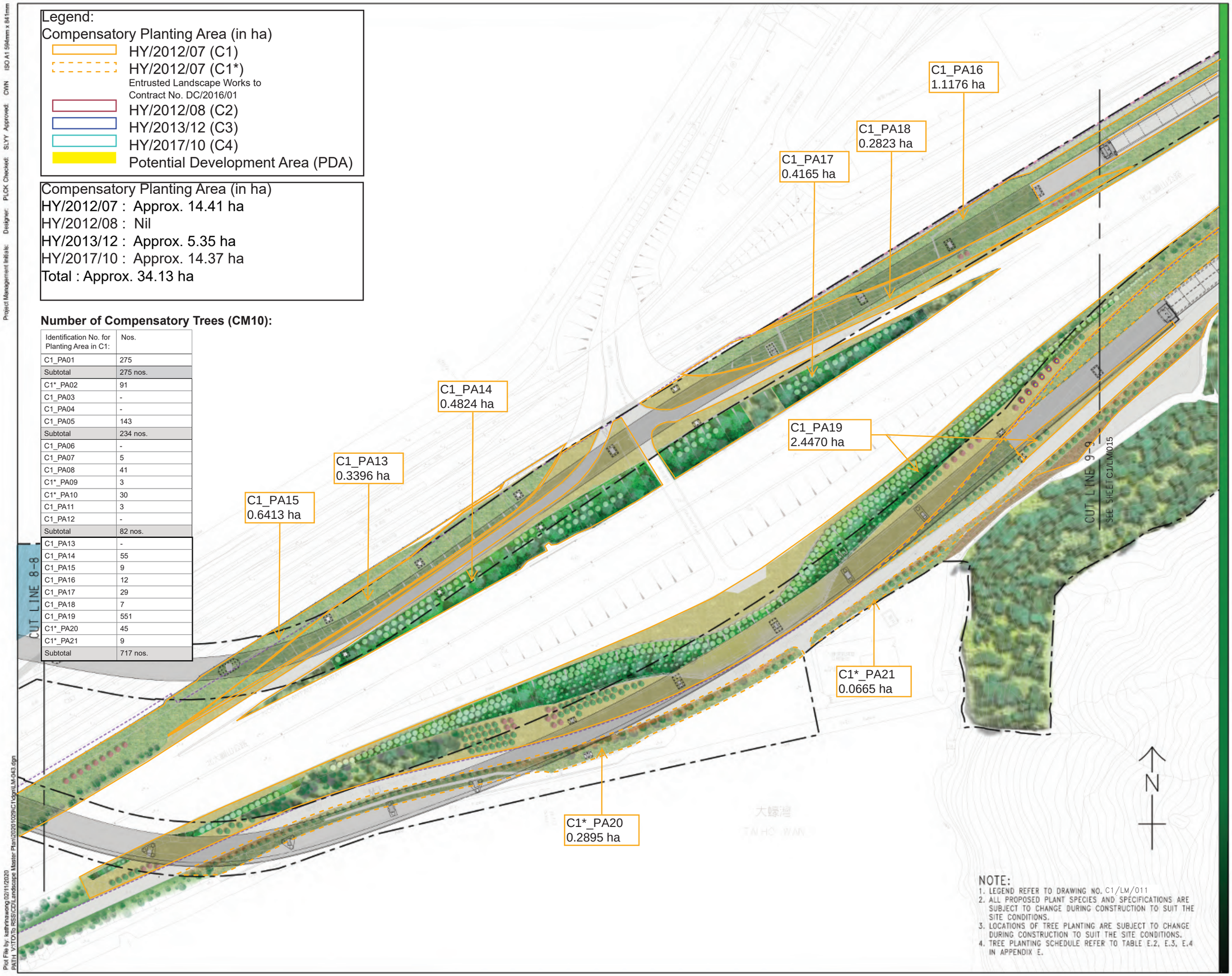
Plot File by: kathmwong 02/11/2020
PATH: V:\TO\To RSS\C2\Landscape Master Plan\20201029\C1\dgn\LM-042.dgn

Legend:
Compensatory Planting Area (in ha)
- HY/2012/07 (C1)
- HY/2012/07 (C1*)
  Entrusted Landscape Works to Contract No. DC/2016/01
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)
HY/2012/07 : Approx. 14.41 ha
HY/2012/08 : Nil
HY/2013/12 : Approx. 5.35 ha
HY/2017/10 : Approx. 14.37 ha
Total : Approx. 34.13 ha

Number of Compensatory Trees (CM10):

Identification No. for Planting Area in C1:	Nos.
C1_PA01	275
Subtotal	275 nos.
C1*_PA02	91
C1_PA03	-
C1_PA04	-
C1_PA05	143
Subtotal	234 nos.
C1_PA06	-
C1_PA07	5
C1_PA08	41
C1*_PA09	3
C1*_PA10	30
C1_PA11	3
C1_PA12	-
Subtotal	82 nos.
C1_PA13	-
C1_PA14	55
C1_PA15	9
C1_PA16	12
C1_PA17	29
C1_PA18	7
C1_PA19	551
C1*_PA20	45
C1*_PA21	9
Subtotal	717 nos.



NOTE:
1. LEGEND REFER TO DRAWING NO. C1/LM/011
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK SOUTHERN CONNECTION VIADUCT SECTION

CLIENT
香港特別行政區政府 HIGHWAYS DEPARTMENT 主要工程管理處(專責事務) Major Works Project Management Office (Special Duties)

CONSULTANT
AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS

ISSUE/REVISION

I/R	DATE	DESCRIPTION	CHK.
B	SEP 20	LANDSCAPE UPDATE	CL
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1 : 1000 A3 1:2000
DIMENSION UNIT: MILLIMETRES

KEY PLAN

PROJECT NO.: 60240249
CONTRACT NO.: HY/2012/07

SHEET TITLE
LANDSCAPE MASTER PLAN

SHEET 14 OF 15

SHEET NUMBER
C1/LM/014

ISO A1 594mm x 841mm CWN SLYY PLCK Designer: Project Management Initials: Approved: Checked:

Plot File by: kathrinawong 03/11/2020
PATH: V:\TO\To RSS\CDL\Landscape Master Plan\20201029\C1\dgn\LM-043.dgn

Legend:

Compensatory Planting Area (in ha)

- HY/2012/07 (C1)
- HY/2012/07 (C1*) Entrusted Landscape Works to Contract No. DC/2016/01
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)

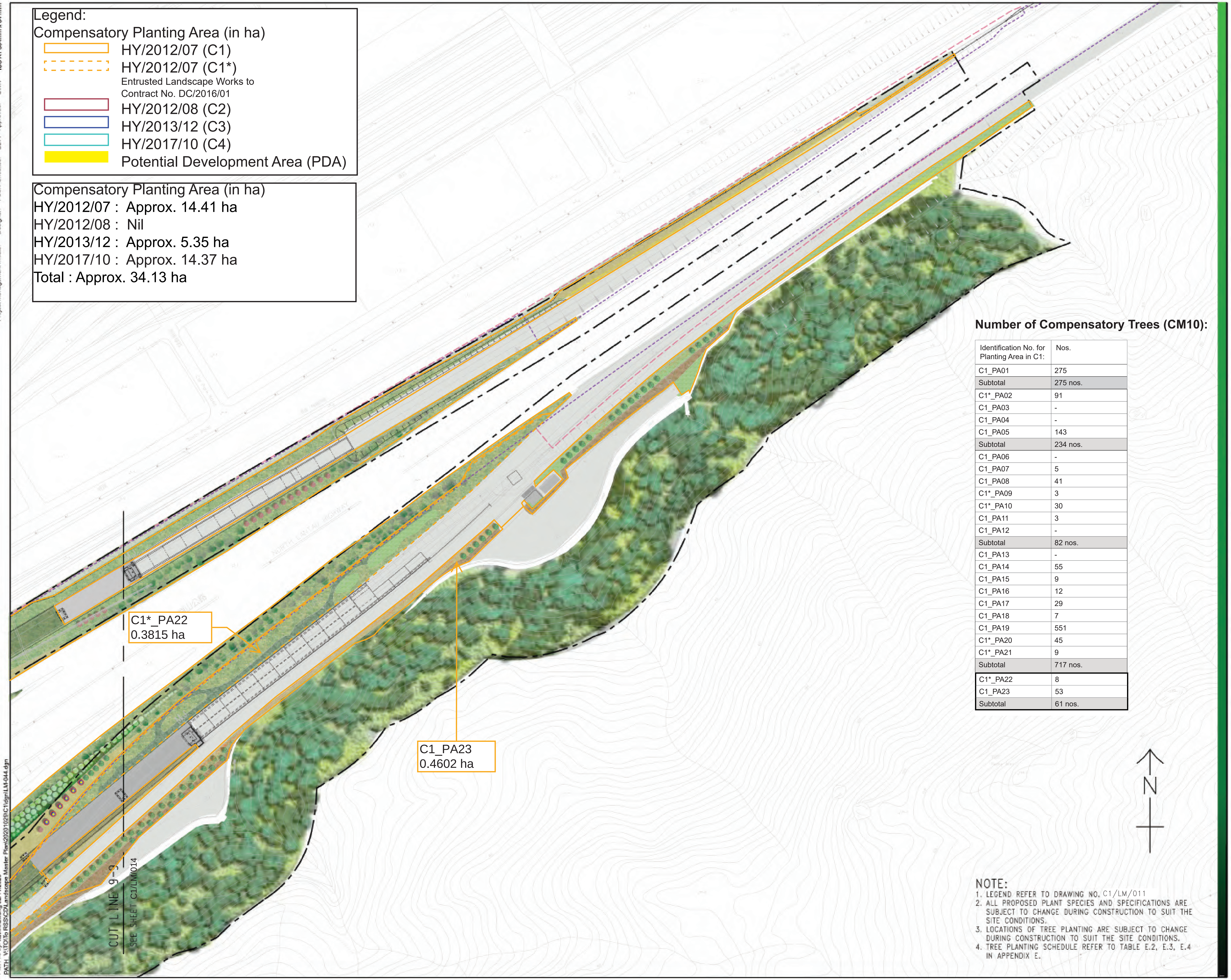
HY/2012/07 : Approx. 14.41 ha

HY/2012/08 : Nil

HY/2013/12 : Approx. 5.35 ha

HY/2017/10 : Approx. 14.37 ha

Total : Approx. 34.13 ha



Number of Compensatory Trees (CM10):

Identification No. for Planting Area in C1:	Nos.
C1_PA01	275
Subtotal	275 nos.
C1*_PA02	91
C1_PA03	-
C1_PA04	-
C1_PA05	143
Subtotal	234 nos.
C1_PA06	-
C1_PA07	5
C1_PA08	41
C1*_PA09	3
C1*_PA10	30
C1_PA11	3
C1_PA12	-
Subtotal	82 nos.
C1_PA13	-
C1_PA14	55
C1_PA15	9
C1_PA16	12
C1_PA17	29
C1_PA18	7
C1_PA19	551
C1*_PA20	45
C1*_PA21	9
Subtotal	717 nos.
C1*_PA22	8
C1_PA23	53
Subtotal	61 nos.

NOTE:

1. LEGEND REFER TO DRAWING NO. C1/LM/011
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

AECOM

PROJECT

TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE

TUEN MUN - CHEK LAP KOK LINK SOUTHERN CONNECTION VIADUCT SECTION

CLIENT

HIGHWAYS DEPARTMENT

Major Works Project Management Office (Special Duties)

CONSULTANT

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS

ISSUE/REVISION

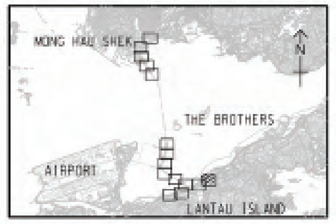
I/R	DATE	DESCRIPTION	CHK.
B	SEP 20	LANDSCAPE UPDATE	CL
A	SEP 19	LANDSCAPE UPDATE	CWN

STATUS

SCALE: A1 1 : 1000 A3 1:2000

DIMENSION UNIT: MILLIMETRES

KEY PLAN



PROJECT NO. 60240249

CONTRACT NO. HY/2012/07

SHEET TITLE

LANDSCAPE MASTER PLAN

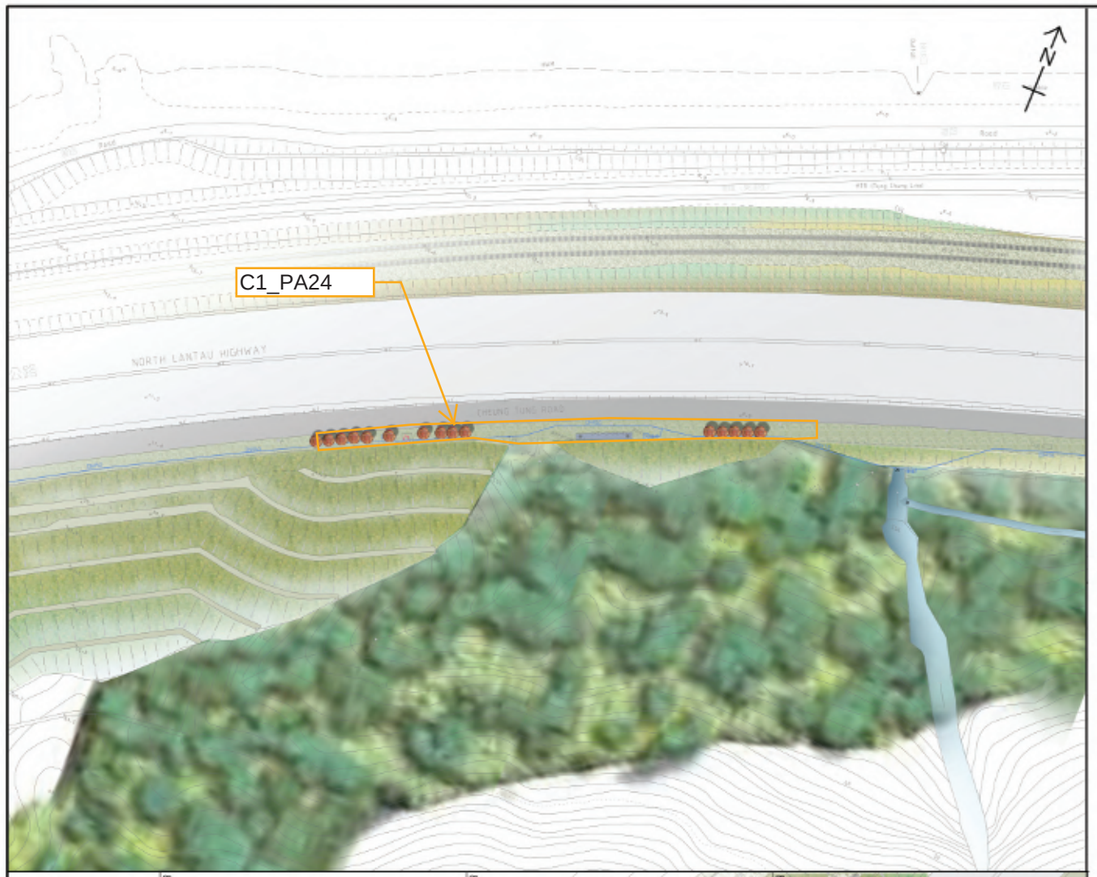
SHEET 15 OF 15

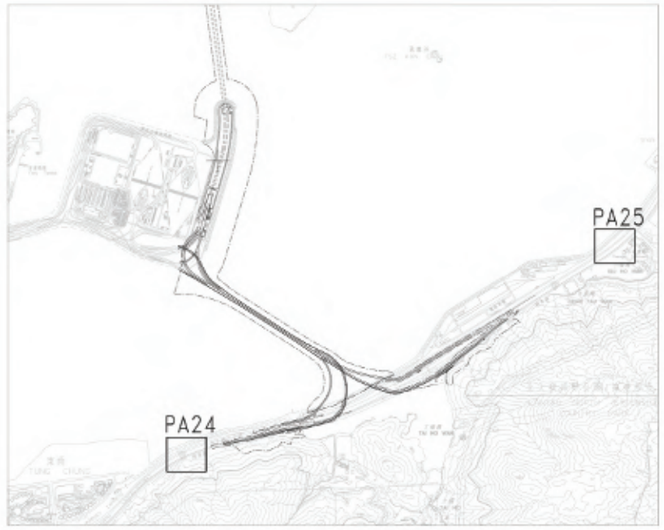
SHEET NUMBER

C1/LM/015

Project Management Initials: Designer: PLCK Checked: SLVY Approved: CWN ISO A1 594mm x 841mm

Plot File by: kathinnawong 02/11/2020





Legend:

Compensatory Planting Area (in ha)

- HY/2012/07 (C1)
- HY/2012/07 (C1*)
  Entrusted Landscape Works to Contract No. DC/2016/01
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)
HY/2012/07 : Approx. 14.41 ha
HY/2012/08 : Nil
HY/2013/12 : Approx. 5.35 ha
HY/2017/10 : Approx. 14.37 ha
Total : Approx. 34.13 ha

Number of Compensatory Trees (CM10):

Identification No. for Planting Area in C1:	Nos.
C1_PA01	275
Subtotal	275 nos.
C1*_PA02	91
C1_PA03	-
C1_PA04	-
C1_PA05	143
Subtotal	234 nos.
C1_PA06	-
C1_PA07	5
C1_PA08	41
C1*_PA09	3
C1*_PA10	30
C1_PA11	3
C1_PA12	-
Subtotal	82 nos.
C1_PA13	-
C1_PA14	55
C1_PA15	9
C1_PA16	12
C1_PA17	29
C1_PA18	7
C1_PA19	551
C1*_PA20	45
C1*_PA21	9
Subtotal	717 nos.
C1*_PA22	8
C1_PA23	53
Subtotal	61 nos.
C1_PA24	15
C1_PA25	6
Subtotal	21 nos.
C1 Total	1390 nos.

LEGEND

- Site Boundary
- New Tree Planting
- Transplanted Trees
- Existing Trees and Shrubs (at-grade)
- Proposed Expressway Boundary
- Proposed Shrub, Ground cover, Grass Planting
- Existing Woodland Tree Groups
- Proposed Tree planting for Slope
- Proposed Tree and Shrub Mix Planting

NOTE:
1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
2. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. TREE PLANTING SCHEDULE REFER TO TABLE E.2, E.3, E.4 IN APPENDIX E.

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION

CLIENT
HIGHWAYS DEPARTMENT
主要工程管理處(專責事務)
Major Works Project Management Office (Special Duties)

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SUB-CONSULTANTS

ISSUE/REVISION

I/R	DATE	DESCRIPTION	CHK.
B	SEP20	LANDSCAPE UPDATE	CL
A	SEP19	LANDSCAPE UPDATE	CWN

STATUS

SCALE
A1 1:1000 A3 1:2000

DIMENSION UNIT
MILLIMETRES

KEY PLAN

PROJECT NO.
60240249

CONTRACT NO.
HY/2013/12

SHEET TITLE
LANDSCAPE MASTER PLAN

SHEET 1 OF 13

SHEET NUMBER
C1/LM/016

Appendix E.1

Summary of Tree Compensation

Table E.1
Tuen Mun - Chek Lap Kok Link (TM-CLKL)
Summary of Tree Felling & Tree Compensation Quantity

		Tree Quantity as in EIA Report (Approx. no.)					Tree Quantity as in Tree Removal Applications (no.)					** Tree Compensation Quantity as in Tree Removal Applications (no.) (CM10)				*** Tree Planting Quantity as in Approved Planting Proposals (no.)				Transplanted Tree Planting Quantity as in Approved Planting Proposals/ as in Landscape and Visual Plan (no.)
		* Fell	Undersirable Species (Weed Tree)	**** Transplant	***** Retain	** Tree Compen-sation	* Fell (Living Tree)	Dead Tree	Undersirable Species (Weed Tree)	**** Transplant	***** Retain	Heavy Standard	Standard	Light Standard	Whip	Heavy Standard	Standard	Light Standard	Whip	**** Transplant
EIA Report (Year 2009)		3460	480	100	1360	6300	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tree Removal Application and Compensatory Planting Proposal (Ref. A35-03) (approved on 8 January 2013)		-	-	-	-	-	2293	701	652	182	2554	2965	0	893	0	-	-	-	-	-
HY/2012/07	C1 - Supplementary Tree Removal Applications	-	-	-	-	-	886	28	0	8	154	372	44	298	90	-	-	-	-	-
	C1 - Adjustments made from the approved Tree Removal Application (Ref. A35-03) through Supplementary Tree Removal Applications	-	-	-	-	-	-	-	-	-76	-136	-	-	-	-	-	-	-	-	-
	C1 - Missing Tree Report	-	-	-	-	-	-168	0	0	-33	-86	-144	0	0	0	-	-	-	-	-
	C1 - Approved Planting Proposal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	557	25	665	143	11
HY/2012/08	C2 - Supplementary Tree Removal Applications	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C2 - Approved Planting Proposal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HY/2013/12	C3 - Supplementary Tree Removal Applications	-	-	-	-	-	1688	103	341	24	40	24	-	207	359	-	-	-	-	-
	C3 - Adjustments made from the approved Tree Removal Application (Ref. A35-03) through Supplementary Tree Removal Applications	-	-	-	-	-	-	-	-	-7	-705	-	-	-	-	-	-	-	-	-
	C3 - Missing Trees on site	-	-	-	-	-	-217	-30	-205	-14	-261	-	-	-	-	-	-	-	-	-
	C3 - Approved Planting Proposal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	308	-	801	411	24
HY/2017/10	C4 - Supplementary Tree Removal Applications	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C4 - Approved Planting Proposal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2997	-	-	-	-
HY/2014/10	C5 - Supplementary Tree Removal Applications	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C5 - Approved Planting Proposal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sub-Total	3460	480	100	1360	6300	4482	802	788	84	1560	3217	44	1398	449	3862	25	1466	554	35
	Total	* 3460	480	**** 100	1360	** 6300	*4482	802	788	**** 84	1560	** 5108				*** 5907				**** 35

Notes:

1. * The tree felling quantity stated in the EIA report and in the Tree Removal Applications varied. The quantity in the EIA report was estimated in an early design stage of the Project and with the development of the Project design, either civil, site formation or slope designs, the trees required to be felled for the construction of works became more accurate. In addition, the trees in Year 2009 were likely to have grown to sizes that require the process of tree removal application which also contributed to the variation in the tree felling quantity.

2. ** The tree compensation quantity stated in the EIA report and in the Tree Removal Applications varied. Mitigation Measure **'CM10'** in Table 10.9 of the EIA report: "Compensatory tree planting shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensenatory trees shall be determined and agreed separately with Governme nt during the Tree Felling Application process ...". The required number for Tree Compensation as listed in "Tree Compensation Quantity as in Tree Removal Applications" was agreed with the relevant Government departments through the applic ations "Tree Preservation and Removal Proposals". The locations and tree species were subsequently agreed with the relevant Government departments through the submissions on detailed planting design proposals. The quantity in the EIA report was estimated in an early design stage of the Project and with the development of the Project design, either civil, site formation or slope designs, the tree compensation quantity and quality as appropriate for the different environmental conditions of the site and the **Design Considerations** as listed in **Section 2** were agreed with the relevant Government departments.

3. *** Through the detailed planting design proposals, the quantity of tree planting exceeds the required tree compensation quantity in the Tree Removal Applications.

4. **** The possible change of condition of the trees to be transplanted and the development of the Project design contributed t o the variation in the transplant tree quantity in the EIA and in the Landscape and Visual Plan. Missing transplant trees, 47 nos., were recorded from the initial tree surveys before works commenced. In Contract No. HY/2012/07, 18 nos. transplant trees cou ld be retained on site instead of transplanting.

5. ***** The quantity of trees to be retained in the EIA report and in the Tree Removal Applications varied. The quantity in the EIA report was estimated in an early design stage of the Project and with the development of the Project design, either civil, site formation or slope designs, and the possible change of condition of the trees, the retained tree quantity became more accurat e in the Tree Removal Applications.

6. To satisfy the tree compensation requirement, the higher quantity from the approved EIA report was used, i.e. 6,300 nos. i nstead of 5108 nos. from the tree removal applications. In order to meet 6,300 nos., compensatory tree planting outside the pro ject boundary is necessary. Information on tree planting outside the project boundary is described in **Section 3.3** and in **Appendix E.3**.

Summary of Tree Compensation - Approved EIA Report and Landscape and Visual Plan Comparison (Table E.1i)

Description	Approved EIA Report (nos.)	Landscape and Visual Plan (nos.)	
		Within Project Boundary	Outside Project Boundary
Nos. of Compensatory Tree Planting	6,300 approx. (Tree Size: Light Standard, Heavy Standard)	5,353	1,040
Total	**6,300**	**6,393 (Tree Size: Light Standard - Heavy Standard)**	

Summary of Tree Transplant - Approved EIA Report and Landscape and Visual Plan Comparison (Table E.1ii)

Description	Approved EIA Report (nos.)	Landscape and Visual Plan (nos.)		Remarks
		Within Project Boundary	Outside Project Boundary	
Nos. of Tree Transplant	100	35	0	47 nos. transplant trees surveyed as missing on site; 18 nos. transplant trees retained on site in Contract No. HY/2012/07; 35 nos. actual transplant trees.
Total	**100**	**35**		**100**

Table E.2
Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Contract No. HY/2012/07 (Contract 1)
Tree Planting Schedule

BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)	QUANTITY (nos.)	IDENTIFICATION NO. FOR PLANTING AREA IN CONTRACT 1																									
					PA01	PA02*	PA03	PA04	PA05	PA06	PA07	PA08	PA09*	PA10*	PA11	PA12	PA13	PA14	PA15	PA16	PA17	PA18	PA19	PA20*	PA21*	PA22*	PA23	PA24	PA25
WHIP																														
Bridelia tomentosa	土蜜樹	WHIP	1500-2000	37	-	-	-	-	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gordonia axillaris	大頭茶	WHIP	1500-2000	30	-	-	-	-	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Litsea glutinosa	潺槁樹	WHIP	1500-2000	31	-	-	-	-	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phyllanthus emblica	餘甘子	WHIP	1500-2000	15	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reevesia thyrsoidea	梭羅樹	WHIP	1500-2000	30	-	-	-	-	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Subtotal	143	0	0	0	0	143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TREE (HEAVY STANDARD)																														
Bauhinia variegata	宮粉羊蹄甲	HEAVY STANDARD	5000	30	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	12	-	-	13	-	-	-	-	-	-
Bauhinia x blakeana	洋紫荊	HEAVY STANDARD	5000	1	-	-	-	-	-	-	-		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grevillea robusta	銀樺	HEAVY STANDARD	4000-5000	52	42	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-
Lagerstroemia speciosa	大花紫薇	HEAVY STANDARD	4000-4500	15	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	-
Peltophorum tonkinense	銀珠	HEAVY STANDARD	5000	2	-	-	-	-	-	-	-		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plumeria rubra	雞蛋花	HEAVY STANDARD 2000-2500 (H) X 2000-2500 (S)	4000-5000	284	233	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	47	-	-	-	-	-	-
Tabebuia impetiginosa	風鈴木	HEAVY STANDARD	5000	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-
Ilex rotunda	鐵冬青	HEAVY STANDARD	5000	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	-	-
Viburnum odoratissimum	珊瑚樹	HEAVY STANDARD	5000	76	-	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	9	-		-	-
			Subtotal	513	275	63	0	0	0	0	5	4	3	0	0	0	0	0	0	12	0	0	70	4	9	0	53	15	0
TREE (STANDARD)																														
Bauhinia variegata	宮粉羊蹄甲	STANDARD	4000/5000	25	-	-	-	-	-	-	-	7	-	-	3	-	-	-	9	-	-	-	-	-	-	-		-	6
			Subtotal	25	0	0	0	0	0	0	0	7	0	0	3	0	0	0	9	0	0	0	0	0	0	0	0	0	6
TREE (LIGHT STANDARD)																														
Bauhinia variegata	宮粉羊蹄甲	LIGHT STANDARD	4000	105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	98	-	-	-	-	-	-	-
Bombax ceiba	木綿	LIGHT STANDARD	4000-5000	84	-	-	-	-	-	-	-	-	-	-	-	-	-	55	-	-	29	-	-	-	-	-	-	-	-
Bridelia tomentosa	土蜜樹	LIGHT STANDARD	3000	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45	-	-	-	-	-	-
Cinnamomum burmannii	陰香	LIGHT STANDARD	4000	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-
Garcinia subelliptica	菲島福木	LIGHT STANDARD	4000-5000	91	-	-	-	-	-	-	-	-	-	30	-	-	-	-	-	-	-	-	12	41	-	8	-	-	-
Melia azedarach	苦楝	LIGHT STANDARD	4000	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-
			Subtotal	364	0	0	0	0	0	0	0	0	0	30	0	0	0	55	0	0	29	7	194	41	0	8	0	0	0
PALM																														
Areca catechu	檳榔	HEAVY STANDARD 4000 (H)	4000	28	-	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caryota mitis	短穗魚尾葵	LIGHT STANDARD 2500 (H) X 1500 (S)	2500	12	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Livistona chinensis	蒲葵	LIGHT STANDARD 2500 (H) X 1500 (S)	3500-4000	248	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	248	-	-	-	-	-	-
Phoenix roebelenii	日本葵	LIGHT STANDARD 2000 (H) X 1500 (S)	2000	49	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	39	-	-	-	-	-	-
Phoenix sylvestris	銀海棗	HEAVY STANDARD 2000 (H) X 1500 (S)	4000	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Washingtonia robusta	華盛頓葵	HEAVY STANDARD 2500 (H) X 1500 (S)	3500-4000	8	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Subtotal	345	0	28	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	287	0	0	0	0	0	0
			Contract 1 Total	1390	275	91	0	0	143	0	5	41	3	30	3	0	0	55	9	12	29	7	551	45	9	8	53	15	6

NOTE:
1. All proposed plant species and specifications are subject to change during construction to suit the site conditions.
2. Locations of tree planting area subject to change during construction to suit the site conditions.
3. The standards of trees follow General Specification for Civil Engineering Works Clause 3.11-3.16; the sizes are also subject to the special feature according to species.
4. The palms are accounted as heavy or light standard trees according to species and sizes for tree compensation accounting purpose.
5. Refer to drawing nos. C1/LM/008ii, C1/LM/009, C1/LM/010, C1/LM/011, C1/LM/012, C1/LM/013, C1/LM/014, C1/LM/015, C1/LM/016 in Appendix D for the locations of planting area in Contract 1
6. *refers to entrusted landscape works under Contract No. DC/2016/01. (C1* refers)

Tree Size	C1	C1*	
Whip	143	-	
Subtotal	143	-	**143**
Light Standard	586	79	
Standard	25	-	
Heavy Standard	450	107	
Subtotal	1061	186	**1247**
		Total	**1390**

Table E.3
Tuen Mun - Chek Lap Kok Link - Northern Connection Toll Plaza and Associated Works
Contract No. HY/2013/12 (Contract 3)
Tree Planting Schedule

BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)	QUANTITY (nos.)	IDENTIFICATION NO. FOR PLANTING AREA IN CONTRACT 3																					
					PA01	PA02	PA03	PA04	PA05	PA06	PA07	PA08	PA09	PA10	PA11	PA12	PA13	PA14	PA15	PA16	PA17	PA18	PA19	PA20	PA21	PA22
WHIP																										
Bauhinia variegata	宮粉羊蹄甲	WHIP	1000	52	-	-	-	-	-	-	-	-	-	52	-	-	-	-	-	-	-	-	-	-	-	-
Bridelia tomentosa	土密樹	WHIP	1000	93	-	-	-	-	-	-	-	-	68	25	-	-	-	-	-	-	-	-	-	-	-	-
Gordonia axillaris	大頭茶	WHIP	1000	140	-	-	-	-	-	-	-	-	18	52	-	-	-	70	-	-	-	-	-	-	-	-
Litsea glutinosa	潺槁樹	WHIP	1000	38	-	-	-	-	-	-	-	-	-	38	-	-	-	-	-	-	-	-	-	-	-	-
Mallotus paniculatus	白楸	WHIP	1000	38	-	-	-	-	-	-	-	-	-	38	-	-	-	-	-	-	-	-	-	-	-	-
Phyllanthus emblica	餘甘子	WHIP	1000	38	-	-	-	-	-	-	-	-	-	38	-	-	-	-	-	-	-	-	-	-	-	-
Sapium discolor	山烏桕	WHIP	1000	12	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-
			Subtotal	411	0	0	0	0	0	0	0	0	86	255	0	0	0	70	0	0	0	0	0	0	0	0
TREE (HEAVY STANDARD)																										
Bauhinia variegata	宮粉羊蹄甲	HEAVY STANDARD	4000-4500	41	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bombax ceiba	木棉	HEAVY STANDARD	4500-5000	16	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brachychiton acerifolius	槭葉蘋婆	HEAVY STANDARD	4500-5000	36	-	-	-	-	-	-	-	-	-	-	-	-	18	-	-	-	-	-	-	-	-	-
Cinnamomum burmannii	陰香	HEAVY STANDARD	4500-5000	23	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sterculia lanceolata	假蘋婆	HEAVY STANDARD	4500-5000	13	10	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Delonix regia	鳳凰木	HEAVY STANDARD	N/A	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Melaleuca cajuputi subsp. cumingiana	白千層	HEAVY STANDARD	4000	51	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	16	-	16	11	-
Tabebuia chrusantha	黃花風鈴木	HEAVY STANDARD	4500-5000	4	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-
Tabebuia impetiginosa	風鈴木	HEAVY STANDARD	4500-5000	52	24	-	-	-	-	10	-	-	3	12	-	-	-	-	-	-	-	-	-	-	-	-
Terminalia mantaly	小葉欖仁	HEAVY STANDARD	4500-5000	8	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Subtotal	224	114	0	1	0	0	10	8	0	6	12	0	8	18	4	0	0	0	16	0	16	11	0
TREE (LIGHT STANDARD)																										
Bauhinia variegata	宮粉羊蹄甲	LIGHT STANDARD	3000	225	-	-	-	-	-	8	-	-	34	180	-	-	-	-	-	-	-	-	3	-	-	-
Bridelia tomentosa	土密樹	LIGHT STANDARD	3000	81	-	-	-	-	-	-	-	-	15	46	-	-	-	-	-	-	-	-	20	-	-	-
Bombax ceiba	木棉	LIGHT STANDARD	3000	32	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	-	-	-	-
Cinnamomum burmannii	陰香	LIGHT STANDARD	3000	51	-	-	-	-	-	-	-	-	-	43	2	-	-	-	-	-	-	-	6	-	-	-
Liquidambar formosana	楓香	LIGHT STANDARD	3000	32	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	-	-	-	-
Litsea glutinosa	潺槁樹	LIGHT STANDARD	3000	19	-	-	-	-	-	-	-	-	19	-	-	-	-	-	-	-	-	-	-	-	-	-
Machilus chekiangensis	浙江潤腸	LIGHT STANDARD	3000	61	-	-	-	-	-	-	-	-	17	44	-	-	-	-	-	-	-	-	-	-	-	-
Reevesia thyrsoidea	梭羅樹	LIGHT STANDARD	3000	36	-	-	-	-	-	4	-	-	7	25	-	-	-	-	-	-	-	-	-	-	-	-
Schima superba	木荷(荷樹)	LIGHT STANDARD	3000	32	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	-	-	-	-
Sterculia lanceolata	假蘋婆	LIGHT STANDARD	3000	53	-	-	-	-	-	-	-	-	6	30	3	-	-	-	-	-	-	-	14	-	-	-
Viburnum odoratissimum	珊瑚樹	LIGHT STANDARD	3000	74	-	-	-	-	-	-	-	-	16	58	-	-	-	-	-	-	-	-	-	-	-	-
Garcinia subelliptica	福木	LIGHT STANDARD	3000	30	-	-	-	-	-	-	-	-	-	-	-	4	-	3	7	-	-	4	-	-	12	-
			Subtotal	726	0	0	0	0	0	12	0	0	114	522	5	4	0	3	7	0	0	4	43	0	12	0
PALM																										
Archontophoenix alexandrae	假檳榔	HEAVY STANDARD 3500(H) X 1500(S)	4000	58	-	-	-	-	-	-	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Livistona chinensis	蒲葵	LIGHT STANDARD 2000(H) X 1500(S)	2500	21	-	-	-	-	-	10	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
Phoenix roebelenii	日本葵	LIGHT STANDARD 2000(H) X 1500(S)	2500-3000	54	13	-	18	-	-	-	-	-	4	19	-	-	-	-	-	-	-	-	-	-	-	-
Wodyetia bifurcata	狐尾椰子	HEAVY STANDARD 2500(H) X 1500(S)	3500	26	-	-	-	-	-	-	-	-	-	-	-	-	-	26	-	-	-	-	-	-	-	-
			Subtotal	159	13	0	18	0	0	10	58	0	4	30	0	0	0	26	0	0	0	0	0	0	0	0
			Contract 3 Total	**1520**	**127**	**0**	**19**	**0**	**0**	**32**	**66**	**0**	**210**	**819**	**5**	**12**	**18**	**103**	**7**	**0**	**0**	**20**	**43**	**16**	**23**	**0**

NOTE:
1. All proposed plant species and specifications are subject to change during construction to suit the site conditions.
2. Locations of tree planting area subject to change during construction to suit the site conditions.
3. The standards of trees follow General Specification for Civil Engineering Works Clause 3.11-3.16; the sizes are also subject to the special feature according to species.
4. The palms are accounted as heavy or light standard trees according to species and sizes for tree compensation accounting purpose.
5. Refer to drawing nos. C3/LM/001, C3/LM/002 in Appendix D for the locations of planting area in Contract 3.

Tree Size	**C3**	
Whip	411	
Subtotal	411	**411**
Light Standard	801	
Standard	0	
Heavy Standard	308	
Subtotal	1109	**1109**
		Total 1520

Table E.4
Tuen Mun - Chek Lap Kok Link - Northern Connection Tunnel Buildings, Electrical and Mechanical Works
Contract No. HY/2017/10 (Contract 4)
Tree Planting Schedule

BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)	QUANTITY (nos.)	IDENTIFICATION NO. FOR PLANTING AREA IN CONTRACT 4									
					PA01	PA02	PA03	PA04	PA05	PA06	PA07	PA08	PA09	PA10
PALM (TUEN MUN)														
Wodyetia bifurcata	狐尾椰子	HEAVY STANDARD 3000(H) X 1500(S)	4500	4	4	-	-	-	-	-	-	-	-	-
			Subtotal	4	4	0	0	0	0	0	0	0	0	0
TREE (NORTHERN LANDFALL)														
Bauhinia x blakeana	洋紫荊	HEAVY STANDARD	4500-5000	10	-	-	-	-	-	-	-	10	-	-
Bauhinia variegata	宮粉羊蹄甲	HEAVY STANDARD	4500-5000	38	-	-	-	-	-	-	-	38	-	-
Elaecarpus hainanensis	水石榕	HEAVY STANDARD	5000	18	-	-	-	-	18	-	-	-	-	-
Elaecarpus apiculatus	尖葉杜英	HEAVY STANDARD	6000	6	-	6	-	-	-	-	-	-	-	-
Garcinia subelliptica	福木	HEAVY STANDARD	3500-4000	3	-	3	-	-	-	-	-	-	-	-
Grevillea robusta	銀樺	HEAVY STANDARD	4500-5000	18	-	-	-	-	-	-	-	18	-	-
Melaleuca quinquenervia	白千層	HEAVY STANDARD	4500-5000	18	-	-	-	-	-	-	-	18	-	-
Plumeria rubra (multi-colour flower)	雞蛋花(多色花)	HEAVY STANDARD	4000-4500	13	-	5	8	-	-	-	-	-	-	-
Plumeria rubra (yellow folwer)	雞蛋花(黃花)	HEAVY STANDARD	4000-4500	46	-	-	46	-	-	-	-	-	-	-
Plumeria rubra (red flower)	雞蛋花(紅花)	HEAVY STANDARD	4000-4500	100	-	78	-	-	22	-	-	-	-	-
Pongamia pinnata	水黃皮	HEAVY STANDARD	5000-6000	51	-	6	-	-	19	-	-	26	-	-
Sterculia lanceolata	假蘋婆	HEAVY STANDARD	4500-5000	54	-	-	-	-	-	-	-	54	-	-
Terminalia catappa	欖仁樹	HEAVY STANDARD	6000-7000	38	-	2	-	-	-	-	-	36	-	-
Viburnum odoratissimum	珊瑚樹	HEAVY STANDARD	4500-5000	10	-	-	-	-	-	-	-	10	-	-
Xanthostemon chrysanthus	金蒲桃	HEAVY STANDARD	5000	13	-	-	-	-	13	-	-	-	-	-
			Subtotal	436	0	100	54	0	72	0	0	210	0	0
PALM (NORTHERN LANDFALL)														
Areca catechu	檳榔	HEAVY STANDARD 3000(H) X 1500(S)	4000	48	-	48	-	-	-	-	-	-	-	-
Hyophorbe lagenicaulis	酒瓶椰子	HEAVY STANDARD 2000(H) X 1500(S)	3000	16	-	-	2	-	14	-	-	-	-	-
Livistona chinensis	蒲葵	HEAVY STANDARD 3000(H) X 2000(S)	4000-4500	245	-	9	5	-	10	57	-	158	6	-
Roystonea regia	王棕	HEAVY STANDARD 4000(H) X 2000(S)	4500-5000	44	-	44	-	-	-	-	-	-	-	-
Wodyetia bifurcata	狐尾椰子	HEAVY STANDARD 3000(H) X 1500(S)	4500	77	-	-	10	-	-	-	-	67	-	-
			Subtotal	430	0	101	17	0	24	57	0	225	6	0
			Northern Landfall Total	870										
TREE (SOUTHERN LANDFALL)														
Callistemon viminalis	串錢柳	HEAVY STANDARD	4000-5000	135	-	-	-	-	-	-	-	-	-	135
Grevillea robusta	銀樺	HEAVY STANDARD	4000-5000	306	-	-	-	-	-	-	-	-	-	306
Plumeria rubra (red flower)	雞蛋花(紅花)	HEAVY STANDARD	4000-5000	574	-	-	-	-	-	-	-	-	-	574
Plumeria rubra (yellow flower)	雞蛋花(黃花)	HEAVY STANDARD	4000-5000	1100	-	-	-	-	-	-	-	-	-	1100
Plumeria rubra (multi-colour flower)	雞蛋花(多色花)	HEAVY STANDARD	4000-5000	12	-	-	-	-	-	-	-	-	-	12
			Southern Landfall Total	2127										2127
			Contract 4 Total	**2997**										

NOTE:
1. All proposed plant species and specifications are subject to change during construction to suit the site conditions.
2. Locations of tree planting area subject to change during construction to suit the site conditions.
3. The standards of trees follow General Specification for Civil Engineering Works Clause 3.11-3.16; the sizes are also subject to the special feature according to species.
4. The palms are accounted as heavy or light standard trees according to species and sizes for tree compensation accounting purpose.
5. Refer to drawing nos. C3/LM/001, C4/LM/003, C4/LM/004, C4/LM/005, C4/LM/006, C4/LM/007, C4/LM008i in Appendix D for the locations of planting area in Contract 4.

Tree Size	**C4**	
Whip	0	
Subtotal	0	**0**
Light Standard	0	
Standard	0	
Heavy Standard	2997	
Subtotal	2997	**2997**
	Total	**2997**

Appendix E.2

Tree Planting on Slopes

Feature No. 5SE-D/C211 and 5SE-D/C210

Location: Tuen Mun

Average Slope Angle: 37 degree and 35 degree

No. of Compensatory Trees: 200

Botanical Name	Chinese Name	Size	Spacing (mm)	Quantity (Nos.)
Bauhinia variegata	宮粉羊蹄甲	Light standard	3000	34
Bridelia tomentosa	土蜜樹	Light standard	3000	15
Litsea glutinosa	潺槁木	Light standard	3000	19
Machilus chekiangensis	浙江潤楠	Light standard	3000	17
Reevesia thyrsoidea	梭羅樹	Light standard	3000	7
Sterculia lanceolata	假蘋婆	Light standard	3000	6
Viburnum odoratissimum	珊瑚樹	Light standard	3000	16
Bridelia tomentosa	土蜜樹	Whip	2000	68
Gordonia axillaris	大頭茶	Whip	1000	18

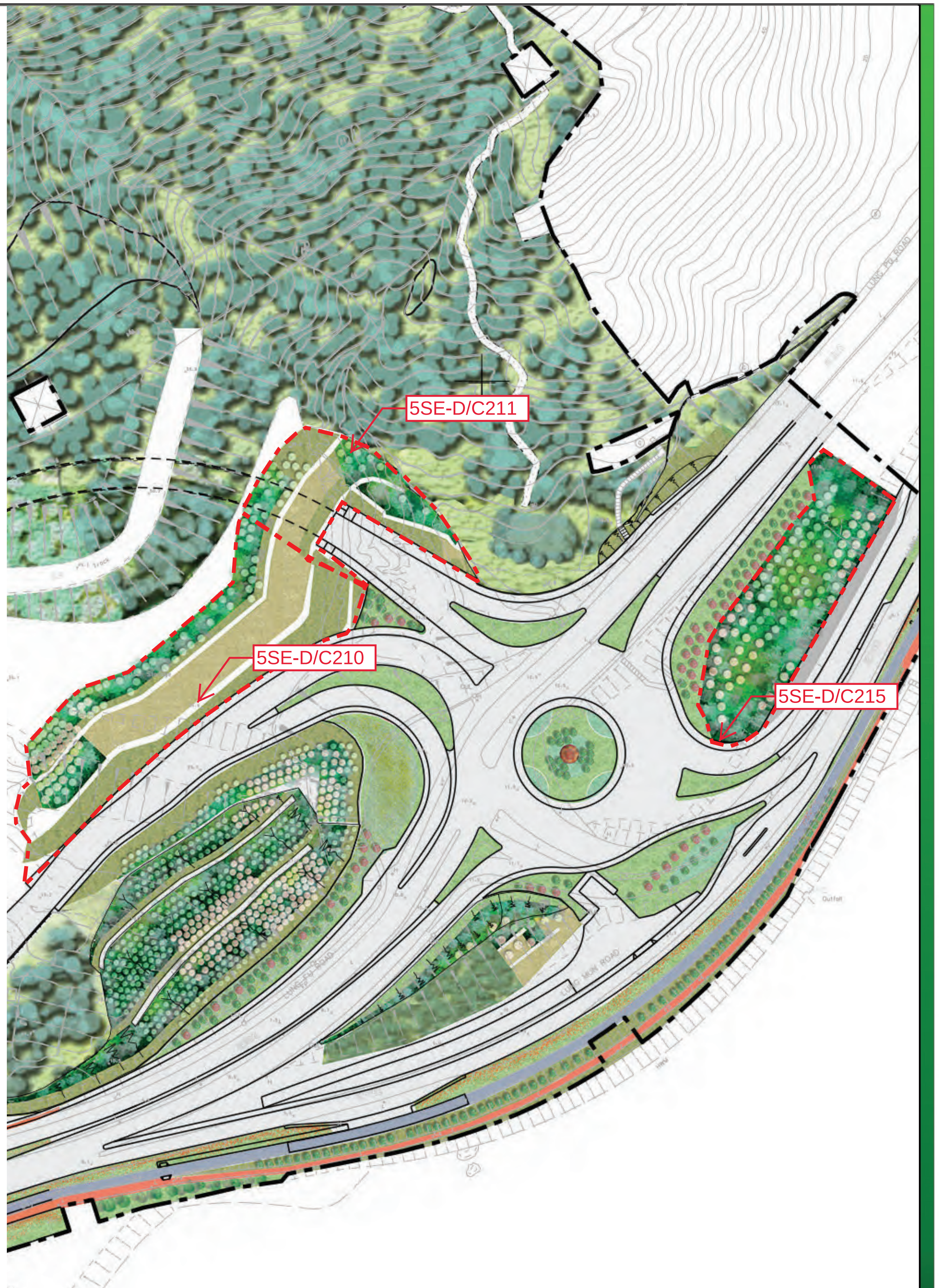
Feature No. 5SE-D/C215

Location: Tuen Mun

Average Slope Angle: -

No. of Compensatory Trees: 90

Botanical Name	Chinese Name	Size	Spacing (mm)	Quantity (Nos.)
Bauhinia variegata	宮粉羊蹄甲	Heavy standard	4000-4500	41
Bombax ceiba	木棉	Heavy standard	4500-5000	16
Cinnamomum burmannii	陰香	Heavy standard	4500-5000	23
Sterculia lanceolata	假蘋婆	Heavy standard	4500-5000	10



NOTES:

1. LEGEND REFER TO DRAWING NO. C3/LM/031.
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. PLANTING PROPOSALS FOR SLOPES HAVE BEEN REFERENCED TO GEO PUBLICATION NO/1/2011 BY CEDD.
5. PLANTING PROPOSALS FOR SLOPES, I.E. TREE SPECEIS, SIZE, SPACING, LOCATION, HAVE BEEN REVIEWED AND COMMENTED BY HYD/LANDSCAPE DIVISION.

AECOM

PROJECT

TUEN MUN - CHEK LAP KOK LINK

COTNRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TOLL PLAZA AND ASSOCIATED WORKS

CLIENT

路政署 HIGHWAYS DEPARTMENT
主要工程管理處(專責事務)
Major Works Project Management Office (Special Duties)

CONSULTANT

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS

ISSUE/REVISION

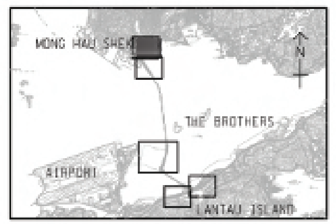
I/R	DATE	DESCRIPTION	CHK.

STATUS

SCALE: A1 1:500 A3 1:4000

DIMENSION UNIT: MILLIMETRES

KEY PLAN



PROJECT NO. 60240249

CONTRACT NO. HY/2013/12

SHEET TITLE: TREE PLANTING ON SLOPES

SHEET 1 OF 6

SHEET NUMBER: C3/LM/046

Feature No. 5SE-D/C209
Location: Tuen Mun
Average Slope Angle: 30 degree
No. of Compensatory Trees: 100

Botanical Name	Chinese Name	Size	Spacing (mm)	Quantity (Nos.)
Bauhinia variegata	宮粉羊蹄甲	Light standard	3000	20
Bridelia tomentosa	土蜜樹	Light standard	3000	25
Reevesia thyrsoidea	梭羅樹	Light standard	3000	25
Sterculia lanceolata	假蘋婆	Light standard	3000	20
Viburnum odoratissimum	珊瑚樹	Light standard	3000	10

Feature No. 5SE-D/C170
Location: Tuen Mun
Average Slope Angle: 28 degree
No. of Compensatory Trees: 677

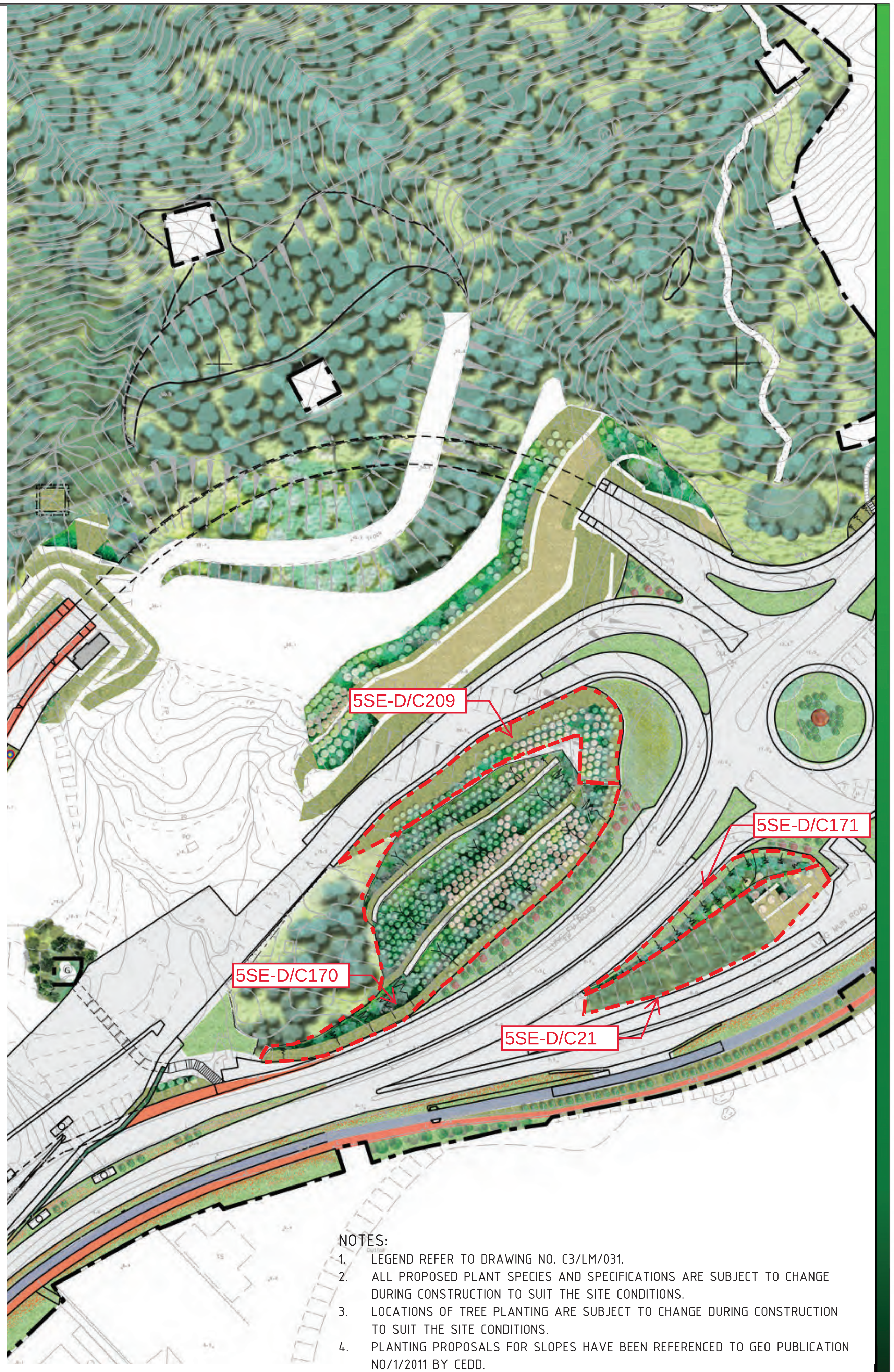
Botanical Name	Chinese Name	Size	Spacing (mm)	Quantity (Nos.)
Bauhinia variegata	宮粉羊蹄甲	Light standard	3000	160
Bombax ceiba	木棉	Light standard	3000	32
Cinnamomum burmannii	陰香	Light standard	3000	43
Liquidambar formosana	楓香	Light standard	3000	32
Machilus chekiangensis	浙江潤楠	Light standard	3000	44
Schima superba	木荷 (荷樹)	Light standard	3000	32
Viburnum odoratissimum	珊瑚樹	Light standard	3000	48
Bridelia tomentosa	土蜜樹	Light standard	3000	21
Sterculia lanceolata	假蘋婆	Light standard	3000	10
Bauhinia variegata	宮粉羊蹄甲	Whip	1000	52
Bridelia tomentosa	土蜜樹	Whip	1000	25
Gordonia axillaris	大頭茶	Whip	1000	52
Litsea glutinosa	潺槁木	Whip	1000	38
Mallotus paniculatus	白楸	Whip	1000	38
Phyllanthus emblica	餘甘子(油甘子)	Whip	1000	38
Sapium discolour	山烏桕	Whip	1000	12

Feature No. 5SE-D/C171
Location: Tuen Mun
Average Slope Angle: 35 degree
No. of Compensatory Trees: 4

Botanical Name	Chinese Name	Size	Spacing (mm)	Quantity (Nos.)
Bauhinia variegata	宮粉羊蹄甲	Light standard	3000	4

Feature No. 5SE-D/C21
Location: Tuen Mun
Average Slope Angle: 50 degree
No. of Compensatory Trees: 8

Botanical Name	Chinese Name	Size	Spacing (mm)	Quantity (Nos.)
Bauhinia variegata	宮粉羊蹄甲	Light standard	3000	4
Reevesia thyrsoidea	梭羅樹	Light standard	3000	4



NOTES:
1. LEGEND REFER TO DRAWING NO. C3/LM/031.
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. PLANTING PROPOSALS FOR SLOPES HAVE BEEN REFERENCED TO GEO PUBLICATION NO/1/2011 BY CEDD.
5. PLANTING PROPOSALS FOR SLOPES, I.E. TREE SPECEIS, SIZE, SPACING, LOCATION, HAVE BEEN REVIEWED AND COMMENTED BY HYD/LANDSCAPE DIVISION.

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK
COTNRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TOLL PLAZA AND ASSOCIATED WORKS
C3/LM/046

CLIENT
路政署 HIGHWAYS DEPARTMENT
主要工程管理處(專責事務)
Major Works Project Management Office (Special Duties)

CONSULTANT
AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS

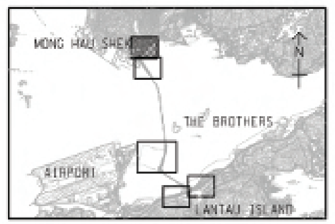
ISSUE/REVISION

I/R	DATE	DESCRIPTION	CHK.

STATUS

SCALE: A1 1 : 2000 A3 1:4000
DIMENSION UNIT: MILLIMETRES

KEY PLAN



PROJECT NO. 60240249
CONTRACT NO. HY/2013/12

SHEET TITLE
TREE PLANTING ON SLOPES

SHEET 2 OF 6

SHEET NUMBER
C3/LM/047

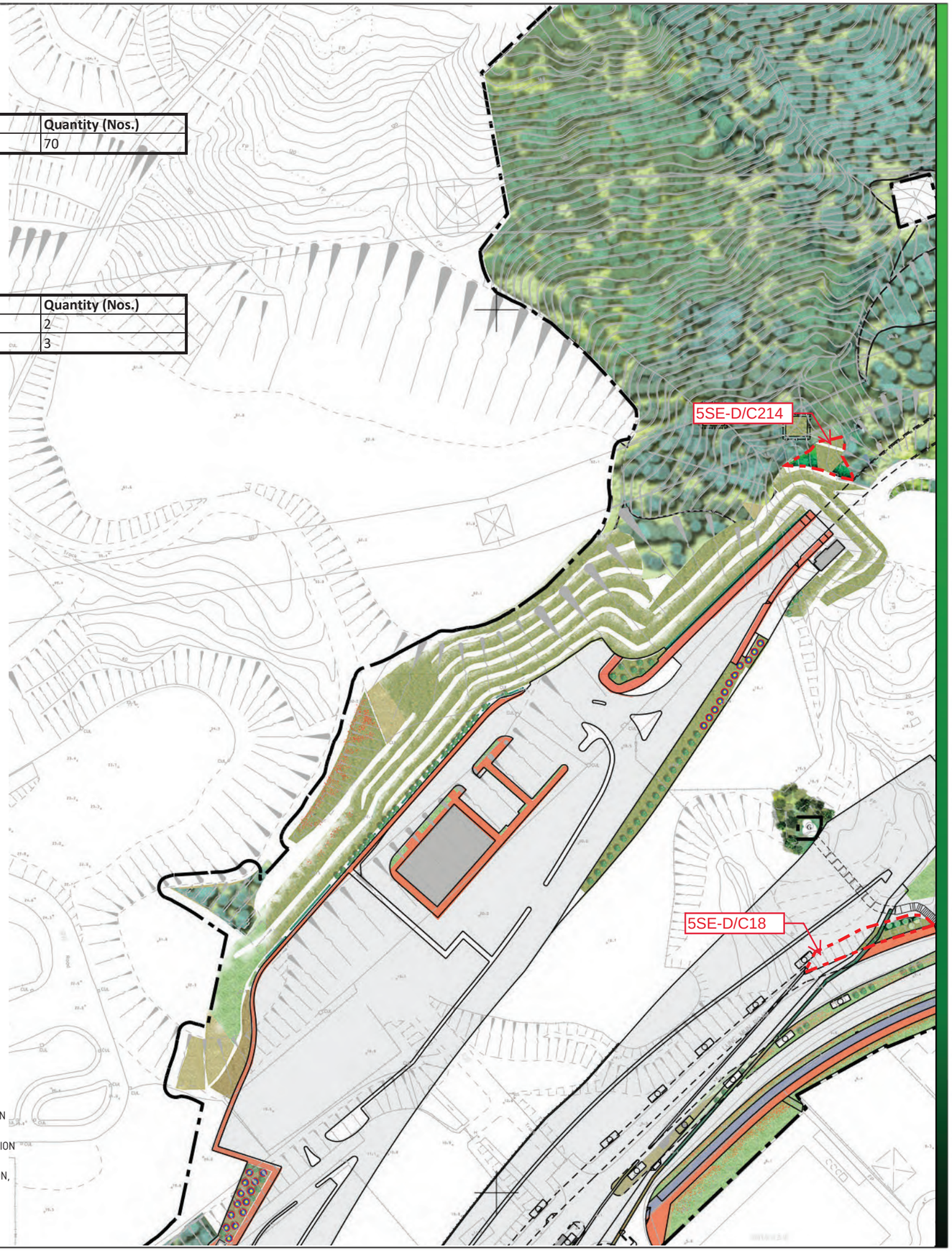
Plot File by: kathrinawong 03/11/2020
PATH V:\TO\To RSS\CD\Landscape Master Plan\20201029\C3\dgn\LM-001.dgn

Feature No. 5SE-D/C214
Location: Tuen Mun
Average Slope Angle: -
No. of Compensatory Trees: 70

Botanical Name	Chinese Name	Size	Spacing (mm)	Quantity (Nos.)
Gordonia axillaris	大頭茶	Whip	1000	70

Feature No. 5SE-D/C18
Location: Tuen Mun
Average Slope Angle: 30 degree
No. of Compensatory Trees: 5

Botanical Name	Chinese Name	Size	Spacing (mm)	Quantity (Nos.)
Cinnamomum burmannii	陰香	Light standard	3000	2
Sterculia lanceolata	假蘋婆	Light standard	3000	3



NOTES:
1. LEGEND REFER TO DRAWING NO. C3/LM/031.
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. PLANTING PROPOSALS FOR SLOPES HAVE BEEN REFERENCED TO GEO PUBLICATION NO/1/2011 BY CEDD.
5. PLANTING PROPOSALS FOR SLOPES, I.E. TREE SPECEIS, SIZE, SPACING, LOCATION, HAVE BEEN REVIEWED AND COMMENTED BY HYD/LANDSCAPE DIVISION.

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK
COTNRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TOLL PLAZA AND ASSOCIATED WORKS

CLIENT
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Major Works Project Management Office (Special Duties)

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STATUS

SCALE: A1 1:500 A3 1:4000
DIMENSION UNIT: MILLIMETRES

KEY PLAN


PROJECT NO. 60240249
CONTRACT NO. HY/2013/12

SHEET TITLE
TREE PLANTING ON SLOPES

SHEET 3 OF 6

SHEET NUMBER
C3/LM/048

Plot File by: kathrinewong 03/11/2020
PATH: V:\TO\16 AS\SO\Landscape Master Plan\20201029\C3\dgn\LM-001.dgn

Feature No. 5SE-D/C16
Location: Tuen Mun
Average Slope Angle: 60 degree
No. of Compensatory Trees: 43

Botanical Name	Chinese Name	Size	Spacing (mm)	Quantity (Nos.)
Bauhinia variegata	宮粉羊蹄甲	Light standard	3000	3
Cinnamomum burmannii	陰香	Light standard	3000	6
Sterculia lanceolata	假蘋婆	Light standard	3000	14
Bridelia tomentosa	土蜜樹	Light standard	3000	20

NOTES:

1. LEGEND REFER TO DRAWING NO. C3/LM/031.
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. PLANTING PROPOSALS FOR SLOPES HAVE BEEN REFERENCED TO GEO PUBLICATION NO/1/2011 BY CEDD.
5. PLANTING PROPOSALS FOR SLOPES, I.E. TREE SPECEIS, SIZE, SPACING, LOCATION, HAVE BEEN REVIEWED AND COMMENTED BY HYD/LANDSCAPE DIVISION.

Plot File by: kathrinewong 03/11/2020
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AECOM

PROJECT 項目
TUEN MUN - CHEK LAP KOK LINK
COTNRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TOLL PLAZA AND ASSOCIATED WORKS

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ISSUE/REVISION 修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 校核

STATUS 階段

SCALE 比例: A1 1:500 A3 1:4000
DIMENSION UNIT 尺寸單位: MILLIMETRES

KEY PLAN 索引圖

PROJECT NO. 項目編號: 60240249
CONTRACT NO. 合約編號: HY/2013/12

SHEET TITLE 圖紙名稱
TREE PLANTING ON SLOPES

SHEET 4 OF 6

SHEET NUMBER 圖紙編號
C3/LM/049

Feature No. 10NW-C/F13, 10NW-C/F14 AND 10NW-C/F15
Location: North Lantau Highway, North Lantau
Average Slope Angle: 26 degree
No. of Compensatory Trees: 456

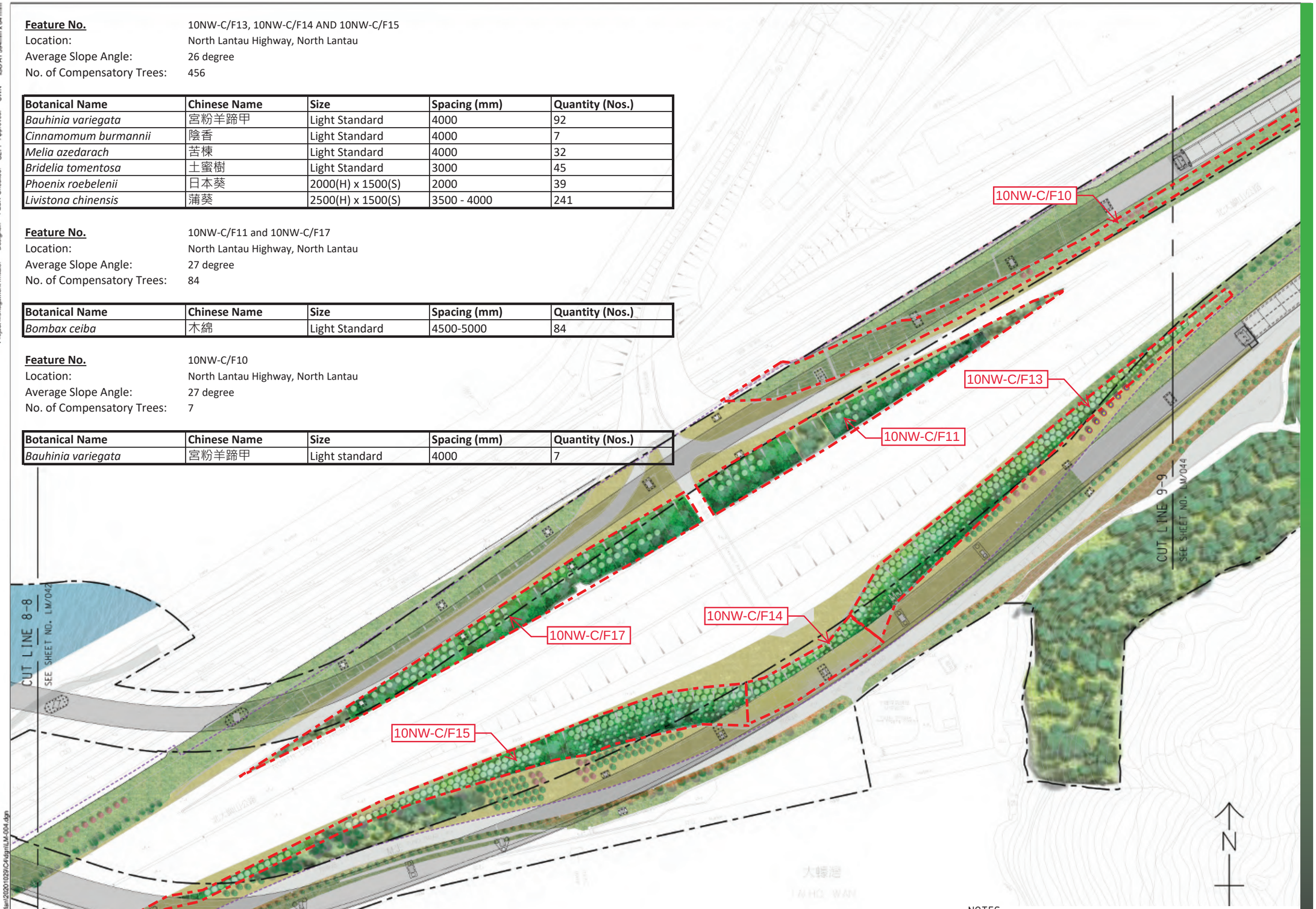
Botanical Name	Chinese Name	Size	Spacing (mm)	Quantity (Nos.)
Bauhinia variegata	宮粉羊蹄甲	Light Standard	4000	92
Cinnamomum burmannii	陰香	Light Standard	4000	7
Melia azedarach	苦楝	Light Standard	4000	32
Bridelia tomentosa	土蜜樹	Light Standard	3000	45
Phoenix roebelenii	日本葵	2000(H) x 1500(S)	2000	39
Livistona chinensis	蒲葵	2500(H) x 1500(S)	3500 - 4000	241

Feature No. 10NW-C/F11 and 10NW-C/F17
Location: North Lantau Highway, North Lantau
Average Slope Angle: 27 degree
No. of Compensatory Trees: 84

Botanical Name	Chinese Name	Size	Spacing (mm)	Quantity (Nos.)
Bombax ceiba	木綿	Light Standard	4500-5000	84

Feature No. 10NW-C/F10
Location: North Lantau Highway, North Lantau
Average Slope Angle: 27 degree
No. of Compensatory Trees: 7

Botanical Name	Chinese Name	Size	Spacing (mm)	Quantity (Nos.)
Bauhinia variegata	宮粉羊蹄甲	Light standard	4000	7



NOTES:
1. LEGEND REFER TO DRAWING NO. C1/LM/040.
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. PLANTING PROPOSALS FOR SLOPES HAVE BEEN REFERENCED TO GEO PUBLICATION NO/1/2011 BY CEDD.
5. PLANTING PROPOSALS FOR SLOPES, I.E. TREE SPECEIS, SIZE, SPACING, LOCATION, HAVE BEEN REVIEWED AND COMMENTED BY HYD/LANDSCAPE DIVISION.

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK
COTNRACT TITLE
SOUTHERN CONNECTION VIADUCT SECTION

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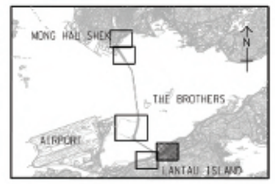
I/R	DATE	DESCRIPTION	CHK.

STATUS

SCALE: A1 1 : 2000 A3 1:4000
DIMENSION UNIT: MILLIMETRES

KEY PLAN


PROJECT NO. 60240249
CONTRACT NO. HY/2012/07

SHEET TITLE
TREE PLANTING ON SLOPES

SHEET 5 OF 6

SHEET NUMBER
C1/LM/050

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

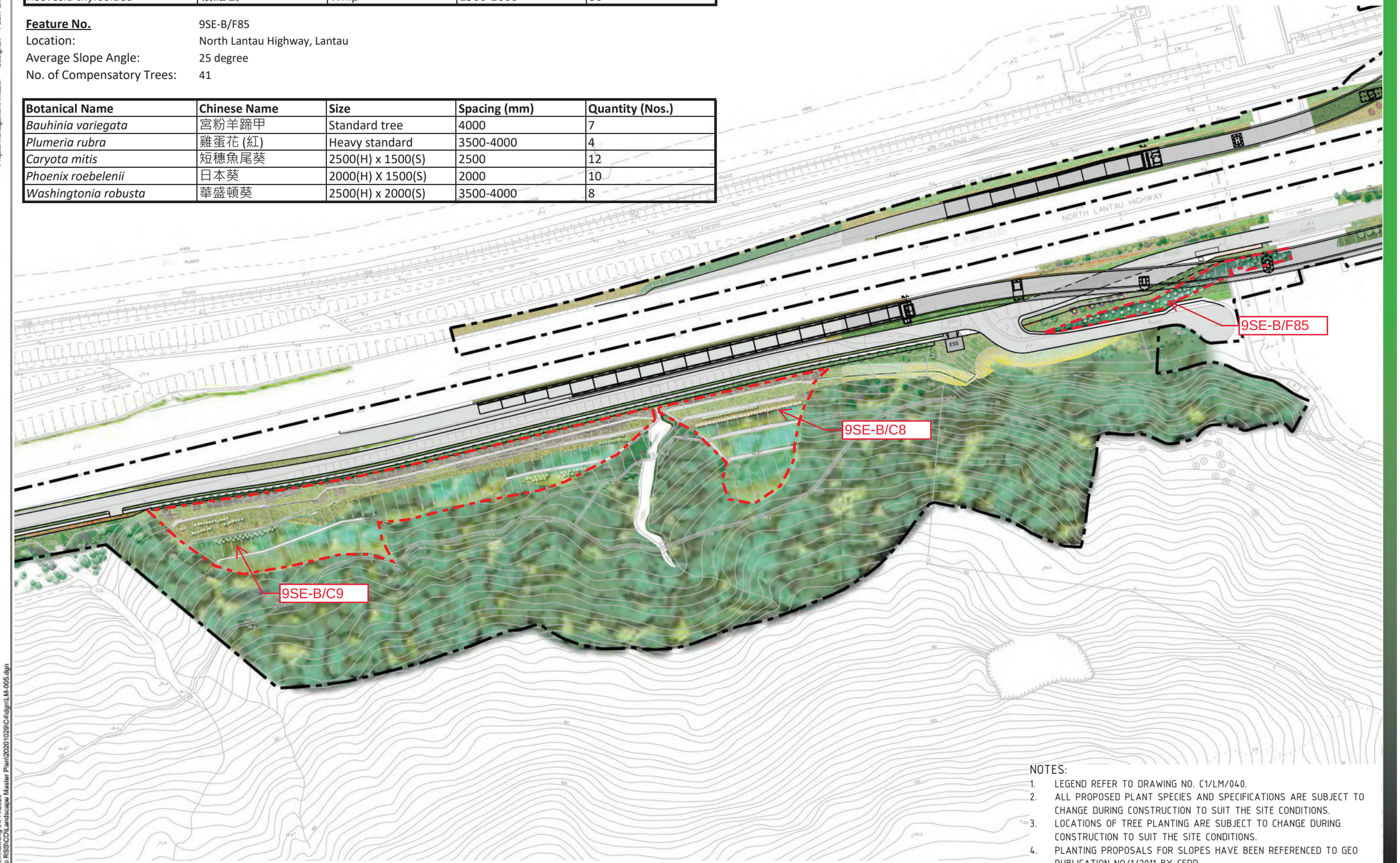
Plot File by: kathrinawong 03/11/2020
PATH: V:\TOTS RSS\CDO\Landscape Master Plan\20201029\C4\dgn\LM-004.dgn

Feature No. 9SE-B/C8, 9SE-B/C9
Location: Cheung Tung Road, North Lantau
Average Slope Angle: 40 and 45 degree respectively; tree planting locations are with 35 degree angle
No. of Compensatory Trees: 143

Botanical Name	Chinese Name	Size	Spacing (mm)	Quantity (Nos.)
Bridelia tomentosa	土蜜樹	Whip	1500-2000	37
Gordonia axillaris	大頭茶	Whip	1500-2000	30
Litsea glutinosa	潺槁樹	Whip	1500-2000	31
Phyllanthus emblica	餘甘子	Whip	1500-2000	15
Reevesia thyrsoidea	梭羅樹	Whip	1500-2000	30

Feature No. 9SE-B/F85
Location: North Lantau Highway, Lantau
Average Slope Angle: 25 degree
No. of Compensatory Trees: 41

Botanical Name	Chinese Name	Size	Spacing (mm)	Quantity (Nos.)
Bauhinia variegata	宮粉羊蹄甲	Standard tree	4000	7
Plumeria rubra	雞蛋花 (紅)	Heavy standard	3500-4000	4
Caryota mitis	短穗魚尾葵	2500(H) x 1500(S)	2500	12
Phoenix roebelenii	日本葵	2000(H) X 1500(S)	2000	10
Washingtonia robusta	華盛頓葵	2500(H) x 2000(S)	3500-4000	8



NOTES:
1. LEGEND REFER TO DRAWING NO. C1/LM/040.
2. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
4. PLANTING PROPOSALS FOR SLOPES HAVE BEEN REFERENCED TO GEO PUBLICATION NO/1/2011 BY CEDD.
5. PLANTING PROPOSALS FOR SLOPES, I.E. TREE SPECEIS, SIZE, SPACING, LOCATION, HAVE BEEN REVIEWED AND COMMENTED BY HYD/LANDSCAPE DIVISION.

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TUEN MUN - CHEK LAP KOK LINK
COTNRACT TITLE
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SCALE: A1 1 : 2000 A3 1:4000
DIMENSION UNIT: MILLIMETRES

KEY PLAN


PROJECT NO. 60240249
CONTRACT NO. HY/2012/07

SHEET TITLE
TREE PLANTING ON SLOPES

SHEET 6 OF 6

SHEET NUMBER
C1/LM/051

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

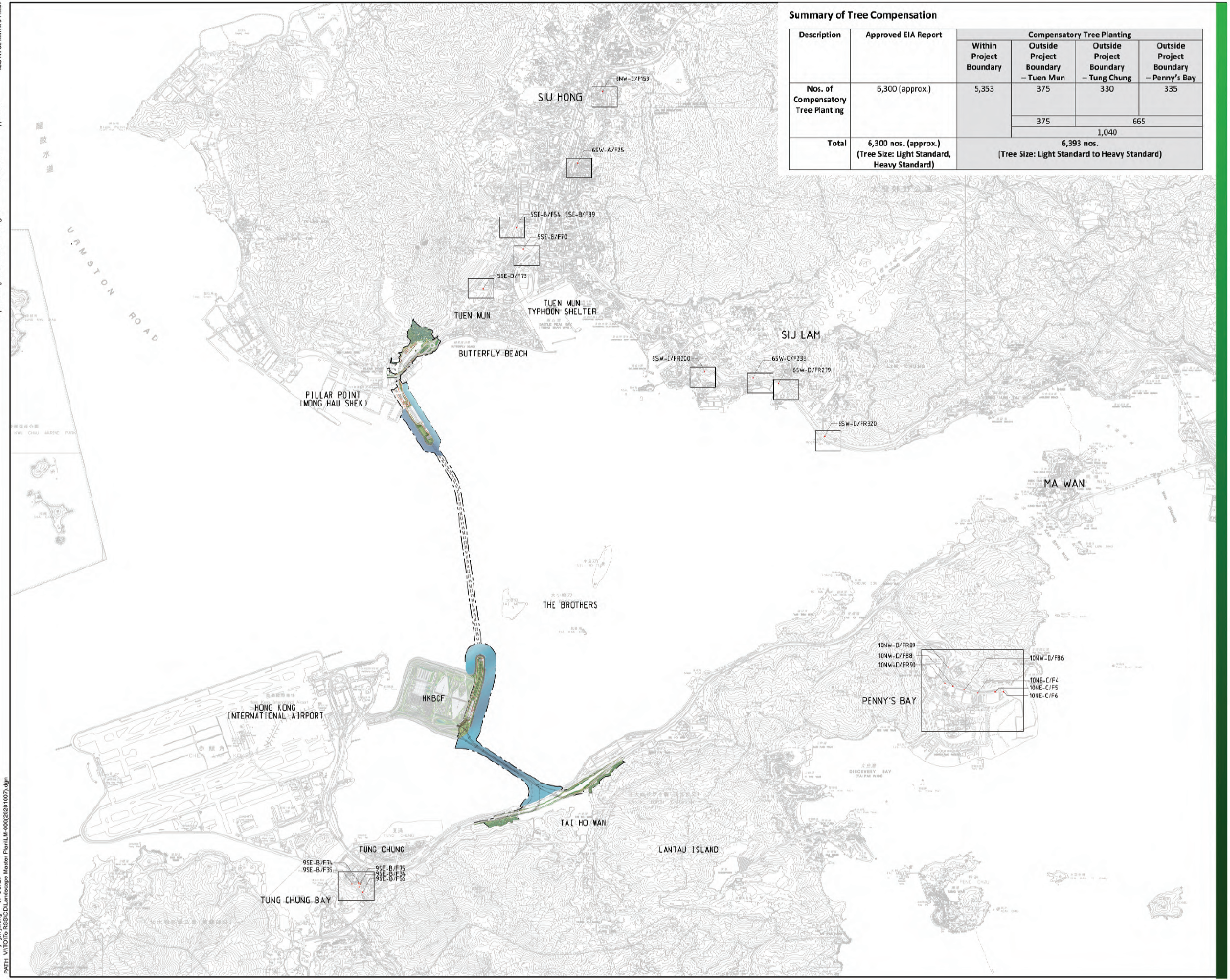
Plot File by: kathrinawong 04/11/2020
PATH: V:\TOTo RSSCC\Landscape Master Plan\20201029\Cridge\LM-005.dgn

Appendix E.3

Tree Compensation Outside Project Boundary

Summary of Tree Compensation

Description	Approved EIA Report	Compensatory Tree Planting			
		Within Project Boundary	Outside Project Boundary – Tuen Mun	Outside Project Boundary – Tung Chung	Outside Project Boundary – Penny's Bay
Nos. of Compensatory Tree Planting	6,300 (approx.)	5,353	375	330	335
			375	665	
			1,040		
Total	**6,300 nos. (approx.) (Tree Size: Light Standard, Heavy Standard)**	**6,393 nos. (Tree Size: Light Standard to Heavy Standard)**			



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TUEN MUN - CHEK LAP KOK LINK DESIGN AND CONSTRUCTION

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SCALE: A1 1 : 30000

DIMENSION UNIT: MILLIMETERS

KEY PLAN

PROJECT NO.: 60240249

CONTRACT NO.

SHEET TITLE

TREE COMPENSATION OUTSIDE PROJECT BOUNDARY

SHEET NUMBER

LM/052

ISO A1 594mm x 841mm
Approved:
Checked:
Designer:
Project Management Initials:
Plot File by: jerrywong 07-Oct-20
PATH V:\TOTO RSS\CD\Landscape Master Plan\LM-000(20201007).dgn

Table E.5
Tuen Mun - Chek Lap Kok Link
Agreement No. CE 7/2011 (HY)
Tree Compensation Outside Project Boundary - Tree Planting Schedule

Location of Slopes Outside Project Boundary: North Lantau (Tung Chung, Penny's Bay)

Feature No. 9SE-B/F56
Location: Shun Tung Road, Tung Chung
Average Slope Angle: 28 degree
No. of Compensatory Trees: 152

Feature No. 9SE-B/F35, 9SE-B/F74, 9SE-B/F75 and 9SE-B/F34
Location: Shun Tung Road, Tung Chung
Average Slope Angle: 35 degree, 30 degree, 30 degree, 35 degree respectively.
No. of Compensatory Trees: 178

Feature No. 10NE-C/F6
Location: Penny's Bay
Average Slope Angle: 27 degree
No. of Compensatory Trees: 38

Feature No. 10NE-C/F5
Location: Penny's Bay
Average Slope Angle: 27 degree
No. of Compensatory Trees: 44

Feature No. 10NE-C/F4
Location: Penny's Bay
Average Slope Angle: 27 degree
No. of Compensatory Trees: 33

Feature No. 10NW-D/F86
Location: Penny's Bay
Average Slope Angle: 27 degree
No. of Compensatory Trees: 32

Feature No. 10NW-D/F88
Location: Penny's Bay
Average Slope Angle: 27 degree
No. of Compensatory Trees: 70

Feature No. 10NW-D/FR89
Location: Penny's Bay
Average Slope Angle: 27 degree
No. of Compensatory Trees: 70

Feature No. 10NW-D/FR90
Location: Penny's Bay
Average Slope Angle: 27 degree
No. of Compensatory Trees: 48

Tung Chung, Penny's Bay: 665 nos.

Tree Species Schedule - Tung Chung

Botanical Name	Chinese Name	Size	Spacing (Approximate mm)	Remarks
Bischofia javanica	秋楓	Light Standard	3000-4000	native tree mix
Bauhinia variegata	宮粉羊蹄甲	Light Standard	3000-4000	exotic - flowering tree
Cassia fistula	豬腸豆	Light Standard	4000-5000	exotic - front row flowering tree
Castanopsis fissa	裂斗錐栗	Light Standard	3000-4000	native tree mix
Celtis sinensis	朴樹	Light Standard	3000-4000	native tree mix
Cinnamomum burmannii	陰香	Light Standard	3000-4000	native tree mix
Cinnamomum camphoroa	樟	Standard	4000-5000	native avenue tree
Cyclobalanopsis championii	嶺南青岡	Light Standard	3000-4000	native tree mix
Elaeocarpus chinensis	中華杜英	Light Standard	3000-4000	native tree mix
Elaeocarpus sylvestris	山杜英	Light Standard	3000-4000	native tree mix
Ilex viridus	綠冬青	Light Standard	3000-4000	native tree mix
Lagerstroemia speciosa	大花紫薇	Light Standard	3000-4000	exotic - front row flowering tree
Liquidambar formosana	楓香	Light Standard	3000-4000	native tree mix
Machilus breviflora	短序潤楠	Light Standard	3000-4000	native tree mix
Machilus chekiangensis	浙江潤楠	Light Standard	3000-4000	native tree mix
Phyllanthus emblica	餘甘子	Light Standard	3000-4000	native tree mix
Pyrus calleryana	豆梨	Light Standard	3000-4000	native - front row flowering tree
Reevesia thyrsoidea	梭羅樹	Light Standard	3000-4000	native tree mix
Sapium discolor	山烏桕	Light Standard	3000-4000	native tree mix
Schefflera heptaphylla	鵝掌柴	Light Standard	3000-4000	native tree mix
Schima superba	木荷	Light Standard/ Standard	3000-4000	native tree mix/ avenue tree
Sterculia lanceolata	假蘋婆	Light Standard	3000-4000	native tree mix
Syzygium hancei	韓氏蒲桃	Light Standard	3000-4000	native tree mix
Tabebuia chrysantha	黃花風鈴木	Light Standard	3000-4000	exotic - front row flowering tree
Tabebuia impetiginosa	紅花風鈴木	Light Standard	3000-4000	exotic - front row flowering tree
Viburnum odoratissimum	珊瑚樹	Light Standard	3000-4000	native tree mix
			Tung Chung Total Quantity:	330 nos.

NOTE:
1. The Tree Species Schedule is a tentative list which has been advised by HyD/Landscape Division. Tree species will be selected from the Tree Species Schedule.
2. All proposed tree species and specifications in the Tree Species Schedule are subject to change during construction to suit the site conditions and market availability.
3. Size of trees shall refer to the General Specification for Civil Engineering Works, 2006 edition.
4. Exact location of tree planting shall be verified on site. Trees may be planted in other slope(s) in the Tuen Mun Area.

Tree Species Schedule - Penny's Bay

Botanical Name	Chinese Name	Size	Spacing (Approximate mm)	Remarks
Bauhinia variegata	宮粉羊蹄甲	Heavy Standard	4000-5000	exotic
Callistemon viminalis	串錢柳	Heavy Standard	4000-5000	exotic
Ficus microcarpa	細葉榕	Standard	-	native
Lagerstroemia indica	紫薇	Standard	4000-5000	exotic
Lagerstroemia speciosa	大花紫薇	Standard	4000-5000	exotic
Liquidambar formosana	楓香	Standard	4000-5000	native
Livistona chinensis	蒲葵	1.5m clear trunk	2500-3000	exotic
Livistona chinensis	蒲葵	3m clear trunk	2500-3000	exotic
Plumeria rubra (red)	雞蛋花(紅花)	Heavy Standard - 2m Height	4000-5000	exotic
Sterculia lanceolata	假蘋婆	Heavy Standard	4000-5000	native
Tabebuia chrysantha	黃花風鈴木	Standard	4000-5000	exotic
Tabebuia rosea	紅花風鈴木	Standard	4000-5000	exotic
Terminalia catappa	欖仁樹	Heavy Standard	4000-4500	exotic
Viburnum odoratissimum	珊瑚樹	Heavy Standard	4000-5000	native
Xanthostemon chrysanthus	金蒲桃	Standard	4000-5000	exotic
Yulania liliiflora	紫玉蘭	Standard	4000-5000	exotic
Yulania x soulangeana	二喬木蘭	Standard	4000-5000	exotic
			Penny's Bay Total Quantity:	335 nos.

NOTE:
1. The Tree Species Schedule is a tentative list which has been advised by HyD/Landscape Division. Tree species will be selected from the Tree Species Schedule.
2. All proposed tree species and specifications in the Tree Species Schedule are subject to change during construction to suit the site conditions and market availability.
3. Size of trees shall refer to the General Specification for Civil Engineering Works, 2006 edition.
4. Exact location of tree planting shall be verified on site. Trees may be planted in other slope(s) in the Tuen Mun Area.

Table E.6
Tuen Mun - Chek Lap Kok Link
Agreement No. CE 7/2011 (HY)
Tree Compensation Outside Project Boundary - Tree Planting Schedule

Location of Slopes Outside Project Boundary: Tuen Mun

Feature No. 6SW-D/FR320
Location: Castle Peak Road
Average Slope Angle: 26 degree
No. of Compensatory Trees: 30

Feature No. 6SW-D/FR279
Location: Castle Peak Road
Average Slope Angle: 30 degree
No. of Compensatory Trees: 20

Feature No. 6SW-C/FR200
Location: Castle Peak Road
Average Slope Angle: 30 degree
No. of Compensatory Trees: 49

Feature No. 5SE-D/F73
Location: San Shek Wan Road
Average Slope Angle: 30 degree
No. of Compensatory Trees: 60

Feature No. 5SE-B/F54 and 5SE-B/F89
Location: Tsing Wan Road
Average Slope Angle: 35 degree
No. of Compensatory Trees: 58

Feature No. 5SE-B/F70
Location: Wong Chu Road
Average Slope Angle: 30 degree
No. of Compensatory Trees: 20

Feature No. 6SW-A/F25
Location: Tseng Choi Street
Average Slope Angle: 30 degree
No. of Compensatory Trees: 48

Feature No. 6NW-C/F153
Location: Tuen Fu Road
Average Slope Angle: 30 degree
No. of Compensatory Trees: 45

Feature No. 6SW-C/F233
Location: Castle Peak Road - Tai Lam
Average Slope Angle: 45 degree
(proposed tree planting is at portion with approximate 35 degree angle)
No. of Compensatory Trees: 45

Tuen Mun: 375 nos.

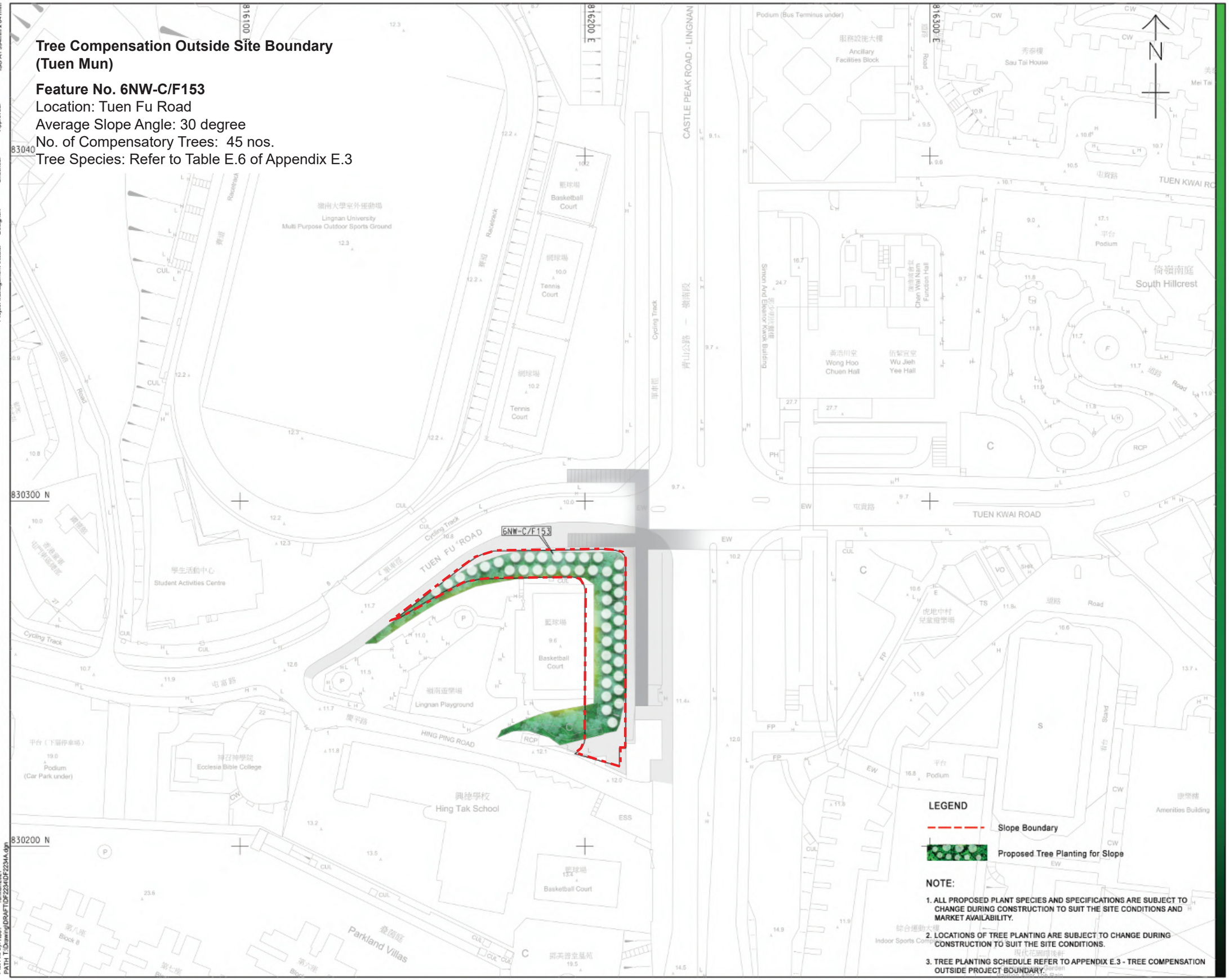
Tree Species Schedule - Tuen Mun

Botanical Name	Chinese Name	Size	Spacing (Approximate mm)	Remarks
Alangium chinense	八角楓	Light Standard	5000 - 6000	native
Bischofia javanica	秋楓	Light Standard	5000 - 6000	native
Bauhinia variegata	宮粉羊蹄甲	Light Standard	3000 - 4000	exotic
Castanopsis fissa	裂斗錐栗	Light Standard	5000 - 6000	native
Celtis sinensis	朴樹	Light Standard	3000 - 4000	native
Cinnamomum burmannii	陰香	Light Standard	3000 - 4000	native
Cinnamomum camphora	樟	Light Standard	5000 - 6000	native
Ilex rotunda var. microcarpa	小果鐵冬青	Light Standard	3000 - 4000	native
Liquidambar formosana	楓香	Light Standard	5000 - 6000	native
Litsea glutinosa	潺槁樹	Light Standard	3000 - 4000	native
Litsea monopetala	假柿木薑子	Light Standard	5000 - 6000	native
Machilus breviflora	短序潤楠	Light Standard	3000 - 6000	native
Photinia benthamiana	閩粵石楠	Light Standard	3000 - 6000	native
Phyllanthus emblica	餘甘子	Light Standard	3000 - 4000	native
Pongamia pinnata	水黃皮	Light Standard	5000 - 6000	native
Pyrus calleryana	豆梨	Light Standard	3000 - 4000	native
Reevesia thyrsoidea	梭羅樹	Light Standard	3000 - 4000	native
Sapium sebiferum	烏桕	Light Standard	5000 - 6000	native
Schefflera heptaphylla	鵝掌柴	Light Standard	5000 - 6000	native
Schima superba	木荷	Light Standard	3000 - 4000	native
Sapium discolor	山烏桕	Light Standard	3000 - 4000	native
Sterculia lanceolata	假蘋婆	Light Standard	3000 - 4000	native
Syzygium hancei	韓氏蒲桃	Light Standard	3000 - 4000	native
Syzygium levinei	山蒲桃	Light Standard	5000 - 6000	native
Tabebuia chrysantha	黃花風鈴木	Light Standard	3000 - 4000	exotic
Viburnum odoratissimum	珊瑚樹	Light Standard	3000 - 6000	native
Xanthostemon chrysanthus	金蒲桃	Light Standard	3000 - 4000	exotic
			Tuen Mun Total Quantity:	375 nos.

NOTE:
1. The Tree Species Schedule is a tentative list which has been advised by HyD/Landscape Division. Tree species will be selected from the Tree Species Schedule.
2. All proposed tree species and specifications in the Tree Species Schedule are subject to change during construction to suit the site conditions and market availability.
3. Size of trees shall refer to the General Specification for Civil Engineering Works, 2006 edition.
4. Exact location of tree planting shall be verified on site. Trees may be planted in other slope(s) in the Tuen Mun Area.

Tree Compensation Outside Site Boundary (Tuen Mun)

Feature No. 6NW-C/F153
Location: Tuen Fu Road
Average Slope Angle: 30 degree
No. of Compensatory Trees: 45 nos.
Tree Species: Refer to Table E.6 of Appendix E.3



NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS AND MARKET AVAILABILITY.
2. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. TREE PLANTING SCHEDULE REFER TO APPENDIX E.3 - TREE COMPENSATION OUTSIDE PROJECT BOUNDARY.

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK DESIGN AND CONSTRUCTION

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A	MAR 21	SLOPES UPDATE	CL

STATUS

SCALE: A1 1 : 500
DIMENSION UNIT

KEY PLAN

PROJECT NO.: 60240249
CONTRACT NO.:

SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - TUEN MUN

SHEET NUMBER
TMCLKL/LM/053

ISO A1 594mm x 841mm
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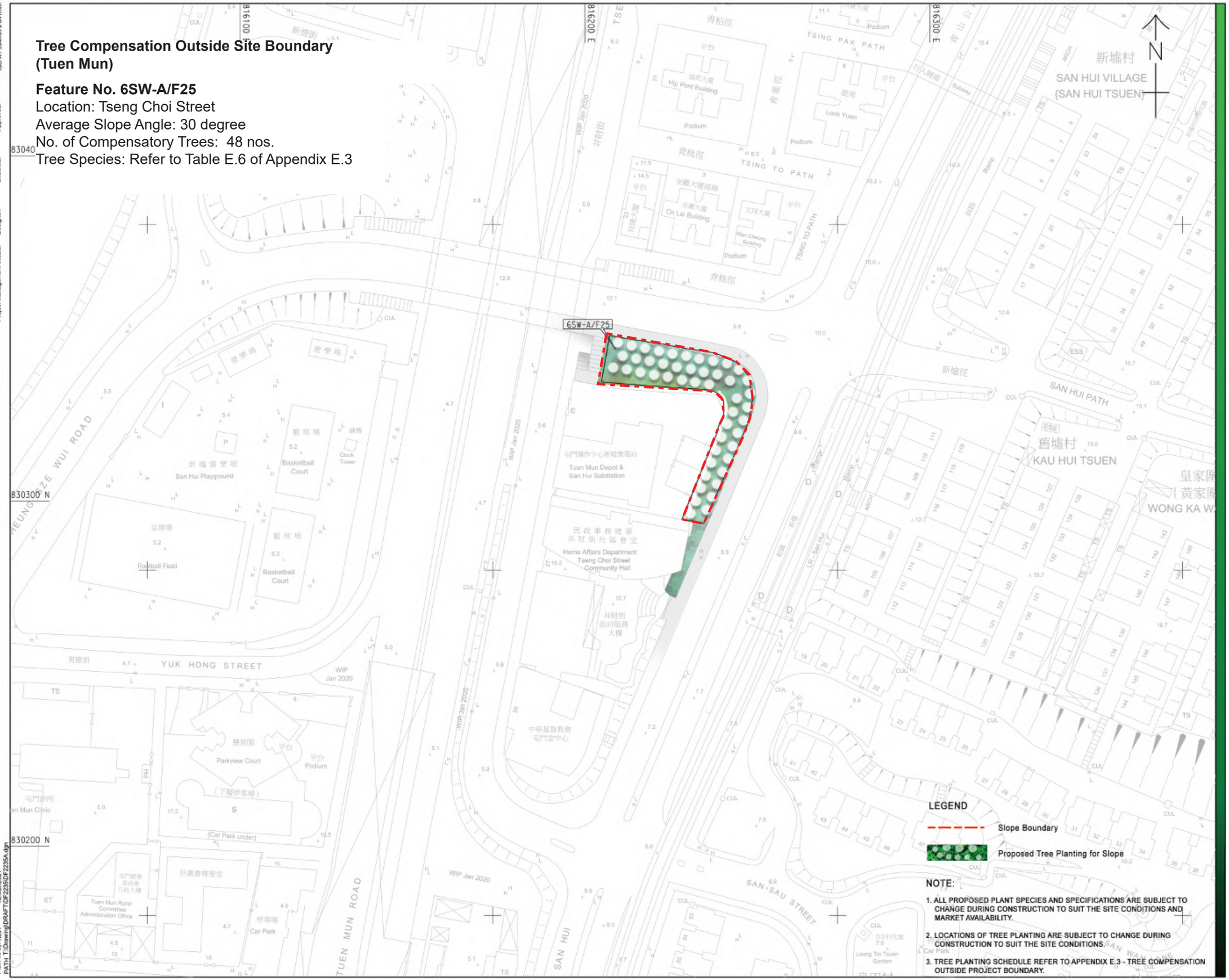
Designer:
Project Management Initials:

Plot File by: rtoc1
15/Mar/2021
PATH T:\Drawing\DRAFT\DF223\4\DF223\4A.dgn

Tree Compensation Outside Site Boundary (Tuen Mun)

Feature No. 6SW-A/F25
Location: Tseng Choi Street
Average Slope Angle: 30 degree
No. of Compensatory Trees: 48 nos.
Tree Species: Refer to Table E.6 of Appendix E.3



LEGEND

- Slope Boundary
- Proposed Tree Planting for Slope

NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS AND MARKET AVAILABILITY.
2. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. TREE PLANTING SCHEDULE REFER TO APPENDIX E.3 - TREE COMPENSATION OUTSIDE PROJECT BOUNDARY.

ISO A1 594mm x 841mm
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Designer:
Project Management Initials:

Plot File by: rtoc1 19/Mar/2021
PATH T:\Drawing\DRAFT\DF2230\DF2235A.dgn

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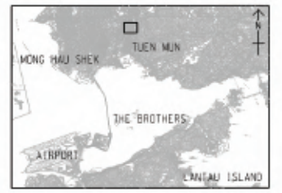
SCALE: A1 1 : 500
DIMENSION UNIT

KEY PLAN



PROJECT NO.: 60240249
CONTRACT NO.:

SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - TUEN MUN

SHEET NUMBER
TMCLKL/LM/054

Tree Compensation Outside Site Boundary (Tuen Mun)

Feature No. 5SE-B/F54, 5SE-B/F89
Location: Tsing Wan Road
Average Slope Angle: 35 degree
No. of Compensatory Trees: 58 nos.
Tree Species: Refer to Table E.6 of Appendix E.3

LEGEND

- Slope Boundary
- Proposed Tree Planting for Slope

NOTE:

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2. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. TREE PLANTING SCHEDULE REFER TO APPENDIX E.3 - TREE COMPENSATION OUTSIDE PROJECT BOUNDARY.

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A	MAR 21	SLOPES UPDATE	CL

STATUS

SCALE: A1 1 : 500
DIMENSION UNIT

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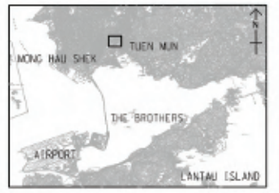

PROJECT NO.: 60240249
CONTRACT NO.

SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - TUEN MUN

SHEET NUMBER
TMCLKL/LM/055

ISO A1 594mm x 841mm
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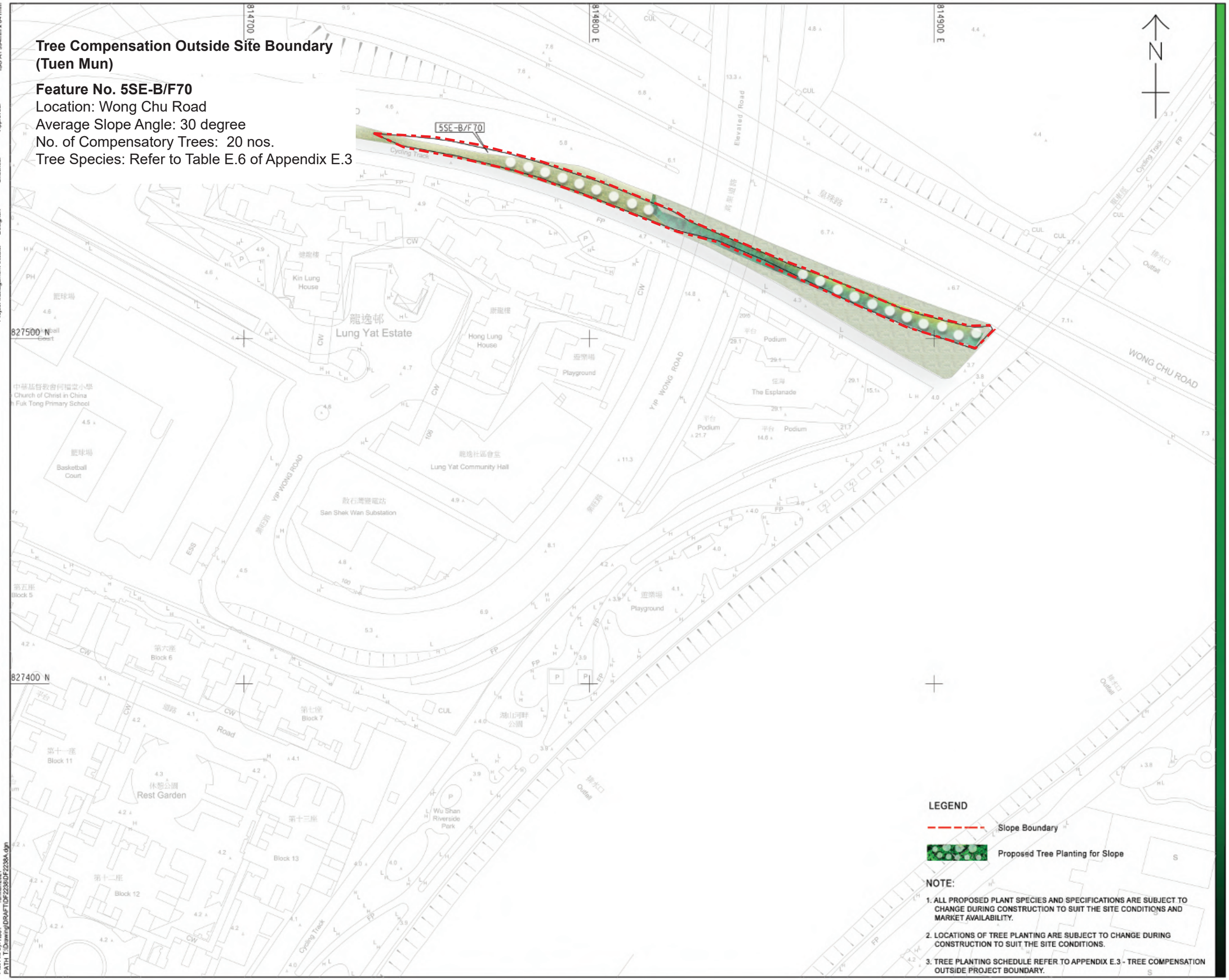
Designer:
Project Management Initials:
Plot File by: rtoct 16/Mar/2021
PATH: T:\Drawing\DRAFT\DF2237\DF2237A.dgn

Tree Compensation Outside Site Boundary (Tuen Mun)

Feature No. 5SE-B/F70
Location: Wong Chu Road
Average Slope Angle: 30 degree
No. of Compensatory Trees: 20 nos.
Tree Species: Refer to Table E.6 of Appendix E.3



NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS AND MARKET AVAILABILITY.
2. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. TREE PLANTING SCHEDULE REFER TO APPENDIX E.3 - TREE COMPENSATION OUTSIDE PROJECT BOUNDARY.

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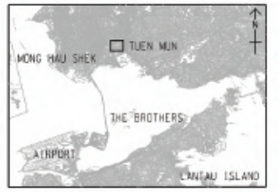
SCALE: A1 1 : 500
DIMENSION UNIT

KEY PLAN


PROJECT NO.: 60240249
CONTRACT NO.

SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - TUEN MUN

SHEET NUMBER
TMCLKL/LM/056

ISO A1 594mm x 841mm
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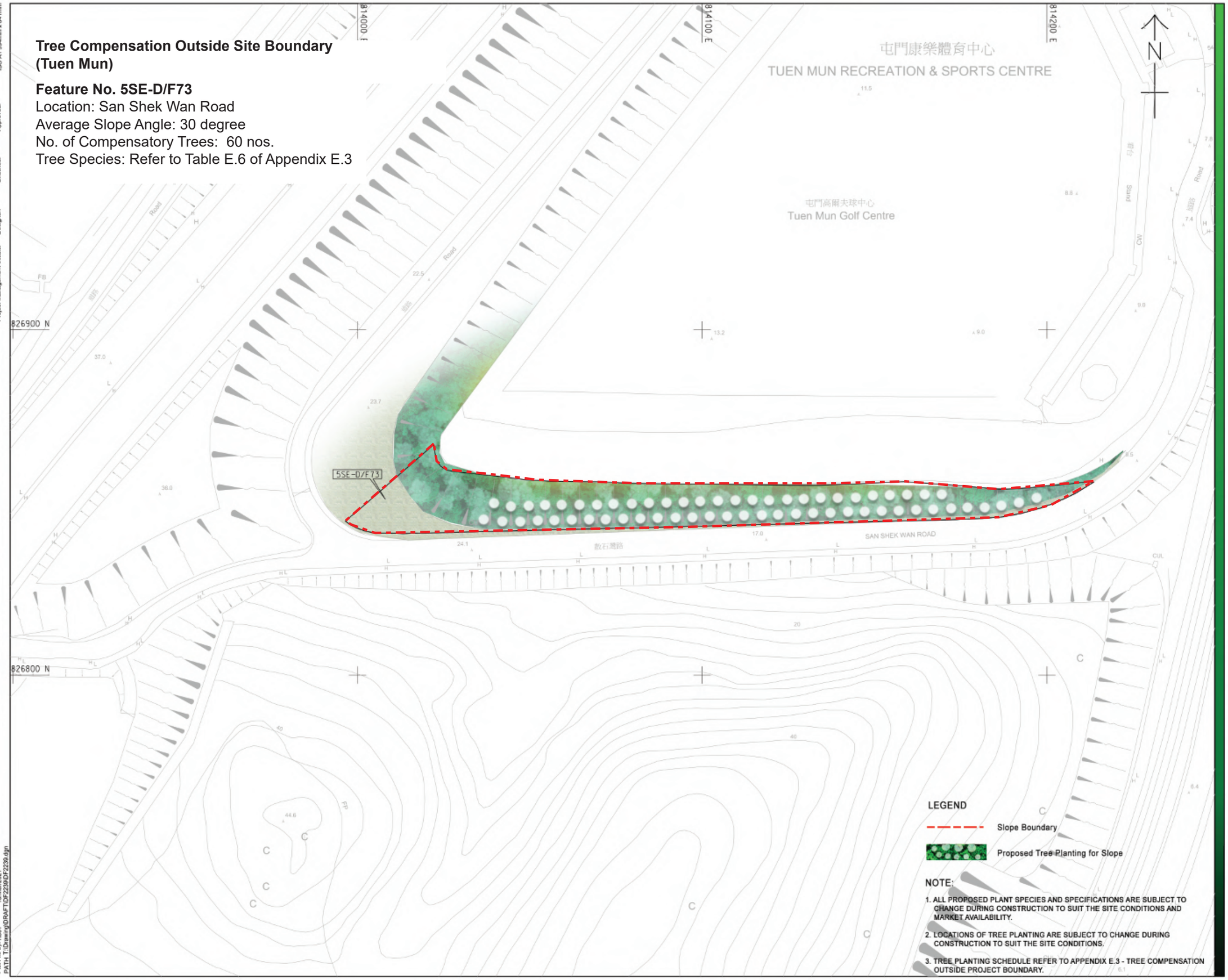
Designer:
Project Management Initials:
Plot File by: rloc1 15/Mar/2021
PATH: T:\Drawing\DRAFT\5P2238\DF2238A.dgn

Tree Compensation Outside Site Boundary (Tuen Mun)

Feature No. 5SE-D/F73
Location: San Shek Wan Road
Average Slope Angle: 30 degree
No. of Compensatory Trees: 60 nos.
Tree Species: Refer to Table E.6 of Appendix E.3



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Designer:
Project Management Initials:

Plot File by: rloc1 18/Mar/2021
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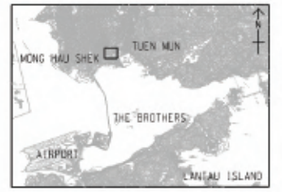
A	MAR 21	SLOPES UPDATE	CL

STATUS

SCALE
A1 1 : 500

DIMENSION UNIT

KEY PLAN



PROJECT NO.
60240249

CONTRACT NO.

SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - TUEN MUN

SHEET NUMBER
TMCLKL/LM/057

ISO A1 594mm x 841mm

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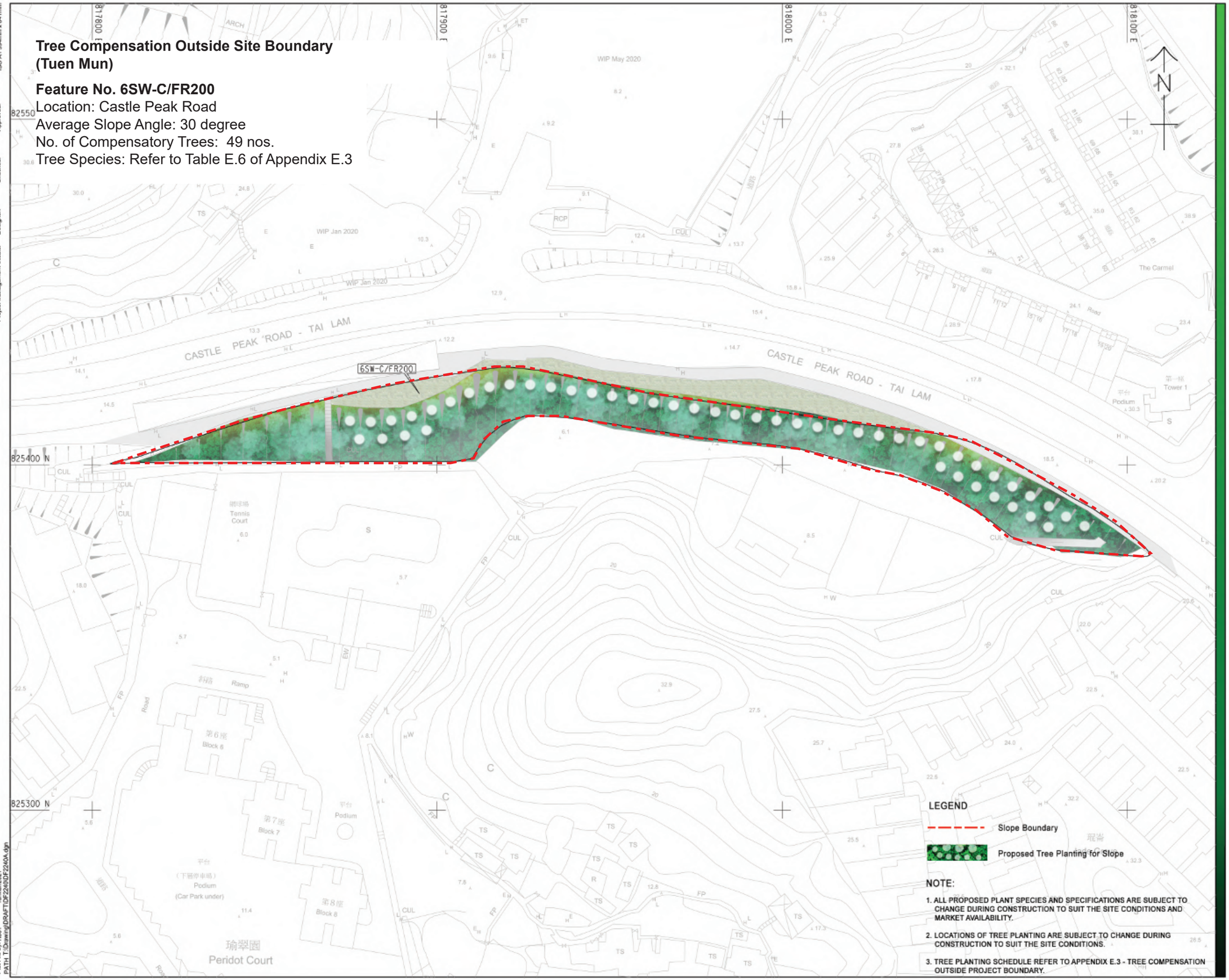
Designer:

Project Management Initials:

Tree Compensation Outside Site Boundary (Tuen Mun)

Feature No. 6SW-C/FR200
Location: Castle Peak Road
Average Slope Angle: 30 degree
No. of Compensatory Trees: 49 nos.
Tree Species: Refer to Table E.6 of Appendix E.3



LEGEND

Slope Boundary

Proposed Tree Planting for Slope

NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS AND MARKET AVAILABILITY.
2. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. TREE PLANTING SCHEDULE REFER TO APPENDIX E.3 - TREE COMPENSATION OUTSIDE PROJECT BOUNDARY.

Plot File by: rocl 15/Mar/2021
PATH: T:\Drawing\DRAFT\DP2240\DP2240A.dgn

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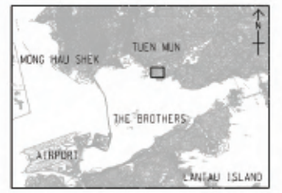
STATUS

SCALE
A1 1 : 500

DIMENSION UNIT

KEY PLAN



PROJECT NO.
60240249

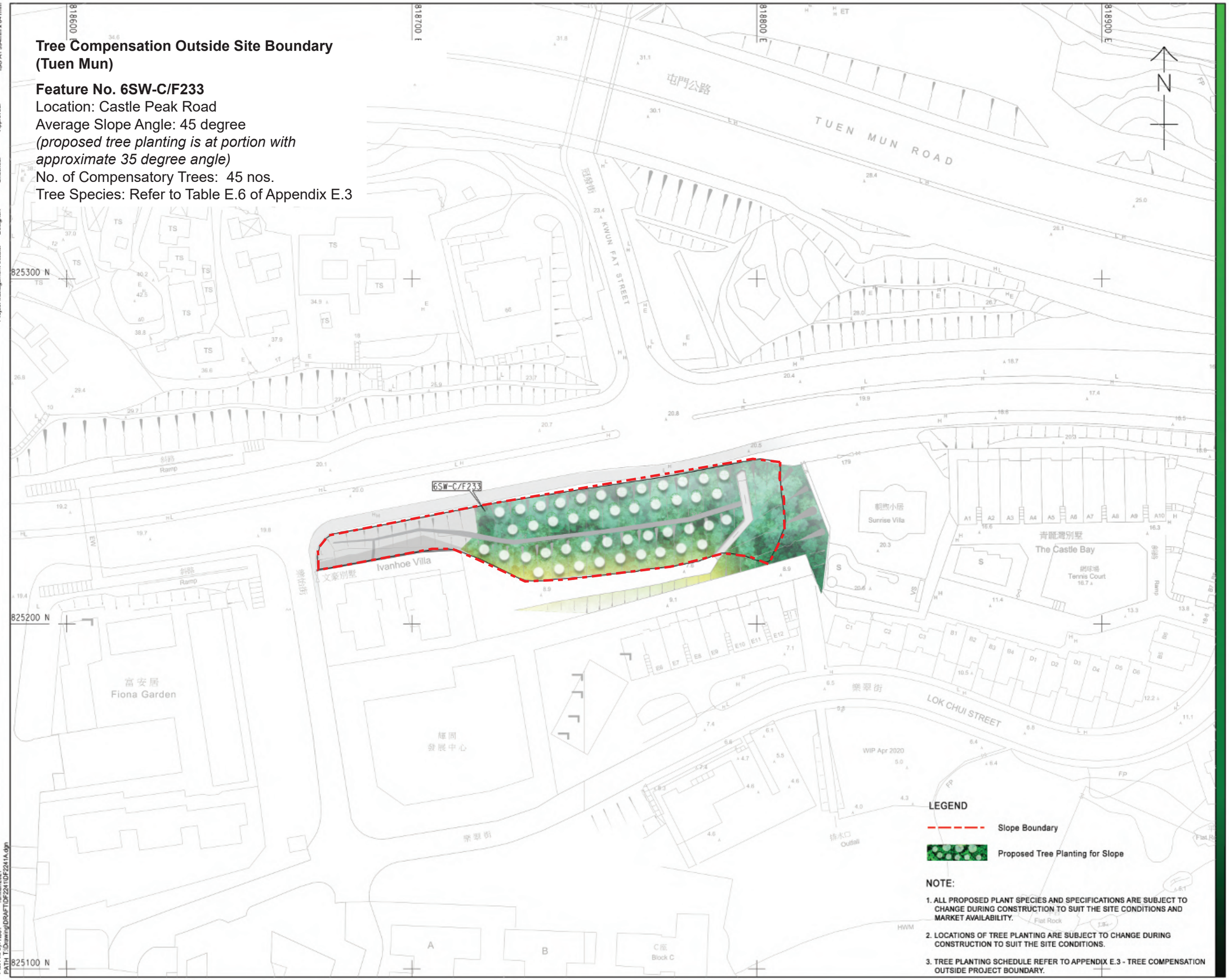
CONTRACT NO.

SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - TUEN MUN

SHEET NUMBER
TMCLKL/LM/058

Tree Compensation Outside Site Boundary (Tuen Mun)

Feature No. 6SW-C/F233
Location: Castle Peak Road
Average Slope Angle: 45 degree
(proposed tree planting is at portion with approximate 35 degree angle)
No. of Compensatory Trees: 45 nos.
Tree Species: Refer to Table E.6 of Appendix E.3



LEGEND

- Slope Boundary
- Proposed Tree Planting for Slope

NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS AND MARKET AVAILABILITY.
2. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. TREE PLANTING SCHEDULE REFER TO APPENDIX E.3 - TREE COMPENSATION OUTSIDE PROJECT BOUNDARY.

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A	MAR 21	SLOPES UPDATE	CL

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SCALE: A1 1 : 500
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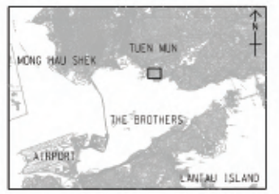
KEY PLAN



PROJECT NO.: 60240249
CONTRACT NO.

SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - TUEN MUN

SHEET NUMBER
TMCLKL/LM/059

ISO A1 594mm x 841mm
Approved:
Checked:
Designer:
Project Management Initials:

Plot File by: rtoc1 15/Mar/2021
PATH: T:\Drawing\DRAFT\DP22410\DP2241A.dgn

Tree Compensation Outside Site Boundary (Tuen Mun)

Feature No. 6SW-D/FR279
Location: Castle Peak Road
Average Slope Angle: 30 degree
No. of Compensatory Trees: 20 nos.
Tree Species: Refer to Table E.6 of Appendix E.3

ISO A1 594mm x 841mm
Approved:
Checked:
Designer:
Project Management Initials:

Plot File by: RTOCTEMP 11/12/2020
PATH: T:\Drawing\DRAFT\DP22440\P2244.dgn

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A	MAR 21	SLOPES UPDATE	CL

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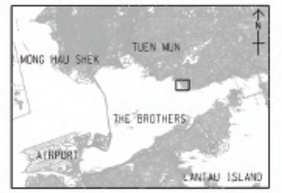


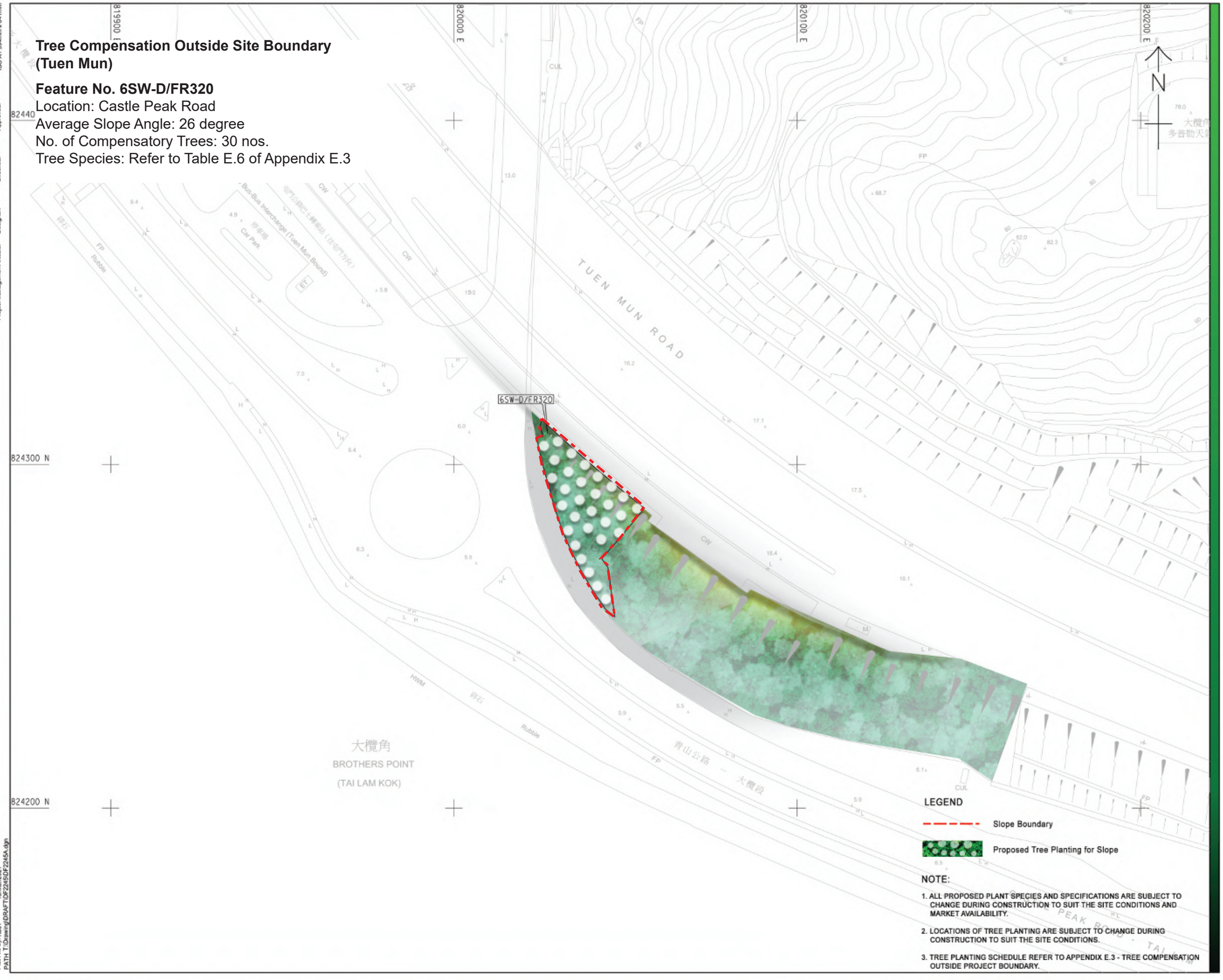
PROJECT NO.: 60240249
CONTRACT NO.

SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - TUEN MUN

SHEET NUMBER
TMCLKL/LM/060

Tree Compensation Outside Site Boundary (Tuen Mun)

Feature No. 6SW-D/FR320
Location: Castle Peak Road
Average Slope Angle: 26 degree
No. of Compensatory Trees: 30 nos.
Tree Species: Refer to Table E.6 of Appendix E.3



LEGEND

- Slope Boundary
- Proposed Tree Planting for Slope

NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS AND MARKET AVAILABILITY.
2. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. TREE PLANTING SCHEDULE REFER TO APPENDIX E.3 - TREE COMPENSATION OUTSIDE PROJECT BOUNDARY.

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SCALE: A1 1 : 500
DIMENSION UNIT

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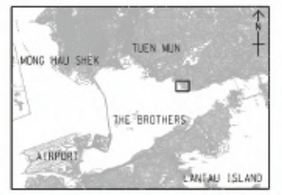

PROJECT NO.: 60240249
CONTRACT NO.

SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - TUEN MUN

SHEET NUMBER
TMCLKL/LM/061

ISO A1 594mm x 841mm
Approved:
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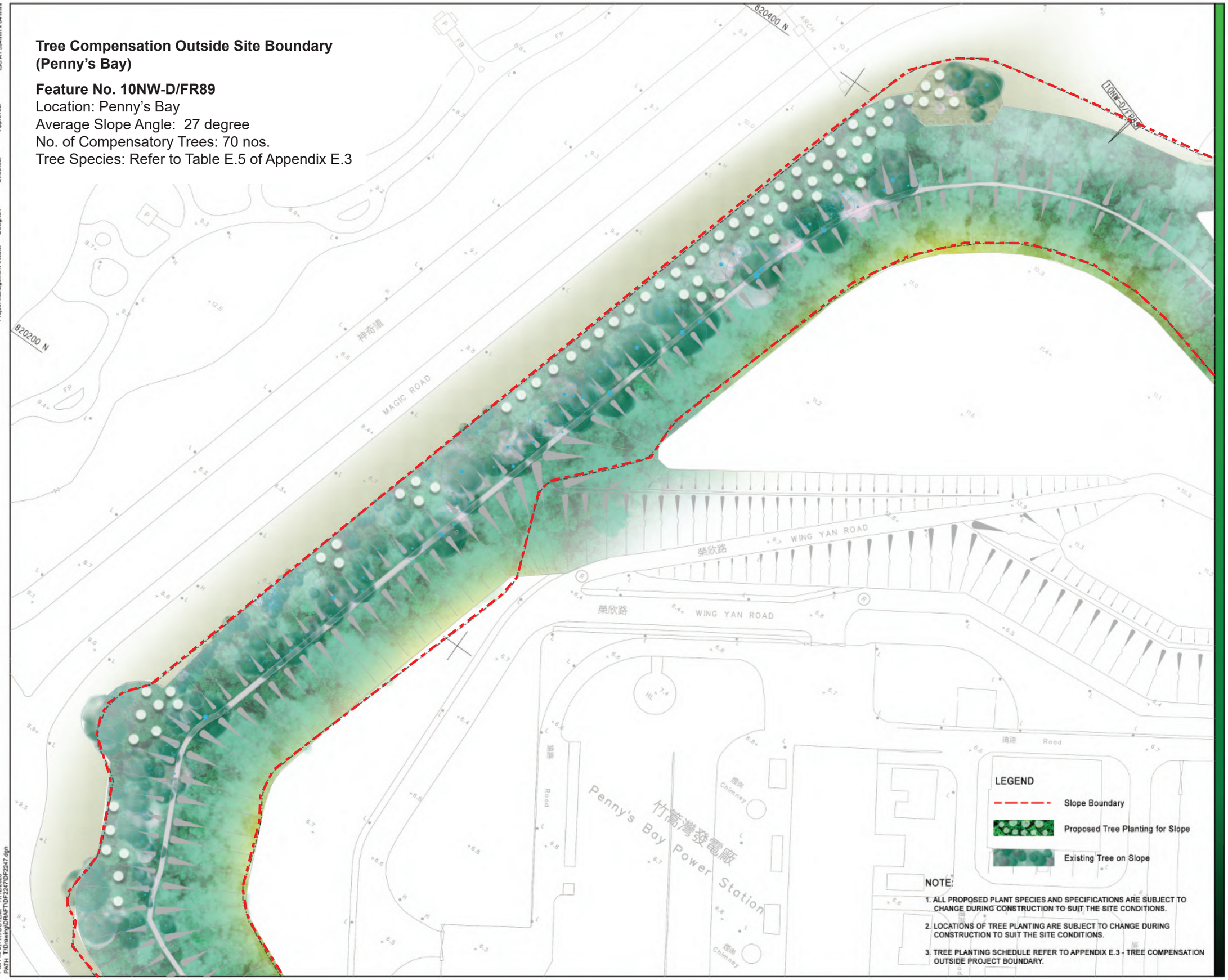
Designer:
Project Management Initials:

Plot File by: rloc1 15/Mar/2021
PATH T:\Drawing\DRAFT\DP2245\DP2245A.dgn

Project Management Initials: Designer: Checked: Approved: ISO A1 594mm x 841mm

Tree Compensation Outside Site Boundary (Penny's Bay)

Feature No. 10NW-D/FR89
Location: Penny's Bay
Average Slope Angle: 27 degree
No. of Compensatory Trees: 70 nos.
Tree Species: Refer to Table E.5 of Appendix E.3



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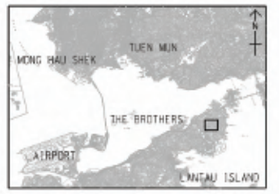
STATUS

SCALE: A1 1 : 500
DIMENSION UNIT

KEY PLAN



PROJECT NO.: 60240249
CONTRACT NO.

SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - PENNY'S BAY

SHEET NUMBER
TMCLKL/LM/062

Tree Compensation Outside Site Boundary (Penny's Bay)

Feature No. 10NW-D/F88
Location: Penny's Bay
Average Slope Angle: 27 degree
No. of Compensatory Trees: 70 nos.
Tree Species: Refer to Table E.5 of Appendix E.3

NOTE:
1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS AND MARKET AVAILABILITY.
2. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. TREE PLANTING SCHEDULE REFER TO APPENDIX E.3 - TREE COMPENSATION OUTSIDE PROJECT BOUNDARY.

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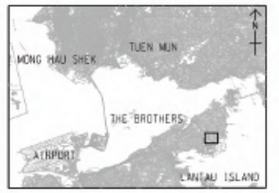

PROJECT NO.: 60240249
CONTRACT NO.:

SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - PENNY'S BAY

SHEET NUMBER
TMCLKL/LM/063

ISO A1 594mm x 841mm
Approved:
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Designer:
Project Management Initials:
Plot File by: RTOCTEMP 11/12/2020
PATH: T:\Drawing\DRAFT\DP2249\DP2245.dgn

Tree Compensation Outside Site Boundary (Penny's Bay)

Feature No. 10NW-D/FR90
Location: Penny's Bay
Average Slope Angle: 27 degree
No. of Compensatory Trees: 48 nos.
Tree Species: Refer to Table E.5 of Appendix E.3

NOTE:

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2. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. TREE PLANTING SCHEDULE REFER TO APPENDIX E.3 - TREE COMPENSATION OUTSIDE PROJECT BOUNDARY.

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SCALE: A1 1 : 500
DIMENSION UNIT

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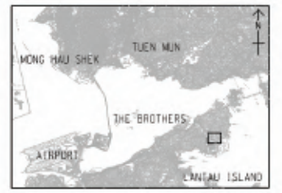

PROJECT NO.: 60240249
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SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - PENNY'S BAY

SHEET NUMBER
TMCLKL/LM/064

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Project Management Initials:

Plot File by: RTOCTEMP 11/12/2020
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Tree Compensation Outside Site Boundary (Penny's Bay)

Feature No. 10NW-D/F86
Location: Penny's Bay
Average Slope Angle: 27 degree
No. of Compensatory Trees: 32 nos.
Tree Species: Refer to Table E.5 of Appendix E.3

ISO A1 594mm x 841mm
Approved:
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Designer:
Project Management Initials:

Plot File by: RTOCTEMP 11/10/2020
PATH: T:\Drawing\DRAFT\DP2250\DP2250.dgn

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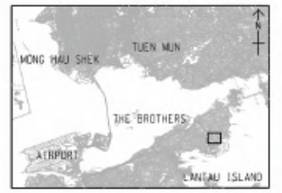
DIMENSION UNIT

KEY PLAN



PROJECT NO.
60240249

CONTRACT NO.

SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - PENNY'S BAY

SHEET NUMBER
TMCLKL/LM/065

Tree Compensation Outside Site Boundary (Penny's Bay)

Feature No. 10NE-C/F4

Location: Penny's Bay

Average Slope Angle: 27 degree

No. of Compensatory Trees: 33 nos.

Tree Species: Refer to Table E.5 of Appendix E.3

LEGEND

- Slope Boundary
- Proposed Tree Planting for Slope
- Existing Tree on Slope

NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS AND MARKET AVAILABILITY.
2. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. TREE PLANTING SCHEDULE REFER TO APPENDIX E.3 - TREE COMPENSATION OUTSIDE PROJECT BOUNDARY.

ISO A1 594mm x 841mm

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Plot File by: RTOCTEMP 11/12/2020

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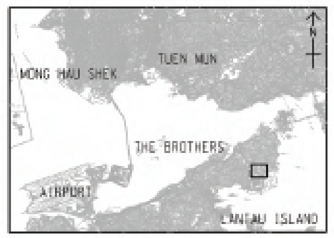
A1 1 : 500

DIMENSION UNIT

KEY PLAN



PROJECT NO.

60240249

CONTRACT NO.

SHEET TITLE

TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - PENNY'S BAY

SHEET NUMBER

TMCLKL/LM/066

Tree Compensation Outside Site Boundary (Penny's Bay)

Feature No. 10NE-C/F5
Location: Penny's Bay
Average Slope Angle: 27 degree
No. of Compensatory Trees: 44 nos.
Tree Species: Refer to Table E.5 of Appendix E.3

LEGEND

- Slope Boundary
- Proposed Tree Planting for Slope
- Existing Tree on Slope

NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS AND MARKET AVAILABILITY.
2. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. TREE PLANTING SCHEDULE REFER TO APPENDIX E.3 - TREE COMPENSATION OUTSIDE PROJECT BOUNDARY.

ISO A1 594mm x 841mm
Approved:
Checked:
Designer:
Project Management Initials:

Plot File by: RTOCTEMP 11/12/2020
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AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK DESIGN AND CONSTRUCTION

CLIENT
HIGHWAYS DEPARTMENT
Major Works Project Management Office (Special Duties)

CONSULTANT
AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS

ISSUE/REVISION

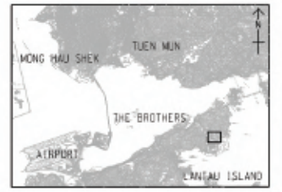
I/R	DATE	DESCRIPTION	CHK.
A	MAR 21	SLOPES UPDATE	CL

STATUS

SCALE
A1 1 : 500

DIMENSION UNIT

KEY PLAN



PROJECT NO.
60240249

CONTRACT NO.

SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - PENNY'S BAY

SHEET NUMBER
TMCLKL/LM/067

Tree Compensation Outside Site Boundary (Penny's Bay)

Feature No. 10NE-C/F6
Location: Penny's Bay
Average Slope Angle: 27 degree
No. of Compensatory Trees: 38 nos.
Tree Species: Refer to Table E.5 of Appendix E.3

ISO A1 594mm x 841mm
Approved:
Checked:
Designer:
Project Management Initials:

Plot File by: RTOCTEMP 11/12/2020
PATH: T:\Drawings\DRAFT\DP2253\DP2253.dgn

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PROJECT
TUEN MUN - CHEK LAP KOK LINK DESIGN AND CONSTRUCTION

CLIENT
路訊署 HIGHWAYS DEPARTMENT
土發工務管理處(專責事務)
Major Works Project Management Office (Special Duties)

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ISSUE/REVISION

I/R	DATE	DESCRIPTION	CHK.
A	MAR 21	SLOPES UPDATE	CL

STATUS

SCALE: A1 1 : 500
DIMENSION UNIT

KEY PLAN

PROJECT NO.: 60240249
CONTRACT NO.

SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - PENNY'S BAY

SHEET NUMBER
TMCLKL/LM/068

Tree Compensation Outside Site Boundary (Tung Chung)

Feature No. 9SE-B/F35, 9SE-B/F74, 9SE-B/F75 and 9SE-B/F34
Location: Shun Tung Road, Tung Chung
Average Slope Angle: 35 degree, 30 degree, 30 degree, 35 degree respectively.
No. of Compensatory Trees: 178 nos.
Tree Species: Refer to Table E.5 of Appendix E.3

9SE-B/F35
9SE-B/F74
9SE-B/F75
9SE-B/F34

LEGEND
- Slope Boundary
- Proposed Tree Planting for Slope
- Existing Tree on Slope

NOTE:
1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS AND MARKET AVAILABILITY.
2. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. TREE PLANTING SCHEDULE REFER TO APPENDIX E.3 - TREE COMPENSATION OUTSIDE PROJECT BOUNDARY.

ISO A1 594mm x 841mm
Approved:
Checked:
Designer:
Project Management Initials:
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15/Mar/2021

AECOM

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TUEN MUN - CHEK LAP KOK LINK DESIGN AND CONSTRUCTION

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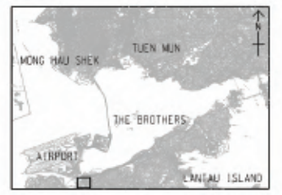
ISSUE/REVISION

I/R	DATE	DESCRIPTION	CHK.
A	MAR 21	SLOPES UPDATE	CL

STATUS

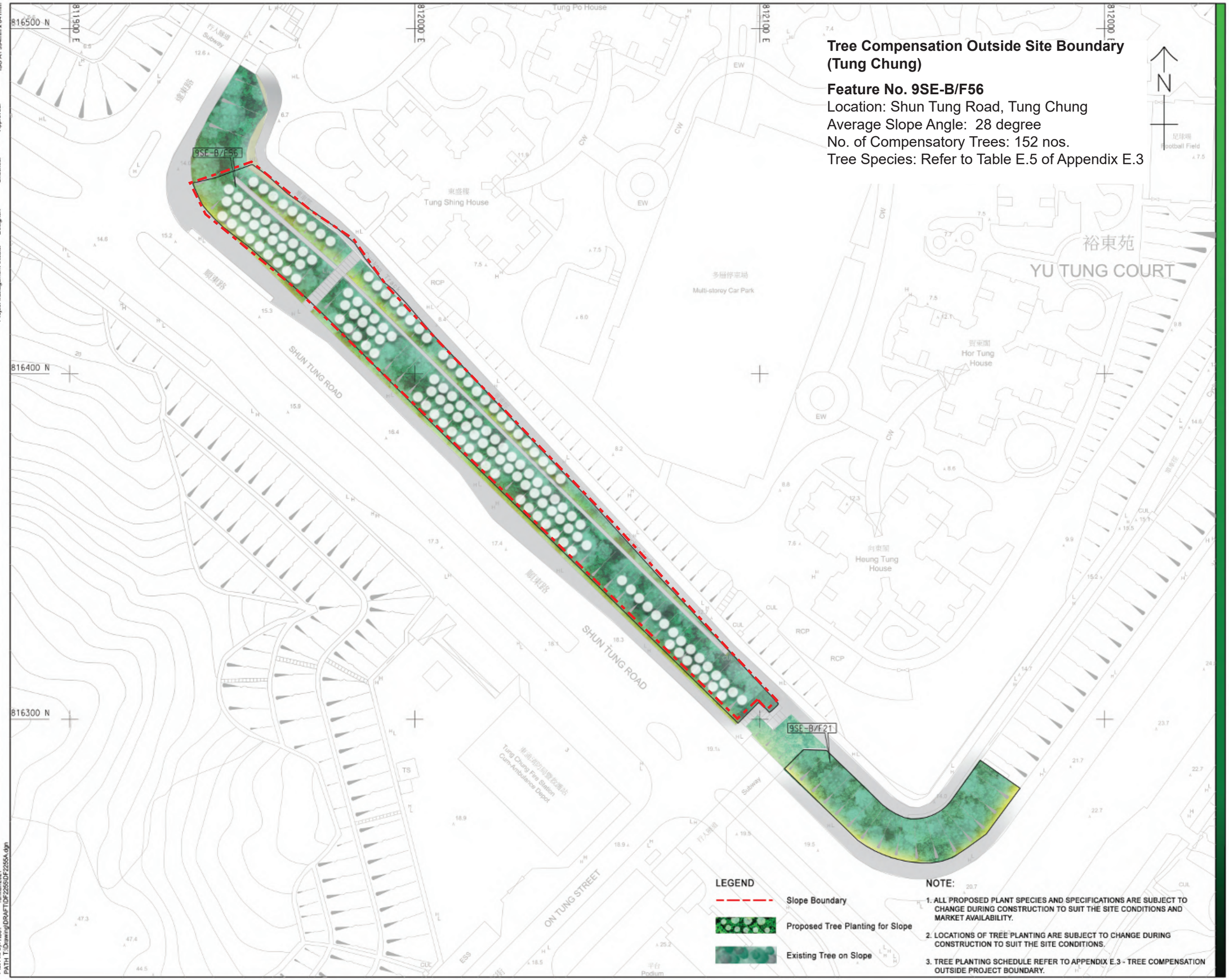
SCALE: A1 1 : 500
DIMENSION UNIT

KEY PLAN


PROJECT NO.: 60240249
CONTRACT NO.

SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - TUNG CHUNG

SHEET NUMBER
TMCLKL/LM/069



Tree Compensation Outside Site Boundary (Tung Chung)

Feature No. 9SE-B/F56
Location: Shun Tung Road, Tung Chung
Average Slope Angle: 28 degree
No. of Compensatory Trees: 152 nos.
Tree Species: Refer to Table E.5 of Appendix E.3

LEGEND

- Slope Boundary
- Proposed Tree Planting for Slope
- Existing Tree on Slope

NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS AND MARKET AVAILABILITY.
2. LOCATIONS OF TREE PLANTING ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
3. TREE PLANTING SCHEDULE REFER TO APPENDIX E.3 - TREE COMPENSATION OUTSIDE PROJECT BOUNDARY.

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PROJECT
TUEN MUN - CHEK LAP KOK LINK DESIGN AND CONSTRUCTION

CLIENT
HIGHWAYS DEPARTMENT
Major Works Project Management Office (Special Duties)

CONSULTANT
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SUB-CONSULTANTS

ISSUE/REVISION

I/R	DATE	DESCRIPTION	CHK.
A	MAR 21	SLOPES UPDATE	CL

STATUS

SCALE
A1 1 : 500

DIMENSION UNIT

KEY PLAN

PROJECT NO.
60240249

CONTRACT NO.

SHEET TITLE
TREE COMPENSATION OUTSIDE PROJECT BOUNDARY - TUNG CHUNG

SHEET NUMBER
TMCLKL/LM/070

ISO A1 594mm x 841mm
Project Management Initials: Designer: Checked: Approved:
Plot File by: rtoc1 15/Mar/2021
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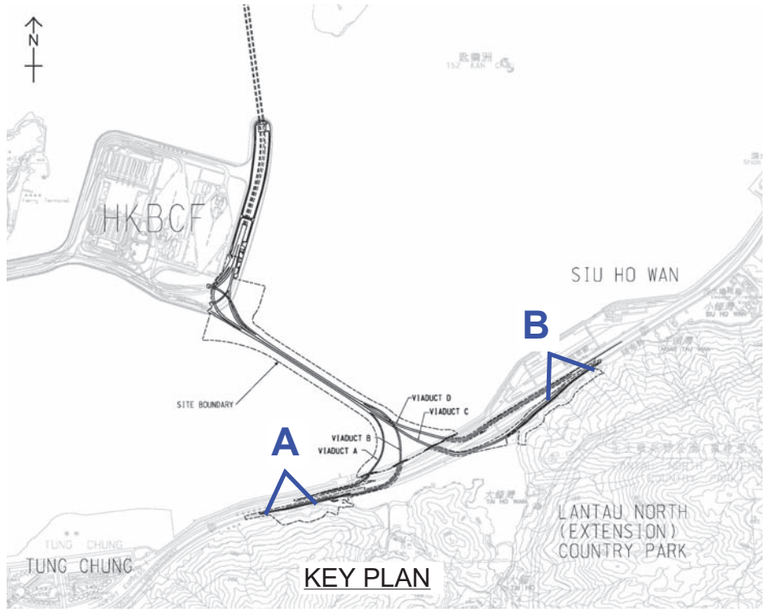
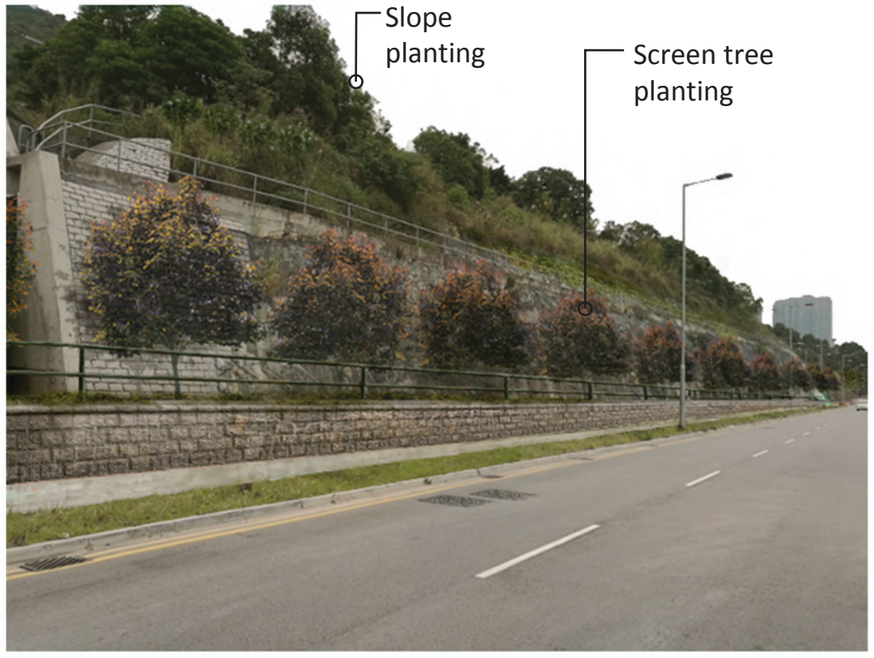
Appendix F

Implementation of Mitigation Measures



KEY PLAN



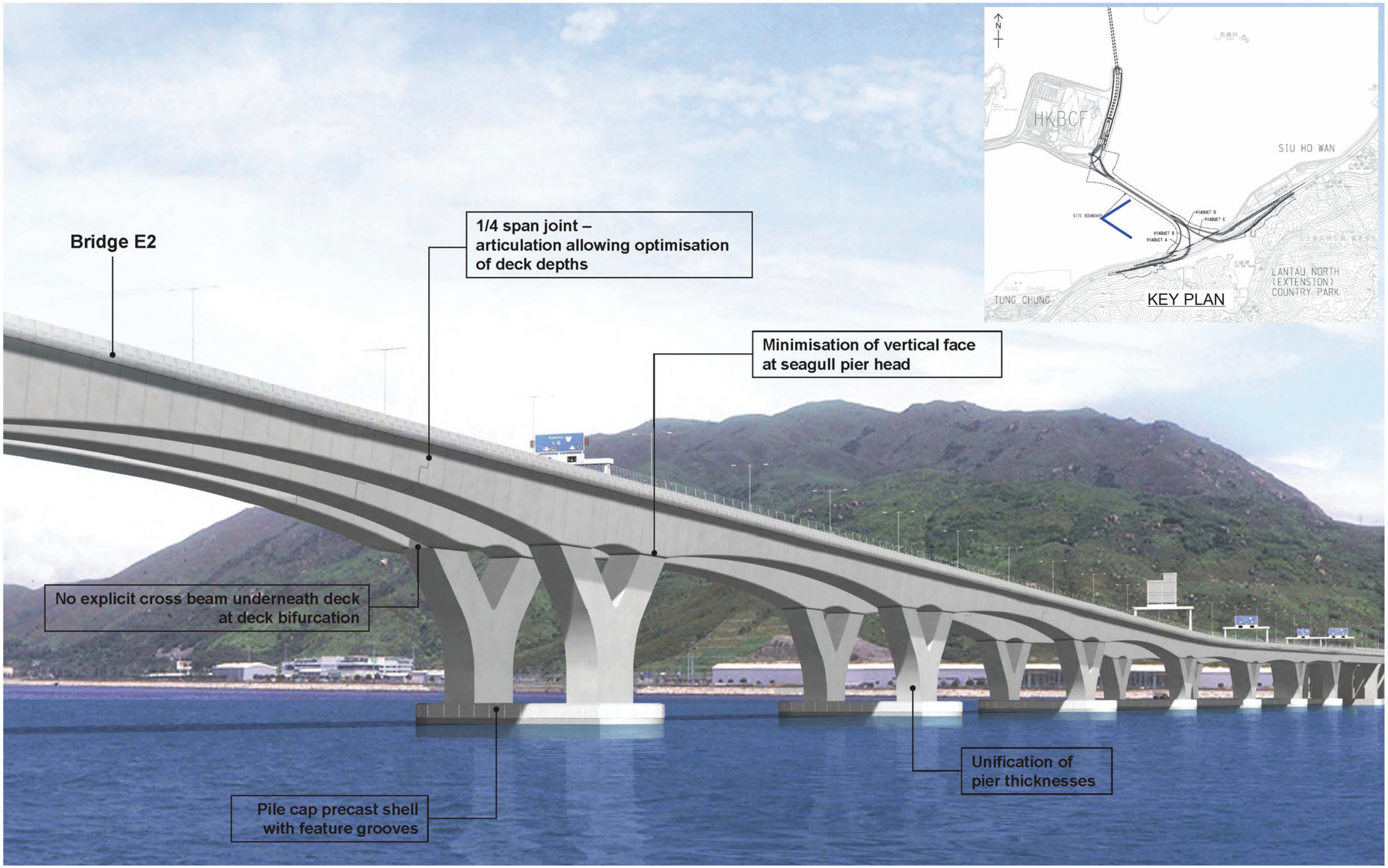
A - SCREEN TREE PLANTING AND SLOPE PLANTING ALONG CHEUNG TUNG ROAD

B - ROADSIDE PLANTING AND ADJACENT SLOPES WITH EXISTING WOODLAND AND SHRUBLAND ALONG CHEUNG TUNG ROAD

AECOM Imagine it. Delivered.

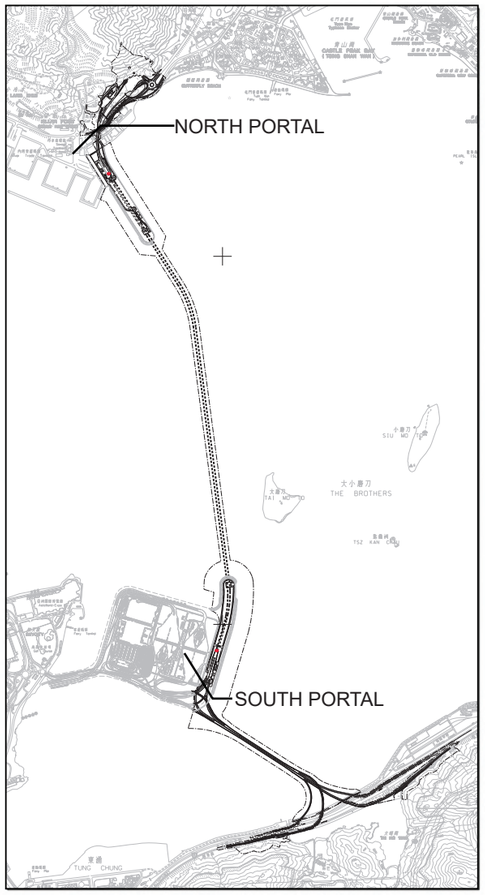
Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction
Roadside Planting and Preservation of Existing Woodland (Contract 1 - HY/2012/07)

Drawing No: Figure 2.1



THE VIADUCT AND SEAGULL PIERS
(reference to ACABAS Submission - General Design Submission Package AP09.00 - Ref: J3518/OAP/PDR/004 Rev.A)

AECOM Imagine it. Delivered.	Agreement No. CE 7/2011(HY) Tuen Mun – Chek Lap Kok Link – Design and Construction Viaduct Design (Contract 1 - HY/2012/07)	Drawing No: Figure 2.2



KEY PLAN

Practical

The pattern on the retaining wall is intended to mitigate the potential abrupt change perceived by drivers entering and leaving the tunnel. This is achieved by gradual change of concrete texture on the retaining wall such that drivers will have a sense of threshold when they are approaching or leaving the portal entranc

Aesthetic

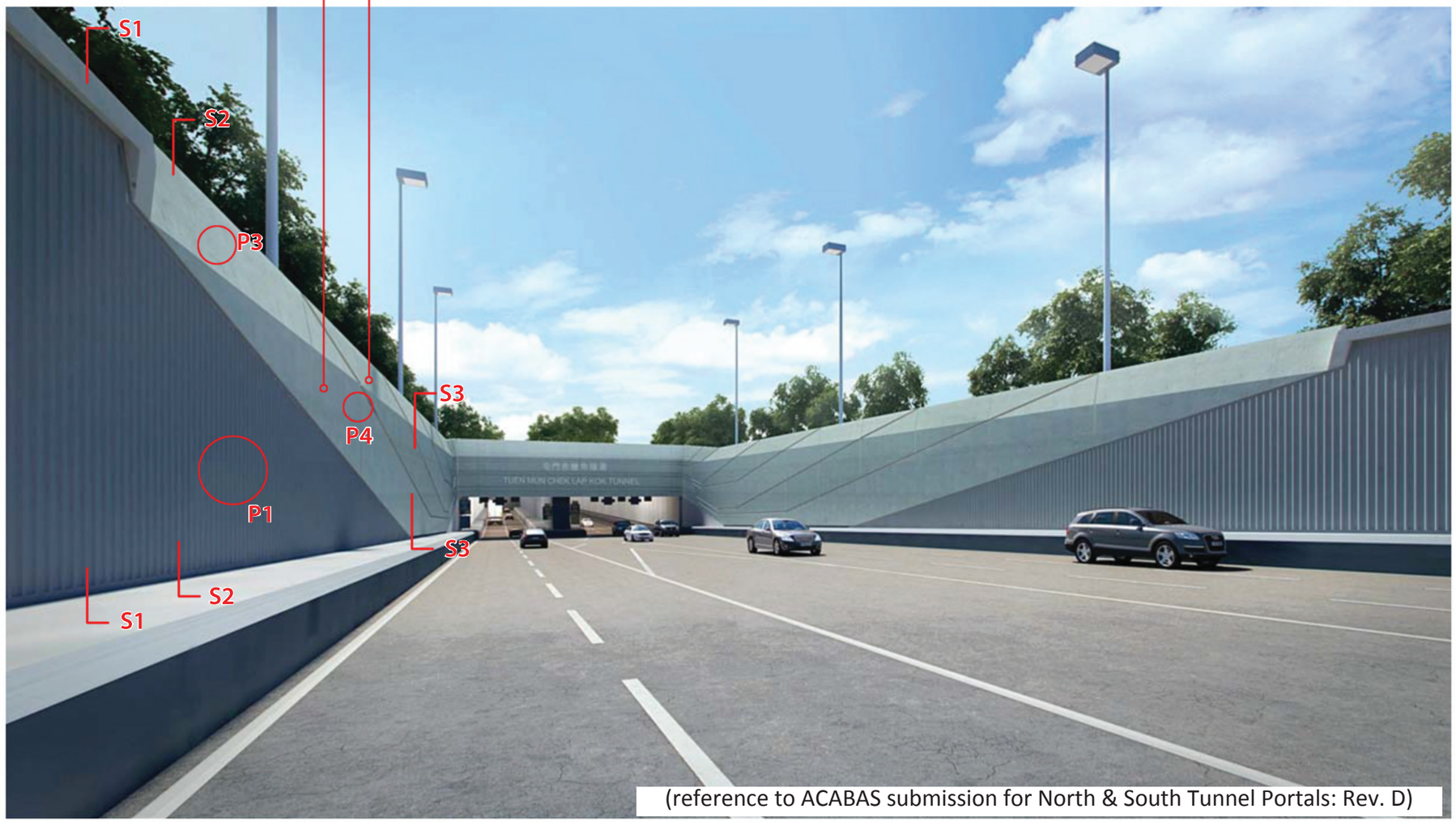
A welcoming architectural feature for tunnel entrance is created by visually joining the side walls and portal together, with a simple incline detail at the top. The new architectural feature gives an impressive and welcoming symbol to match the tunnel entrance. In order to echo with the vehicular nature of this project, the gradual change of concrete texture on retain ing wall creates a sense of dynamics to the drivers.

Smooth Concrete (KEIM Concretal C 9432)

created using F4 formwork with panels defined by grooves

Smooth Concrete (KEIM Concretal C 9435)

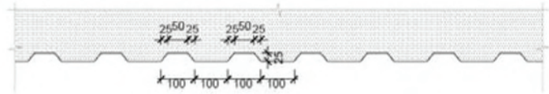
created using F4 formwork with panels defined by grooves



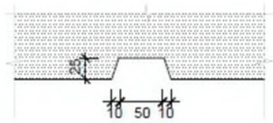
(reference to ACABAS submission for North & South Tunnel Portals: Rev. D)

Ribbed Finish

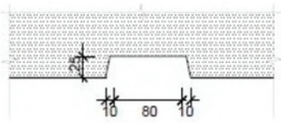
Applying F5 specialist formwork. The ribs will be vertical (to encourage water run-ff) and all faces of the ribs will be smooth.



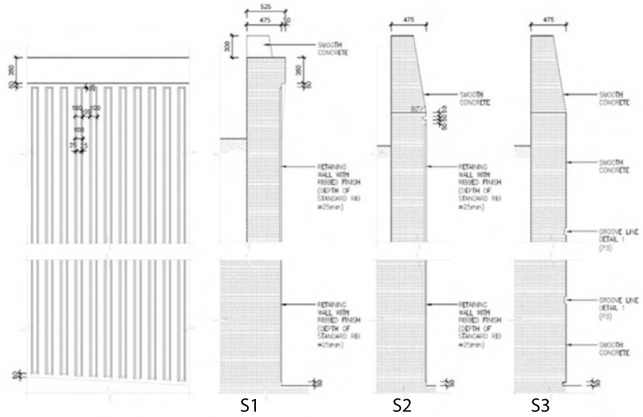
HORIZONTAL SECTION SHOWING TYPICAL ARRNAGEMENT OF RIBBED FINISH (P1)



GROOVE LINE DETAIL 1 (P3)



GROOVE LINE DETAIL 2 (P4)

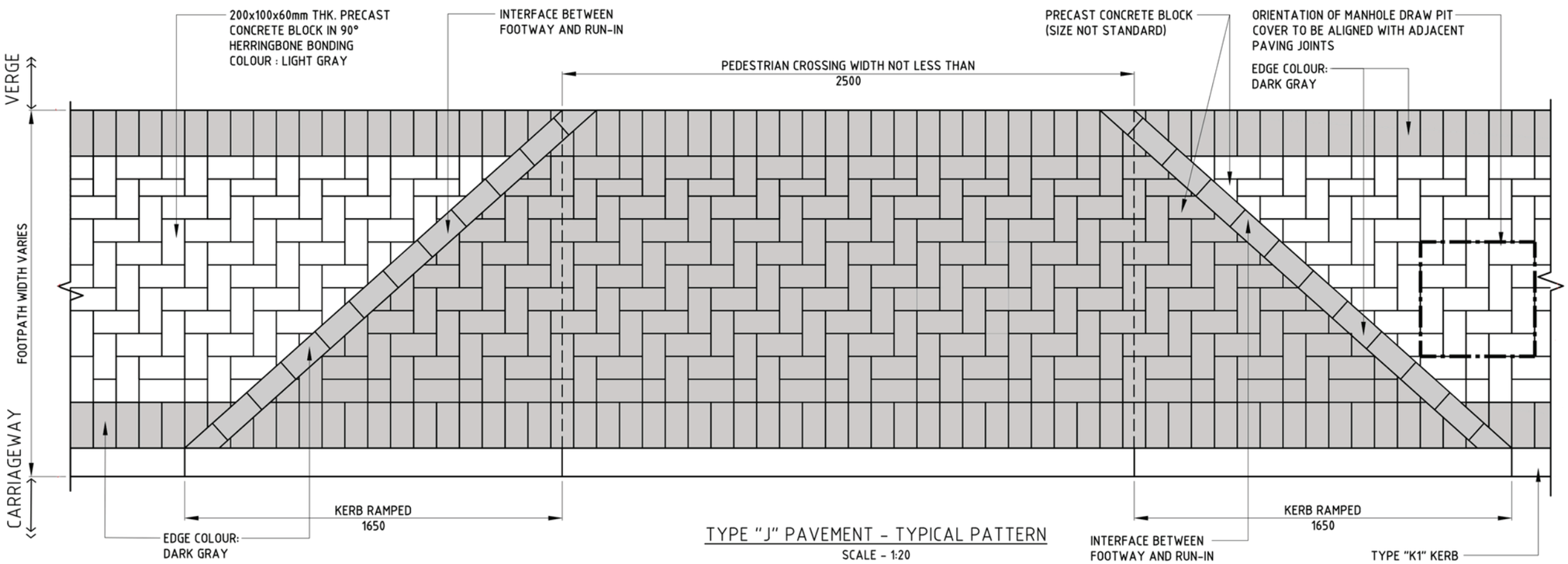


DETAILS OF RIBBED FINISH ON RETAINING WALL

AECOM Imagine it. Delivered.

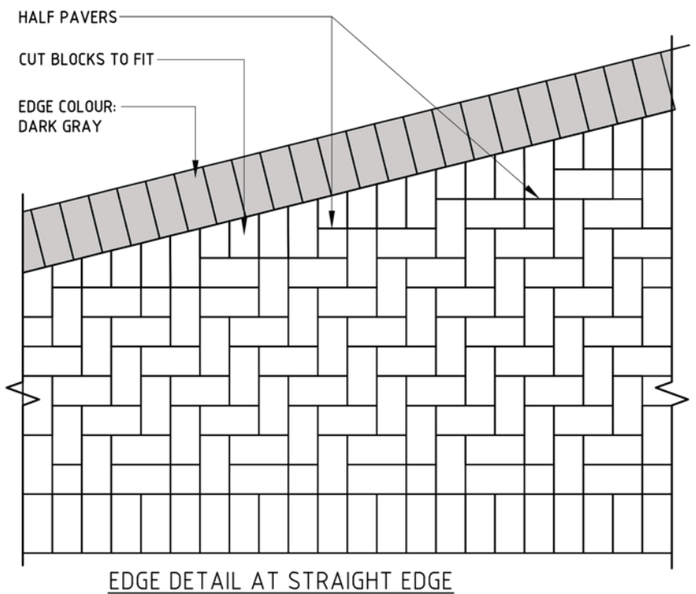
Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction
Aesthetic Design of North and South Portal at Landfalls (Contract 2 - HY/2012/08)

Drawing No: Figure 3.1



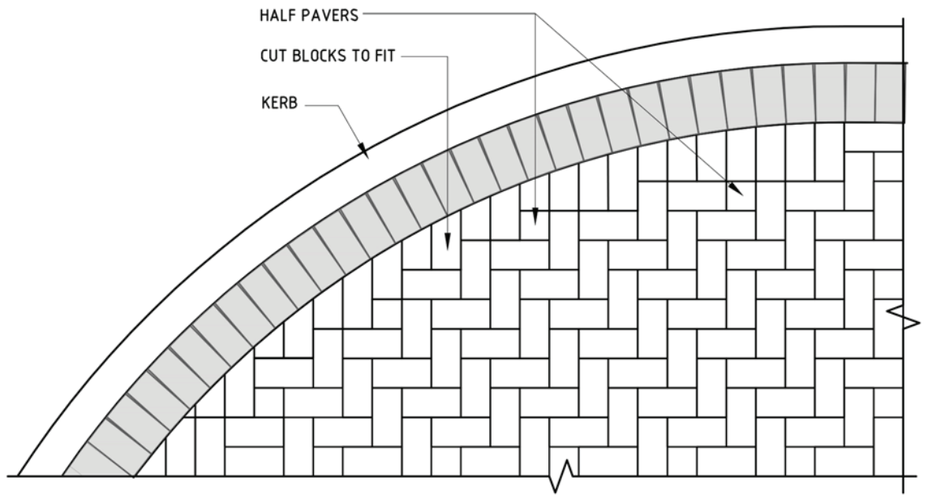
TYPE "J" PAVEMENT - TYPICAL PATTERN

SCALE - 1:20



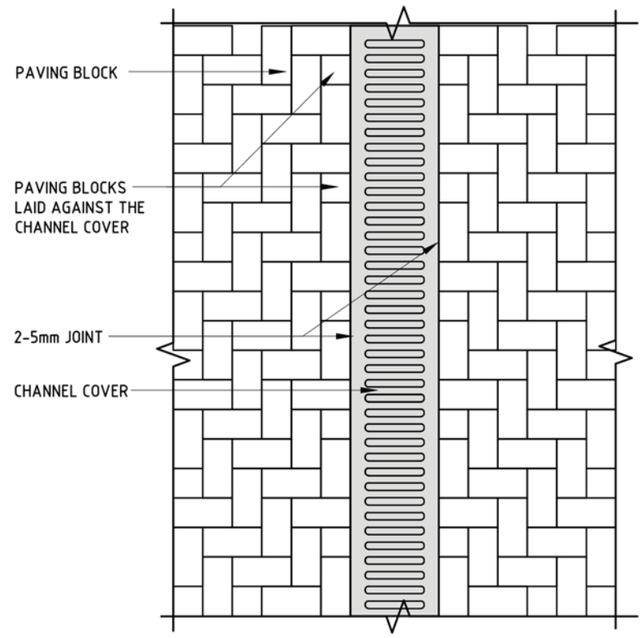
EDGE DETAIL AT STRAIGHT EDGE

SCALE - 1:20



EDGE DETAIL AT CURVED EDGE

SCALE - 1:20



TREATMENT TO PAVING UNITS ADJOINING CHANNELS EDGES

SCALE - 1:20

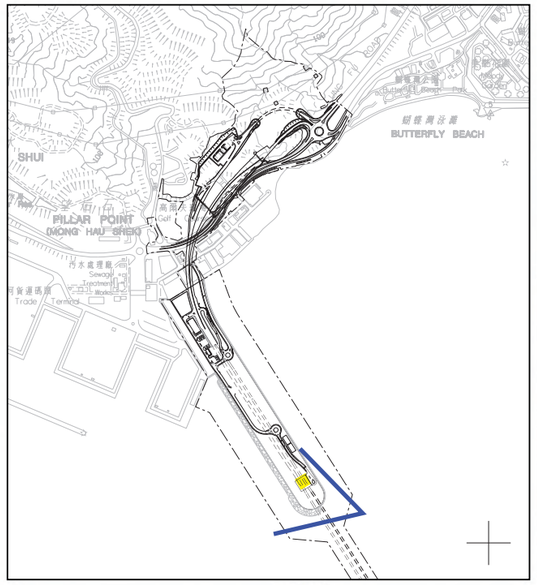
AECOM Imagine it. Delivered.

Agreement No. CE 7/2011(HY)

Tuen Mun – Chek Lap Kok Link – Design and Construction

Paving Pattern of Concrete Paving Block (Contract 2 - HY/2012/08)

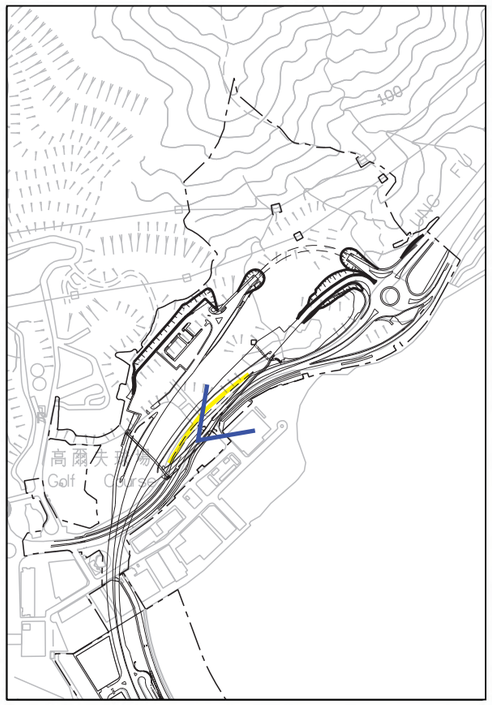
Drawing No: Figure 3.2



Key Plan

(reference to Aesthetic Design Submission Stage 2)

*Artistic Impression



Key Plan

Vitreous Enamel (VE) Panel

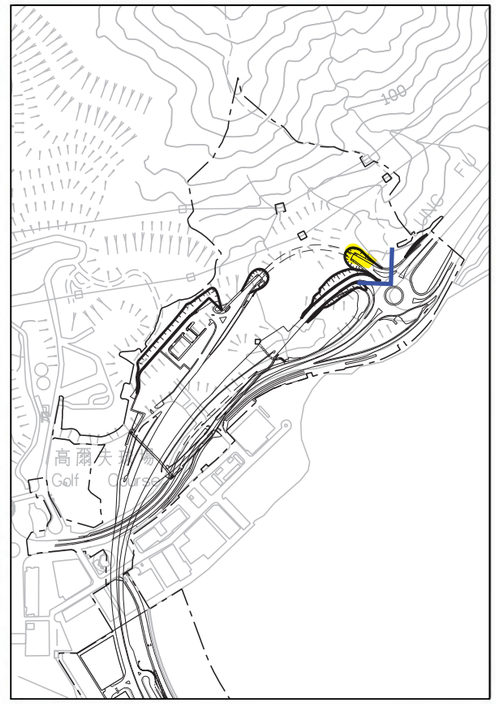
(reference to ACABAS 410th meeting)

AECOM Imagine it. Delivered.

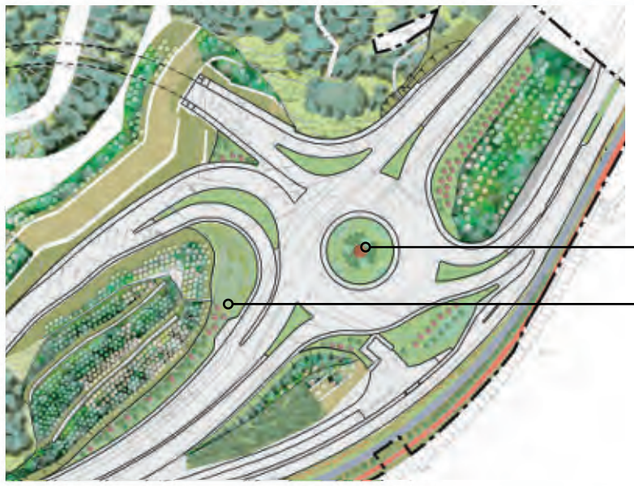
Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction
Vitreous Enamel (VE) Panel at Retaining Wall RW_B (Contract 3 - HY/2013/12)

Drawing No: Figure 4.1

(reference to ACABAS 415th meeting)



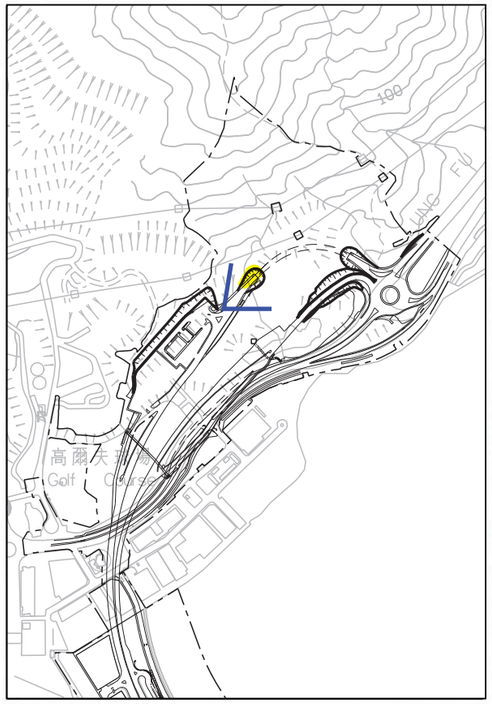
Key Plan



AECOM Imagine it. Delivered.

Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction
Vehicular Underpass East Portal (Contract 3 - HY/2013/12)

Drawing No: Figure 4.2



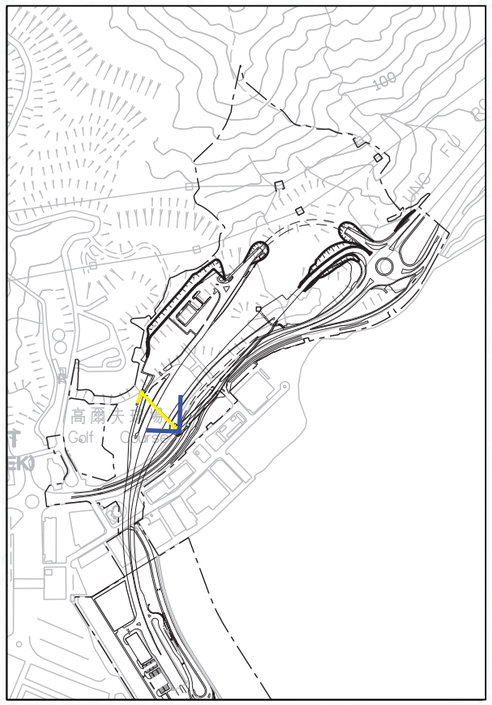
Key Plan

(reference to ACABAS 411th meeting)

AECOM Imagine it. Delivered.

Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction
Vehicular Underpass West Portal (Contract 3 - HY/2013/12)

Drawing No: Figure 4.3

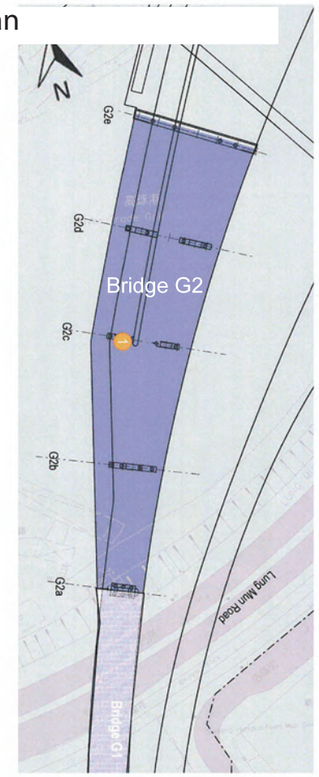


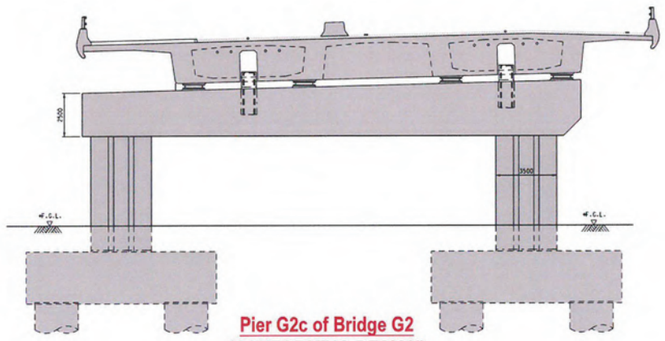
Key Plan

(reference to ACABAS 319th meeting)

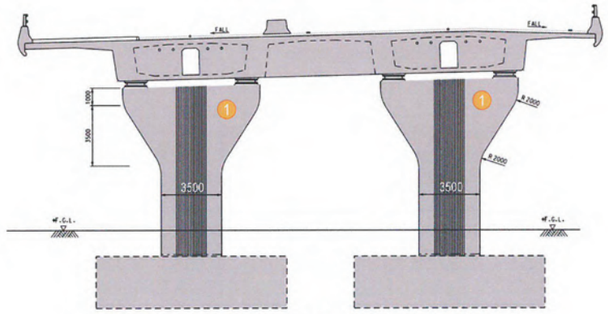
AECOM Imagine it. Delivered.	Agreement No. CE 7/2011(HY) Tuen Mun – Chek Lap Kok Link – Design and Construction Footbridge (Contract 3 - HY/2013/12)	Drawing No: Figure 4.4

Key Plan

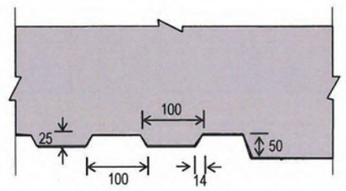




Pier G2c of Bridge G2
(CONFORMING DESIGN)

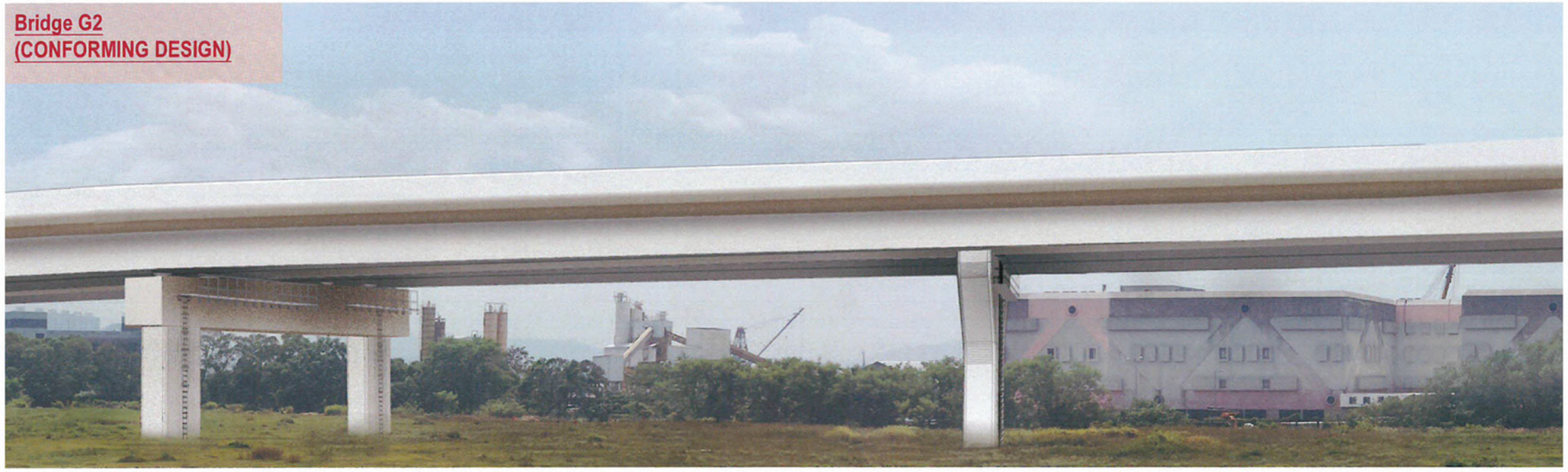


Pier G2c of Bridge G2
(ALTERNATIVE DESIGN)



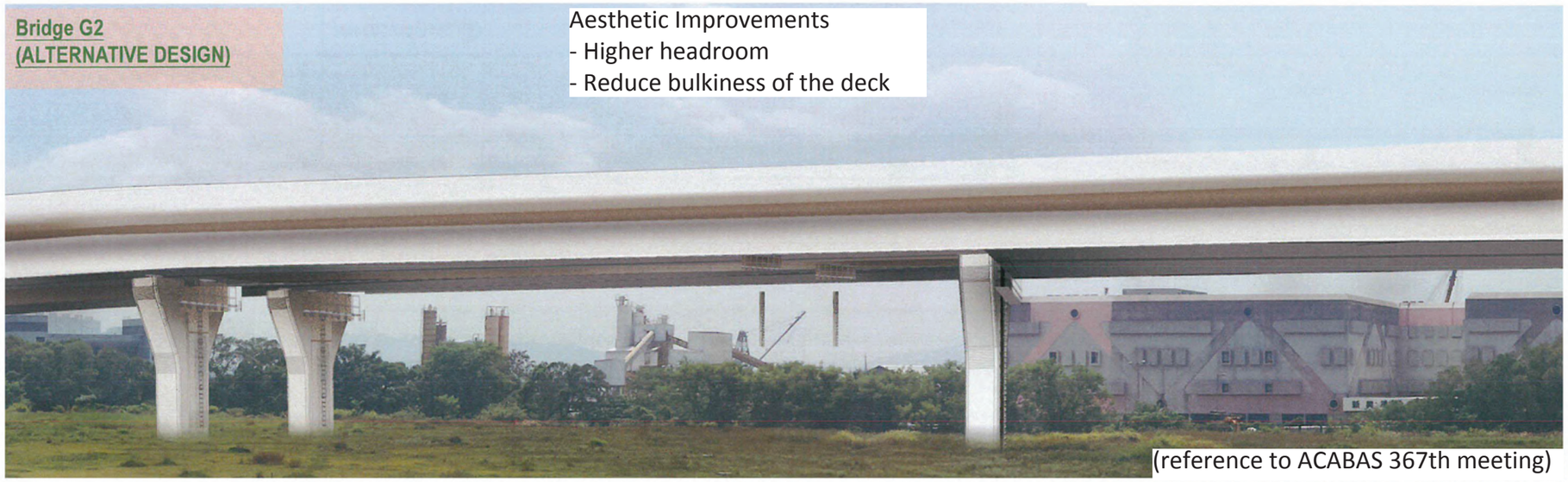
Pier Finish Details
(Same as other piers of G2 in the approved Conforming Design)

Bridge G2
(CONFORMING DESIGN)



Bridge G2
(ALTERNATIVE DESIGN)

Aesthetic Improvements
- Higher headroom
- Reduce bulkiness of the deck

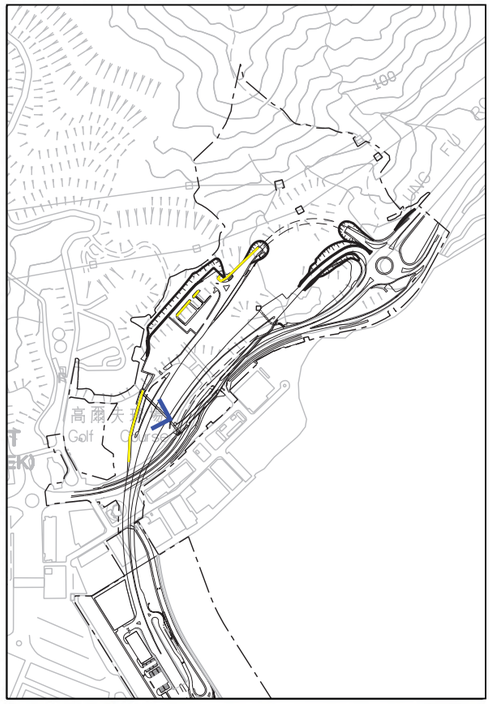


(reference to ACABAS 367th meeting)

AECOM Imagine it. Delivered.

Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction
Viaduct Bridge G2 (Contract 3 - HY/2013/12)

Drawing No: Figure 4.5



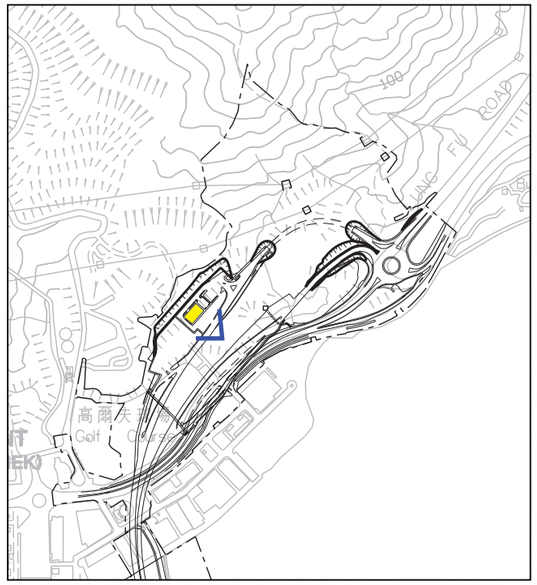
Key Plan

Paving bands in rhythm
dark grey and light grey pattern

AECOM Imagine it. Delivered.

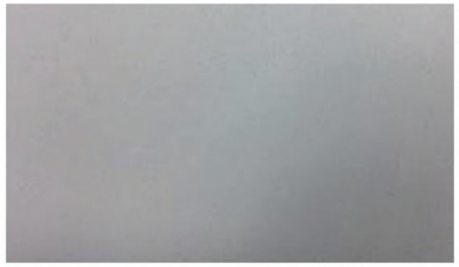
Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction
Paving Pattern at Deck (Contract 3 - HY/2013/12)

Drawing No: Figure 4.6

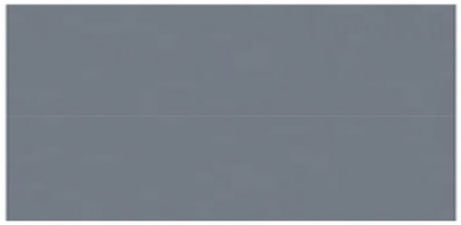


Key Plan

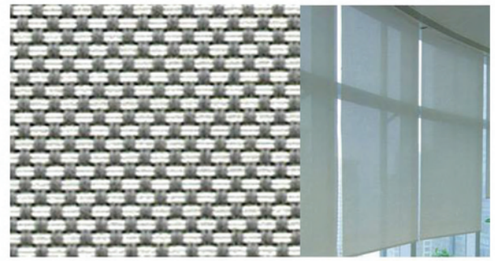
Aluminium Cladding (RAL9006)



Mineral Silicate Paint



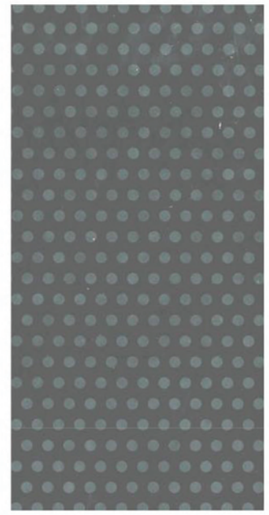
Aluminium Cladding (RAL9007)



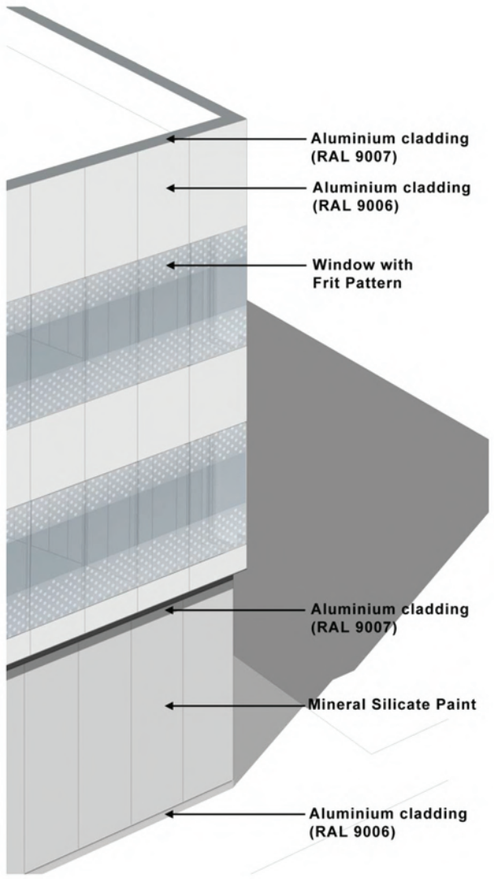
Vertical Blind

Stainless Steel in Satin Finish

Roof Floor Tiles



Windows with Frit Pattern



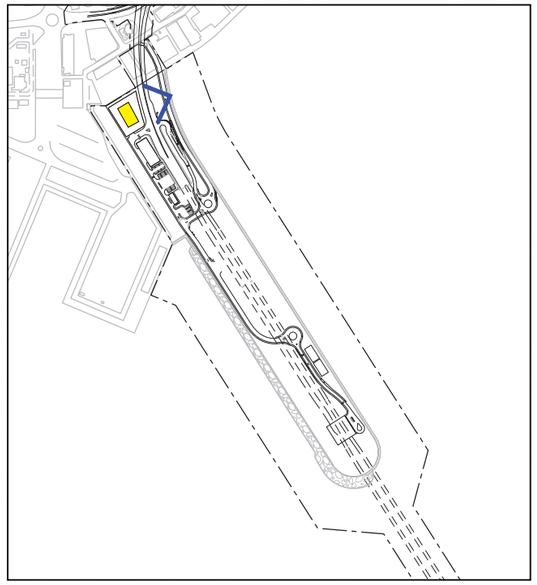
(reference to Aesthetic Design Submission Stage 2)

*Artistic Impression

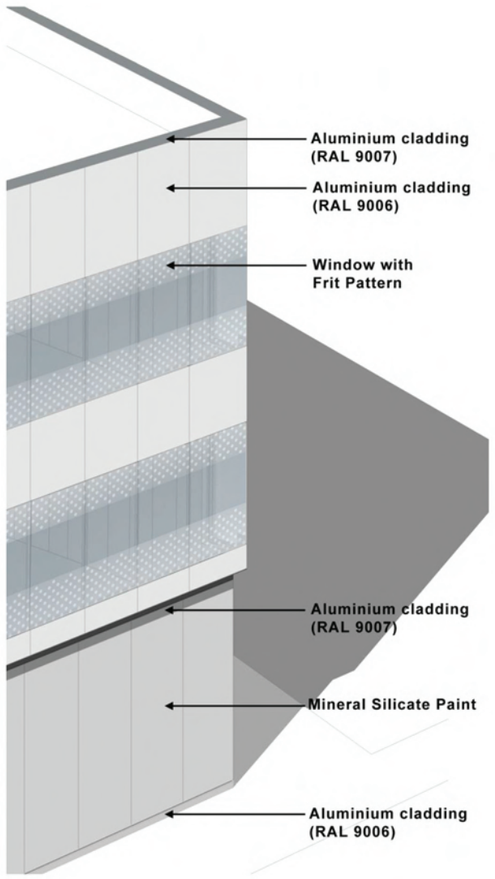
AECOM Imagine it. Delivered.

Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction
Main Control Building (Contract 4 - HY/2017/10)

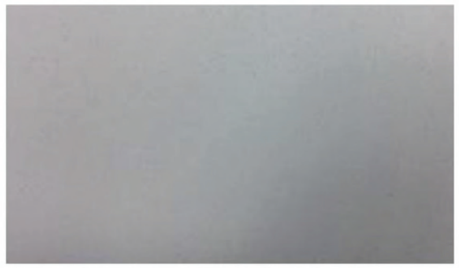
Drawing No: Figure 5.1



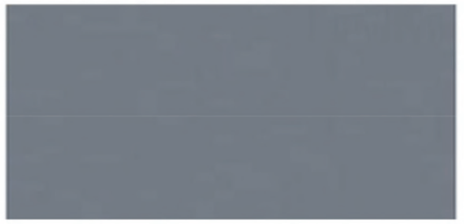
Key Plan



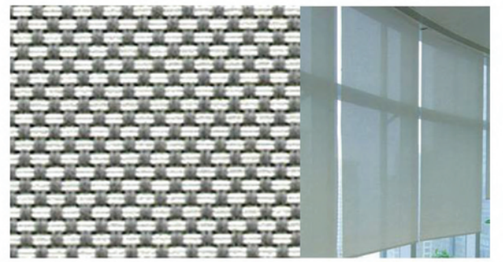
Aluminium Cladding (RAL9006)



Mineral Silicate Paint



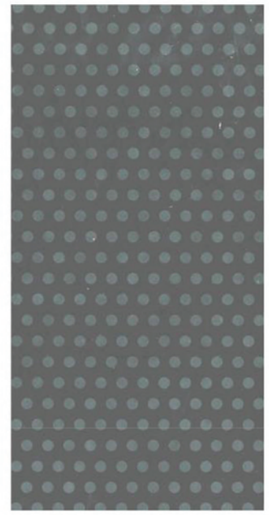
Aluminium Cladding (RAL9007)



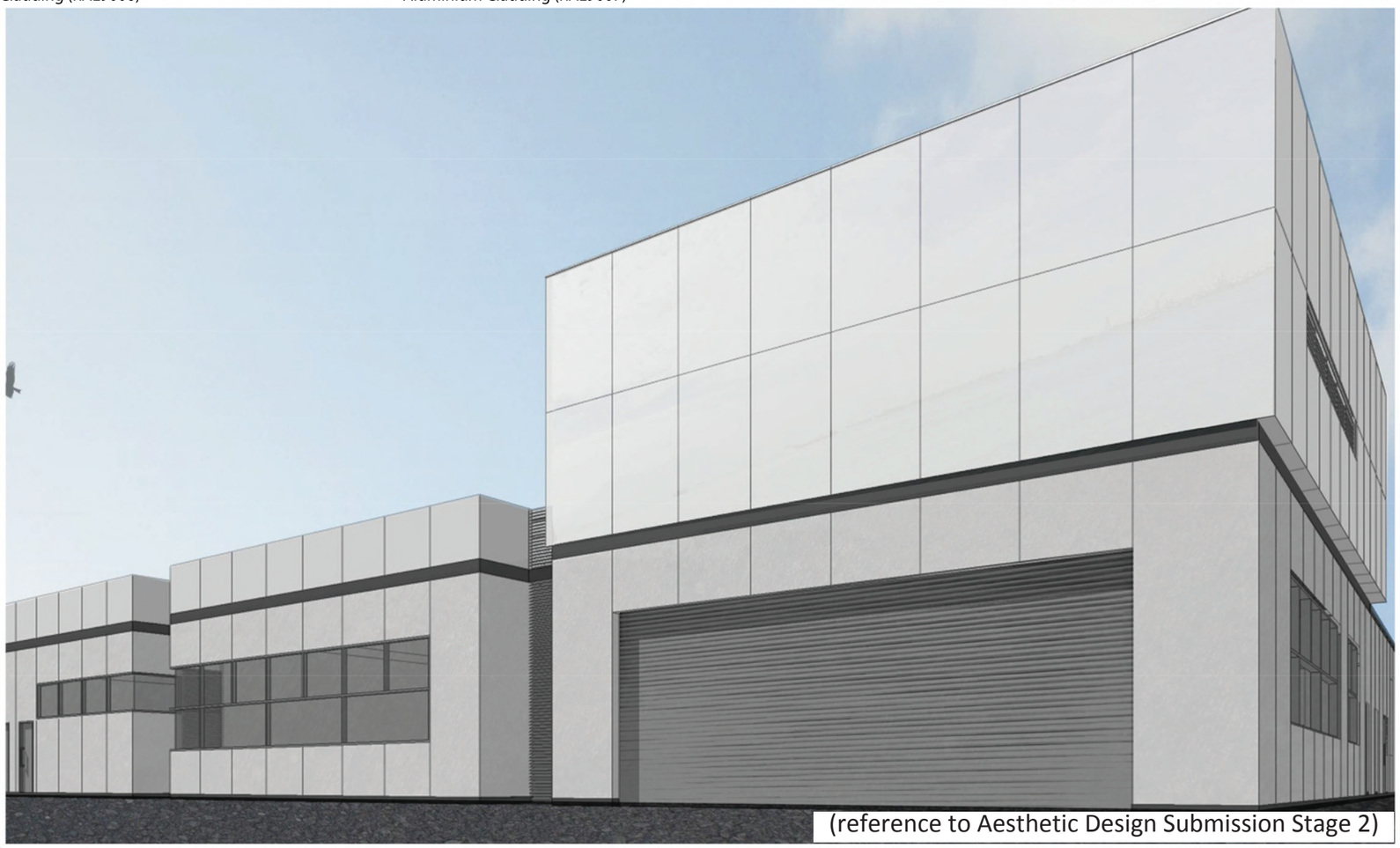
Vertical Blind

Stainless Steel in Satin Finish

Roof Floor Tiles



Windows with Frit Pattern



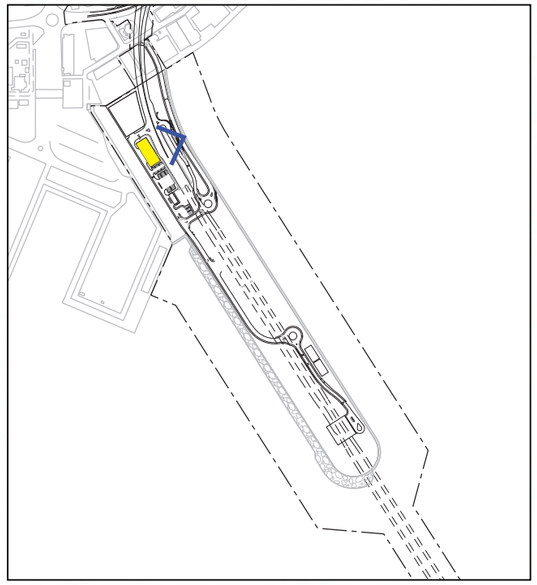
(reference to Aesthetic Design Submission Stage 2)

*Artistic Impression

AECOM Imagine it. Delivered.

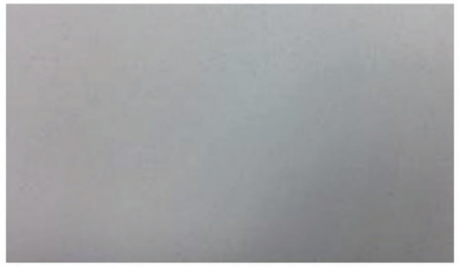
Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction
Maintenance Depot at Northern Landfall (Contract 4 - HY/2017/10)

Drawing No: Figure 5.2

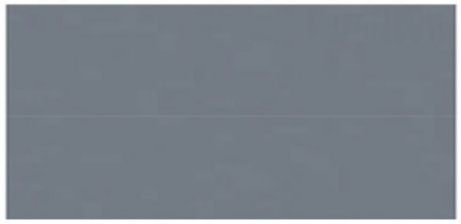


Key Plan

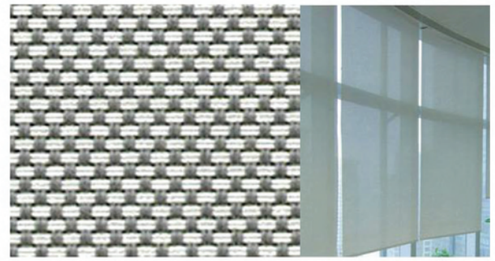
Aluminium Cladding (RAL9006)



Mineral Silicate Paint



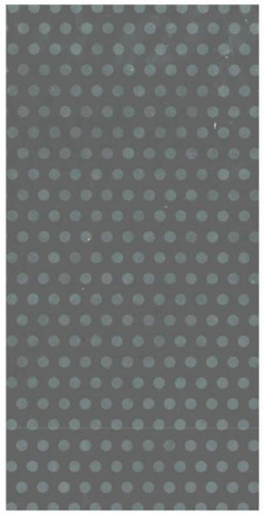
Aluminium Cladding (RAL9007)



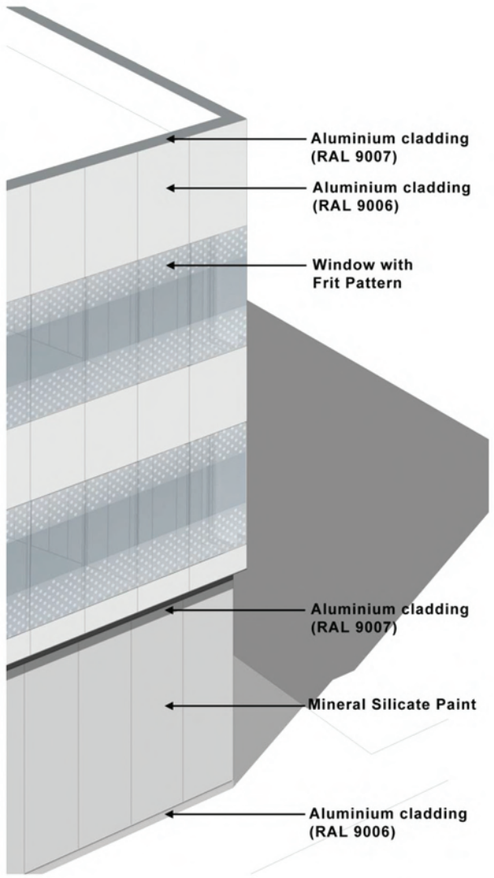
Vertical Blind

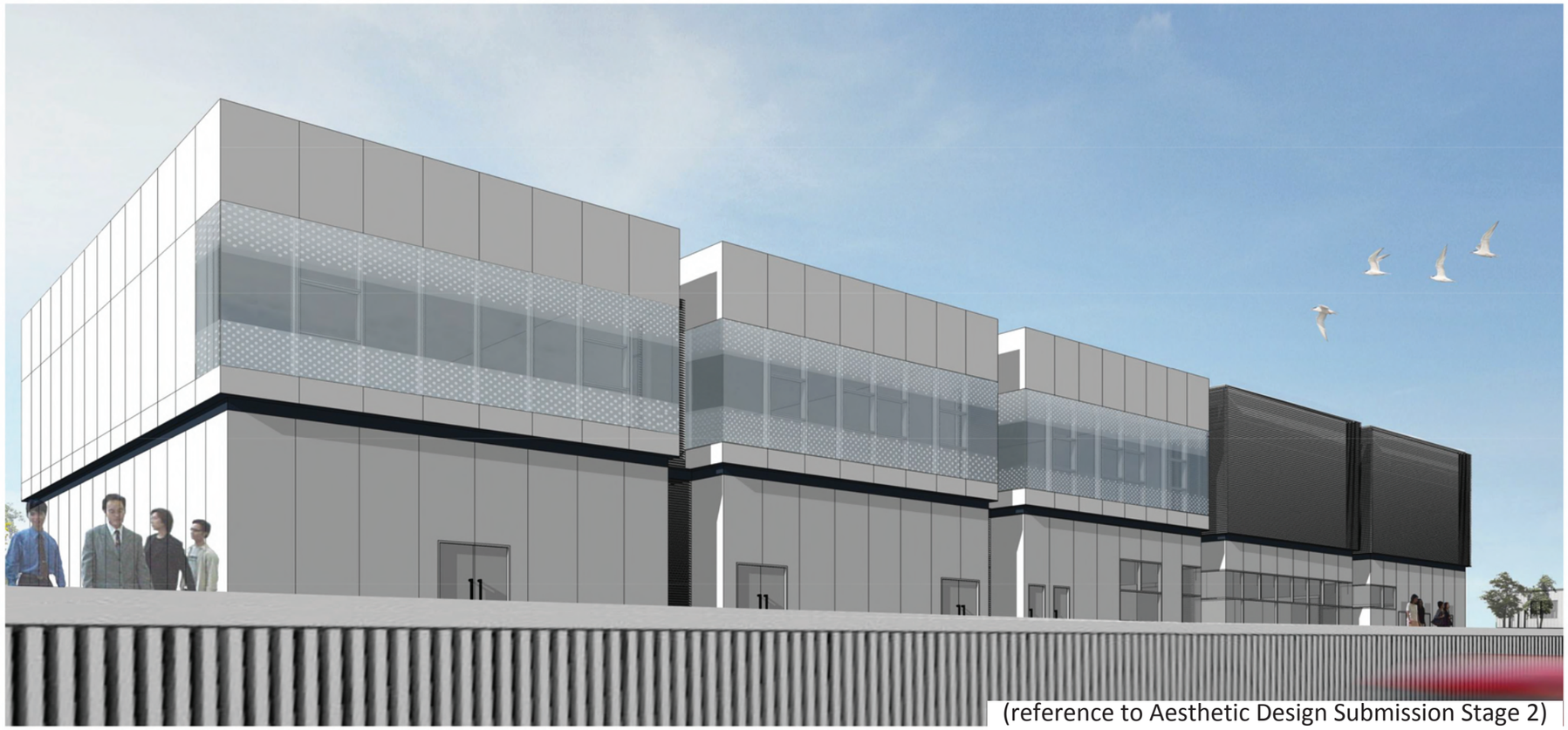
Stainless Steel in Satin Finish

Roof Floor Tiles



Windows with Frit Pattern





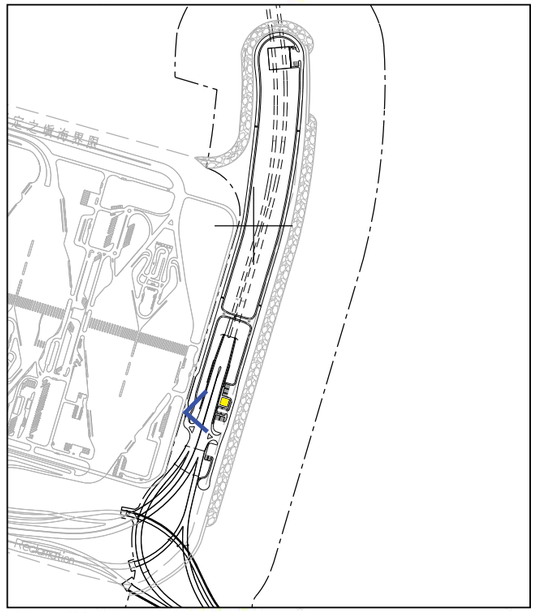
(reference to Aesthetic Design Submission Stage 2)

*Artistic Impression

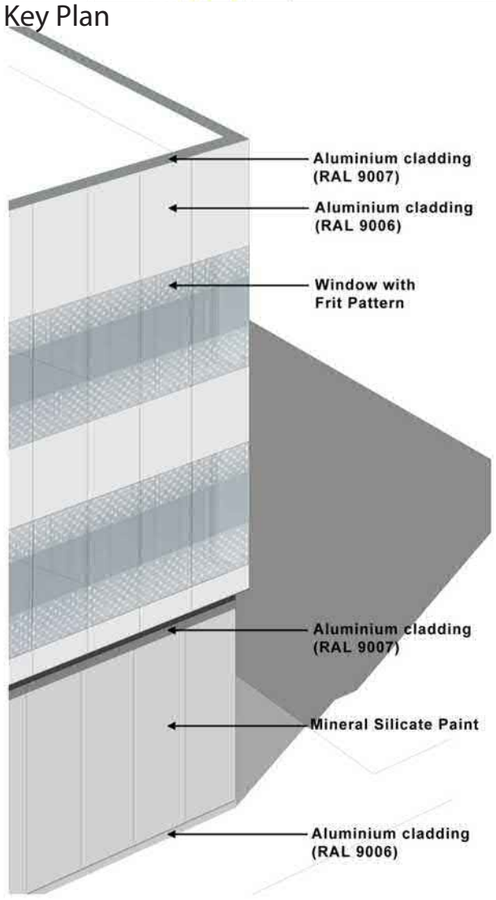
AECOM Imagine it. Delivered.

Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction
Administration Building at Northern Landfall (Contract 4 - HY/2017/10)

Drawing No: Figure 5.3



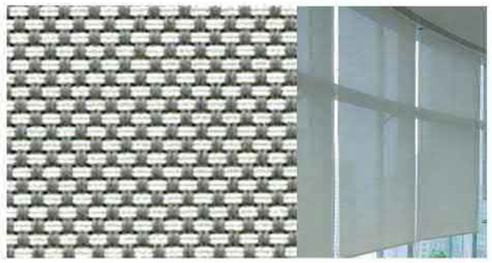
Key Plan



Aluminium Cladding (RAL9006)

Mineral Silicate Paint

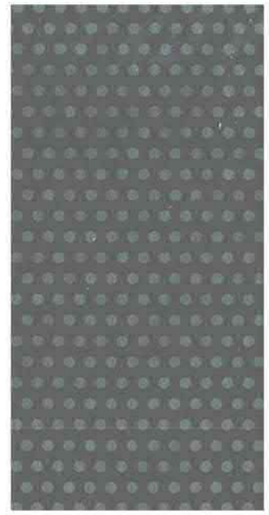
Aluminium Cladding (RAL9007)



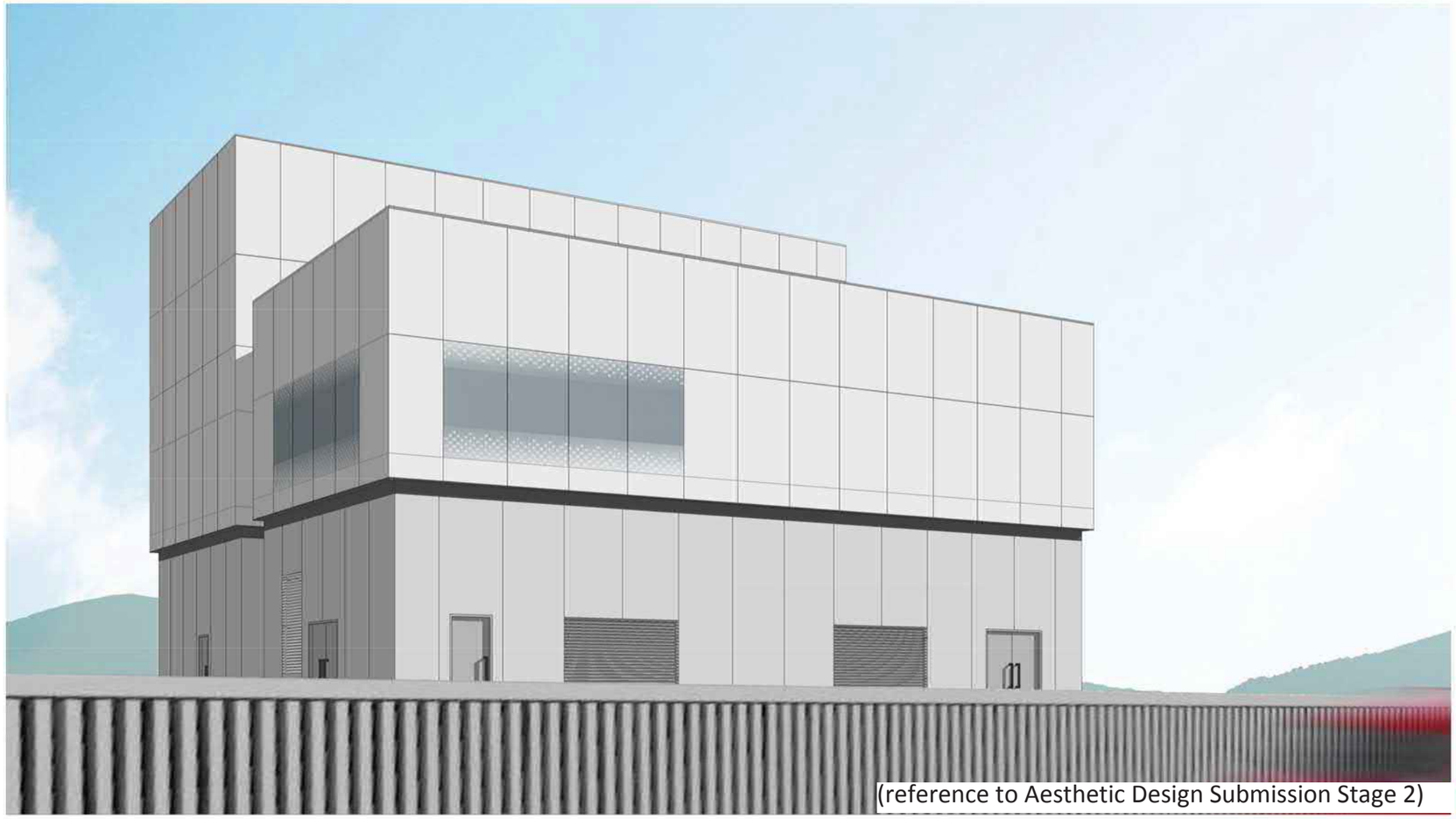
Vertical Blind

Stainless Steel in Satin Finish

Roof Floor Tiles



Windows with Frit Pattern

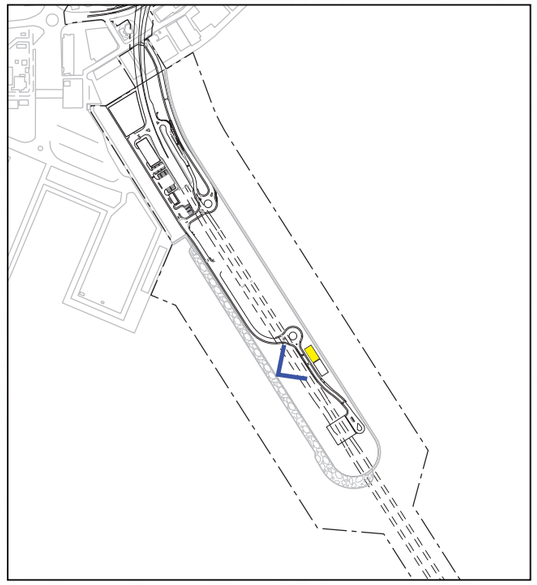


(reference to Aesthetic Design Submission Stage 2)

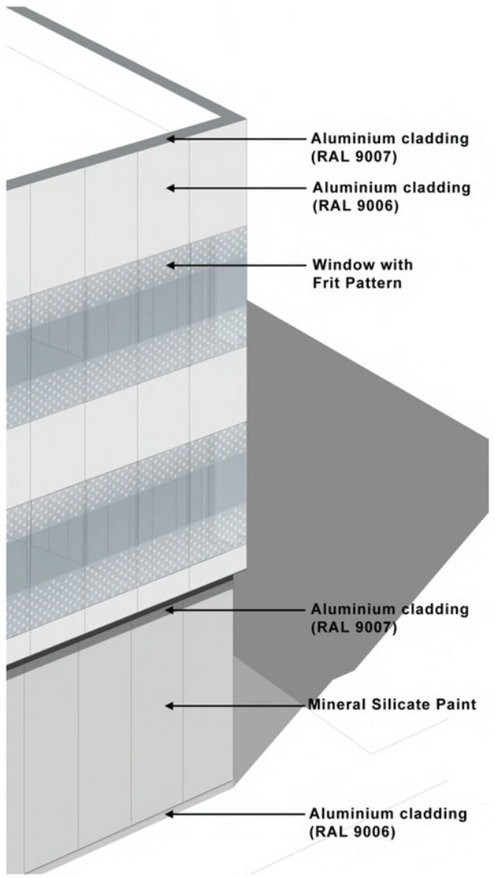
AECOM Imagine it. Delivered.

Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction
Satellite Control Building at Southern Landfall (Contract 4 - HY/2017/10)

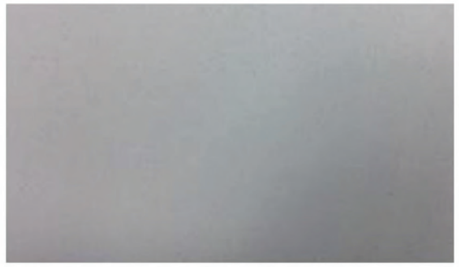
Drawing No: Figure 5.4



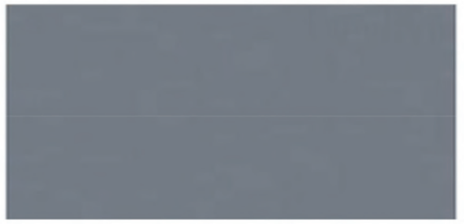
Key Plan



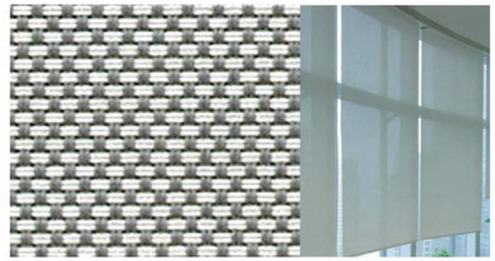
Aluminium Cladding (RAL9006)



Mineral Silicate Paint



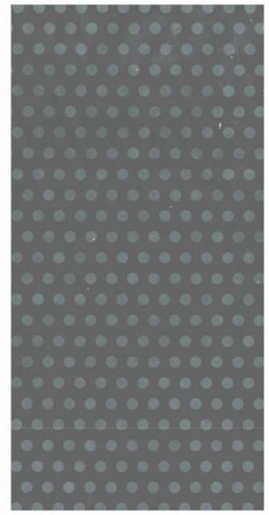
Aluminium Cladding (RAL9007)



Vertical Blind

Stainless Steel in Satin Finish

Roof Floor Tiles



Windows with Frit Pattern

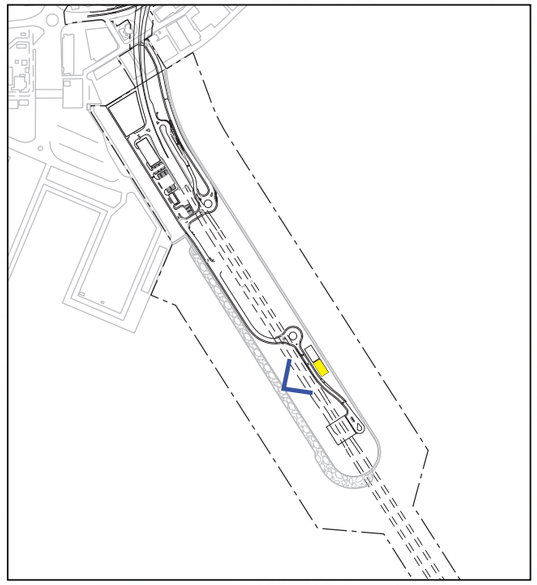
(reference to Aesthetic Design Submission Stage 2)

*Artistic Impression

AECOM Imagine it. Delivered.

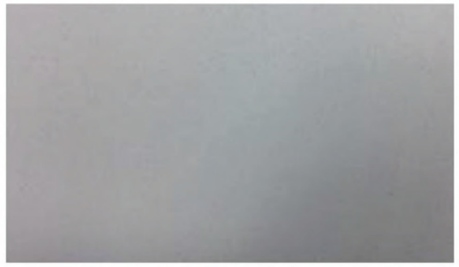
Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction
Reprovisioned Customs and Excise Department Building at Northern Landfall (Contract 4 - HY/2017/10)

Drawing No: Figure 5.5

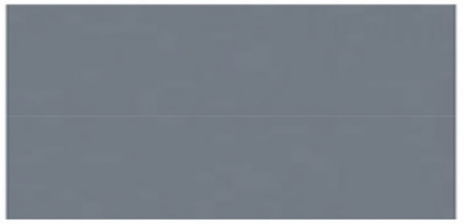


Key Plan

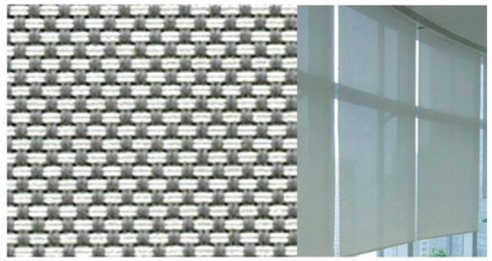
Aluminium Cladding (RAL9006)



Mineral Silicate Paint



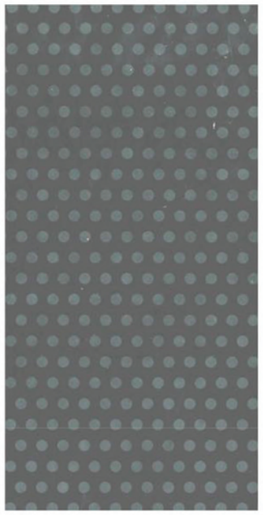
Aluminium Cladding (RAL9007)



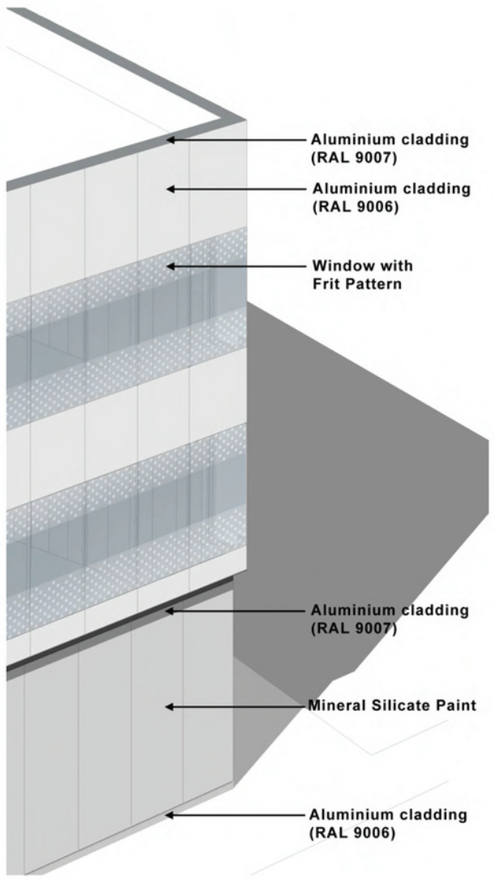
Vertical Blind

Stainless Steel in Satin Finish

Roof Floor Tiles



Windows with Frit Pattern



(reference to Aesthetic Design Submission Stage 2)

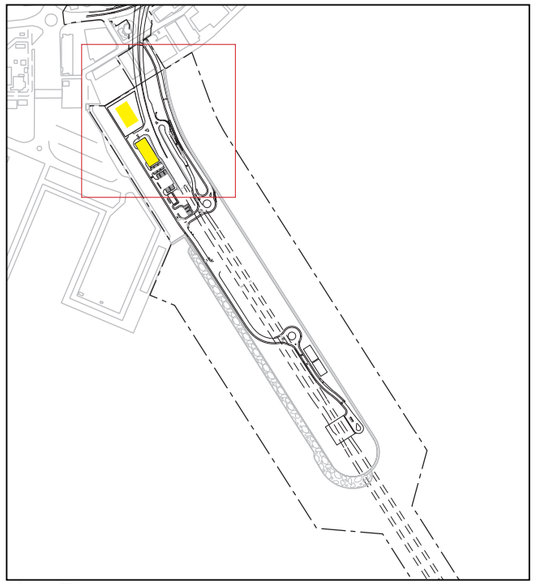
*Artistic Impression

AECOM Imagine it. Delivered.

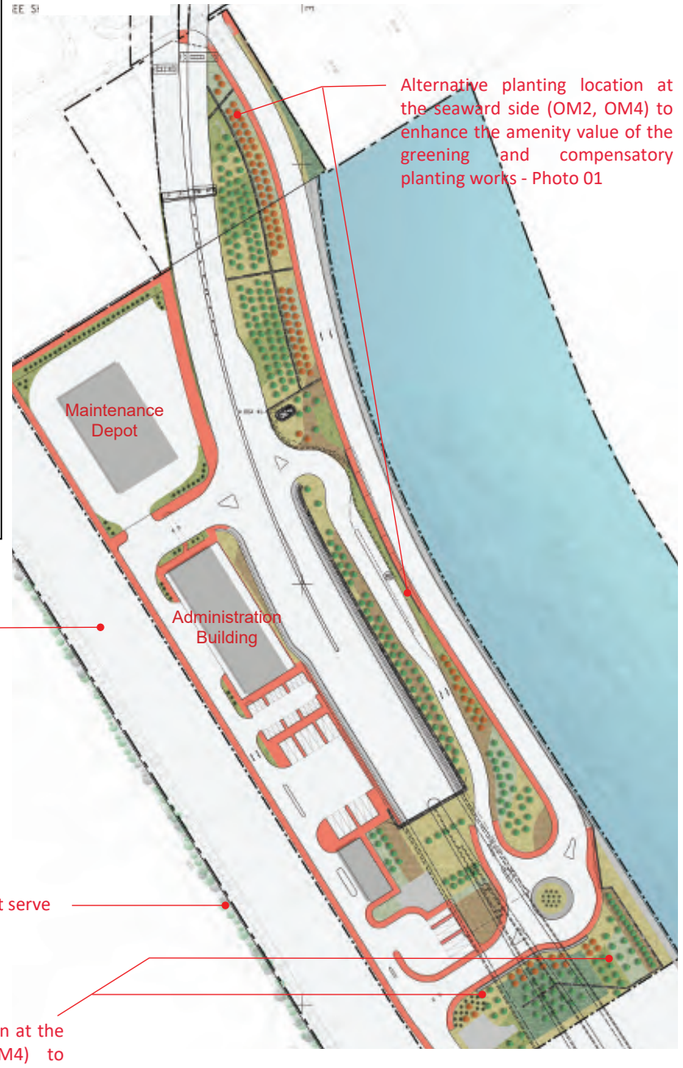
Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction
Reprovisioned Fire Services Department Building at Northern Landfall (Contract 4 - HY/2017/10)

Drawing No: Figure 5.6

Buffer Planting and Enhancement of Townscape Quality (OM2, OM4)



Key Plan



Alternative planting location at the seaward side (OM2, OM4) to enhance the amenity value of the greening and compensatory planting works - Photo 01

Drainage Reserve and fenced-off area - not accessible to the public and thus diminishing the amenity value of the greening works. Also considered not suitable for implementing long term greening strategy due to uncertain but potential programme of development of the land.

The buffer and structure, ornamental planting works (OM2, OM4) is relocated to the seaward side of the Maintenance Depot and Administration Building for better public enjoyment.

Existing trees at adjacent lot serve as buffer (OM2)

Alternative planting location at the seaward side (OM2, OM4) to enhance the amenity value of the greening and compensatory planting works
- Photo 02 and Photo 03

Photo 01

Planting near the seaward side which is accessible to the public (i.e. at the eastern side of Maintenance Depot and Administration Building) serves as buffer to the building structures and enhancement to the townscape quality.

Photo 02

Planting near the seaward side which is accessible to the public serves as buffer to the building structures and enhancement to the townscape quality.

Photo 03

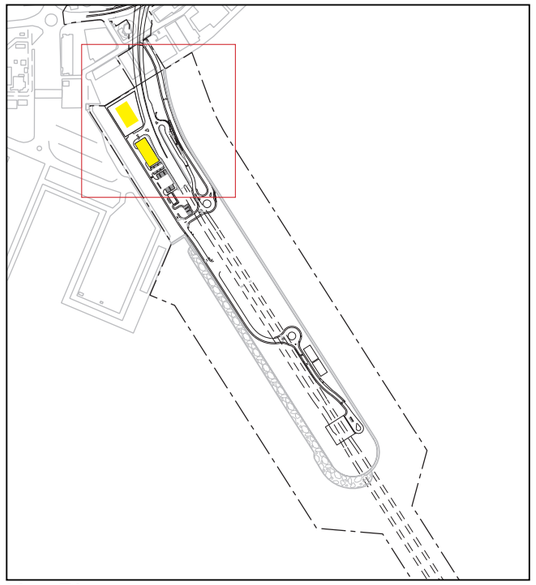
Planting near the seaward side which is accessible to the public serves as buffer to the building structures and enhancement to the townscape quality.

AECOM magne it. De ivered.

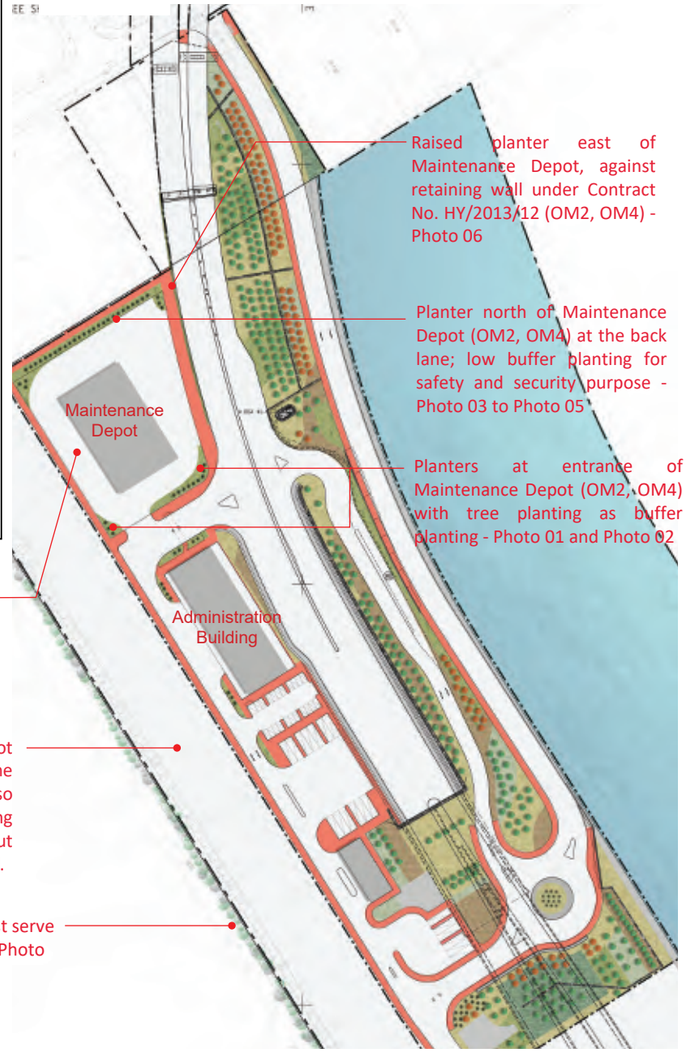
Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction

Drawing No: Figure 5.7

Buffer Planting and Enhancement of Townscape Quality at Northern Landfall (Contract 4 - HY/2017/10)



Key Plan



Raised planter east of Maintenance Depot, against retaining wall under Contract No. HY/2013/12 (OM2, OM4) - Photo 06

Planter north of Maintenance Depot (OM2, OM4) at the back lane; low buffer planting for safety and security purpose - Photo 03 to Photo 05

Planters at entrance of Maintenance Depot (OM2, OM4) with tree planting as buffer planting - Photo 01 and Photo 02

Maintenance Depot with Emergency Vehicular Access (EVA), Training Ground Area, Detention Area, Car parking spaces. The locations and sizes of planters are maximized to avoid obstructing the operational needs of the Maintenance Depot.

Drainage Reserve and fenced-off area - not accessible to the public and thus diminishing the amenity value of the greening works. Also considered not suitable for implementing long term greening strategy due to uncertain but potential programme of development of the land.

Existing trees at adjacent lost serve as buffer (OM2) - Photo 01, Photo 02 and Photo 03

Buffer and Structure, Ornamental Planting surrounding Maintenance Depot (OM2, OM4)

Photo 01

Photo 02

Photo 03


Photo 04


Photo 05


Photo 06

Photo 01, Photo 02: Buffer tree planting (OM2) and structure, ornamental planting (OM4) at entrance of Maintenance Depot; locations and sizes of planters are maximized to avoid obstructing the operational needs of the Maintenance Depot. Existing trees at the adjacent lot serves as buffer (OM2).

Photo 03, Photo 04, Photo 05: Buffer shrub planting (OM2) and structure, ornamental planting (OM4) at the back lane of Maintenance Depot. The back lane which is a remote area should be kept in open view for safety and security purpose, therefore, low planting is suitable to keep the view open. Locations and sizes of planters are maximized to avoid obstructing the operational needs of the Maintenance Depot.

Photo 06: Raised planter for shrub planting against retaining wall of the viaduct at the east of Maintenance Depot (OM2, OM4) under Contract No. HY/2013/12, serves as buffer to the engineering structures and enhancement to the townscape quality.

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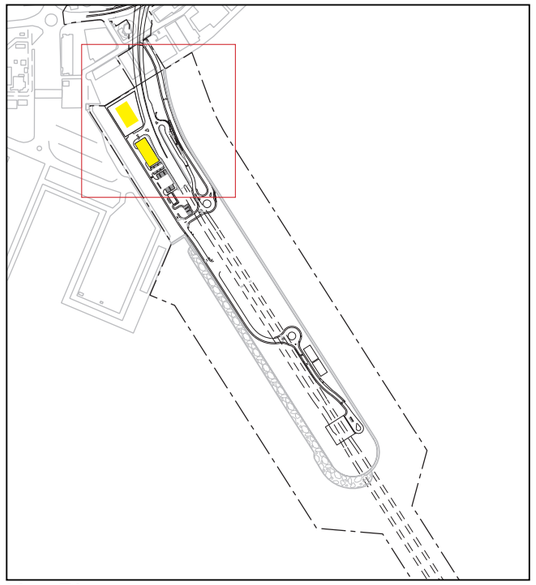
Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction

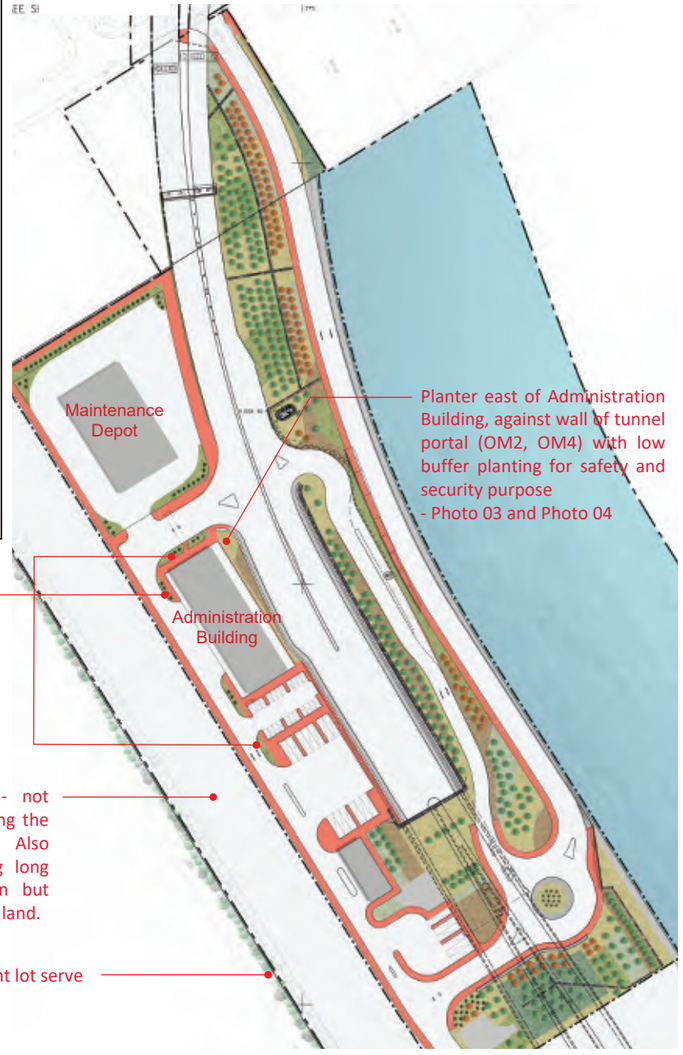
Drawing No: Figure 5.8

Buffer and Structure, Ornamental Planting at Maintenance Depot and Administration Building (Contract 4 - HY/2017/10)



Key Plan

Planters at Administration Building; locations and sizes of planters are maximized to avoid obstructing the operational and security needs of the Administration Building. Buffer and structure low shrub planting (OM2, OM4) is designed at the roadside planters to avoid obstructing sightlines for safe driving at turning corners.
- Photo 01 and Photo 02



Buffer and Structure, Ornamental Planting surrounding Administration Building (OM2, OM4)


Photo 01


Photo 02

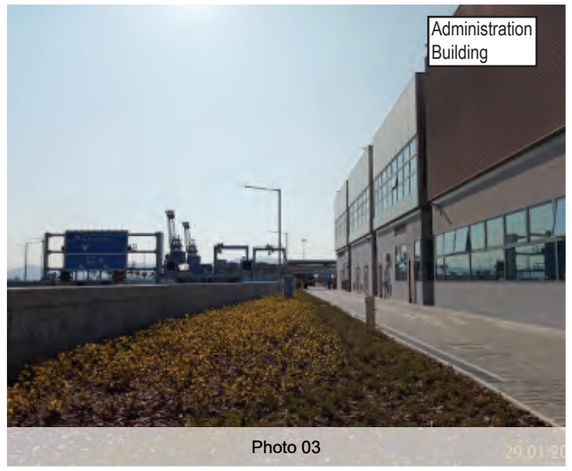


Photo 03

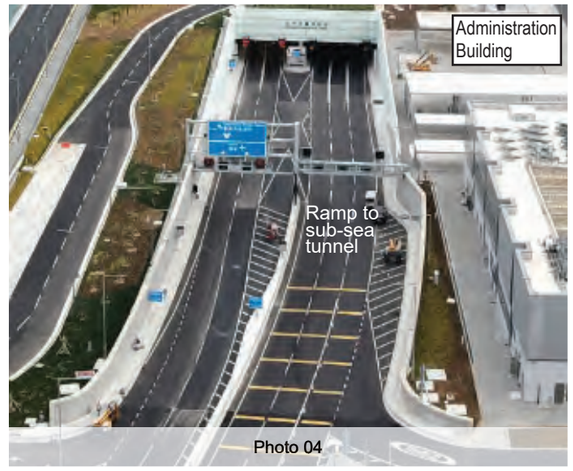
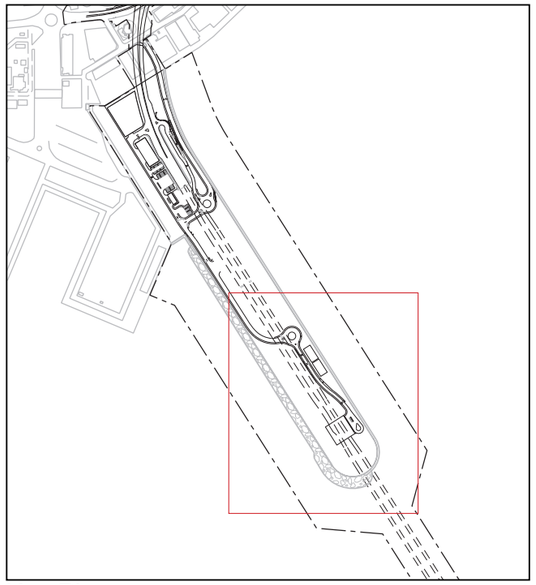


Photo 04

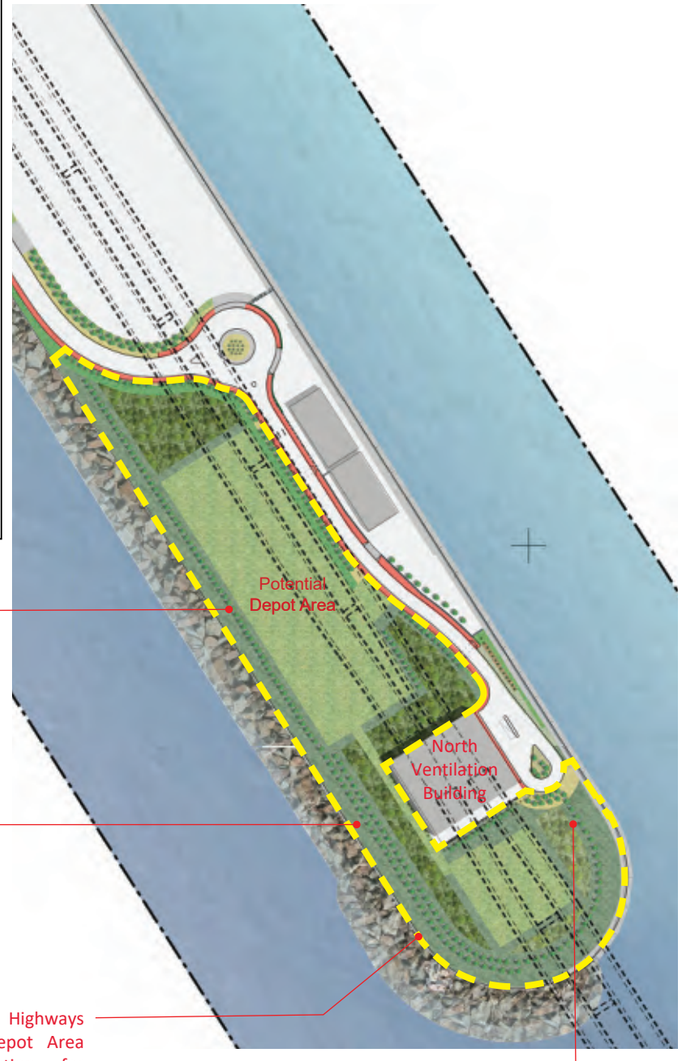
Photo 01, Photo 02: Planters at Administration Building serve as buffer to the engineering structures and enhancement to the townscape quality (OM2, OM4). Locations and sizes of planters are maximized to avoid obstructing the operational and security needs of the Administration Building. Buffer and structure, low ornamental shrub planting is purposely designed at the roadside planters to avoid obstructing sightlines for safe driving at turning corners.

Photo 03, Photo 04: Planters at Administration Building serve as buffer to the engineering structures and enhancement to the townscape quality (OM2, OM4). Locations and sizes of planters are maximized to avoid obstructing the operational and security needs of the Administration Building. Buffer and structure, low ornamental shrub planting is purposely designed at the planter against the wall of tunnel portal to avoid leaves and twigs blowing over and falling to the ramp of the sub-sea tunnel causing safety hazard to road users and to allow the essential open view from the adjacent Administration Building to monitor the road condition at the entrance/exit of the sub-sea tunnel by the tunnel operator to ensure smooth and safe operation.

Buffer Planting and Enhancement of Townscape Quality (OM2, OM4)



Key Plan



Tree planting set at 10m from the sloping seawall and 15m from the vertical seawall to address CEDD's concern on planting close to the seawall, and the locations of tree planting (OM2, OM4) within the Potential Highways Department Depot Area are maximized to avoid obstructing the operational needs of the Depot.
- Photo 01

Tree planting set at 10m from the sloping seawall and 15m from the vertical seawall to address CEDD's concern on planting close to the seawall, and the locations of tree planting (OM2, OM4) within the Potential Highways Department Depot Area are maximized to avoid obstructing the operational needs of the Depot.
- Photo 02

Potential Highways Department Depot Area under application for temporary government land allocation (TGLA)

Tree planting set at 10m from the sloping seawall and 15m from the vertical seawall to address CEDD's concern on planting close to the seawall, and the locations of tree planting (OM2, OM4) within the Potential Highways Department Depot Area are maximized to avoid obstructing the operational needs of the Depot.
- Photo 03

Photo 01

Tree planting set at 10m from the sloping seawall and 15m from the vertical seawall to address CEDD's concern on tree planting close to the seawall. In addition, the locations of tree planting (OM2, OM4) within the Potential Highways Department Depot Area are maximized to avoid obstructing the operational needs of the Potential Depot.

As a result of these conditions, one row of tree planting is feasible along a section of the western seawall.

Photo 02

Tree planting set at 10m from the sloping seawall and 15m from the vertical seawall to address CEDD's concern on tree planting close to the seawall. In addition, the locations of tree planting (OM2, OM4) within the Potential Highways Department Depot Area are maximized to avoid obstructing the operational needs of the Potential Depot.

At the southwestern section of the seawall, it is feasible to provide more than one row of trees without obstructing the operational needs of the Potential Depot and at the same time could address the concern of CEDD on tree planting close to the seawall.

Photo 03

Tree planting set at 10m from the sloping seawall and 15m from the vertical seawall to address CEDD's concern on tree planting close to the seawall. In addition, the locations of tree planting (OM2, OM4) within the Potential Highways Department Depot Area are maximized to avoid obstructing the operational needs of the Potential Depot.

At the southern and southwestern section of the seawall, it is feasible to provide more than one row of trees without obstructing the operational needs of the Potential Depot and at the same time could address the concern of CEDD on tree planting close to the seawall.

AECOM magne it. De ivered.

Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction

Drawing No: Figure 5.10

Buffer Planting and Enhancement of Townscape Quality at Northern Landfall (Contract 4 - HY/2017/10)

Slope Planting

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
WHIP				
BRI.TOM.	*Bridelia tomentosa* *	土蜜樹	WHIP	1500-2000
GOR.AXI.	*Gordonia axillaris* *	大頭茶	WHIP	1500-2000
LIT.GLU.	*Litsea glutinosa* *	潺槁樹	WHIP	1500-2000
PHY.EMB.	*Phyllanthus emblica* *	餘甘子	WHIP	1500-2000
REE.THY.	*Reevesia thyrsoidea* *	梭羅樹	WHIP	1500-2000
TREE				
BAU.VAR.	*Bauhinia variegata*	宮粉羊蹄甲	LIGHT STANDARD/ STANDARD	4000
BOM.CEI.	*Bombax ceiba*	木棉	LIGHT STANDARD	4000-5000
BRI.TOM.	*Bridelia tomentosa* *	土蜜樹	LIGHT STANDARD	3000
CIN.BUR.(A)	*Cinnamomum burmannii* *	陰香	LIGHT STANDARD	4000
MEL.AZE.(A)	*Melia azedarach*	苦楝	LIGHT STANDARD	4000
PLU.RUB.	*Plumeria rubra*	雞蛋花	HEAVY STANDARD 2000 (H) X 2000 (S)	3500-4000
PALM				
CAR.MIT.	*Caryota mitis*	短穗魚尾葵	2500(H) x 1500(S)	2500
LIV.CHI.	*Livistona chinensis*	蒲葵	1500-2500(H) X 1500(S)	3500-4000
PHO.ROE.	*Phoenix roebelenii*	日本葵	2000(H) x 1500(S)	2000
WAS. ROB.	*Washingtonia robusta*	華盛頓葵	1500 - 2500(H) X 1500(S)	3500-4000
SHRUB				
CAL.HAE.	*Calliandra haematocephala*	紅絨球	300(H) X 300(S)	1000
FIC.MIC.'GOL'	*Ficus microcarpa* 'Golden Leaf'	黃榕	300(H) X 300(S)	500
GAR.JAS.	*Gardenia jasminoides* *	白蟬	300(H) x 300(S)	500
GOR.AXI.	*Gordonia axillaris* *	大頭茶	500(H) X 500(S)	500
HIB.ROS.	*Hibiscus rosa-sinensis*	大紅花	300(H) x 300(S)	1000
LIG.SIN.	*Ligustrum sinense* *	山指甲	300(H) x 300(S)	500
MEL.CAN.	*Melastoma candidum* *	野牡丹	300(H) X 300(S)	500
MEL.SAN.	*Melastoma sanguineum* *	毛萼	300(H) X 300(S)	500
NER.OLE.	*Nerium oleander*	夾竹桃	300(H) X 300(S)	1000
PIT.TOB.	*Pittosporum tobira* *	海桐花	300(H) x 300(S)	500
PSY. ASI.	*Psychotria asiatica* *	九節	300(H) x 300(S)	500
RHO.SIM.	*Rhododendron simsii* *	紅杜鵑	300(H) x 300(S)	500
RHO.TOM.	*Rhodomyrtus tomentosa* *	桃金娘	300(H) X 300(S)	500
SCH.ARB.	*Schefflera arboricola*	八葉	300(H) x 300(S)	500
GROUNDCOVER				
HYM.LIT.	*Hymenocallis littoralis*	蜘蛛蘭	300(H) X 300(S)	300
CLIMBER				
EPI.AUR.	*Epipremnum aureum*	綠蘿	MIN. 4 SHOOTS PER PLANT, 300mm LONG	500
FIC.PUM.	*Ficus pumila* *	薜荔	MIN. 3 SHOOTS PER PLANT, 300-1000mm LONG	300
LON.JAP.	*Lonicera japonica* *	金銀花	MIN. 4 SHOOTS PER PLANT, 600mm LONG	500
PAR.DAL.	*Parthenocissus dalzielii*	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	300/500
HYDROSEEDING / GRASS				
-	HYDROSEEDING	噴草	-	-

NOTE:
1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
2. SHRUB / GROUNDCOVER SHOULD BE PLANTED IN A STAGGERED PATTERN.
3. SIZE OF TREES SHALL REFER TO THE GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, 2006 EDITION.
4. GRASS SEED AS GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, 2006 EDITION, CLAUSE 3.26(3).
5. * SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBARIUM WEBSITE.
6. + PLANT SPECIES INCLUDED IN THE ENTRUSTED LANDSCAPE WORKS TO CONTRACT NO. DC/2016/01.

Roadside Planting

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
TREE				
BAU.BLA.	*Bauhinia x blakeana* * +	洋紫荊	HEAVY STANDARD	5000
BAU.VAR.	*Bauhinia variegata*	宮粉羊蹄甲	LIGHT STANDARD/ STANDARD/ HEAVY STANDARD	4000 - 5000
GAR.SUB.	*Garcinia subelliptica* +	菲島福木	LIGHT STANDARD	4000-5000
GRE.ROB.(H)	*Grevillea robusta*	銀樺	HEAVY STANDARD	5000
ILE.ROT.	*Ilex rotunda*	鐵冬青	HEAVY STANDARD	5000
LAG.SPE.	*Lagerstroemia speciosa*	大花紫薇	HEAVY STANDARD	4000-4500
PEL.TON.	*Peltophorum tonkinense* +	銀珠	HEAVY STANDARD	5000
PLU.RUB.	*Plumeria rubra*	雞蛋花	HEAVY STANDARD 2000(H) x 2000(S) - 2500(H) x 2500(S)	4000
TAB.IMP	*Tabebuia impetiginosa*	風鈴木	HEAVY STANDARD	5000
VIB.ODO.	*Viburnum odoratissimum* * +	珊瑚樹	HEAVY STANDARD	5000
PALM				
ARE.CAT.	*Areca catechu* +	檳榔	4000(H)	4000
CAR.MIT.	*Caryota mitis* +	短穗魚尾葵	2500(H)	750
LIV.CHI.	*Livistona chinensis*	蒲葵	2500(H) x 1500(S)	3500-4000
PHO.SYL.	*Phoenix sylvestris*	銀海棗	2000(H) x 1500(S)	4000
SHRUB				
ALL.CAT.	*Allamanda cathartica*	軟枝黃蟬	300(H) X 300(S)	300/350
DUR.REP.	*Duranta repens*	假連翹	300(H) x 250(S)	400
COD.VAR.'AUC'	*Codiaeum variegatum* 'Aucubaefolium' +	灑金榕	300(H) X 300(S)	300
COD.VAR.'RED'	*Codiaeum variegatum* 'Red' +	灑金榕 (紅色)	300(H) X 300(S)	300
FIC.MIC.'GOL'	*Ficus microcarpa* 'Golden Leaf'	黃榕	300(H) X 300(S)	350/500
GAR.JAS.	*Gardenia jasminoides* *	白蟬	300(H) x 300(S)	500
GOR.AXI.	*Gordonia axillaris* *	大頭茶	300(H) X 300(S)	350
IXO.CHI.	*Ixora chinensis* * +	龍船花	300(H) x 300(S)	300
LIG.SIN.	*Ligustrum sinense* *	山指甲	300(H) x 250(S)	400
MEL.CAN.	*Melastoma candidum* *	野牡丹	300(H) X 300(S)	350
MEL.SAN.	*Melastoma sanguineum* *	毛萼	300(H) X 300(S)	350
NER.OLE.	*Nerium oleander*	夾竹桃	400(H) x 250(S) / 300(H) X 300(S)	400/500
PIT.TOB.	*Pittosporum tobira* * +	海桐花	300(H) x 300(S)	500
RHA.IND.	*Rhaphiolepis indica* * +	車輪梅	300(H) x 300(S)	300
RHO.TOM.	*Rhodomyrtus tomentosa* *	桃金娘	300(H) X 300(S)	350/500
SCH.ARB.	*Schefflera arboricola* +	八葉	300(H) x 300(S)	350/ 500
ZAM.FUR.	*Zamia furfuracea* +	牙買加蘇鐵	400(H) x 500(S)	500
GROUNDCOVER				
ARA.DUR.	*Arachis duranensis*	金花生	100(H) x 200(S)	200
ASP.DEN.	*Asparagus densiflorus* 'Sprengeri' +	非洲天門冬	200(H) x 300(S)	200
HYM.LIT.	*Hymenocallis littoralis*	蜘蛛蘭	300(H) X 300(S)	300
NEP.AUR.	*Nephrolepis auriculata* * +	腎蕨	250(H) x 250(S)	150
PHY.MYR.	*Phyllanthus myrtifolius* +	錫蘭葉下珠	300(H) x 300(S)	300
TRA.SPA.	*Tradescantia spathacea*	蚌花	200(H) x 300(S)	250
WED.TRI.	*Wedelia trilobata*	三裂葉蟛蜞菊	200(H) x 150(S)	300
CLIMBER				
EPI.AUR.	*Epipremnum aureum* +	綠蘿	MIN. 4 SHOOTS PER PLANT, 300mm LONG	500/300
FIC.PUM.	*Ficus pumila* *	薜荔	MIN. 3 SHOOTS PER PLANT, 300-1000mm LONG	300
PAR.DAL.	*Parthenocissus dalzielii*	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	300
HYDROSEEDING / GRASS				
-	HYDROSEEDING	噴草	-	-
AXO.COM.	*Axonopus compressus* +	地毯草(大葉草)	Whole piece turf 300(L)x300(W)x50(H)	-

Slope Planting

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
WHIP				
BAU.VAR.	*Bauhinia variegata*	宮粉羊蹄甲	WHIP	1000
BRI.TOM.	*Bridelia tomentosa* *	土密樹	WHIP	1000-2000
GOR.AXI.	*Gordonia axillaris* *	大頭茶	WHIP	1000
LIT.GLU.	*Litsea glutinosa* *	潺槁木	WHIP	1000
MAL.PAN.	*Mallotus paniculatus* *	白楸	WHIP	1000
PHY.EMB.	*Phyllanthus emblica* *	餘甘子(油甘子)	WHIP	1000
SAP.DIS.	*Sapium discolour* *	山烏桕	WHIP	1000
TREE				
BAU.VAR.(L)	*Bauhinia variegata*	宮粉羊蹄甲	LIGHT STANDARD	3000
BAU.VAR.(H)	*Bauhinia variegata*	宮粉羊蹄甲	HEAVY STANDARD	4000-4500
BRI.TOM.	*Bridelia tomentosa* *	土密樹	LIGHT STANDARD	3000
BOM.CEI.(L)	*Bombax ceiba*	木棉	LIGHT STANDARD	3000
BOM.CEI.(L)	*Bombax ceiba*	木棉	HEAVY STANDARD	4500-5000
CIN.BUR.	*Cinnamomum burmannii* *	陰香	LIGHT STANDARD	3000
CIN.BUR.	*Cinnamomum burmannii* *	陰香	HEAVY STANDARD	4500-5000
LIQ.FOR.	*Liquidambar formosana* *	楓香	LIGHT STANDARD	3000
LIT.GLU.(L)	*Litsea glutinosa* *	潺槁木	LIGHT STANDARD	3000
MAC.CHE.	*Machilus chekiangensis* *	浙江潤楠	LIGHT STANDARD	3000
REE.THY.	*Reevesia thyrsoidea* *	梭羅樹	LIGHT STANDARD	3000
SCH.SUP.	*Schima superba* *	木荷 (荷樹)	LIGHT STANDARD	3000
STE.LAN.	*Sterculia lanceolata* *	假蘋婆	LIGHT STANDARD	3000
STE.LAN.	*Sterculia lanceolata* *	假蘋婆	HEAVY STANDARD	4500-5000
VIB.ODO.	*Viburnum odoratissimum* *	珊瑚樹	LIGHT STANDARD	3000
SHRUB				
DES.CHI.	*Desmos chinensis* *	假鷹爪	300(H) x 300(S)	500
ILE.ASP.	*Ilex asprella* *	梅葉冬青	300(H) x 300(S)	500
ILE.PUB.	*Ilex pubescens* *	毛冬青	300(H) x 300(S)	500
LIG.SIN.	*Ligustrum sinense*	山指甲	300(H) x 300(S)	350-500
MEL.CAN.	*Melastoma candidum* *	野牡丹	300(H) x 300(S)	350-500
MEL.SAN.	*Melastoma sanguineum* *	毛蕊	300(H) x 300(S)	350-500
NER.OLE.	*Nerium oleander*	夾竹桃	300(H) x 300(S)	350
PSY.ASI.	*Psychotria asiatica* *	九節	300(H) x 300(S)	500
RHA.IND.	*Rhaphiolepis indica* *	車輪梅	300(H) x 300(S)	350-500
RHO.PUL.	*Rhododendron pulchrum*	紫杜鵑	300(H) x 300(S)	500
RHO.SIM.	*Rhododendron simsii* *	紅杜鵑	300(H) x 300(S)	500
SCH.ARB.	*Schefflera arboricola*	八葉木	300(H) x 300(S)	500
SCH.VAR.	*Schefflera arboricola* 'Variegata'	花葉八葉木	300(H) x 300(S)	500
GROUNDCOVER				
NEP.AUR.	*Nephrolepis auriculata* *	腎蕨	300(H) x 300(S)	100-300
NEP.HIR.	*Nephrolepis hirsutula* *	毛葉腎蕨	300(H) x 300(S)	100-300
CLIMBER				
BAU.COR.	*Bauhinia corymbosa*	首冠藤	MIN. 5 SHOOTS PER PLANT, 600mm LONG	300-1000
BOU.SPE.	*Bougainvillea spectabilis*	簕杜鵑	MIN. 5 SHOOTS PER PLANT, 600mm LONG	300-500
FIC.PUM.	*Ficus pumila* *	薜荔	MIN. 3 SHOOTS PER PLANT, 1000mm LONG	300
LON.JAP.	*Lonicera japonica* *	忍冬(金銀花)	MIN. 5 SHOOTS PER PLANT, 600mm LONG	300-1000
PAR.DAL.	*Parthenocissus dalzielii*	爬墻虎	MIN. 3 SHOOTS PER PLANT, 1000mm LONG	300-1000
WED.TRI.	*Wedelia trilobata*	三裂葉蟛蜞菊	MIN. 5 SHOOTS PER PLANT, 600mm LONG	300

Roadside Planting

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
TREE				
BRA.ACE.	*Brachychiton acerifolius*	槭葉蘋婆	HEAVY STANDARD	4500-5000
DEL.REG.	*Delonix regia*	鳳凰木	HEAVY STANDARD	N/A
GAR.SUB.	*Garcinia subelliptica*	菲島福木 (福木)	LIGHT STANDARD	3000
MEL.CUM.	*Melaleuca cajuputi subsp. cumingiana*	白千層	HEAVY STANDARD	4000
STE.LAN.	*Sterculia lanceolata* *	假蘋婆	HEAVY STANDARD	5000
TAB.CHR.	*Tabebuia chrysantha*	黃花風鈴木	HEAVY STANDARD	5000
TAB.IMP.	*Tabebuia impetiginosa*	風鈴木	HEAVY STANDARD	5000
TER.MAN.	*Terminalia mantaly*	小葉欖仁	HEAVY STANDARD	5000
PALM				
ARC.ALE.	*Archontophoenix alexandrae*	假檳榔	3500(H) x 1500(S)	4000
CHR.LHT.	*Chrysalidocarpus lutescens*	散尾葵	1500(H)	2000
LIV.CHI.	*Livistona chinensis*	蒲葵	2000(H) x 1500(S)	2500
PHO.ROE.	*Phoenix roebelenii*	日本葵	2000(H) x 1500(S)	2500-3000
WOD.BIF.	*Wodyetia bifurcata*	狐尾椰子	2500(H) x 1500(S)	3500
SHRUB				
DUR.GOL.	*Duranta repens* 'Golden'	金連翹	300(H) x 300(S)	300
IXO.CHI.	*Ixora chinensis* *	龍船花	300(H) x 300(S)	300
IXO.COC.	*Ixora coccinea*	橙紅龍船花	300(H) x 300(S)	300
IXO.LUT.	*Ixora coccinea* 'Lutea'	黃花龍船花	300(H) x 300(S)	300
RHA.IND.	*Rhaphiolepis indica* *	車輪梅	300(H) x 300(S)	300
RHO.PUL.	*Rhododendron pulchrum*	紫杜鵑	300(H) x 300(S)	300
RHO.SIM.	*Rhododendron simsii* *	紅杜鵑	300(H) x 300(S)	300
SCH.ARB.	*Schefflera arboricola*	八葉木	300(H) x 300(S)	300
SCH.VAR.	*Schefflera arboricola* 'Variegata'	斑葉鵝掌藤 (花葉八葉木)	300(H) x 300(S)	300
GROUNDCOVER				
ARA.DUR.	*Arachis duranensis*	金花生	100(H) x 200(S)	200
ASP.DEN.	*Asparagus densiflorus* 'Myersii'	狐尾天冬	300(H) x 300(S)	250
ASP.SPR.	*Asparagus densiflorus* 'Sprengeri'	非洲天門冬 (天冬)	100(H) x 200(S)	200
CUP.HYS.	*Cuphea hyssopifolia*	細葉雪茄花	250(H) x 300(S)	250-300
DIA.VAR.	*Dianella tasmanica* 'Variegata'	花葉山菅蘭	250(H) x 250(S)	250
LAN.FLA.	*Lantana camara* 'Flava'	黃花馬纓丹	200(H) x 200(S)	200
LAN.MON.	*Lantana montevidensis*	小葉馬纓丹	200(H) x 200(S)	200
NEP.AUR.	*Nephrolepis auriculata* *	腎蕨	300(H) x 300(S)	100-300
OPH.JAP.	*Ophiopogon japonicus* *	沿階草	200(H) x 200(S)	200

NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
2. SHRUB / GROUNDCOVER SHOULD BE PLANTED IN A STAGGERED PATTERN.
3. SIZE OF TREES SHALL REFER TO THE GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, 2006 EDITION.
4. GRASS SEED AS GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, CLAUSE 3.26(3).
5. * SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBARIUM WEBSITE.

Northern Landfall - Roadside Planting

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
TREE				
BAU.BLA	*Bauhinia x blakeana* *	洋紫荊	HEAVY STANDARD	4500-5000
BAU.VAR	*Bauhinia variegata*	宮粉羊蹄甲	HEAVY STANDARD	4500-5000
ELA.API	*Elaeocarpus apiculatus*	尖葉杜英	HEAVY STANDARD	6000
ELA.HAI	*Elaeocarpus hainanensis*	水石榕	HEAVY STANDARD	5000
GAR.SUB	*Garcinia subelliptica*	菲島福木	HEAVY STANDARD	3500-4000
GRE.ROB	*Grevillea robusta*	銀樺	HEAVY STANDARD	4500-5000
MEL.QUI	*Melaleuca quinquenervia*	白千層	HEAVY STANDARD	4500-5000
PLU.MUL	*Plumeria rubra* (multi-colour flower)	雞蛋花(多色花)	HEAVY STANDARD 2000(H) x 2000(S) - 2500(H) x 2500(S)	4000-4500
PLU.RUB	*Plumeria rubra* (red flower)	雞蛋花(紅花)	HEAVY STANDARD 2000(H) x 2000(S) - 2500(H) x 2500(S)	4000-4500
PLU.RUB(Y)	*Plumeria rubra* (yellow flower)	雞蛋花(黃花)	HEAVY STANDARD 2000(H) x 2000(S) - 2500(H) x 2500(S)	4000-4500
PON.PIN	*Pongamia pinnata* *	水黃皮	HEAVY STANDARD	5000-6000
STE.LAN	*Sterculia lanceolata* *	假蘋婆	HEAVY STANDARD	4500-5000
TER.CAT	*Terminalia catappa*	欖仁樹	HEAVY STANDARD	5000-7000
VIB.ODO	*Viburnum odoratissimum* *	珊瑚樹	HEAVY STANDARD	4500-5000
XAN.CHR	*Xanthostemon chrysanthus*	金蒲桃	HEAVY STANDARD	5000
PALM				
ARE.CAT	*Areca catechu*	檳榔	3000(H) x 1500(S)	4000
HYO.LAG	*Hyophorbe lagenicaulis*	酒瓶椰子	2000(H) x 1500(S)	3000
LIV.CHI	*Livistona chinensis*	蒲葵	3000(H) x 2000(S)	4000-4500
ROY.REG	*Roystonea regia*	王棕	4000(H) x 2000(S)	4500-5000
WOD.BIF	*Wodyetia bifurcata*	狐尾椰子	3000(H) x 1500(S)	4500
SHRUB				
CMI	*Carmona microphylla*	福建茶	300(H) x 300(S)	300
CRE	*Cycas revoluta*	蘇鐵	500(H) x 600(S)	N/A
DLU	*Dypsis lutescens*	散尾葵	2000(H) x 2000(S)	2000
JKA	*Juniperus chinensis* 'Kaizuca'	龍柏球	600(H) x 600(S)	N/A
ICH	*Ixora chinensis* *	龍船花	300(H) x 300(S)	300
ICO	*Ixora coccinea*	橙紅龍船花	300(H) x 300(S)	300
ILU	*Ixora coccinea* 'Lutea'	黃花龍船花	400(H) x 300(S)	300
IST	*Ixora stricta*	細葉龍船花	250(H) x 250(S)	250
IWE	*Ixora westii*	粉紅龍船花	400(H) x 300(S)	300
NOL	*Nerium oleander*	夾竹桃	500(H) x 400(S)	500
PTO	*Pittosporum tobira*	海桐	300(H) x 300(S)	350
PMA	*Podocarpus macrophyllus* *	羅漢松	600(H) x 500(S)	N/A
PAX	*Polyspora axillaris* *	大頭茶	300(H) x 300(S)	350
RIN	*Rhaphiolepis indica* *	車輪梅	300(H) x 300(S)	300-350
RPU	*Rhododendron pulchrum*	錦繡杜鵑	300(H) x 300(S)	350
RSI	*Rhododendron simsii* *	紅杜鵑	250(H) x 250(S)	350
RTO	*Rhodomyrtus tomentosa* *	桃金娘	300(H) x 300(S)	350
STA	*Scaevola taccada* *	草海桐	300(H) x 300(S)	350
SDA	*Schefflera arboricola* 'Dazzle'	黃金八葉	300(H) x 300(S)	350
SVA	*Schefflera arboricola* 'Variegata'	斑葉鵝掌藤 (花葉八葉木)	300(H) x 300(S)	300-350

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
GROUNDCOVER				
ADU	*Arachis duranensis*	蔓花生 (金花生)	100(H) x 200(S)	200
AMY	*Asparagus densiflorus* 'Myersii'	狐尾天冬	300(H) x 300(S)	300
ASP	*Asparagus densiflorus* 'Sprengeri'	非洲天門冬	100(H) x 200(S)	200
CHY	*Cuphea hyssopifolia*	細葉萼距花	200(H) x 250(S)	250
CRO	*Catharanthus roseus*	長春花	200(H) x 200(S)	200
LFL	*Lantana camara* 'Flava'	黃花馬纓丹	200(H) x 200(S)	200
LMO	*Lantana montevidensis*	小葉馬纓丹	200(H) x 200(S)	200
NAU	*Nephrolepis auriculata* *	腎蕨	250(H) x 250(S)	200
NHI	*Nephrolepis hirsutula* *	毛葉腎蕨	250(H) x 250(S)	200
ONA	*Ophiopogon japonicus* 'Nana'	玉龍草	50(H)	N/A
WTR	*Wedelia trilobata*	三裂葉蟛蜞菊	150(H) x 200(S)	200
CLIMBER				
BCO	*Bauhinia corymbosa*	首冠藤	MIN. 4 SHOOTS PER PLANT, 600mm LONG	300-500
QIN	*Quisqualis indica*	使君子	MIN. 4 SHOOTS PER PLANT, 600mm LONG	300-500

NOTE:
1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
2. SHRUB / GROUNDCOVER SHOULD BE PLANTED IN A STAGGERED PATTERN.
3. SIZE OF TREES SHALL REFER TO THE GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, 2006 EDITION.
4. GRASS SEED AS GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, CLAUSE 3.26(3).
5. * SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBARIUM WEBSITE.

Southern Landfall (Contract 1 - HY/2012/07)

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
TREE				
GRE.ROB.	*Grevillea robusta*	銀樺	HEAVY STANDARD	4000-5000
PLU.RUB.	*Plumeria rubra*	雞蛋花(紅)	HEAVY STANDARD 2000(H) x 2000(S) - 2500(H) x 2500(S)	4000-5000
SHRUB				
RUS.EQU.	*Russelia equisetiformis*	爆仗竹	300(H) x 300(S)	250
GROUNDCOVER				
IPO.PES.	*Ipomoea pes-caprae* *	海灘牽牛	200(H) x 200(S)	200
LAN.MON.	*Lantana montevidensis*	小葉馬纓丹 (鋪地臭金鳳)	200(H) x 200(S)	250
OPH.JAP.	*Ophiopogon japonicus* *	麥冬(沿階草)	150(H) x 200(S)	200
SYN.POD.	*Syngonium podophyllum*	白蝴蝶	100(H) x 200(S)	200
TRA.SPA.	*Tradescantia spathacea*	蚌花	200(H) x 300(S)	250
ZEP.ROS.	*Zephyranthes rosea*	玫瑰葱蓮	100(H) x 200(S)	150
CLIMBER				
MON.DEL.	*Monstera deliciosa*	龜背竹	MIN. 5 SHOOTS PER PLANT, 300mm LONG	500
HYDROSEEDING / GRASS				
-	HYDROSEEDING	噴草	-	-
ZOY.JAP.	*Zoysia japonica*	朝鮮草	300(L)x300(W)x50(H)	N/A

NOTE:
1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
2. SHRUB / GROUNDCOVER SHOULD BE PLANTED IN A STAGGERED PATTERN.
3. SIZE OF TREES SHALL REFER TO THE GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, 2006 EDITION.
4. GRASS SEED AS GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, CLAUSE 3.26(3).
5. * SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBARIUM WEBSITE.
6. THE PLANT SPECIES ALLOWED FOR PLANTING IN EACH ZONE STATED IN THE HONG KONG INTERNATIONAL AIRPORT (HKIA) APPROVED PLANT SPECIES LIST (Revision. 4.0.1: October 2015).

Southern Landfall (Contract 4 - HY/2017/10)

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
TREE				
CV	*Callistemon viminalis*	串錢柳	HEAVY STANDARD	4000-5000
GR	*Grevillea robusta*	銀樺	HEAVY STANDARD	4000-5000
PRR	*Plumeria rubra* (red flower)	雞蛋花(紅花)	HEAVY STANDARD 2000(H) x 2000(S) - 2500(H) x 2500(S)	4000-5000
PRY	*Plumeria rubra* (yellow flower)	雞蛋花(黃花)	HEAVY STANDARD 2000(H) x 2000(S) - 2500(H) x 2500(S)	4000-5000
PLU.MUL	*Plumeria rubra* (multi-colour flower)	雞蛋花(多色花)	HEAVY STANDARD 2000(H) x 2000(S) - 2500(H) x 2500(S)	4000-5000
GROUNDCOVER				
IPE	*Ipomoea pes-caprae* *	海灘牽牛	150(H) x 200(S)	200
LMO	*Lantana montevidensis*	小葉馬纓丹 (鋪地臭金鳳)	200(H) x 300(S)	200
OJA	*Ophiopogon japonicus* *	麥冬(沿階草)	100(H) x 100(S)	100
SPO	*Syngonium podophyllum*	白蝴蝶	100(H) x 200(S)	200
TSP	*Tradescantia spathacea* 'dwarf'	矮蚌花	100(H) x 100(S)	100
WTR	*Wedelia trilobata*	三裂葉蟛蜞菊	150(H) x 200(S)	200
GRASS				
ZJA	*Zoysia japonica*	朝鮮草	300(L)x300(W)x50(H)	N/A

NOTE:
1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
2. SHRUB / GROUNDCOVER SHOULD BE PLANTED IN A STAGGERED PATTERN.
3. SIZE OF TREES SHALL REFER TO THE GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, 2006 EDITION.
4. GRASS SEED AS GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, CLAUSE 3.26(3).
5. * SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBARIUM WEBSITE.
6. THE PLANT SPECIES ALLOWED FOR PLANTING IN EACH ZONE STATED IN THE HONG KONG INTERNATIONAL AIRPORT (HKIA) APPROVED PLANT SPECIES LIST (Revision. 4.0.1: October 2015).

Appendix G

Tree Transplant

ROOT PRUNING IN STAGES

PREPARATION OF ROOTBALL

PREPARATION OF ROOTBALL FOR UPLIFTING

UPLIFTING OF TREE

PREPARATION OF TRANSPORTATION

WATERING IMMEDIATELY AFTER PLANTING THE TRANSPLANTED TREE

AECOM Imagine it. Delivered.

Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction
Tree Transplant (CM2) (Contract 1 - HY/2012/07)

Drawing No: Figure 7.1

ROOT PRUNING IN STAGES

ROOT PRUNING IN STAGES

PREPARATION OF ROOTBALL FOR UPLIFTING

PREPARATION OF TRANSPORTATION

PLANTING THE TRANSPLANTED TREE

WATERING IMMEDIATELY AFTER PLANTING THE TRANSPLANTED TREE

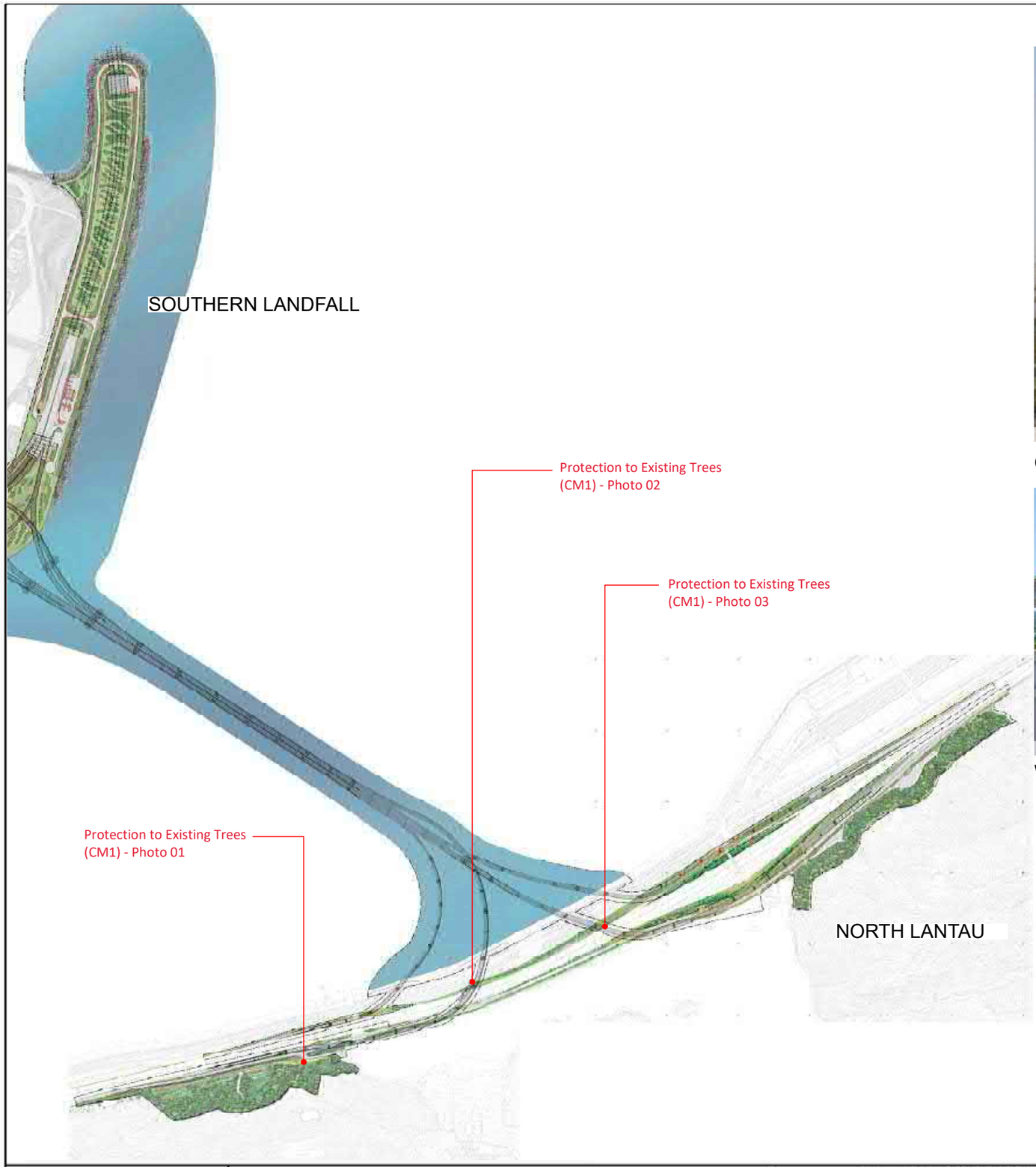
AECOM Imagine it. Delivered.

Agreement No. CE 7/2011(HY)
Tuen Mun – Chek Lap Kok Link – Design and Construction
On site Tree Transplant (CM2) (Contract 3 - HY/2013/12)

Drawing No: Figure 7.2

Appendix H

Mitigation Measures at Construction Phase



Protection to Existing Trees (CM1)

Photo 01

Chain link fence for tree protection


Photo 02

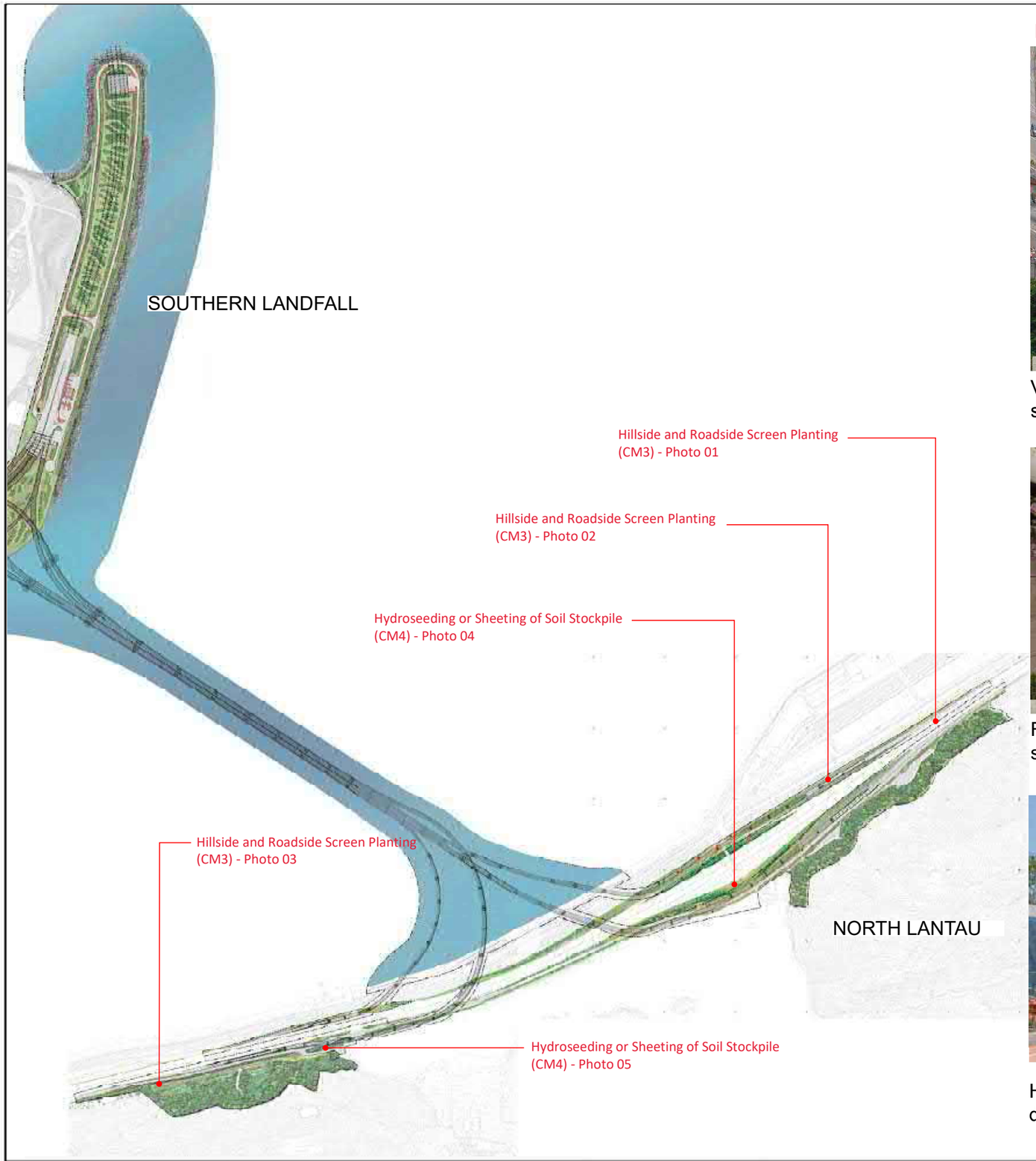

Photo 03

Water barriers with panels for tree protection

AECOM Imagine it. Delivered.

Agreement No. CE7/2011(HY)
Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Mitigation Measures in Construction Phase (Contract 1 - HY/2012/07)

Drawing Title: Figure 8.1



Hillside and Roadside Screen Planting (CM3)


Photo 01

Vegetation not affected by works was not cleared under site clearance provided some screening of construction works.


Photo 02


Photo 03

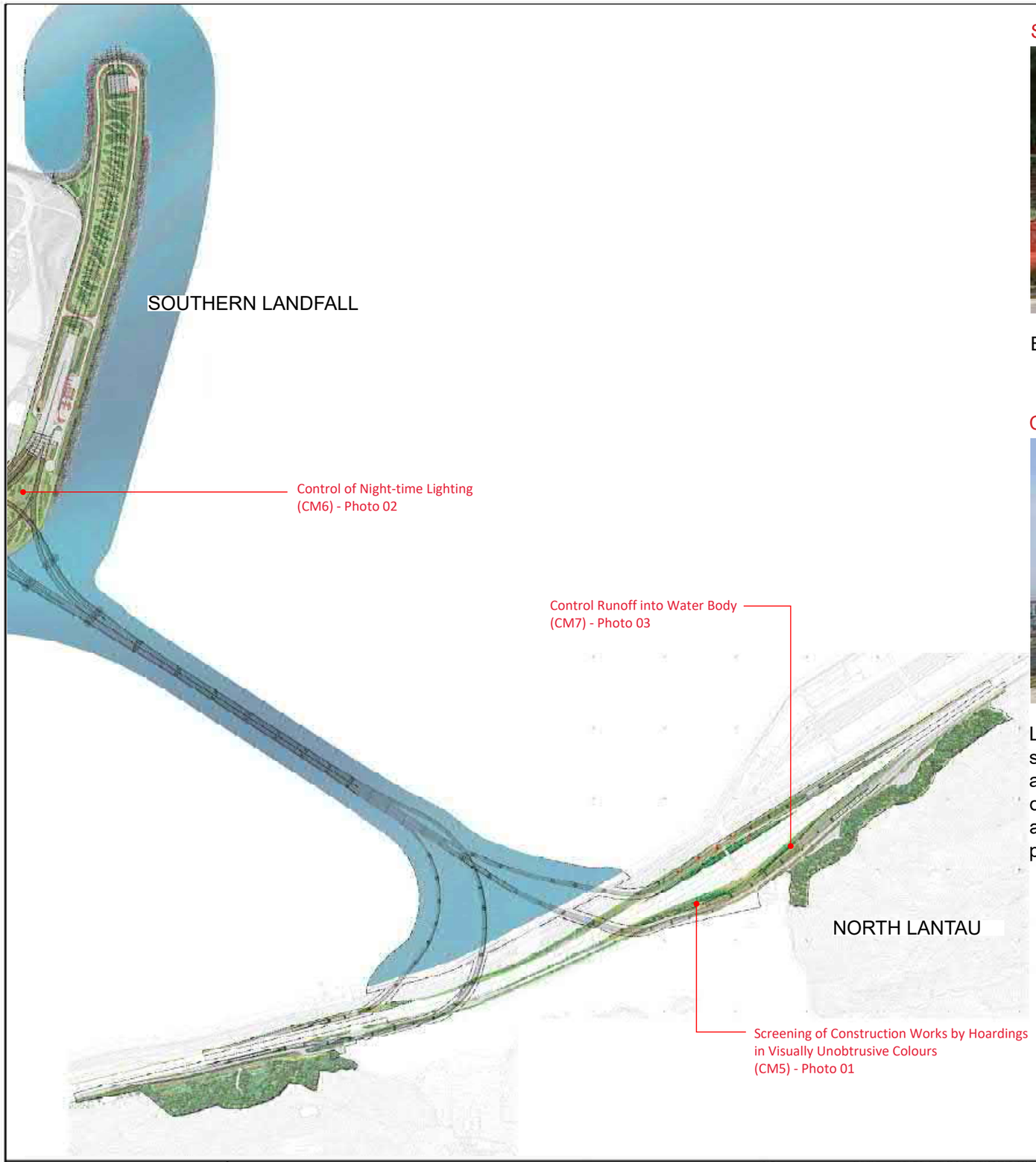
Roadside planting to road associated Hillside planting structure

Hydroseeding or Sheeting of Soil Stockpile (CM4)


Photo 04


Photo 05

Hydroseeding on soil slopes and sheeting of soil stockpiles to prevent erosion and dust generation with visually unobtrusive material



Screening of Construction Works by Hoardings in Visually Unobtrusive Colours (CM5)

Photo 01

Barriers with visually unobtrusive colours to screen works

Control of Night-time Lighting (CM6)

Photo 02

Lighting in the Southern Landfall was subject to the requirement on aviation aspects. Lights shall not form a source of glare or in any way affect pilots and air traffic controllers. All lights shall not project skyward.

Control Runoff into Water Body (CM7)

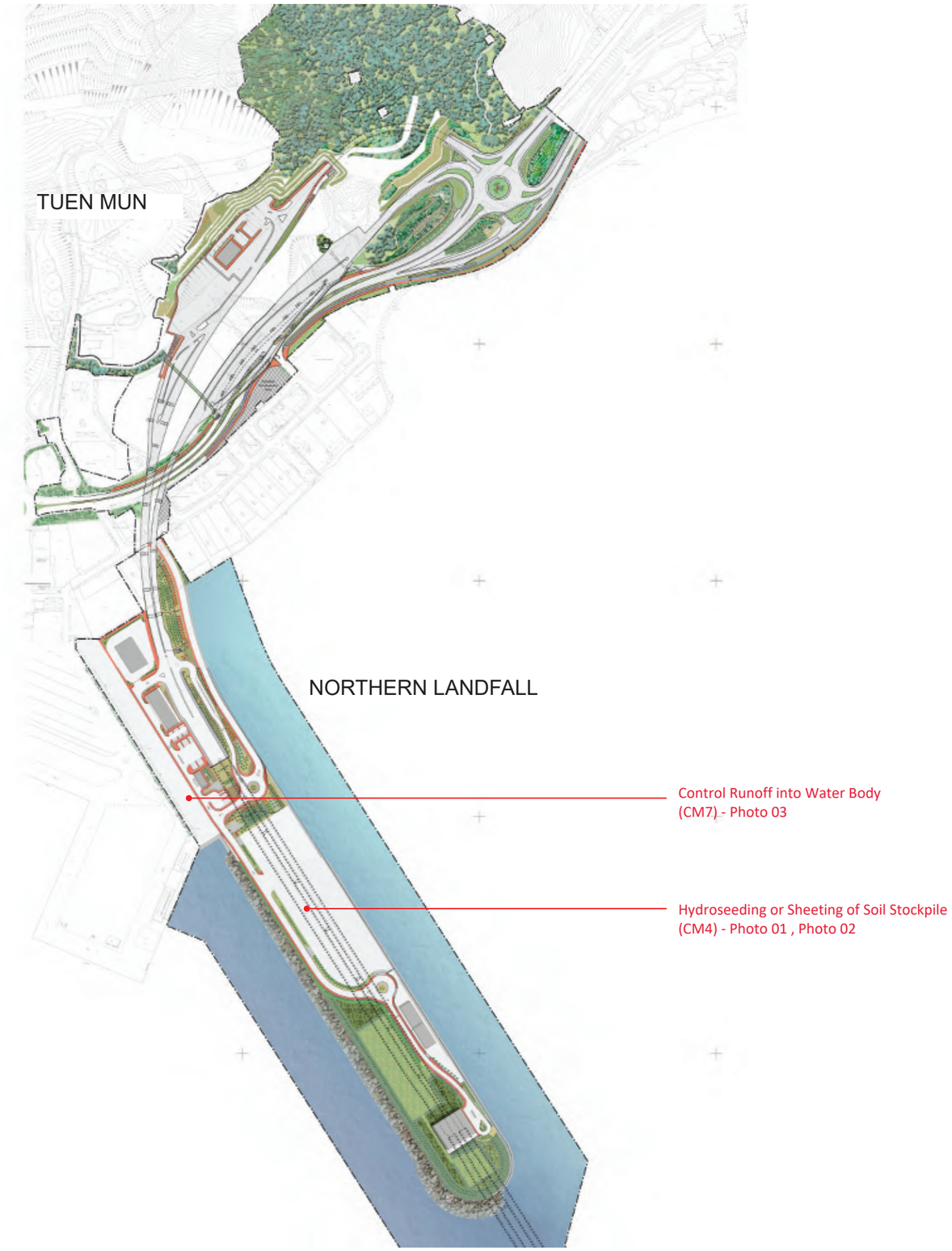
Photo 03

Site runoff was collected and treated in the waste water treatment facilities before discharged into the adjacent water bodies.

AECOM Imagine it. Delivered.

Agreement No. CE7/2011(HY)
Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Mitigation Measures in Construction Phase (Contract 1 - HY/2012/07)

Drawing Title: Figure 8.3



Hydroseeding or Sheeting of Soil Stockpile (CM4)

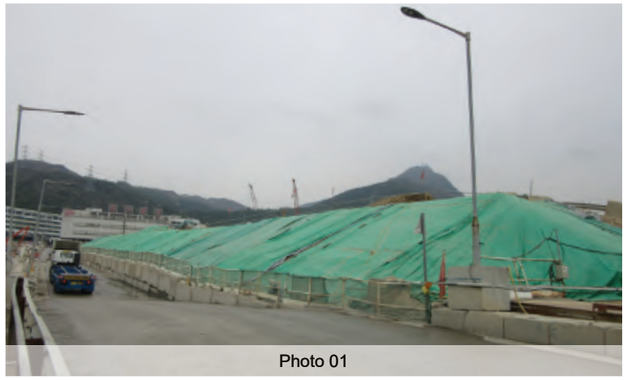


Photo 01

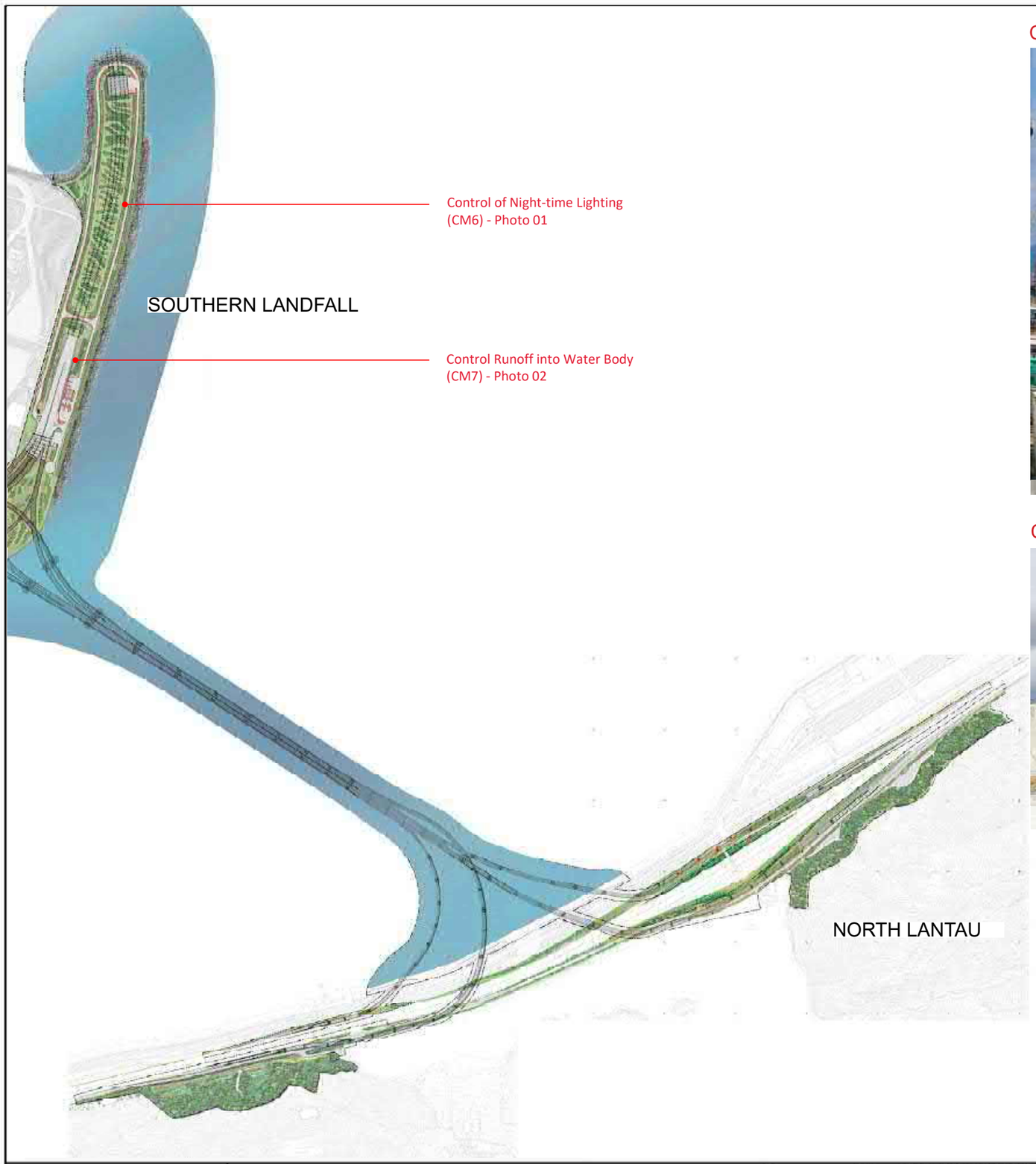
Photo 02

Sheeting of soil stockpiles to prevent erosion and dust generation with visually unobtrusive material

Control Runoff into Water Body (CM7)

Photo 03

Site runoff was collected and treated in the waste water treatment facilities before discharged into the adjacent water bodies.



Control of Night-time Lighting (CM6)

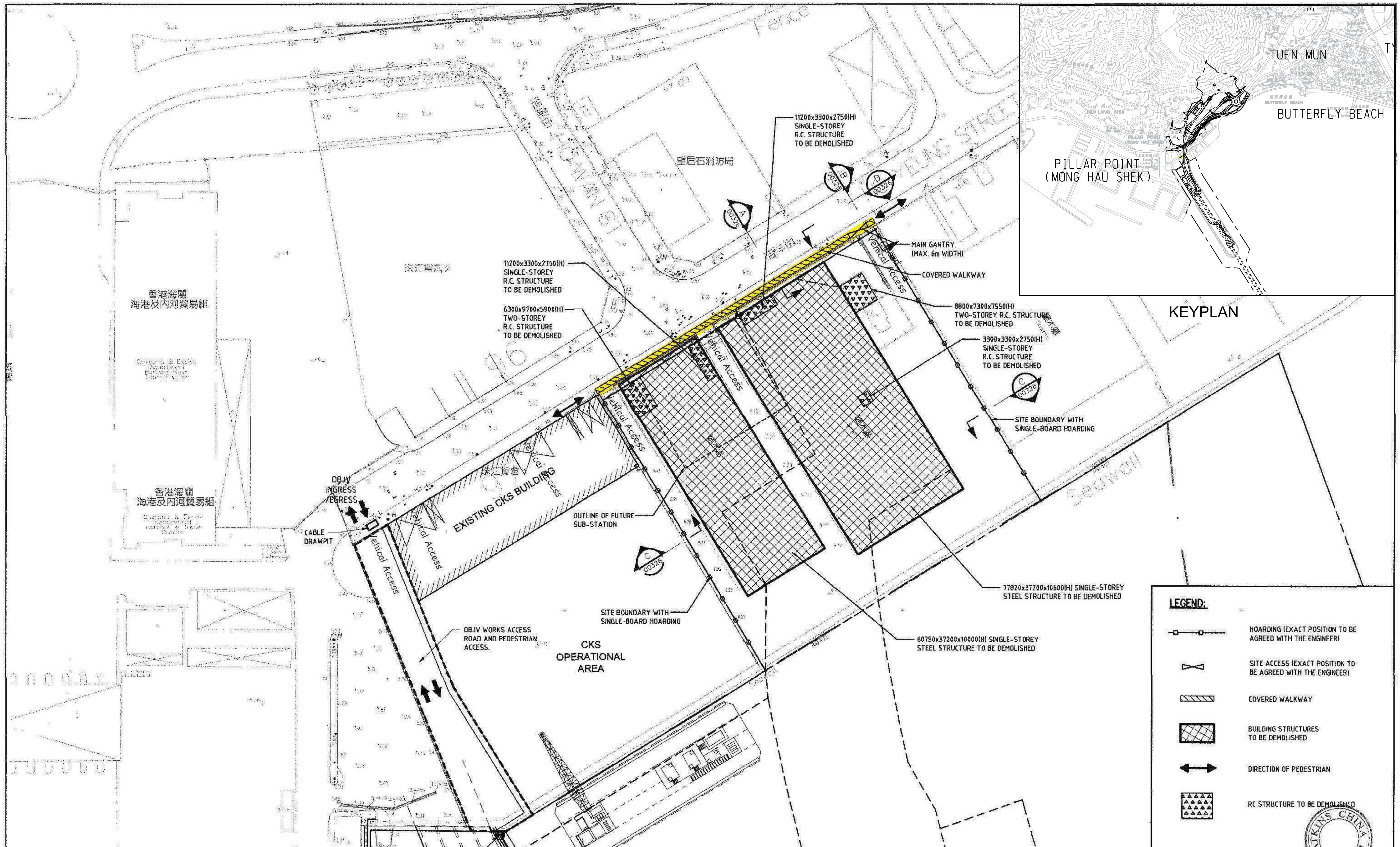
Photo 01

Lighting in the Southern Landfall is subject to the requirement on aviation aspects. Lights shall not form a source of glare or in any way affect pilots and air traffic controllers.

Control Runoff into Water Body (CM7)

Photo 02

Site runoff was collected and treated in the waste water treatment facilities before discharged into the adjacent water bodies.



Screening of Construction Works by Hoardings Around Works (CM5)

Contract 2 - HY/2012/08

Rev.	Description	Date	Checked
D	GATE & SECTION BB MOVED	29NOV13	BSh
C	RC STRUCTURE TO DEMOLISH SHOWN	04NOV13	pkv
B	SUB-STATION OUTLINE ADDED	28OCT13	pkv
A	FIRST ISSUE	19OCT13	pkv

Designed By	pkv
Drawn By	DAI/GAn
Approved By	SPo
Date	19OCT2013

Main Contractor: Dragages - Bouygues Joint Venture

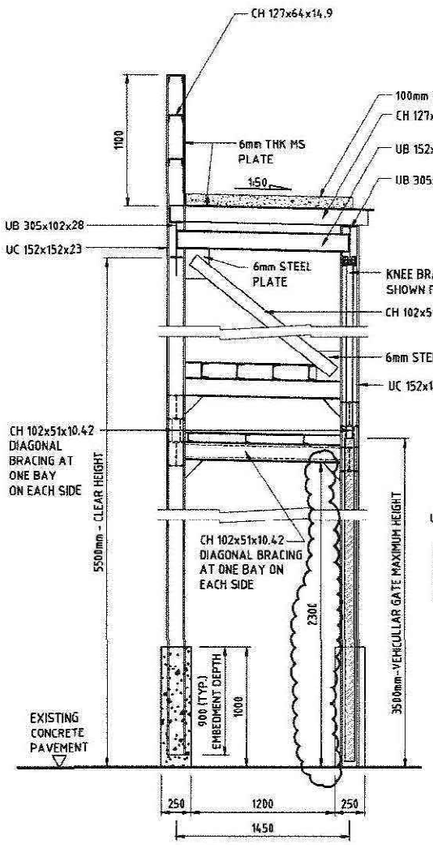
Client: 路政署 HIGHWAYS DEPARTMENT

Contractor's Designer: ARUP Ove Arup & Partners Hong Kong Limited

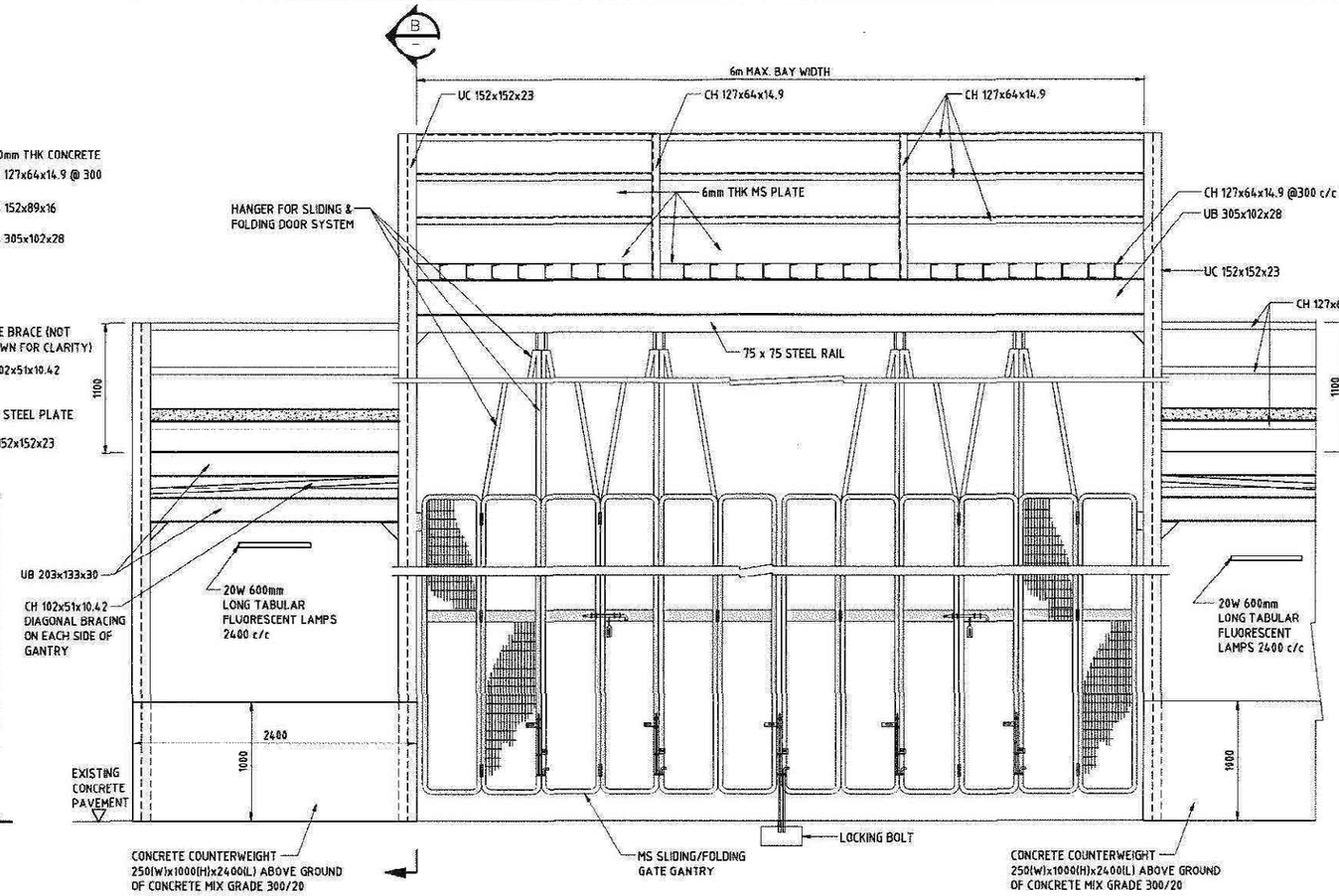
Project: Contract No. HY/2012/08 Tuen Mun - Chek Lap Kok Link - Northern Connection Sub-Sea Tunnel Section

Drawing Title: GENERAL–PORTION 6 DEMOLITION WORKS SITE LAYOUT OF PROPOSED HOARDING AND DEMOLITION WORKS (SHEET 1 OF 2)

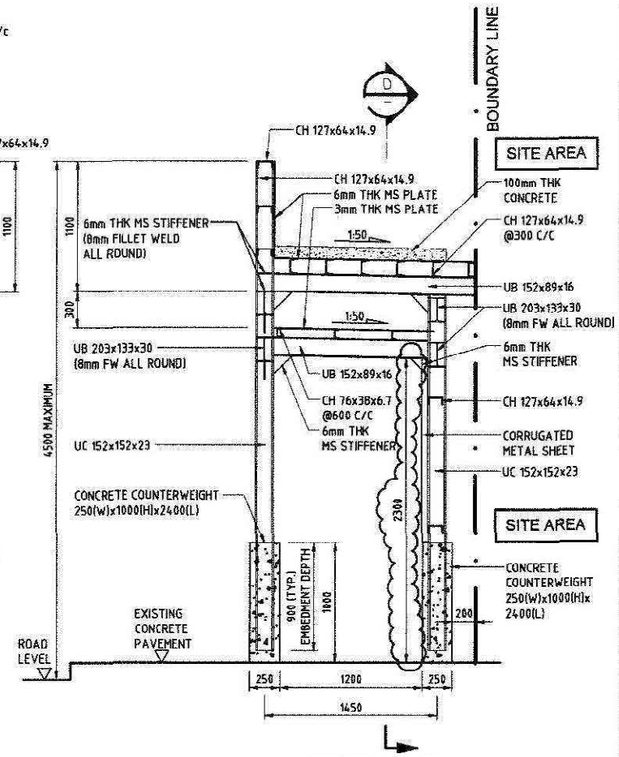
Figure 8.6i



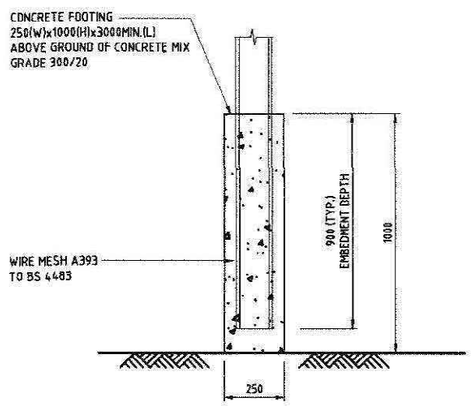
SECTION B-B
SCALE 1:50



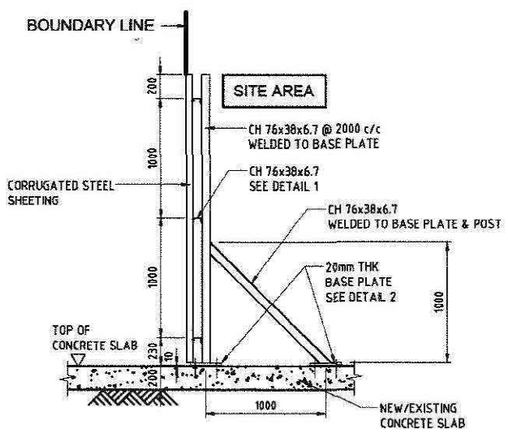
SECTION D-D
SCALE 1:50



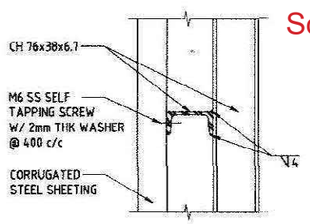
SECTION A-A
PROPOSED COVERED WALKWAY
SCALE 1:50



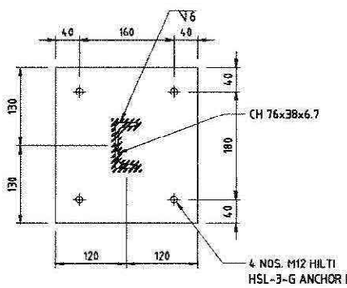
TYPICAL DETAIL OF CONCRETE COUNTERWEIGHT FOR COVERED WALKWAY
SCALE 1:25



SECTION C-C
PROPOSED SINGLE BOARD HOARDING (2440mm HIGH)
SCALE 1:50



DETAIL 1
SCALE 1:10



DETAIL 2
SCALE 1:10

DESIGN ASSUMPTIONS:

A) ALL STRUCTURAL STEELWORK SHALL BE GRADE 250 AND DESIGN COMPLIES WITH STRUCTURAL USE OF STEEL IN HONG KONG, 1987.
B) ALL CONNECTIONS BETWEEN STEEL MEMBERS SHALL BE 6mm FILLET WELD LEG LENGTH ALL AROUND.
C) WIND LOAD IS BASED ON 0.67kPa, i.e. 37% OF THE DESIGN WIND PRESSURE OF 1.82kPa.
D) SAFE BEARING PRESSURE OF SOIL UNDERNEATH PAVEMENT IS 100kPa (OR 125kPa WITH WIND CONDITION)
E) NO OVERHANG OF THE CATCH PLATFORM ON THE SIDE OF THE CARRIAGEWAY.

ATKINS CHINA LTD

Rev.	Description	Date	Checked
F	ICE COMMENTS ADDED	29NOV13	pkv
E	DESIGN ASSUMPTIONS & BEAM HT ADDED	29NOV13	pkv
D	DETAILS REVISED TO BD STANDARD	29NOV13	BSh
C	SECTIONS A-A, B-B & D-D REVISED	04NOV13	pkv
B	REVISED HOARDING (SECTION C-C)	31OCT13	BSh/pkv
A	FIRST ISSUE	19OCT13	pkv

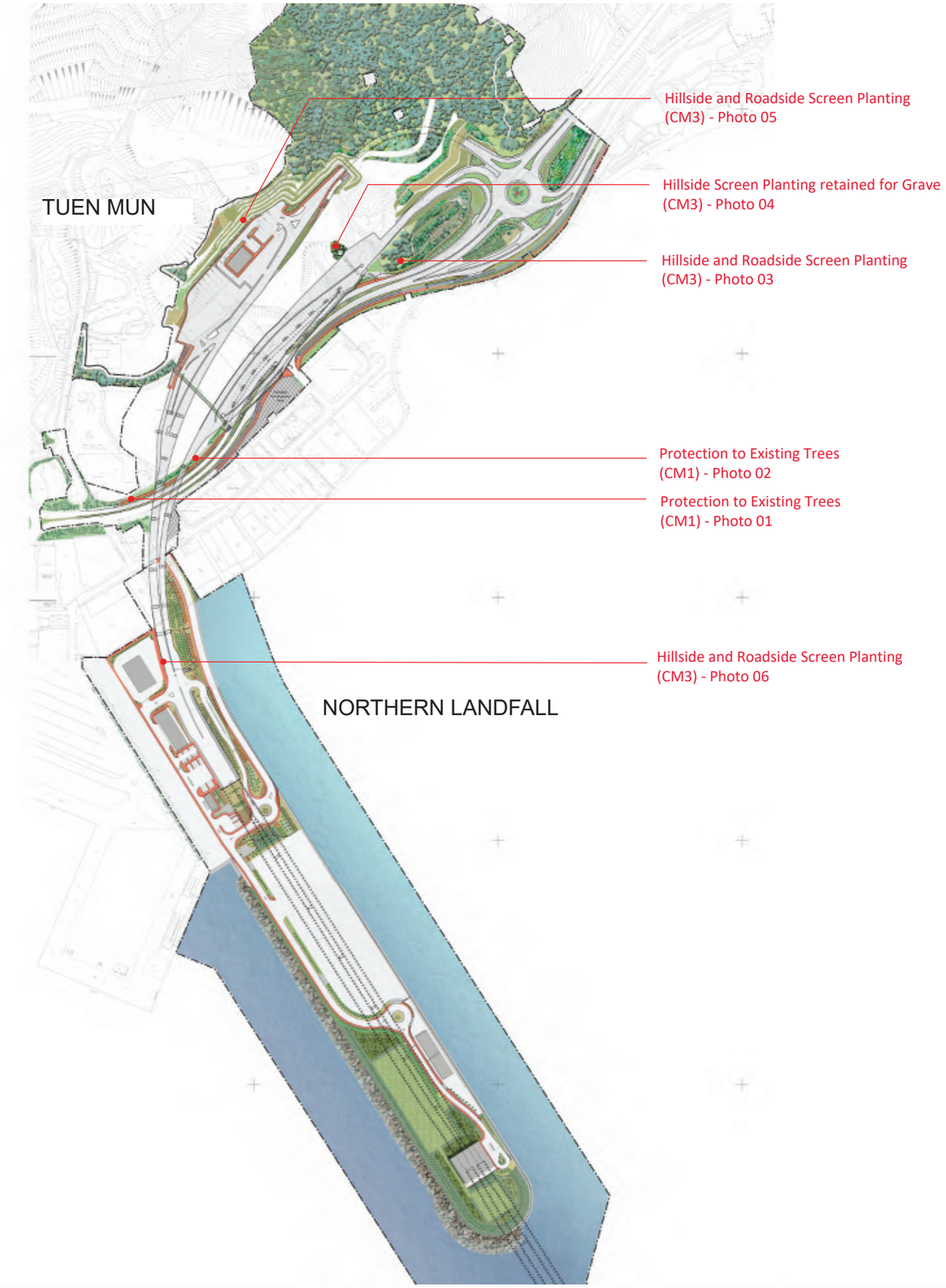
Designed By: pkv
Drawn By: DAI/GAn
Approved By: SPo
Date: 19OCT2013

Main Contractor: Dragages Hongkong — Dragages - Bouygues Joint Venture
Client: HIGHWAYS DEPARTMENT
Contractor's Designer: ARUP Ove Arup & Partners Hong Kong Limited

Project: Contract No. HY/2012/08
Tuen Mun - Chek Lap Kok Link - Northern Connection Sub-Sea Tunnel Section

Drawing Title: GENERAL-PORTION 6 DEMOLITION WORKS SITE LAYOUT OF PROPOSED HOARDING AND DEMOLITION WORKS (SHEET 2 OF 2)

Figure 8.6ii



Protection to Existing Trees (CM1)


Photo 01


Photo 02

Water barriers with panels for on-site tree protection

Hillside and Roadside Screen Planting (CM3)


Photo 03

Photo 04

Vegetation not affected by works was not cleared under site clearance provided some screening of construction works.


Photo 05

Screen planting on rock slope with berm planter

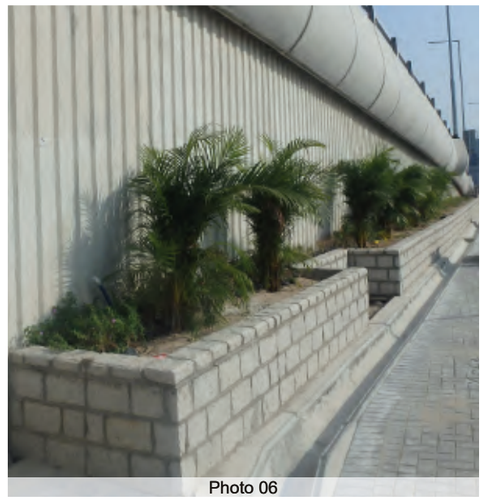


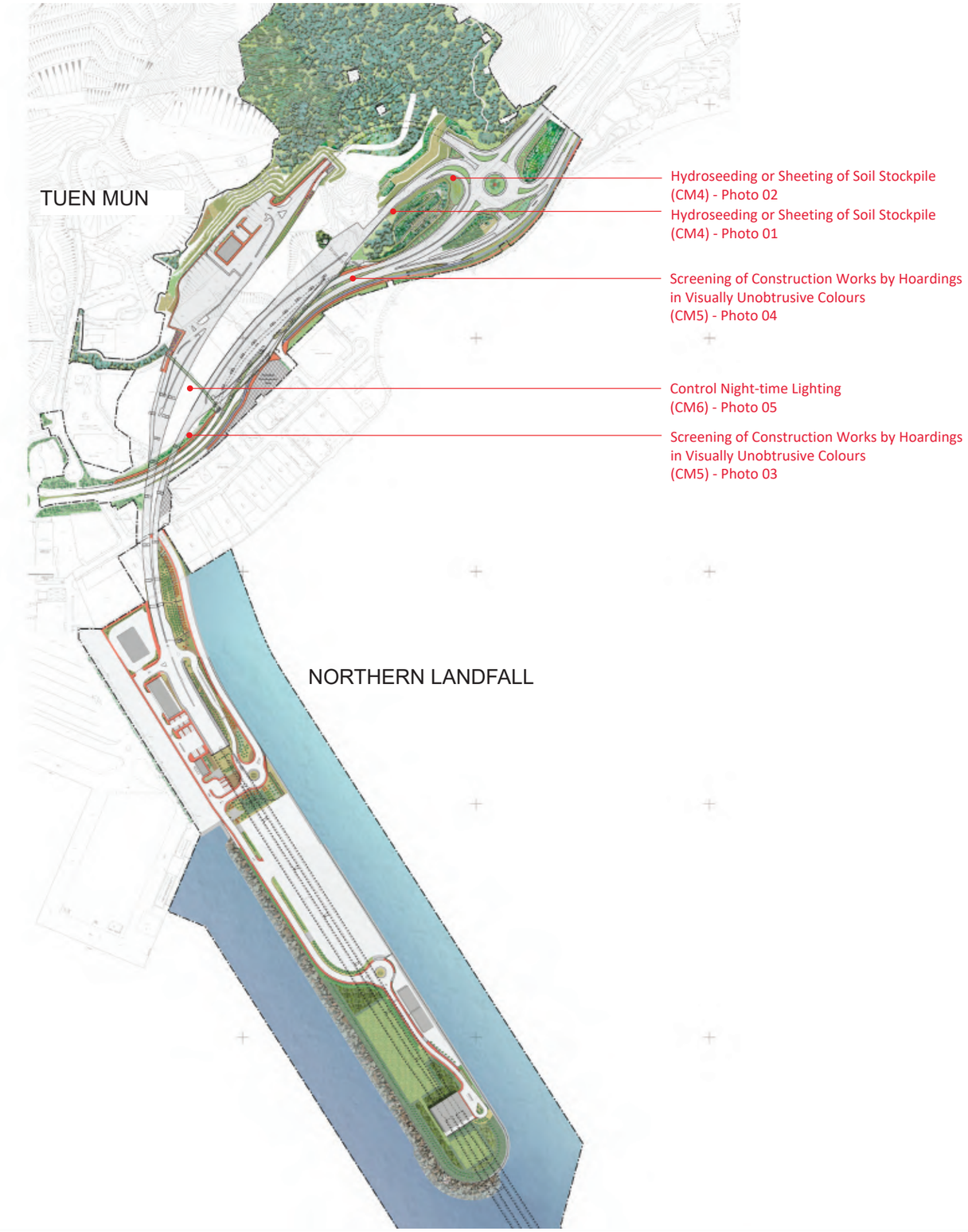
Photo 06

Screen planting to road associated structure

AECOM Imagine it. Delivered.

Agreement No. CE7/2011(HY)
Tuen Mun - Chek Lap Kok Link - Northern Connection Toll Plaza and Associated Works
Mitigation Measures in Construction Phase (Contract 3 - HY/2013/12)

Drawing Title: Figure 8.7



Hydroseeding or Sheeting of Soil Stockpile (CM4)

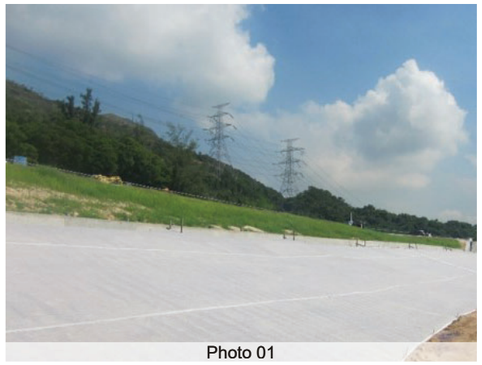


Photo 01


Photo 02

Hydroseeding on soil slopes and sheeting of soil stockpiles to prevent erosion and dust generation with visually unobtrusive material.

Screening of Construction Works by Hoardings in Visually Unobtrusive Colours (CM5)

Photo 03


Photo 04

Barriers with visually unobtrusive colours to screen works.

Control of Night-time Lighting (CM6)

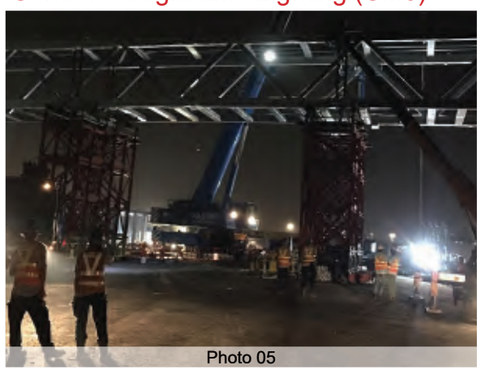
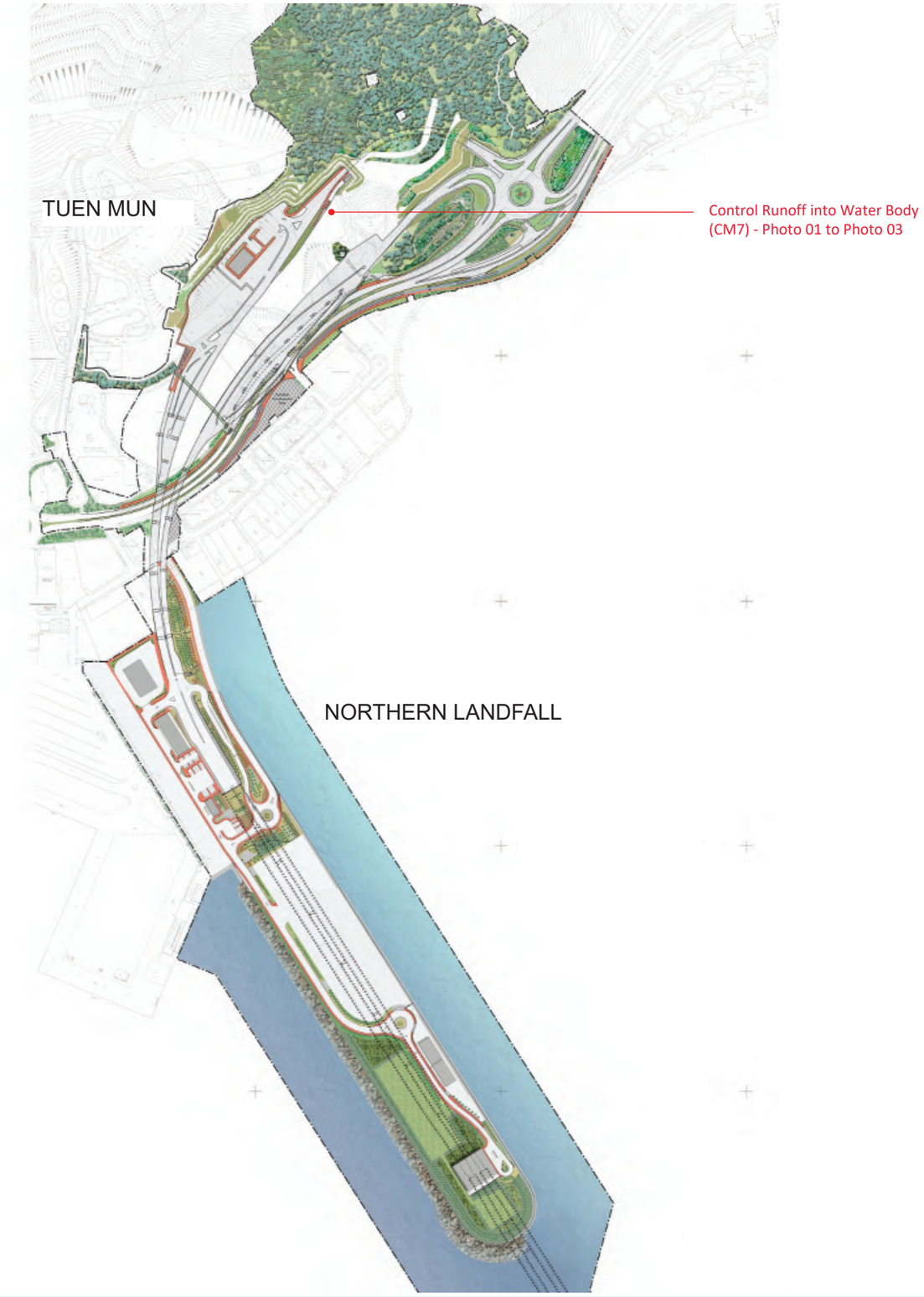


Photo 05

No excessive lighting for night-time operations



Control Runoff into Water Body (CM7)

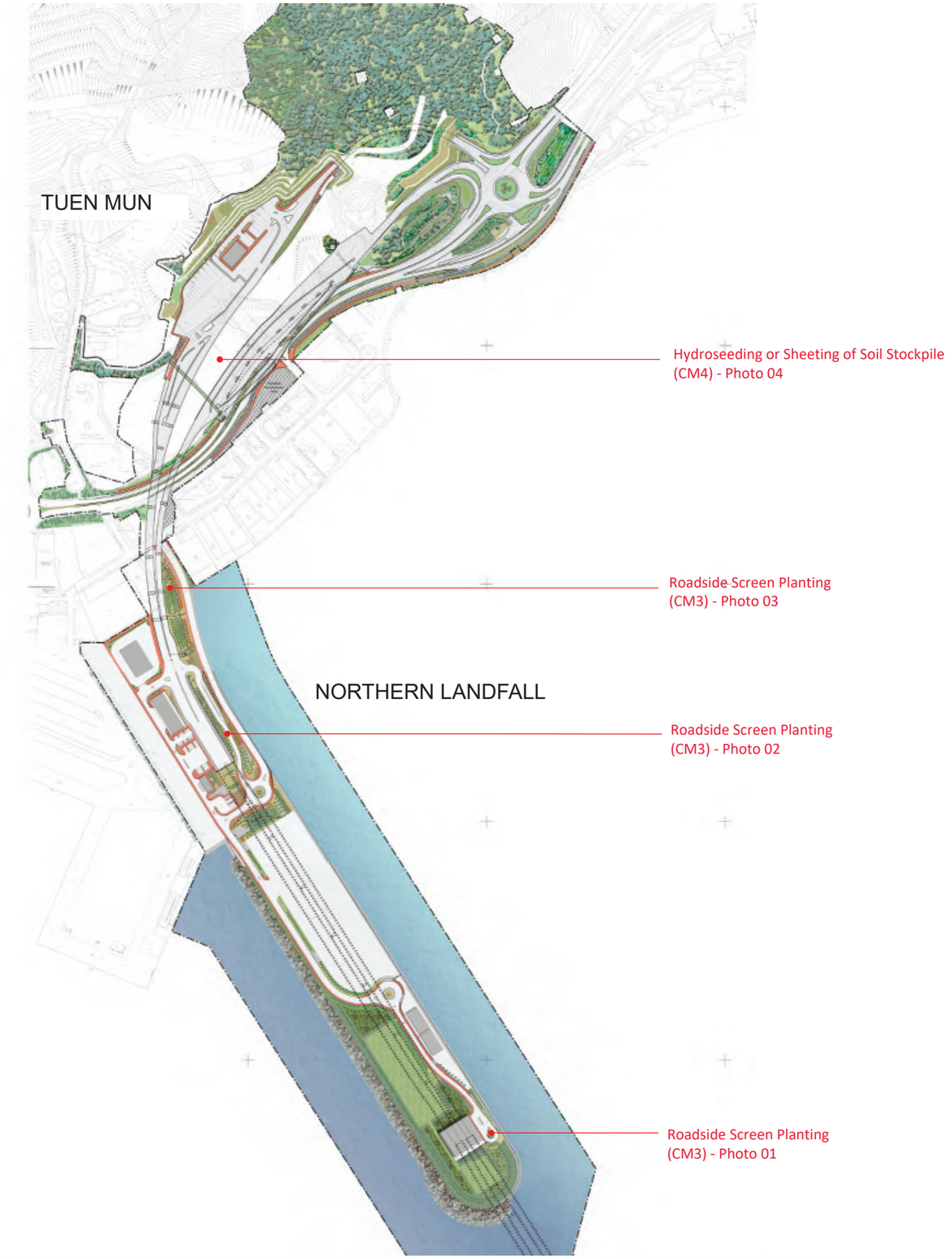
Photo 01

Site runoff was collected and treated in the waste water treatment facilities before discharged into the adjacent water bodies.

Photo 02

Photo 03

Discharge from site shall not endanger public health or causing harm to the sewerage or drainage system. Water sample was collected and tested for compliance with the safety standard.



Hillside and Roadside Screen Planting (CM3)


Photo 01

Roadside screen planting to building


Photo 02

Roadside screen planting to road associated structure


Photo 03

Roadside screen planting to road associated structure

Hydroseeding or Sheeting of Soil Stockpile (CM4)

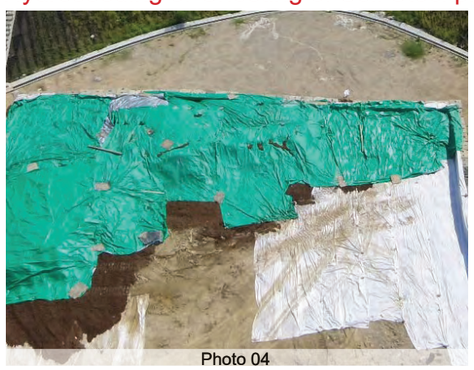
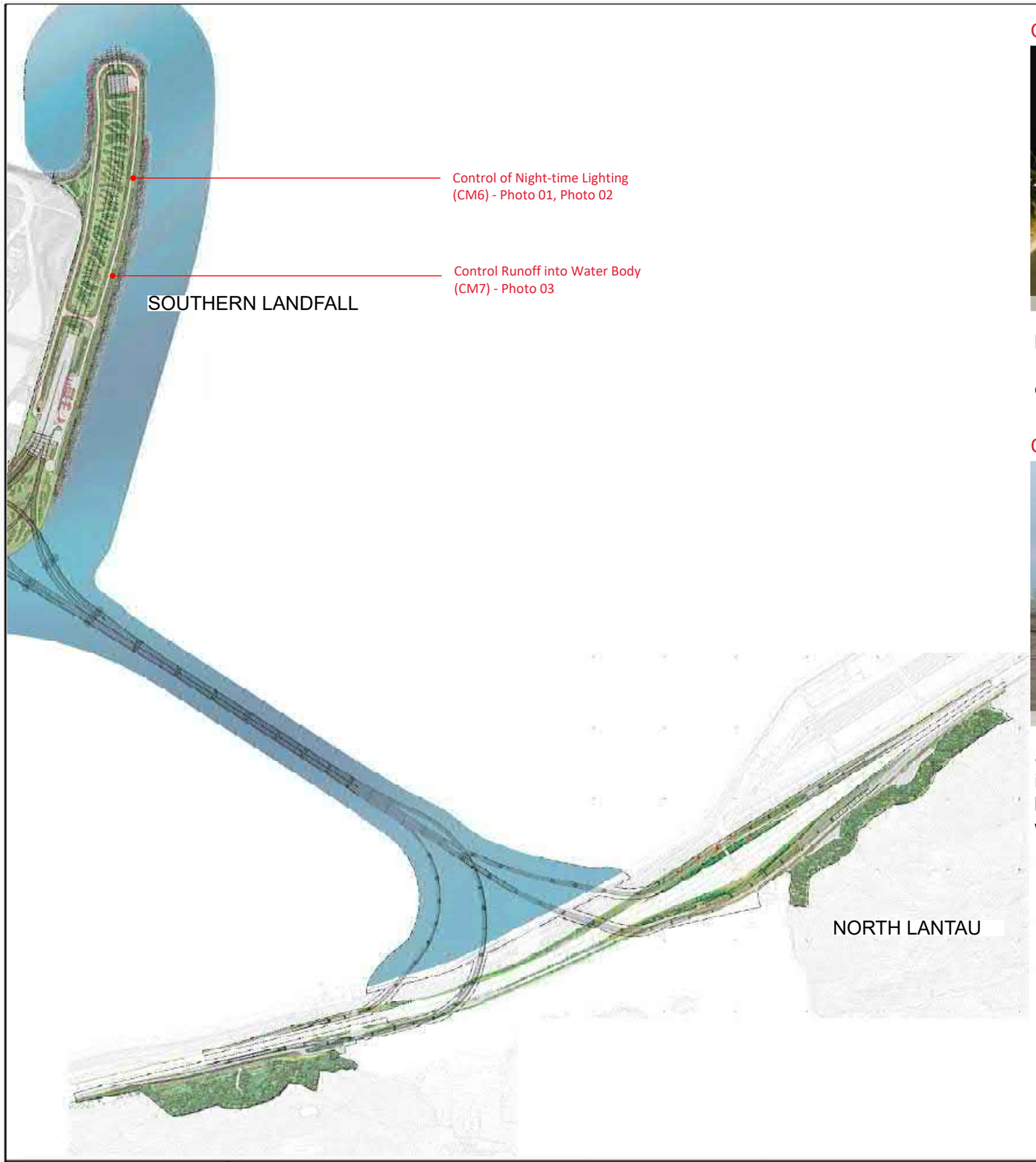


Photo 04

Sheeting of soil stockpiles to prevent erosion and dust generation with visually unobtrusive material



Control of Night-time Lighting (CM6)


Photo 01


Photo 02

Lighting at the Southern Landfall is subject to the requirement on aviation aspects. Lights shall not form a source of glare or any way affect pilots and air traffic controllers.

Control Runoff into Water Body (CM7)


Photo 03

Site runoff was controlled and treated in the waste water treatment facilities before discharged into the adjacent water bodies.

Appendix I

Implementation Schedule

Appendix I

Table I.1 Implementation Schedule of Landscape and Visual Mitigation Measures

EIA Ref.	Mitigation Measures ID No.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to Address	Who to implement the measures?	Location of the Measures	When to implement the measures?	Implementation status (as of November 2020)
Landscape & Visual (Design Measures)							
S10.9.2.2	DM1	The large surface of the retaining wall along the toll plaza area shall adopt a patterned/ smoother finishes and texture design to break the large surface. Climber treatment is proposed to soften the structures.	Minimise visual & landscape impact	Detailed designer	Tuen Mun	Design stage	Fully implemented
	DM2	The colour and shape of the toll control buildings, ventilation building and administration building shall adopt a design which could blend it into the vicinity elements, and the details will be developed in detailed design stage.	Minimise visual & landscape impact	Detailed designer	Tuen Mun, Southern Landfall (HKBCF)	Design stage	Fully implemented
	DM3	Round angle, patterned finishes, and oval shaped pier were considered in the viaduct design, and further details will be developed under ACABAS submission.	Minimise visual & landscape impact	Detailed designer	Tuen Mun, North Lantau	Design stage	Fully implemented
	DM4	Details of the street furniture will be developed in the detailed design stage.	Minimise visual & landscape impact	Detailed designer	Tuen Mun, Southern Landfall (HKBCF), North Lantau	Design stage	Fully implemented
	DM5	Aesthetic design of the viaduct, retaining wall and other structures will be developed under ACABAS submission.	Minimise visual & landscape impact	Detailed designer	Tuen Mun, Southern Landfall (HKBCF), North Lantau	Design stage	Fully implemented

EIA Ref.	Mitigation Measures ID No.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to Address	Who to implement the measures?	Location of the Measures	When to implement the measures?	Implementation status (as of November 2020)
Landscape & Visual (Construction Phase Mitigation Measures)							
S10.9.3.1	CM1	Existing trees on boundary of the Project Area shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas. (Tree protection measures will be detailed at Tree Removal Application stage).	Minimise visual & landscape impact	Contractors of C1 and C3	Tuen Mun, North Lantau	Construction stage	Fully implemented
	CM2	Trees unavoidably affected by the works shall be transplanted where practical. Trees will be transplanted straight to their final receptor site and not held in a temporary nursery. A detailed Tree Transplanting Specification shall be provided in the Contract Specification. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.	Minimise visual & landscape impact	Contractors of C1 and C3, and Contractor of Contract No. DC/2016/01 for the entrusted landscape softworks in C1	Tuen Mun, North Lantau	Construction stage	Works under C3 fully implemented; entrusted landscape softworks by Contract No. DC/2016/10 for the works in C1 to be implemented
	CM3	Hillside and roadside screen planting to proposed roads, associated structures and slope works.	Minimise visual & landscape impact	Contractors of C1, C3 and C4, and Contractor of Contract No. DC/2016/01 for the entrusted landscape softworks in C1	Tuen Mun, North Lantau	Construction stage	Works under C3 and C4 fully implemented; entrusted landscape softworks by Contract No. DC/2016/10 for the works in C1 to be implemented
	CM4	Hydroseeding or sheeting of soil stockpiles with visually unobtrusive material (in earth tone).	Minimise visual & landscape impact	Contractors of C1, C2, C3 and C4	Tuen Mun, North Lantau	Construction stage	Fully implemented
	CM5	Screening of construction works by hoardings around works area in visually unobtrusive colours, to screen works.	Minimise visual & landscape impact	Contractors of C1, C2 and C3	Tuen Mun, North Lantau	Construction stage	Fully implemented
	CM6	Control night-time lighting and glare by hooding all lights.	Minimise visual impact	Contractors of C1, C2, C3 and C4	Tuen Mun, Southern Landfall (HKBCF), North Lantau	Construction stage	Fully implemented
	CM7	Ensure no run-off into water body adjacent to the Project Area.	Minimise landscape impact	Contractors of C1, C2, C3 and C4	Tuen Mun, Southern Landfall (HKBCF), North Lantau	Construction stage	Fully implemented
	CM8	Avoidance of excessive height and bulk of buildings and structures.	Minimise visual & landscape impact	Contractors of C1, C2, C3 and C4	Tuen Mun, Southern Landfall (HKBCF), North Lantau	Construction stage	Fully implemented
	CM9	Recycle/Reuse all felled trees and vegetation, e.g. mulching	Minimise landscape impact	Contractors of C1 and C3	Tuen Mun, North Lantau	Construction stage	Fully implemented

	CM10	Compensatory tree planting shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Felling Application process under ETWBTC 3/2006.	Minimise landscape impact	Contractors of C1, C3 and C4	Tuen Mun, Southern Landfall (HKBCF), North Lantau	Construction stage	Works under C3 and C4 fully implemented; entrusted landscape softworks by Contract No. DC/2016/10 for the works in C1 to be implemented

EIA Ref.	Mitigation Measures ID No.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to Address	Who to implement the measures?	Location of the Measures	When to implement the measures?	Implementation status (as of November 2020)
Landscape & Visual (Operation Phase Mitigation Measures)							
10.9.3.1	OM1	Re-vegetation of affected woodland/shrubland with native species.	Minimise visual & landscape impact	Contractors of C1 and C3	Tuen Mun, North Lantau	Operation stage	Fully implemented
	OM2	Tall buffer screen tree / shrub / climber planting should be incorporated to soften hard engineering structures and facilities.	Minimise visual & landscape impact	Contractors of C1, C3, C4, and Contractor of Contract No. DC/2016/01 for the entrusted landscape softworks in C1	Tuen Mun, Southern Landfall (HKBCF), North Lantau	Operation stage	Works under C3 and C4 fully implemented; entrusted landscape softworks by Contract No. DC/2016/10 for the works in C1 to be implemented
	OM3	Streetscape elements (e.g. paving, signage, street furniture, lighting etc.) shall be sensitively designed in a manner that responds to the local context, and minimises potential negative landscape and visual impacts. Lighting units should be directional and minimise unnecessary light spill.	Minimise visual & landscape impact	Contractors of C1, C2, C3 and C4	Tuen Mun, Southern Landfall (HKBCF), North Lantau	Operation stage	Fully implemented
	OM4	Structure, ornamental tree / shrub / climber planting should be provided along roadside amenity strips, central dividers and newly formed slopes to enhance the townscape quality and further greenery enhancement.	Minimise visual & landscape impact	Contractors of C1, C3, C4, and Contractor of Contract No. DC/2016/01 for the entrusted landscape softworks in C1	Tuen Mun, Southern Landfall (HKBCF), North Lantau	Operation stage	Works under C3 and C4 fully implemented; entrusted landscape softworks by Contract No. DC/2016/10 for the works in C1 to be implemented
	OM5	Aesthetically pleasing design (visually unobtrusive and non-reflective) as regard to the form, material and finishes shall be incorporated to all buildings, engineering structures and associated infrastructure facilities.	Minimise visual & landscape impact	Contractors of C1, C2, C3 and C4	Tuen Mun, Southern Landfall (HKBCF), North Lantau	Operation stage	Fully implemented
	OM6	Avoidance of excessive height and bulk of buildings and structures.	Minimise visual & landscape impact	Contractors of C1, C2, C3 and C4	Tuen Mun, Southern Landfall (HKBCF), North Lantau	Operation stage	Fully implemented

10.10.4.2	-	Approximately 6300 heavy standard trees and light standard trees will be planted to compensate for the loss of existing trees.	Minimise landscape impact	Contractors of C1, C3, C4 (for tree planting within project boundary) and future Contractor of TM-CLKL Project (for tree planting outside project boundary)	Tuen Mun, Southern Landfall (HKBCF), North Lantau	Operation stage	For compensatory trees within project boundary: works under C3 and C4 fully implemented; entrusted landscape softworks by Contract No. DC/2016/10 for the works in C1 to be implemented. For compensatory tree planting outside the project boundary: works by future Contractor of TM-CLKL Project to be implemented.