

Airport Authority Hong Kong

**Hong Kong – Zhuhai – Macao Bridge
Hong Kong Boundary Crossing
Facilities (HKBCF) – Inbound
Carpark A (Phase 1) and Inbound
Carpark B (Phase 1)**

Landscape and Visual Plan

268827

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Abbreviations

Abbreviations	Description
3RS	Three-runway System
AAHK	Airport Authority Hong Kong
AHR	Airport Height Restriction
APS	Automated Parking System
Arup	Ove Arup and Partners Hong Kong Limited
AWE	AsiaWorld-Expo
CFA	Construction Floor Area
CLP	China Light & Power Company Limited
C&SD	Census and Statistics Department
EIA	Environmental Impact Assessment
EIAO	Environmental Impact Assessment Ordinance
EP	Environmental Permit
ER	Environmental Review
EV	Electric Vehicle
FCF	Food Control Facility
FHB	Food and Health Bureau
FTE	Full-time Equivalent
GBA	Guangdong-Hong Kong-Macao Greater Bay Area
GFA	Gross Floor Area
GSE	Ground Support Equipment
HKBCF	Hong Kong Boundary Crossing Facilities
HKP	Hong Kong Port
HKIA	Hong Kong International Airport
HKIAA	Hong Kong International Aviation Academy
HKSAR	Hong Kong Special Administrative Region
HZMB	Hong Kong-Zhuhai-Macao Bridge
ICPs	Inbound Carparks
ITT	Intermodal Transfer Terminal
LEA	Law Enforcement Agency
LR	Landscape Resource
LCA	Landscape Character Area
NEF	Noise Exposure Forecast
OU	Other Specified Uses
OZP	Outline Zoning Plan
PCB	Passenger Clearance Building
PEA Study	Planning, Engineering and Architectural Study for Topside Development at HKBCF Island
RRF	Refuse and Recycling Facility
STP	Sewage Treatment Plant
STT	Short Term Tenancy
TM-EIAO	Technical Memorandum - Environmental Impact Assessment Ordinance
TM-CLKL	Tuen Mun – Chek Lap Kok Link
TSE	Treated Sewage Effluent
VA	Value Added
VCP	Vehicle Clearance Plaza

1 Introduction

1.1 Background

- 1.1.1.1 The Environmental Impact Assessment (EIA) Report (Register No. AEIAR-145/2009) (hereafter referred as “the approved EIA Report) and the Environmental Monitoring and Audit (EM&A) Manual (hereafter referred as “the approved EM&A Manual”) was presented together for the Hong Kong – Zhuhai – Macao Bridge (HZMB) Hong Kong Boundary Crossing Facilities (HKBCF) and Hong Kong Link Road (HKLR) as they are closely interrelated. The EIA Report for the HZMB HKBCF was approved in 2009.
- 1.1.1.2 Pursuant to Sections 10 & 12 of the Environmental Impact Assessment Ordinance (the EIAO), the further Environmental Permit (EP No. FEP-02/353/2009/K) was granted to “Airport Authority” (hereinafter referred to as the “Permit Holder”) in Dec 2020 to construct the designated project Hong Kong-Zhuhai-Macao Bridge (HZMB) Hong Kong Boundary Crossing Facilities (HKBCF) – “Inbound Carpark A (Phase 1) and Inbound Carpark B (Phase 1)” (hereafter referred as “the Project”).
- 1.1.1.3 As stipulated in Condition 2.4 of EP No. FEP-02/353/2009/K, “*The Permit Holder shall deposit with the Director, at least 1 month before the commencement of construction of relevant part of the Project, three hard copies and one electronic copy of a landscape and visual plan incorporating aesthetic architectural design on buildings structures and related infrastructure of the Project, streetscape elements, planting proposals and other measures including night-time lighting control.*”
- 1.1.1.4 To fulfil Condition 2.4 of the EP, the Landscape and Visual Plan of the Project have been prepared, certified by the relevant Environmental Team Leaders (ETLs) (see **Appendix A1**), verified by the Independent Environmental Checker (IEC) (see **Appendix A2**), and submitted to the Director of Environmental Protection (DEP) at least 1 month before the commencement of construction of relevant parts of the contract.
- 1.1.1.5 For HKBCF, Highways Department is comprising the landscape works under Contract No. HY/2019/01 at the current stage, the extent of this contract is shown in **Figure 1.1** for reference. The Landscape and Visual Plan of Inbound Carparks (ICPs) (hereinafter referred to as “this LVP”) has incorporated the tree planting information as presented in the Tree Planting Plan of Contract No. HY/2019/01.
- 1.1.1.6 The LVP of the HZMB HKBCF (Agreement No. CE 13/2010 (CE)) had been previously submitted and approved by the DEP in April, 2021, the report indicates that part of the areas on HKBCF (within the area of Contract no. HY/2013/02 (C2)) will be taken up by Airport Authority Hong Kong (AAHK) for the Project (see **Figure 1.1**). Hence, the landscape and visual mitigation measures implemented under HKBCF contracts in these areas (including 36 trees already planted and 115 trees to be planted) will be superseded and included in this LVP. All the landscape and visual mitigation measures for these affected areas will be fully covered by AAHK’s upcoming works as stipulated in the further EP for the Project (EP No. FEP-02/353/2009/K).

1.2 Project Description

- 1.2.1.1 The construction works under the Project comprise the following provisions:

- (a) 2 nos. above-ground carpark buildings for automated parking systems (APS), namely Inbound Carpark A (Phase 1) & Inbound Carpark B (Phase 1) for the provision of approximately 1,800 and 1,000 automatic parking spaces respectively, including all related structural, foundation, building services, IT, electrical and mechanical systems, and supply and installation of the APS;
- (b) Ancillary facilities including structural, system connection and fitting-out for Departure and Arrival Lounge with check-in counters, waiting area and toilets; integrated checking kiosks; and secondary search area for LEAs; and
- (c) Associated roadworks including modification of the internal service road, vehicle clearance plaza and ITT bonded bus routing; and civil utilities including the reprovisioning of existing facilities such as existing toilet, mobile antenna, CCTV and high-mast lighting etc.

1.2.1.2 Landscape works under the Project include the following:

- (a) Construction of landscape hardworks, including
 - Pedestrian paving
- (b) Construction of landscape softworks, including
 - New Tree planting
 - Shrub planting
 - Groundcover planting
 - Turfing

1.3 Purpose and Scope

1.3.1.1 This LVP for the ICPs aims to demonstrate the landscape and visual design and mitigation measures adopted in the detail design stage, construction phase and operation phase with reference to Section 14 – Landscape and Visual Impact Assessment (LVIA) of the approved EIA Report and EM&A Manual. Design measures developed during the detailed design stage to remedy and compensate unavoidable impacts in accordance with the approved EIA Report will be discussed in the subsequent sections of this LVP.

2 Tree Felling and Compensatory Tree Planting Proposal in the Affected Areas

2.1 General

2.1.1.1 As stated in **Section 1.1.1.6**, subsequent to the approval of the LVP HZMB HKBCF (Agreement No. CE 13/2010 (CE)) in April 2021, updates which affect the implementation of the landscape and visual mitigation measures implemented under HKBCF contracts in the affected areas (including 36 trees already planted and 115 trees to be planted) are required to be incorporated in this LVP.

2.2 Impacts on Planted Trees and Planned Trees

2.2.1.1 According to the latest design information, 115 nos. of the planned trees and 36 planted trees (under contract No. HY/2019/01) are in direct conflict with the proposed layout of ICPs, the location of these affected trees are indicated in **Figure 2.1**. Summary of the affected trees are listed in **Table 2.1**.

Table 2.1 Summary of the affected trees

Scientific name	Chinese name	Specification ^[1]	Spacing	Quantity
<i>Cassia siamea</i>	鐵刀木	Standard Tree	4	10
<i>Jacaranda acutifolia</i>	藍花楹	Standard Tree	4	129
<i>Plumeria rubra</i>	雞蛋花	Standard Tree	4	12

[1] Specification: Standard Tree shall be in accordance with GS clause 3.14

2.3 Tree Felling and Compensatory Tree Planting Proposal

2.3.1.1 Total 36 planted trees (*Jacaranda acutifolia* 藍花楹) are proposed to be felled. Given this species is vulnerable to strong winds due to its brittle wood, it is not suitable to transplant at the waterfront area. Besides, this species is not the approved tree species of the HKIA APSL (Revision 6.0 August 2021). The felled trees are proposed to compensate at the southern portion on HKBCF. The compensatory tree species should comply with the planting restrictions in respective Zones of HKIA as stipulated in HKIA APSL (Revision 6.0 August 2021). In addition, 115 affected planned trees will be proposed to the new locations. The proposed new locations are shown in **Figure 2.2**. The proposed compensatory planting schedule are listed below in **Table 2.2** for reference:

Table 2.2 Proposed compensatory tree planting species

Species	Chinese Name	Size (Height H x Spread SP) (mm)	DBH(mm)	Spacing (m)	Quantity (No.)
<i>Plumeria rubra</i>	雞蛋花	2000-3500 (H) x 2000- 3000 (SP)	100	4	36
<i>Callistemon viminalis</i>	串錢柳	2000-3500 (H) x 2000- 3000 (SP)	100	4	115

3 Design Considerations

3.1 Landscape and Visual Design Measures in the approved EIA and EM&A Manual

3.1.1.1 In Section 14.3.3.2 of the approved EIA Report and Section 14.2.4 of the EM&A Manual, design measures are proposed as landscape and visual mitigation measures during detailed design stage. These mitigation measures are considered and will be adopted during construction as far as practicable.

3.1.1.2 Some of these design measures are applicable to HZMB HKLR but not HKBCF. Relevance of these design measures to the Project will be discussed in Section 5.

3.1.1.3 The design measures as extracted from Section 14.3.3.2 of the approved EIA Report are listed below for easy reference.

- Roadside planting and planting along the edge of the reclamation is proposed;
- Transplanting of mature trees in good health and amenity value where appropriate and reinstatement of areas disturbed during construction by compensatory hydro-seeding and planting;
- Protection measures for the trees to be retained during construction activities;
- Optimizing the sizes and spacings of the bridge columns;
- Fine-tuning the location of the bridge columns to avoid visually-sensitive locations;
- Aesthetic design of the bridge form and its structural elements for HKLR, e.g. parapet, Soffit, columns, lightings and so on;
- Considering the decorative urban design elements for HKLR, e.g. decorative road lightings;
- Maximizing new tree, shrub and other vegetation planting to compensate tree felled and vegetation removed;
- Providing planting area around peripheral of HKLR and HKBCF for tree planting screening effect;
- Providing salt-tolerant native trees along the planter strip at affected seawall and newly reclaimed coastline;
- For HKBCF, providing aesthetic architectural design on the related buildings (e.g. similar materials for Passenger Clearance Building (PCB) building facade to Airport buildings, roof planting and subtle materials for other facilities buildings and so on), and the related infrastructure (e.g. parapet planting and transparent cover for elevated footbridges) to provide harmonic atmosphere of the HKBCF;
- Fine-tuning the sizes of the structural members to minimize the bulkiness of buildings and adjustment of building arrangement to minimise disturbance to surrounding vegetation in the HKBCF; and
- For HKLR, providing aesthetic design on the viaduct, tunnel portals, at-grade roads and reclamation (e.g. subtle colour tone and slim form for viaduct to

minimize the bulkiness of the structure and to blend the viaduct better with the background environment, featured form of tunnel portals, roadside planting along at-grade roads and landscape berm on & planting along edge of reclamation area) to beautify the HKLR alignment.

3.2 Landscape Design Considerations

- 3.2.1.1 HKBCF is located very close to the Hong Kong International Airport (HKIA) and underneath the air-flight route. In this connection, all landscape planting proposed have to adhere to the HKIA Approved Plant Species List (APSL) (Revision 6.0 August 2021) (see **Appendix B**).
- 3.2.1.2 According to the zoning plan of the Airport Island for existing platform and future Third Runway System (3RS) presented as Figure 1 in the HKIA APSL (Revision 6.0 August 2021), the works areas of ICPs fall within Zone 2a. The relevant restrictions on planting design in Zone 2 and Zone 2a are extracted below for easy reference:

Section 5 – Zone 2

*In this zone climbers, palms, cycads, trees or shrubs are acceptable only if they do not produce fleshy fruit. Species, height and canopy structure of most of the existing, planted palms, cycads and trees have been strictly reviewed and managed to control their spread and height so as not to be attractive to birds. With the support of routine bird monitoring data and practical tree maintenance practice, the majority of the existing palms, cycads and trees have been restricted to a height range of 5-10m. The exceptions are some areas with mature trees or tree groups (such as *Casuarina equisetifolia* along Chun Wan Road, and *Delonix regia* next to Catering Road West) that are at least 10m in height, which have been present since airport inception (Figure 2). These trees and tree groups are present along busy roads (e.g. Chun Wan Road and Catering Road West) and are separated from the runway by tall buildings. Implementing a height restriction (5-10m) on these existing trees may require excessive pruning of canopies, which could negatively influence overall tree structures. Routine bird monitoring has revealed that these areas are not very attractive to birds. In addition, for all existing planted palms, cycads and trees, their suitability and horticultural maintenance practice will be regularly reviewed by AAHK, and their attraction to birds will be monitored by AAHK's bird control service consultant.*

As a precautionary measure and for effective horticultural maintenance, a height restriction of 5-10m applies to future planting of palms, cycads and trees; in addition, trees that could produce a spreading crown and/or develop a tall structure should be avoided. The selection of small trees is preferred as a long-term management and maintenance approach to future planting in this zone.

Future planting of palms, cycads, ravenala, bamboos and trees should be in groups of 50 individuals or fewer. The area of each tree group should not exceed 150m², and shrubs / climbers should be planted in areas of no more than 500m². Routine horticultural maintenance should be carried out to maintain vegetation groups of smaller sizes as far as practical. The height restriction of existing and newly-planted shrubs is 1.5m.

Existing planted palms, cycads, ravenala, bamboos, trees and shrubs are monitored by AAHK's bird control service consultant for usage by birds, and by AAHK. The planted area can be no more than 500 m² for palms, cycads ravenala,

bamboos and trees, and 1,000m² for shrubs and climbers. The linear segregation for adjacent groups of palms, cycad, ravenala, bamboo, trees and shrubs should be at least 50m; however, this segregation restriction can be relaxed if the plantation is assessed as not creating significant or hazardous attraction to birds by AAHK's bird control service consultant.

Trees that produce fleshy fruits should be avoided in future planting in Zone 1, 2, 2a and areas in Zone 3 close to the runway and the airfield. Should new fleshy fruit-bearing tree individuals be proposed and/or planted in these zones, strong justification for such proposal should be provided.

Section 5 – Zone 2a

Zone 2a has been formulated based on existing planting guidelines and maintenance practice in Zone 2, including a prohibition on planting fleshy fruit bearing plants and a requirement for regular shrub pruning, to avoid creating a habitat that might be used by large numbers of birds, in particular hazardous species. The relaxation of planting area for shrubs and trees releases landside area (e.g., planting areas underneath highways with high vertical clearance and considerable sunlight from both sides) for soft landscaping and tree transplanting in the future.

Most of the plant species that are acceptable in Zone 2 are permitted in Zone 2a. However, in view of the more exposed environment at HKP, trees that are vulnerable to strong wind should be avoided. Any landscape proposals for new tree planting or transplantation to this zone should take into account sensitivity to exposed sites, and be reviewed by the Airfield Department for approval on a case-by-case basis.

Future planting of shrubs and climbers should be in areas of no more than 1000m², while the height restriction on newly-planted shrubs remains at 1.5m. Planting of palms, cycads, ravenala, bamboos and trees should be in groups not exceeding 500m², with a linear separation of tree groups of at least 50m. The height restriction on palms, cycads and trees is 5-10m, and planting of small-sized palms, cycads and trees are preferable as a long-term plant management approach in this zone. Should tree species of a mature size exceeding 10m be planted in the future, routine horticultural maintenance should be carried out to control height.

Transplantation of trees from the airport island to the HKP is acceptable if the above principles are adopted. Planting guidelines and restrictions on newly planted trees in Zone 2a are also applicable to the trees transplanted to HKP.

3.2.1.3 Within Zone 2a, other than the tree planting restrictions stipulated in HKIA APSL (Revision 6.0 August 2021), the following also pose constraints on tree planting and landscape treatment on the HKBCF:

- **Public Lighting Design Manual (PLDM) (2nd Edition: September 2006)**

As stipulated in PLDM (2nd Edition: September 2006), “trees shall be planted 5m away from the lighting columns”. Hence, there is a no tree zone with a 5m radius at each of the public lighting column on the HKBCF.

- **Areas Reserved for Future Development**

There are a few areas on the HKBCF which are reserved for potential future development as shown in **Figure 3.1**. Tree planting is not recommended in

these areas because trees are anticipated to be removed in these areas in the near future to cater for future development.

- **Areas under Shade**

Areas under shade are not suitable for tree planting as the environment is not favourable for healthy development of trees. Such areas include places under the canopy cover of various building structures and under viaducts.

- **Systematic Identification of Maintenance Responsibility (SIMAR) Slopes**

Trees are not recommended on SIMAR slopes because the SIMAR slopes are on the embankments of viaducts. Trees may affect the sightline of road / viaduct traffic. Also, tree failure on these SIMAR slopes may pose safety hazard to road users.

- **Hard-paved Areas**

Tree planting is not feasible in hard-paved areas reserved for road traffic access.

- **Underground Utilities and Structures**

Reasonable amount of land area is reserved for accommodation of underground public utilities and under structures. Tree planting in these areas are undesirable because trees may obstruct the necessary maintenance works of underground utilities and structures.

3.2.1.4 In addition, to minimize potential landscape and visual impact, other than maximizing greening opportunities, aesthetic architectural design on all above-ground structures to provide a harmonized effect on HKBCF and the adjacent Airport Island is therefore also a key design consideration.

4 Adopted Design Measures in Detail Design Stage

4.1 Landscape and Visual Design Measures Adopted in Inbound Carparks Project

- 4.1.1.1 During the detailed design stage, the proposed landscape and visual design measures in Section 14.3.3.2 of the approved EIA Report and Section 14.2.4 of the EM&A Manual are considered. They are proposed and adopted as far as practicable.
- 4.1.1.2 The following sections summarize the development of relevant design measures relevant to the Project as recommended in the approved EIA Report and EM&A Manual.

Table 4.1 Adopted Design Measures

Design Measures in the Approved EIA Report and EM&A Manual	Applicable/ Non-Applicable to ICPs	Justifications
Roadside planting and planting along the edge of the reclamation is proposed	Not applicable to the Project	No reclamation works is proposed in the Project.
Transplanting of mature trees in good health and amenity value where appropriate and reinstatement of areas disturbed during construction by compensatory hydro-seeding and planting	Not applicable to the Project	No mature trees are found within the development area of ICPs. Hence, transplantation of mature trees is not relevant to the Project. For the disturbed areas within the development boundary of ICPs, they will be reinstated to their former state with hydroseeding and planting up to the satisfaction of Airport Authority, the future maintenance agent of the reinstated areas.
Protection measures for the trees to be retained during construction activities	Not applicable to the Project	No trees are proposed to be retained.
Optimizing the sizes and spacings of the bridge columns	Not applicable to the Project	This design measure is applicable to HKLR, not HKBCF.
Fine-tuning the location of the bridge columns to avoid visually-sensitive locations	Not applicable to the Project	This design measure is applicable to HKLR, not HKBCF.
Aesthetic design of the bridge form and its structural elements	Not applicable to the Project	This design measure is applicable to HKLR, not HKBCF

Design Measures in the Approved EIA Report and EM&A Manual	Applicable/ Non-Applicable to ICPs	Justifications
for HKLR, e.g. parapet, Soffit, columns, lightings and so on		
Considering the decorative urban design elements for HKLR, e.g. decorative road lightings	Not applicable to the Project	This design measure is applicable to HKLR, not HKBCF.
Maximizing new tree, shrub and other vegetation planting to compensate tree felled and vegetation removed	Applicable to the Project	Total 36 affected planted trees are proposed to be felled and compensated at the promenade on HKBCF. The proposed location for the compensatory trees is shown in Figure 2.2 .
Providing planting area around peripheral of HKLR and HKBCF for tree planting screening effect	Not applicable to the Project	No additional visual impacts will be generated by the Project (refer to Section 5 of this LVP).
Providing salt-tolerant native trees along the planter strip at affected seawall and newly reclaimed coastline	Not applicable to the Project	No reclamation works is proposed in the Project.
For HKBCF, providing aesthetic architectural design on the related buildings (e.g. similar materials for PCB building facade to Airport buildings, roof planting and subtle materials for other facilities buildings and so on), and the related infrastructure (e.g. parapet planting and transparent cover for elevated footbridges) to provide harmonic atmosphere of the HKBCF	Applicable to the Project	<p>For the proposed aesthetic architectural design on the ICPs, the design of the façade elevation (as shown in Figure 4.1 and 4.3) has adopted a sinuous and organic form that echoes the repeating wave elements in the vicinity, including the surrounding sea, the mountain ridge in the backdrop, the Airport terminal building and the PCB canopy.</p> <p>The use of transparent glass is necessary to comply with fire safety regulations and allows for the provision of necessary openable windows for smoke control. The modular and pixelated waveform of the elevation also evokes high-tech design (as shown in Figure 4.2 and 4.4) to reflect the automated parking system housed within.</p>

Design Measures in the Approved EIA Report and EM&A Manual	Applicable/ Non-Applicable to ICPs	Justifications
		<p>In order to comply with Fire Safety regulations, a number of vertical voids are provided throughout the carpark building, with multiple louvres and weather-protection dog house protruding at the R/F. Fireman lifts and staircases are also provided at regular spacing to provide maintenance and emergency access and means of escape, which have protruding machine rooms at the R/F as well. These, along with the large number of protruding machine rooms for the vehicle lifts needed to operate the automatic parking system, create a highly complex and irregular roof layout which make it difficult to provide roof greening for the ICPs.</p> <p>Due to the complex and strict security concerns at the site, the majority of the at-grade area outside the building extent are reserved for the Integrated Checking Kiosk and Secondary Search Area to provide security checking and operations as required by the LEAs. Additionally, the existing verge area between Shun Hang Road and the internal service road will be reduced to 2.5m which will be too narrow for tree planting. Soft landscape similar to the existing turfing shall be provided along the roadside at this location.</p> <p>In addition, a “no-man zone” concept is adopted to operate the automated parking system in the two inbound carparks. The proposed car-parking facilities are at the Hong Kong Boundary Crossing area/ Closed Area and within the restricted zone, in which the facility owner or operator must ensure a proper facility security to prevent unauthorised access or activities. Automated Parking System (APS), where the vehicle storage is an</p>

Design Measures in the Approved EIA Report and EM&A Manual	Applicable/ Non-Applicable to ICPs	Justifications
		<p>unmanned zone (no-man zone) to avoid the possibility of breaching any current HK legislations, is adopted for accommodating the inbound vehicles in order to confine and control the access within the area. Adoption of APS minimizes access to the no-man zone (vehicle storage, which is 1/F and above) even due to necessary operation and maintenance. Thus, nonessential provisions should be refrained to avoid possible disruption and/or intrusion to the no-man zone.</p> <p>Besides isolation between no-man zone (1/F and above) and public area, Visitor Departure zone (M/F) and Arrival zone (G/F) of the proposed car-parking facilities are required to be segregated in order to tally with the operation and security arrangement as Passenger Clearance Building (PCB). Demarcation among the Departure zone (M/F), Arrival zone (G/F), Closed Area and Restricted Area is not simply by sectional lines in stratum, but also along elevations. Thus, nonessential provisions and or connection between Departure zone (M/F) and Arrival zone (G/F) should be refrained similar to the isolation principle of no-man zone & public area arrangement. It is therefore considered not desirable to provide any greenery within the two inbound carparks to strike a balance between the operation and security needs.</p> <p>As a result, further landscape measures have been explored on the ground level area within the site boundary and illustrated in Figure 4.6 and Figure 6.1. An addition of about 600 m² greenery areas have been proposed at the ground floor of Carpark B to maximise the greening opportunities.</p>

Design Measures in the Approved EIA Report and EM&A Manual	Applicable/ Non-Applicable to ICPs	Justifications
<p>Fine-tuning the sizes of the structural members to minimize the bulkiness of buildings and adjustment of building arrangement to minimise disturbance to surrounding vegetation in the HKBCF</p>	<p>Applicable to the Project</p>	<p>The building shall house a minimum of 1,800 and 1,000 car parking spaces at Inbound Carpark A (Phase 1) and Inbound Carpark B (Phase 1) respectively to meet the required capacity as stipulated in the CE's 2021 Policy Address. As such, the building extent is maximised at the available site area. Additionally, the building shape shall be regular to suit the operation of the APS housed within, and at-grade areas need to be reserved to provide facilities as requested by the Law Enforcement Agencies to ensure safe, secure and segregated users at the automated carpark buildings. Structural members are sized to ensure the strict deflection tolerance and criteria are met to suit the operation of the sensitive equipment of APS. To minimise bulk, the building shall not encroach above the top of the PCB building located in the vicinity.</p>
<p>For HKLR, providing aesthetic design on the viaduct, tunnel portals, at-grade roads and reclamation (e.g. subtle colour tone and slim form for viaduct to minimize the bulkiness of the structure and to blend the viaduct better with the background environment, featured form of tunnel portals, roadside planting along at-grade roads and landscape berm on & planting along edge of reclamation area) to beautify the HKLR alignment.</p>	<p>Not applicable to the Project</p>	<p>This design measure is applicable to HKLR, not HKBCF.</p>

5 Mitigation Measures and Maintenance in Construction and Operational Stages

5.1 Landscape and Visual Mitigation Measures in the Construction and Operational Stages

- 5.1.1.1 In Section 14.3.3.3 of the approved EIA Report and Section 14.2.5 of the EM&A Manual, landscape and visual mitigation measures are proposed for construction and operational stages. These mitigation measures are considered and will be adopted during construction and operation as far as practicable.
- 5.1.1.2 In the approved EIA Report, 14 out of 32 identified Visually Sensitive Receivers (VSRs), namely VSR19 to VSR32, are relevant to HKBCF (see **Figure 5.1**). Hence, only photomontages with mitigation measures targeted for these 14 VSRs are shown in **Figures 5.2** to **Figure 5.15**.
- 5.1.1.3 Given the accessibility and limited viewing angle of the original VSRs in the approved EIA, the location and viewing angle of 8 VSRs have been adjusted in this LVP, the amendments are listed as follows:
- Given VSR19 is no longer accessible, the original location of VSR 19 has revised from Coastal Skyline to Yi Tung Park.
 - Given VSR20 is no longer accessible, the original view of VSR 20 has revised from the roof top of City Gate to the public foot bridge along Tat Tung Road.
 - Given VSR25 is no longer accessible, the original view of VSR 25 has revised from the open sea to the MTR Siu Ho Wan Depot.
 - Given VSR29 is no longer accessible, the original location of VSR 29 has revised from Luk Hop Yuen Kung to the rocky shore along Tai Ho Wan.
 - Given VSR31 is no longer accessible, the original location of VSR 31 has revised from Hong Kong Skycity Marriott Hotel to the construction site near Sky City Road East.
 - The viewing angle for VSR26, VSR28 and VSR 32 have revised to direct towards the proposed development.
- 5.1.1.4 Implementation details of mitigation measures under the Project are summarized in below table. AAHK will be responsible for the implementation of the respective mitigation measures, including the landscape construction works and the maintenance during the establishment period. **Appendix C** shows the implementation schedule of all landscape and visual mitigation measures.

Table 5.1 Landscape and Visual Mitigation Measures in Construction and Operational Stages

Mitigation Code	Mitigation Measures in the Approved EIA Report and EM&A Manual	Applicable/ Non-Applicable to ICPs	Justifications
Construction Phase			
G1	Grass-hydroseed bare soil surface and stock pile areas.	Not applicable to the Project	No reclamation works is proposed in the Project.
G2	Add planting strip and automatic irrigation system if appropriate at some portions of bridge or footbridge to screen bridge and traffic.	Not applicable to the Project	This design measure is applicable to HKLR, not HKBCF.
G3	For HKLR, providing aesthetic design on the viaduct, tunnel portals, at-grade roads and reclamation (e.g. subtle colour tone and slim form for viaduct, aesthetic design of the bridge form and its structural elements including the parapet, soffit, columns and so on and decorative urban design elements and lightings for the HKLR; featured form of tunnel portals, roadside planting along at-grade roads and landscape berm on & planting along edge of reclamation area) to beautify the HKLR alignment.	Not applicable to the Project	This design measure is applicable to HKLR, not HKBCF.
G4	For HKBCF, providing aesthetic architectural design on the related buildings (e.g. similar materials for PCB building facade to Airport buildings, roof planting and subtle materials for other facilities buildings and so on), and the related infrastructure (e.g. parapet planting and transparent cover for elevated	Applicable to the Project	For the proposed aesthetic architectural design on the ICPs, the design of the façade elevation (as shown in Figure 4.1 and 4.3) has adopted a sinuous and organic form that echoes the repeating wave elements in the vicinity, including the surrounding sea, the mountain ridge in the

Mitigation Code	Mitigation Measures in the Approved EIA Report and EM&A Manual	Applicable/ Non-Applicable to ICPs	Justifications
Construction Phase			
	<p>footbridges) to provide harmonic atmosphere of the HKBCF (see Figure 14.3.1 for example).</p>		<p>backdrop, the Airport terminal building and the PCB canopy.</p> <p>The use of transparent glass is necessary to comply with fire safety regulations and allows for the provision of necessary openable windows for smoke control. The modular and pixelated waveform of the elevation also evokes high-tech design (as shown in Figure 4.2 and 4.4) to reflect the automated parking system housed within.</p> <p>In order to comply with Fire Safety regulations, a number of vertical voids are provided throughout the carpark building, with multiple louvres and weather-protection dog house protruding at the R/F. Fireman lifts and staircases are also provided at regular spacing to provide maintenance and emergency access and means of escape, which have protruding machine rooms at the R/F as well. These, along with the large number of protruding machine rooms for the vehicle lifts needed to operate the automatic parking system, create a highly complex and irregular roof layout which make it difficult to provide roof greening for the ICPs.</p> <p>Due to the complex and strict security concerns at the site, the majority of the at-grade area outside the building extent are reserved for the Integrated Checking Kiosk and</p>

Mitigation Code	Mitigation Measures in the Approved EIA Report and EM&A Manual	Applicable/ Non-Applicable to ICPs	Justifications
Construction Phase			
			<p>Secondary Search Area to provide security checking and operations as required by the LEAs. Additionally, the existing verge area between Shun Hang Road and the internal service road will be reduced to 2.5m which will be too narrow for tree planting. Soft landscape similar to the existing turfing shall be provided along the roadside at this location.</p> <p>In addition, a “no-man zone” concept is adopted to operate the automated parking system in the two inbound carparks. The proposed car-parking facilities are at the Hong Kong Boundary Crossing area/ Closed Area and within the restricted zone, in which the facility owner or operator must ensure a proper facility security to prevent unauthorised access or activities. Automated Parking System (APS), where the vehicle storage is an unmanned zone (no-man zone) to avoid the possibility of breaching any current HK legislations, is adopted for accommodating the inbound vehicles in order to confine and control the access within the area. Adoption of APS minimizes access to the no-man zone (vehicle storage, which is 1/F and above) even due to necessary operation and maintenance. Thus, nonessential provisions should be refrained to avoid possible</p>

Mitigation Code	Mitigation Measures in the Approved EIA Report and EM&A Manual	Applicable/ Non-Applicable to ICPs	Justifications
Construction Phase			
			<p>disruption and/or intrusion to the no-man zone.</p> <p>Besides isolation between no-man zone (1/F and above) and public area, Visitor Departure zone (M/F) and Arrival zone (G/F) of the proposed car-parking facilities are required to be segregated in order to tally with the operation and security arrangement as Passenger Clearance Building (PCB). Demarcation among the Departure zone (M/F), Arrival zone (G/F), Closed Area and Restricted Area is not simply by sectional lines in stratum, but also along elevations. Thus, nonessential provisions and or connection between Departure zone (M/F) and Arrival zone (G/F) should be refrained similar to the isolation principle of no-man zone & public area arrangement. It is therefore considered not desirable to provide any greenery within the two inbound carparks to strike a balance between the operation and security needs.</p> <p>As a result, further landscape measures have been explored on the ground level area within the site boundary and illustrated in Figure 4.6 and Figure 6.1. An addition of about 600 m² greenery areas have been proposed at the ground floor of Carpark B to maximise the greening opportunities.</p>

Mitigation Code	Mitigation Measures in the Approved EIA Report and EM&A Manual	Applicable/ Non-Applicable to ICPs	Justifications
Construction Phase			
G5	Vegetation reinstatement and upgrading to disturbed areas.	Applicable to the Project	For the disturbed vegetated areas on the development area of ICPs, they will be reinstated (as shown in Figure 4.5 and Figure 4.6) to their former state with planting up to the satisfaction of Airport Authority, the future maintenance agent of the reinstated areas.
G6	Maximize new tree, shrub and other vegetation planting to compensate tree felled and vegetation removed.	Applicable to the Project	Total 36 affected planted trees are proposed to be felled and compensated at the promenade on HKBCF. The proposed location for the compensatory trees is shown in Figure 2.2 .
G7	Provide planting area around peripheral of and within HKBCF and HKLR for tree screening buffer effect.	Not applicable to the Project	No additional visual impacts will be generated by the Project (refer to Section 5 of this LVP).
G8	Plant salt tolerant native tree and shrubs etc along the planter strip at affected seawall.	Not applicable to the Project	No reclamation works is proposed in the Project.
G9	Reserve of loose natural granite rocks for re-use. Provide new coastline to adopt “natural-look” by means of using armour rocks in the form of natural rock materials and planting strip area accommodating screen buffer to enhance “natural-look” of the new coastline (see Figure 14.4.2 for example).	Not applicable to the Project	No reclamation works is proposed in the Project.

Mitigation Code	Mitigation Measures in the Approved EIA Report and EM&A Manual	Applicable/ Non-Applicable to ICPs	Justifications
Construction Phase			
V1	Minimize time for construction activities during construction period.	Applicable to the Project	The progress of construction works will be closely monitored to ensure that the time for construction activities is minimized during construction period.
V2	Provide screen hoarding at the portion of the project site / works areas / storage areas near VSRs who have close low-level views to the Project during HKLR & HKBCF construction.	Applicable to the Project	The screen hording will be constructed along the ICPs works area to minimise the visual impacts during construction.
Operational Phase			
G10	Provide proper planting maintenance on the new planting areas to enhance the aesthetic degree.	Applicable to the Project	Planting maintenance such as watering, fertilizing, weeding, pruning and mowing etc. will begin immediately after planting. Table 5.5 and Table 5.6 show the planting maintenance principle and schedule in Section 5.3 of this LVP.
V3	Lighting design to minimize glare at night. Decorative road lighting to be considered during detailed design stage.	Applicable to the Project	Decorative road lighting has been considered during the detailed design stage. However, to minimize glare at night and avoid any unnecessary light spill to nearby VSRs (e.g. those on Airport Island and residents at Tung Chung and north Lantau), only minimum functional lighting will be provided for safety and all directional lighting will be facing towards, instead of away from, the HKBCF.

5.2 Re-assessment of Residual Impacts

- 5.2.1.1 In the approved EIA Report of HZMB HKBCF (Register No. AEIAR-145/2009), the potential landscape and visual impact on HKBCF was assessed and mitigation measures were proposed to mitigate the potential impacts to acceptable level. Also, as stipulated in Condition 2.4 of the FEP for the Project (EP No. FEP-02/353/2019/K), this LVP has prepared with implementation details of landscape and visual mitigation measures.
- 5.2.1.2 Total 36 nos. of affected planted trees are proposed to be felled and compensated at the southern portion on HKBCF, the 115 affected planned trees will be proposed to the new locations. The maintenance responsibilities for landscape works will be taken up by AAHK (Permit Holder of EP No. FEP-02/353/2009/K). The details of compensatory proposal have incorporated in **Section 2** of this LVP. Besides, it is anticipated that the Project will not generate any additional visual impacts to the relevant VSRs (refer to the photomontage drawings from **Figures 5.2** to **Figure 5.15**).
- 5.2.1.3 Given the above, the potential landscape and visual impact on HKBCF due to implementation of the Project will be mitigated to acceptable level and will not have unacceptable impact on the landscape and visual mitigation measures implemented by HKBCF.
- 5.2.1.4 In conclusion, the proposed development of the Project do not affect the effectiveness of the landscape and visual mitigation measures as listed in the approved LVP Report of the HZMB HKBCF (Agreement No. CE 13/2010 (CE)). The residual impact will remain acceptable with mitigation measures in this LVP.

5.3 Maintenance and Management

- 5.3.1.1 As specified in Section 14.2.10 of the EM&A Manual, *“The planting works shall be monitored during the first 10 years of the operation phase of the Project”*.
- 5.3.1.2 The Environmental Teams will be responsible for the landscape and visual monitoring works as listed in the monitoring programme in Table 14.1 of the EM&A Manual during construction and the establishment period. The landscape and visual monitoring works shall make reference to this LVP once this LVP is endorsed by PlanD/ EPD. For reporting and submission on landscape and visual monitoring, for both construction and the establishment periods, the ET will submit the report to the IEC.
- 5.3.1.3 After the establishment period, the monitoring of long-term management of planting works in the remaining 9 years of the operational stages of the Project will be taken up by a maintenance agency (engaged by management agency) annually.
- 5.3.1.4 The schedule of management and maintenance responsibilities for landscape works is shown in **Table 5.2** to identify the long-term management and maintenance responsibilities after the establishment period. Such arrangement has been included in the overall Management and Maintenance Schedule for the Project, which has been agreed by AAHK.

Table 5.2 Landscape Works Schedule of Management and Maintenance Responsibilities

Item	Detailed Description	Management Agency	Maintenance Agency
Hard Landscape			
1	Paving works	AAHK	AAHK
2	At-grade planters	AAHK	AAHK
Soft Landscape			
1	At-grade planting works (trees, shrubs, groundcovers and turf)	AAHK	AAHK
2	At-grade irrigation system	AAHK	AAHK

5.3.1.5 Typical operations and scheduling are illustrated in **Table 5.3** to **Table 5.6**.

Table 5.3 Hard Landscape Maintenance Principles

Irrigation	
Operation:	Oversee system and adjust timers as required
Adjust:	Adjust valve water flow rates in field twice a year March and October
Repair:	Repair and replace fittings and pipework as required
Lighting	
Repair:	Fittings as required
Replace:	Replace bulbs as required
Hard Paving	
Repair:	Check and maintain all paving and repair as required
Clear:	Remove debris from drains twice a year and routinely check monthly and after storms

Table 5.4 Hard Landscape Maintenance Schedule

	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Irrigation												
Operation	*	*	*	*	*	*	*	*	*	*	*	*
Adjust valves			*							*		
Repair	*	*	*	*	*	*	*	*	*	*	*	*
Lighting												
Repair	*	*	*	*	*	*	*	*	*	*	*	*
Replace	*	*	*	*	*	*	*	*	*	*	*	*
Hard Paving												
Repair	*	*	*	*	*	*	*	*	*	*	*	*
Clear	*	*	*	*	*	*	*	*	*	*	*	*

Table 5.5 Soft Landscape Maintenance Principles

Planting	
Watering:	Watering to all plants to ensure satisfactory growth and health (manual and automatic irrigation)
Fertilizing:	Twice yearly November and March with emphasis on March application
Fungicide / Insecticide:	Spray as necessary or 3 times a year with approved non-toxic pesticides
Weeding:	Use selective herbicide to reduce maintenance costs as required
Securing:	Adjust tree stakes, guys and ties as required for safety and avoid chaffing of bark

Planting	
Repairing:	After exceptional weather conditions replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site
Litter Removal:	Remove all litter and debris
Pruning Shrubs / GCs:	Prune Shrubs and ground covers twice a year in March and November in accordance with HKIA APSL (Revision 6.0: August 2021) or the latest revision of HKIA APSL for respective zones (i.e. Zone 1 or Zone 2)
Pruning Trees:	Prune trees/limb overhanging branches in accordance with HKIA APSL (Revision 6.0: August 2021) or the latest revision of HKIA APSL for Zone 2 , monthly and as required for safety to minimize usage by birds
Mowing:	Mow grass twice a year in March and October in accordance with HKIA APSL (Revision 6.0: August 2021) or the latest revision of HKIA APSL for respective zones (i.e. Zone 1 or Zone 2)
Tree Risk Assessment:	Undertake Tree Risk Assessment in accordance with the latest edition of <i>Guidelines for Tree Risk Assessment and Management Arrangement</i> promulgated by Greening, Landscape and Tree Management Section of Development Bureau

Table 5.6 Soft Landscape Maintenance Schedule

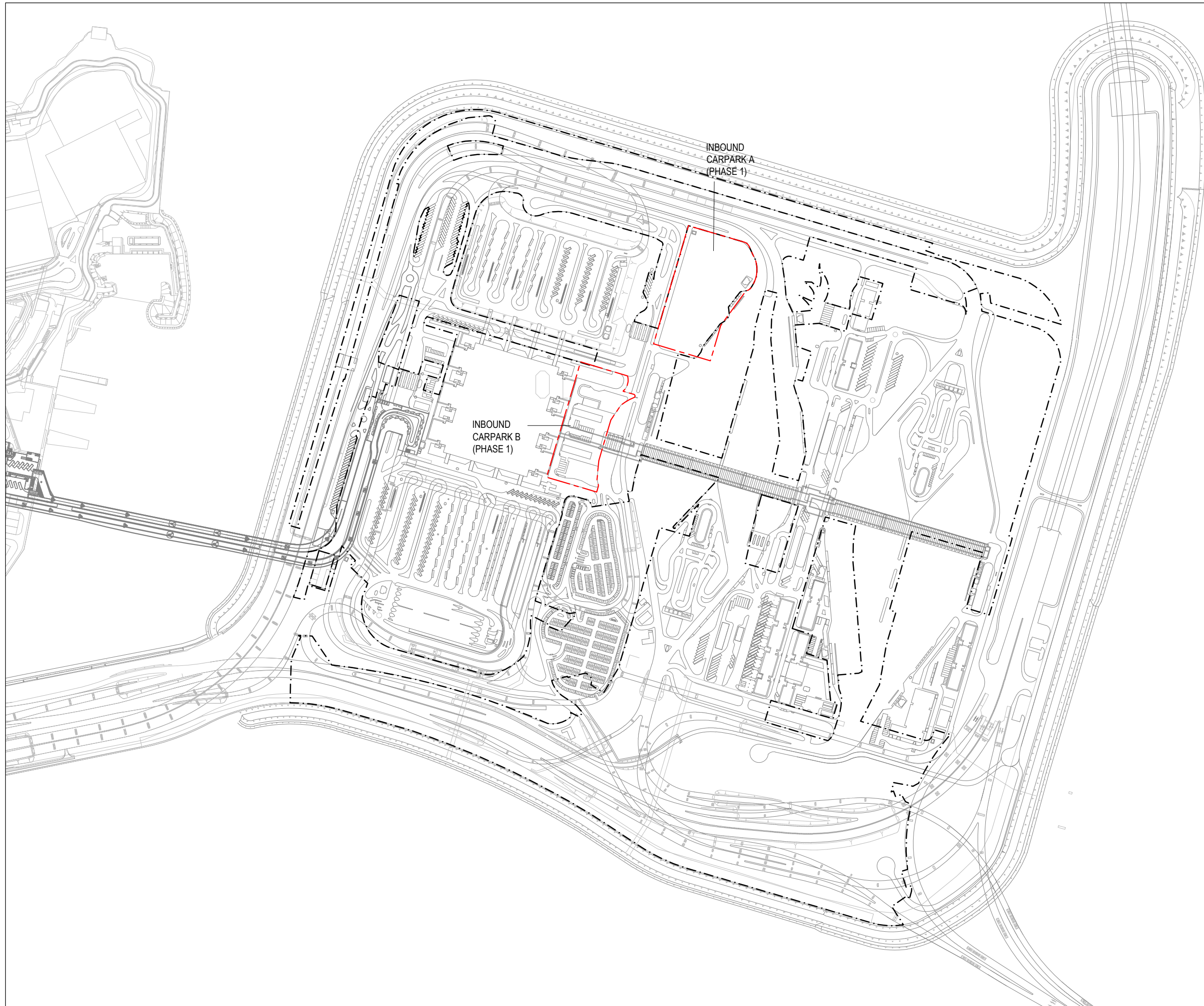
	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Watering *	●	●	●	●	●	●	●	●	●	●	●	●
Fertilizing			●								●	
Fungicide / Insecticide			●						●			●
Weeding		●	●	●	●	●	●	●		●		●
Securing			●						●			
Repairing	As required											
Litter Removal	●	●	●	●	●	●	●	●	●	●	●	●
Pruning Shrubs / GCs			●								●	
Pruning Trees	●	●	●	●	●	●	●	●	●	●	●	●
Mowing			●							●		
Tree Risk Assessment			●									

* Dot size denotes watering frequency, which will be higher in dry season and lower in wet season in general. Exact frequency of watering shall be adjusted from time to time as required to suit the site condition.

6 Summary

- 6.1.1.1 Subsequent to the approval of the LVP of the HZMB HKBCF (Agreement No. CE 13/2010 (CE)) in April 2021, this LVP is required due to the Project initiated by AAHK on HKBCF island. This LVP submission is prepared in fulfilment of Condition 2.4 of the further EP (EP No. FEP-02/353/2009/K). This LVP submission covers the Project site to demonstrate the detail design approach for the Project.
- 6.1.1.2 The Project mainly involves the construction of ICPs buildings and the road infrastructure on the newly reclaimed HKBCF Island. Landscape hardworks include pedestrian paving and landscape softworks include shrub and groundcover planting and turfing.
- 6.1.1.3 The tree planting works implemented under the HKBCF contract (Contract No. HY/2019/01) are in direct conflict with the Project, including 36 trees already planted and 115 trees to be planted. Total 36 affected planted trees are proposed to be felled and compensated and 115 affected planned trees are proposed to plant at the new locations. The compensatory proposal has incorporated in Section 2 of this LVP submission.
- 6.1.1.4 All relevant design and mitigation measures listed in Section 14.3.3.2 of the approved EIA Report (Register No.: AEIAR-145/2009) and Section 14.2.4 of the EM&A Manual have been considered in the detailed design stage. These measures have been incorporated into the landscape design as far as practicable.
- 6.1.1.5 Since HKBCF is located underneath the air-flight route, the planting design also complies with the planting restrictions in respective Zones of HKIA as stipulated in HKIA APSL (Revision 6.0: August 2021). For the works contract(s) of HKBCF awarded in 2021, all planting proposed follows the latest HKIA APSL (Revision 6.0: August 2021).
- 6.1.1.6 To minimize potential landscape and visual impact, other than maximizing greening opportunities, aesthetic architectural design on all above-ground structures to provide a harmonized effect on HKBCF and the adjacent Airport Island is a key design consideration.
- 6.1.1.7 Landscape and visual mitigation measures for construction and operation phases as recommended in Section 14.3.3.3 of the approved EIA Report and Section 14.2.5 of the EM&A Manual will also be adopted as far as practicable. Implementation details of mitigation measures relevant to the Project are described in this LVP submission.
- 6.1.1.8 Detailed arrangement on maintenance and management of landscape works is also presented in this LVP submission to identify the management authorities and maintenance parties and summarize the basic principles for maintenance of landscape works, the details of which will be developed in the O&M Manual.

Figures



LEGEND

- CONTRACT AREA (HY/2019/01)
- PROJECT BOUNDARY

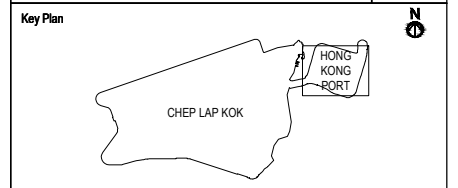


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Consultant's Signatures for Approval		Date
Design Supervisor	ZD	07/21
Checkers	CY	07/21
Authorised Representative		



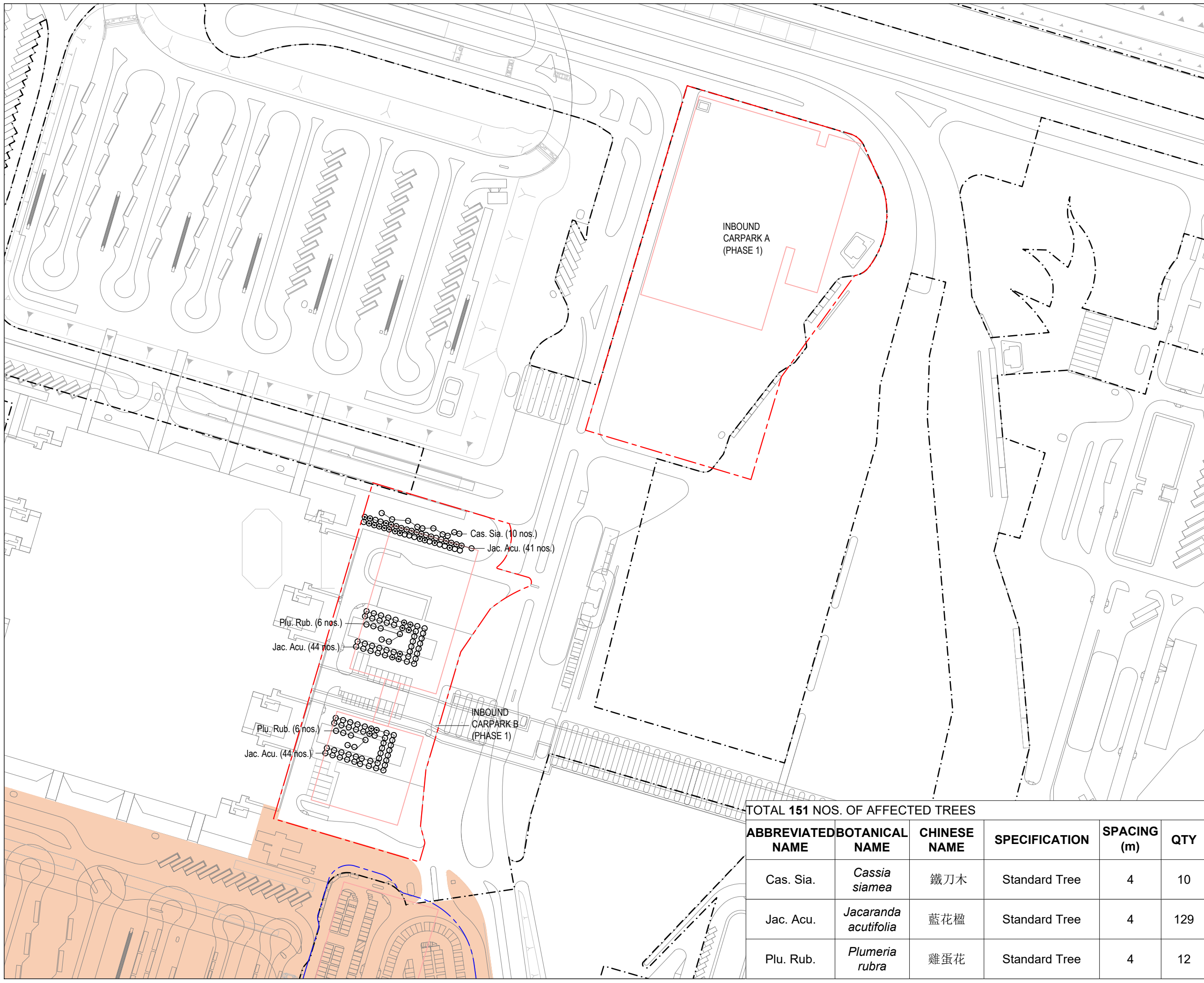
Title

HKBCF DESIGN AND CONSTRUCTION CONTRACT AREA

Drawing No.

FIGURE 1.1

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale	1:6,000 on A3		Rev.



LEGEND

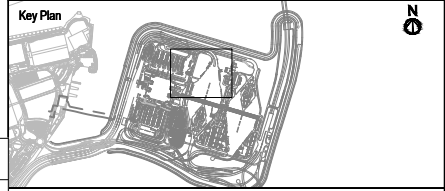
- CONTRACT AREA (HY/2019/01)
- PROJECT BOUNDARY
- HKBCF PROJECT BOUNDARY
- LAND TO BE GRANTED TO AA / NON-CLOSED AREA
- PROPOSED LAND USE / DEVELOPMENT
- PLANNED TREE
- PLANTED TREE



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Design Supervisor	RH	02/22
Checkers	CY	02/22
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TOTAL 151 NOS. OF AFFECTED TREES

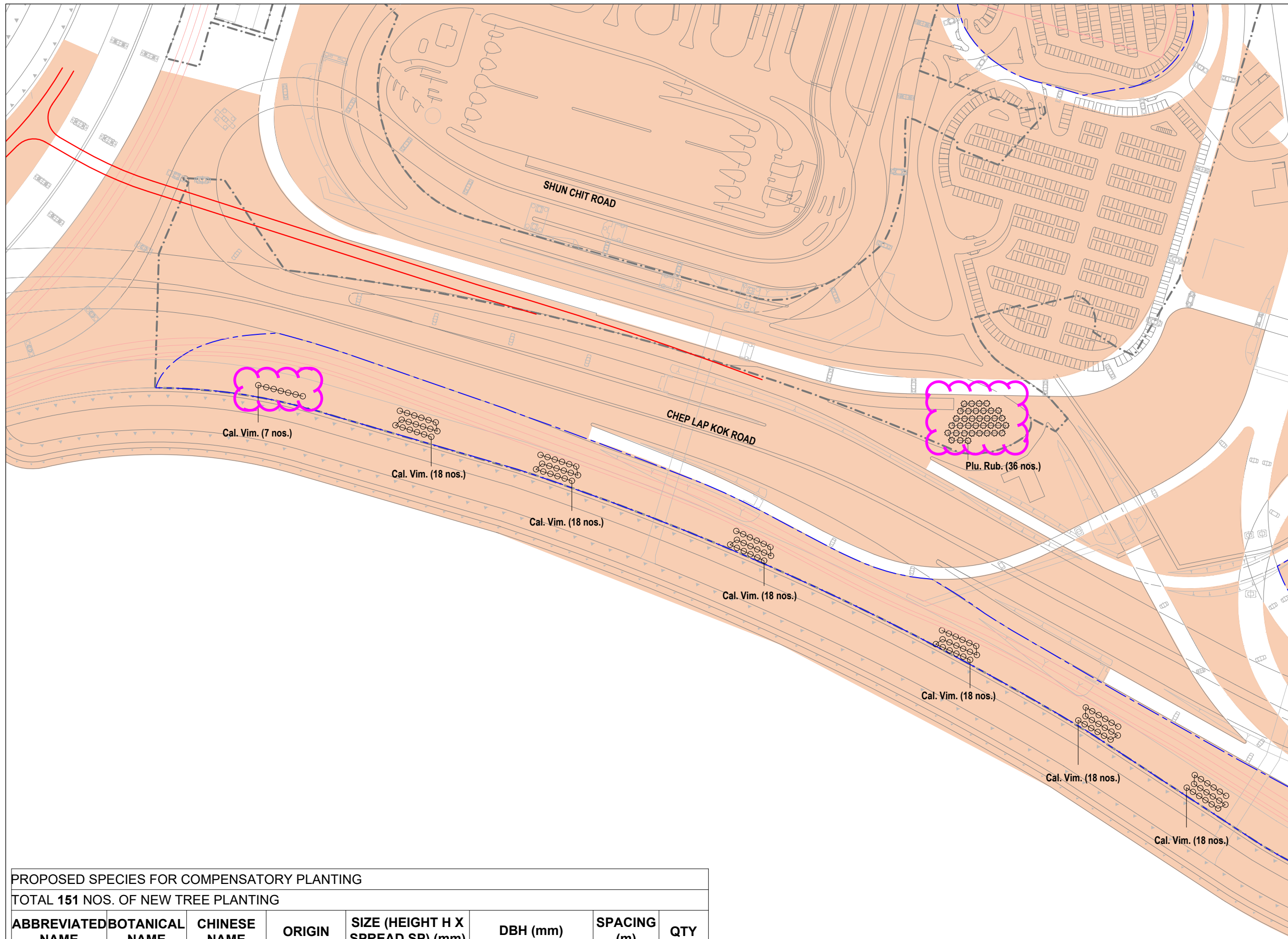
ABBREVIATED BOTANICAL NAME	BOTANICAL NAME	CHINESE NAME	SPECIFICATION	SPACING (m)	QTY
Cas. Sia.	<i>Cassia siamea</i>	鐵刀木	Standard Tree	4	10
Jac. Acu.	<i>Jacaranda acutifolia</i>	藍花楹	Standard Tree	4	129
Plu. Rub.	<i>Plumeria rubra</i>	雞蛋花	Standard Tree	4	12

Title

IMPACT PLAN OF NEWLY PLANTED TREES AND PLANNED TREES WITHIN AFFECTED AREAS

Drawing No.
FIGURE 2.1

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale	1:2,000 on A3	Rev.	1



- LEGEND
- CONTRACT AREA (HY/2019/01)
 - HKBCF POTENTIAL FUTURE DEVELOPMENT
 - LAND TO BE GRANTED TO AA / NON-CLOSED AREA
 - PROPOSED LAND USE / DEVELOPMENT
 - COMPENSATORY TREES (36 NOS.)
 - PLANNED TREES (115 NOS.)

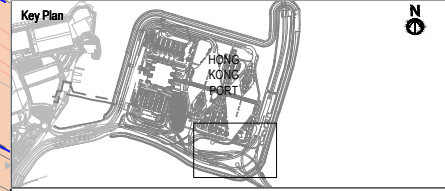


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Design Supervisor	RH	03/24
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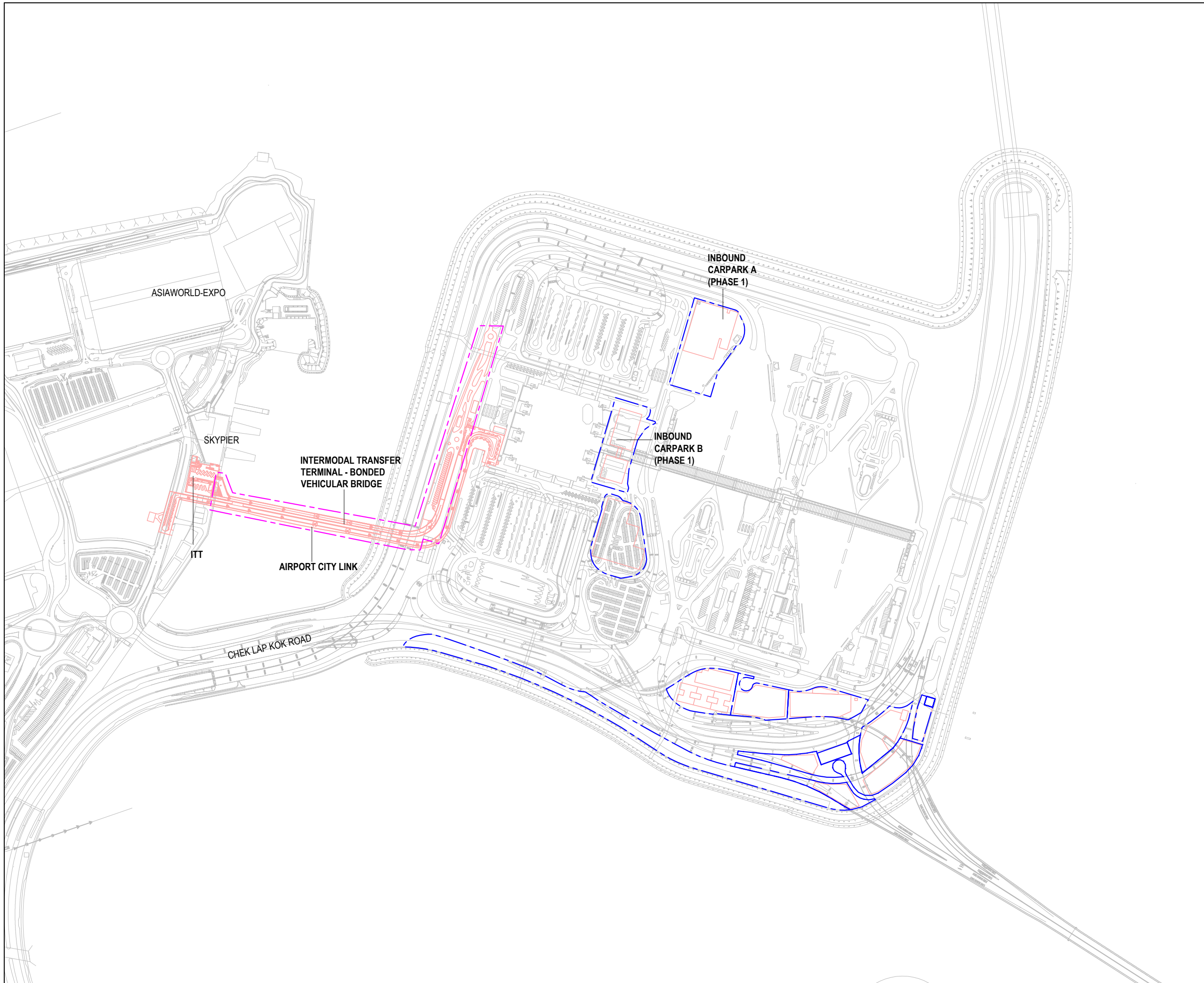


Title

COMPENSATORY TREE PLANTING PLAN

Drawing No.		FIGURE 2.2	
Originator	Location	Discipline	Type
Status	Scale	1:2,000 on A3	
		Dwg Sequence No.	Rev.

PROPOSED SPECIES FOR COMPENSATORY PLANTING							
TOTAL 151 NOS. OF NEW TREE PLANTING							
ABBREVIATED NAME	BOTANICAL NAME	CHINESE NAME	ORIGIN	SIZE (HEIGHT H X SPREAD SP) (mm)	DBH (mm)	SPACING (m)	QTY
Plu. Rub.	<i>Plumeria rubra</i>	雞蛋花	Exotic	2000-3500 (H) x 2000- 3000 (SP)	100	4	36
Cal. Vim.	<i>Callistemon viminalis</i>	串錢柳	Exotic	2000-3500 (H) x 2000- 3000 (SP)	100	4	115



LEGEND

- INTERMODAL TRANSFER TERMINAL - BONDED VEHICULAR BRIDGE AND ASSOCIATED ROADS SITE BOUNDARY
- HKBCF POTENTIAL FUTURE DEVELOPMENT BOUNDARY
- PROPOSED DEVELOPMENT

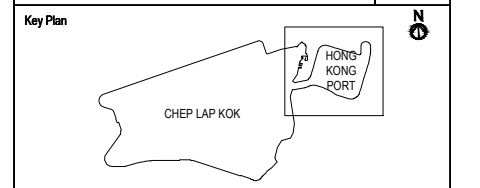


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Consultant's Signatures for Approval		Date
Design Supervisor	RH	05/22
Checkers	CY	05/22
Authorised Representative		



Title

AREAS RESERVED FOR FUTURE DEVELOPMENT

Drawing No.

FIGURE 3.1

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale	1:30,000 on A3		Rev.

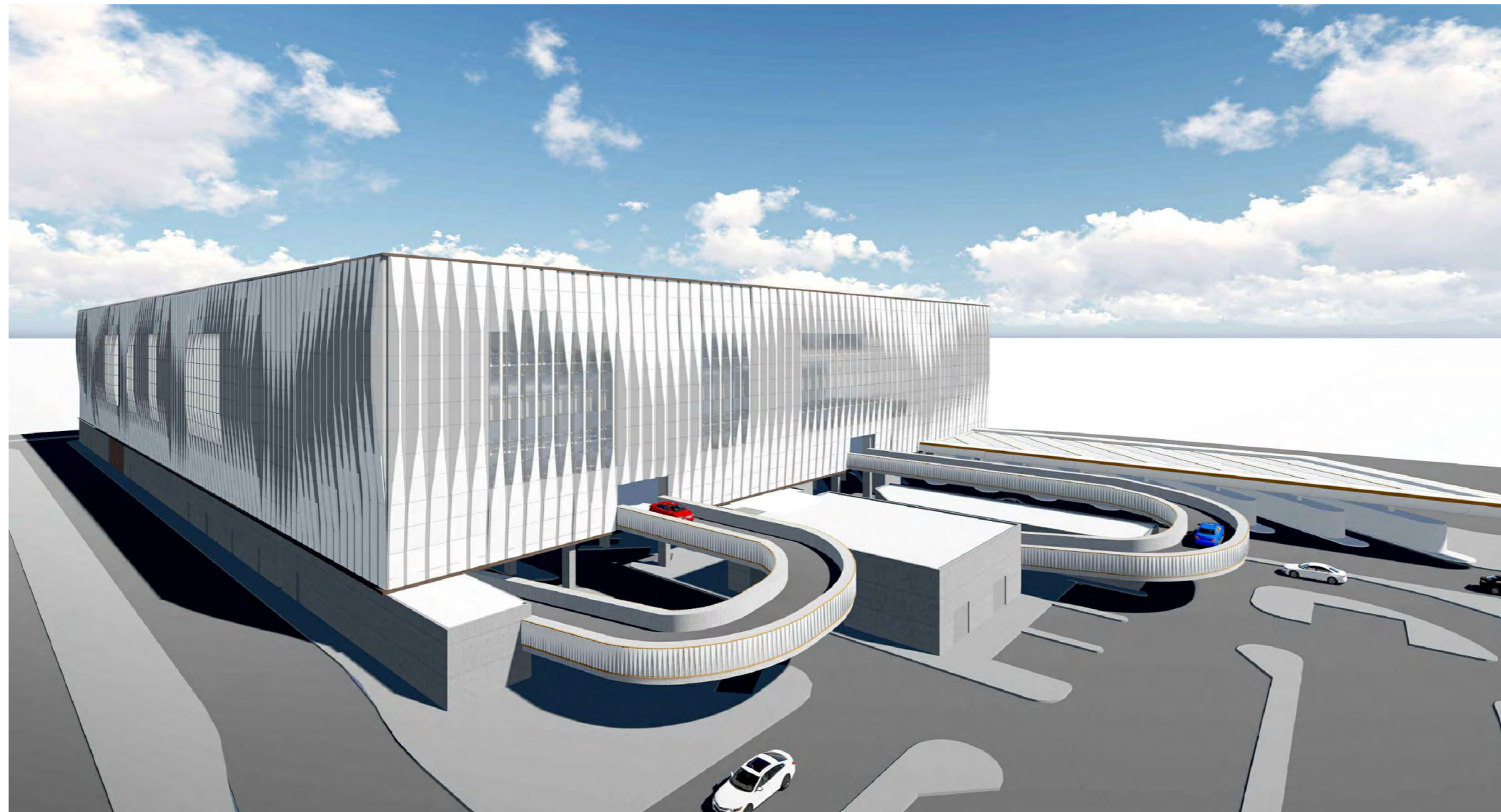


PCB existing photos

Existing PCB canopy



ICPs facade design concept



Inbound Carpark A (Phase 1) facade design

- Adopted a sinuous and organic form
- Echoes the repeating wave elements in the vicinity including the open sea, mountain, Airport Building and the PCB canopy

LEGEND



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Key Plan

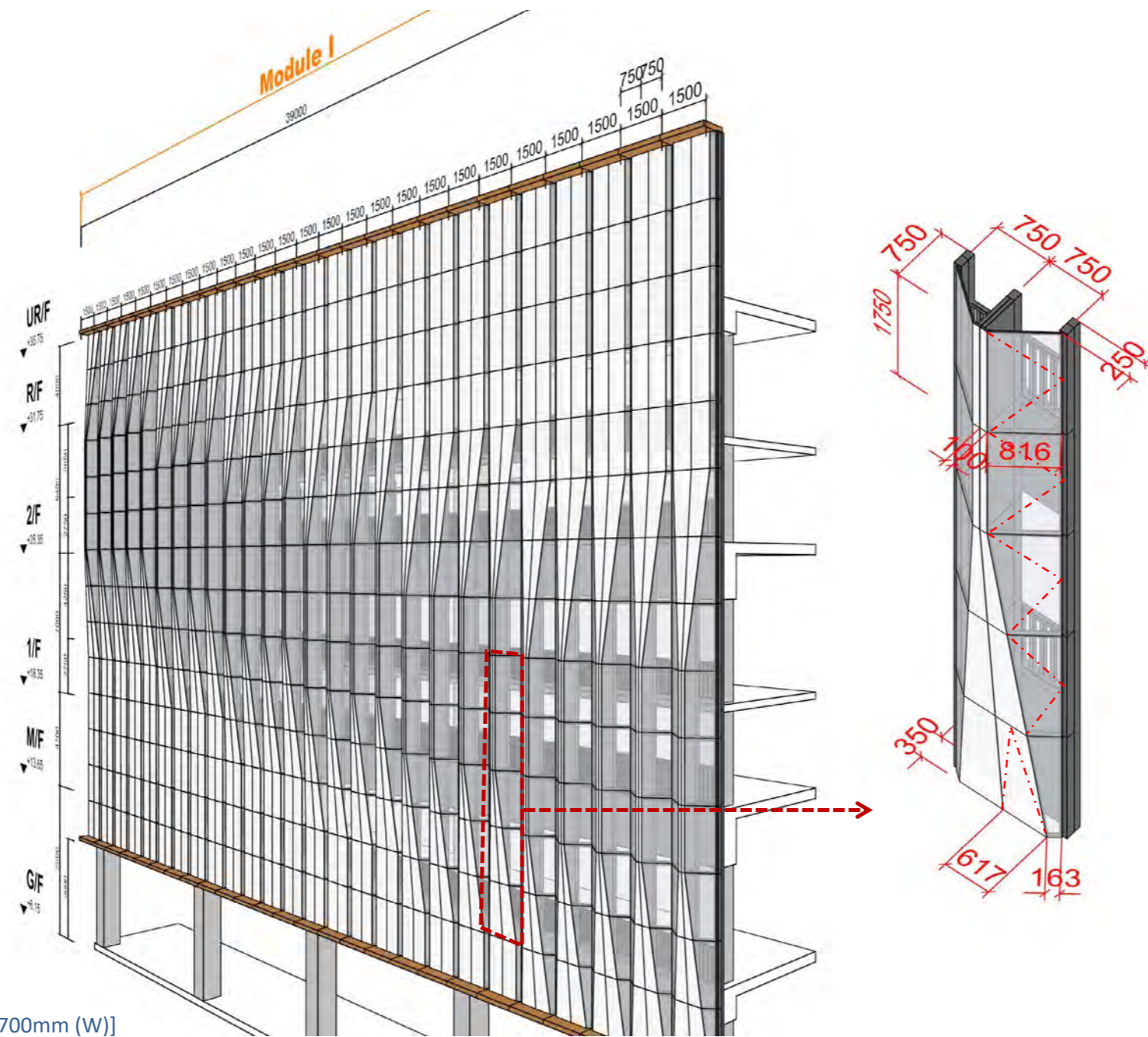
Title

AESTHETIC ARCHITECTURAL DESIGN ON THE ICPs (INBOUND CARPARK A (PHASE 1))

Drawing No.

FIGURE 4.1

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale			Rev.



- 750mm modulation
- Side hung window [Max. 700mm (W)]

Inbound Carpark A (Phase 1) curtain wall system



Elevation

LEGEND



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Key Plan

Title

USE OF GLASS FOR FACADE AND BALUSTRADE SIMILAR TO AIRPORT BUILDINGS (INBOUND CARPARK A (PHASE 1))

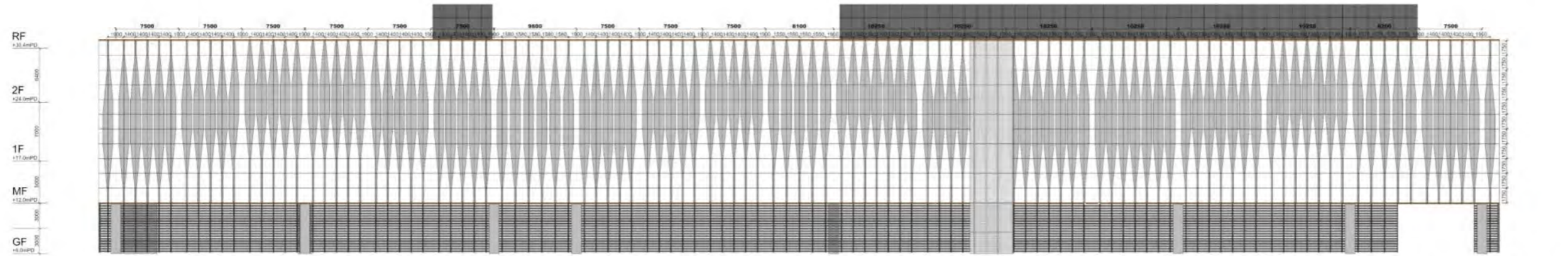
Drawing No.

FIGURE 4.2

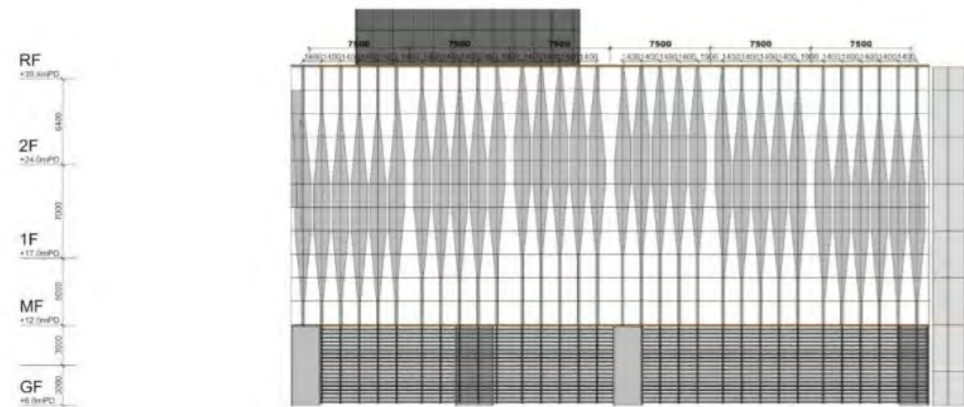
Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale			Rev.

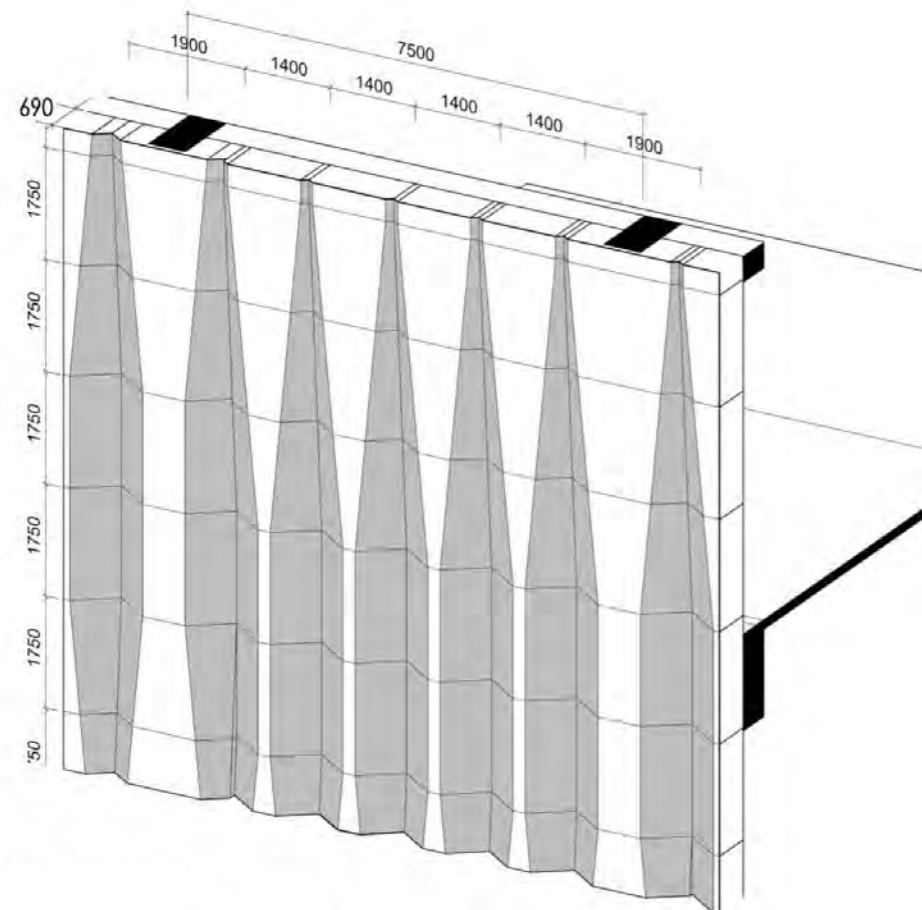


Inbound Carpark B (Phase 1) facade design

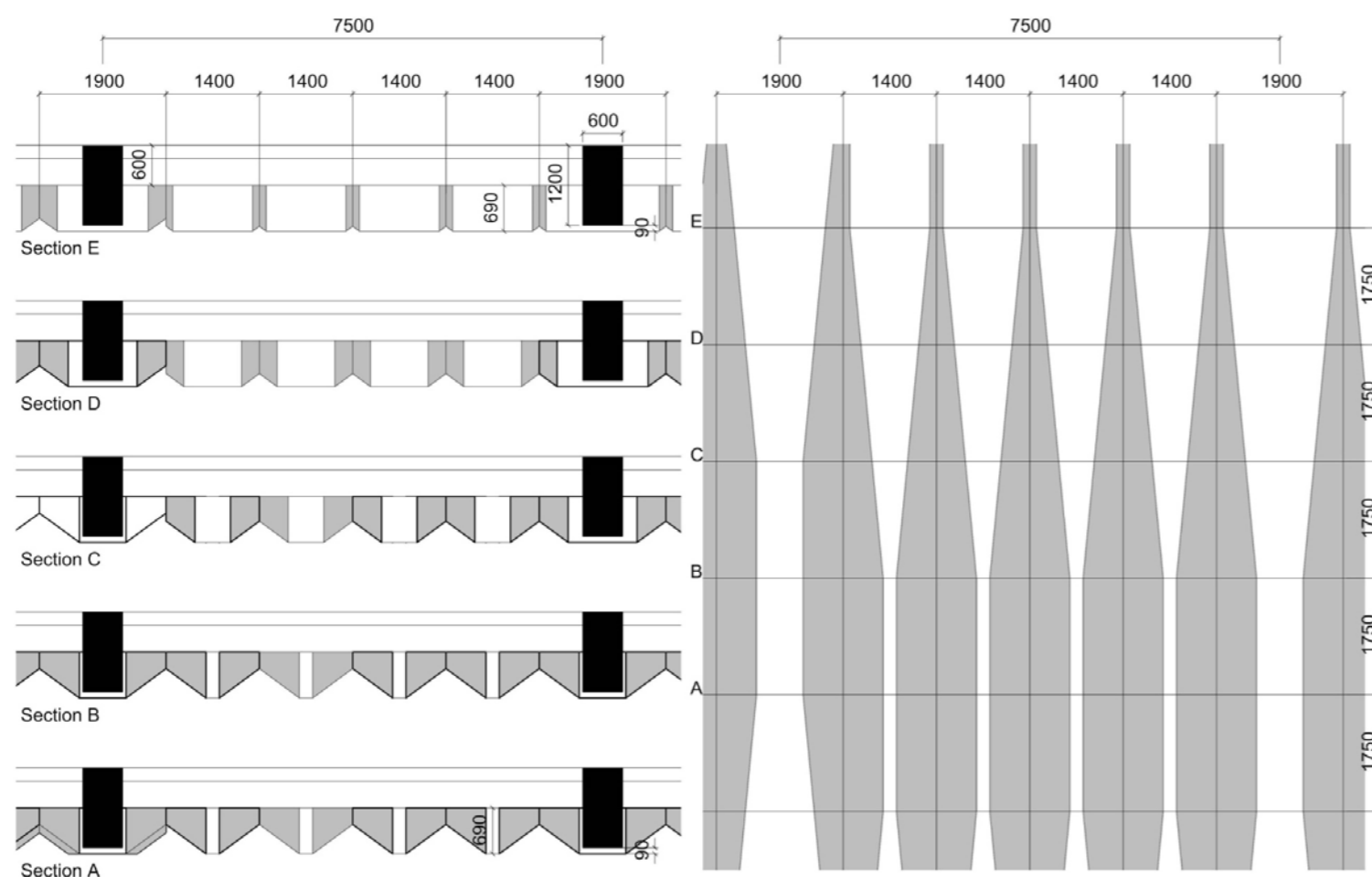


EAST ELEVATION
1:450





Inbound Carpark B (Phase 1) curtain wall system



Elevation

LEGEND



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ARUP

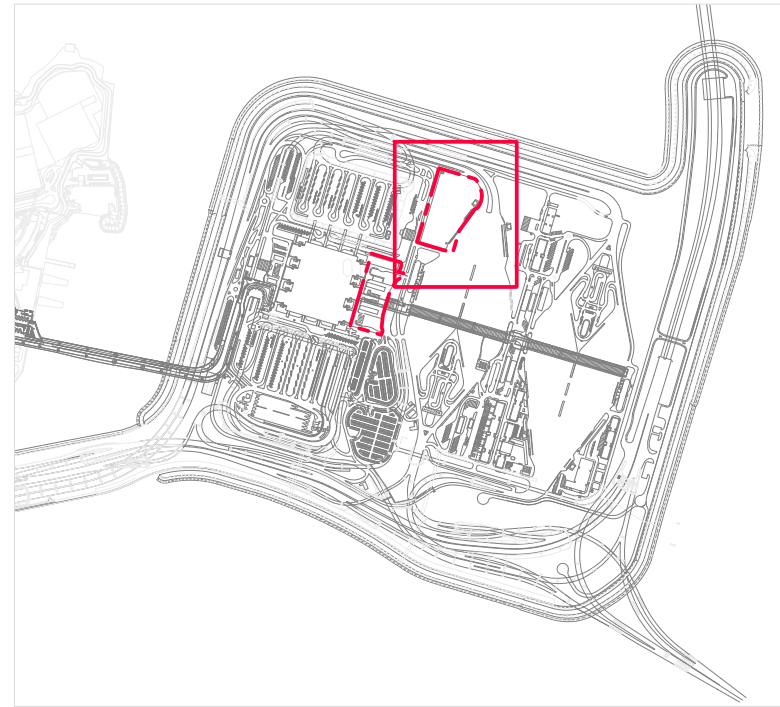
Consultant's Signatures for Approval		Date
Design Supervisor	RH	06/21
Checkers	CY	06/21
Authorised Representative		

Key Plan

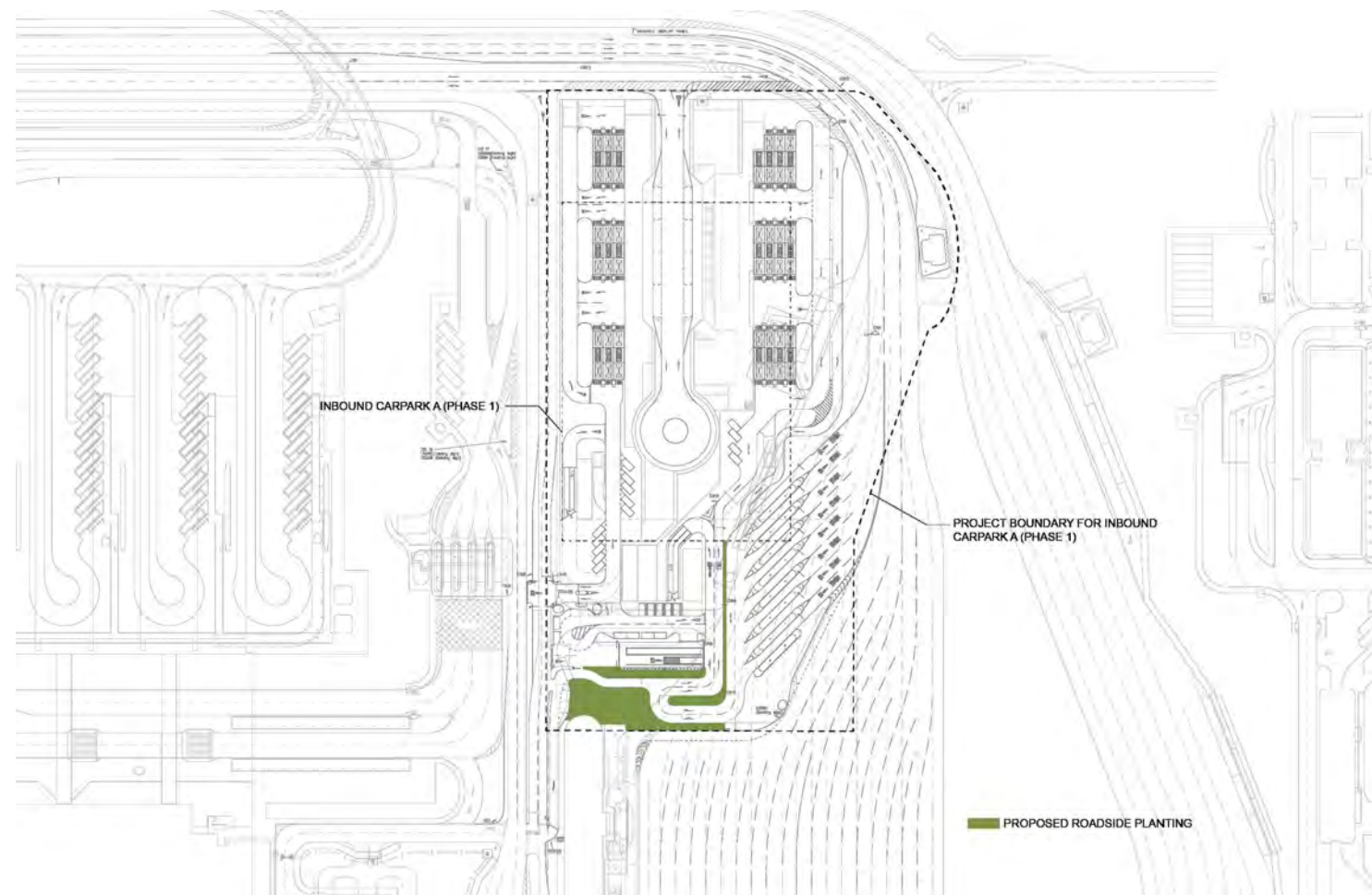
Title
USE OF GLASS FOR FACADE AND BALUSTRADE SIMILAR TO AIRPORT BUILDINGS (INBOUND CARPARK B (PHASE 1))

Drawing No.
FIGURE 4.4

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale			Rev.



KEY PLAN WITH PROPOSED ROADSIDE GREENERY LOCATION



PROPOSED ROADSIDE GREENERY LOCATION AT INBOUND CARPARK A (PHASE 1)



ROADSIDE PLANTING AROUND INBOUND CARPARK A (PHASE 1)

LEGEND



Hong Kong International Airport

Consultant

ARUP

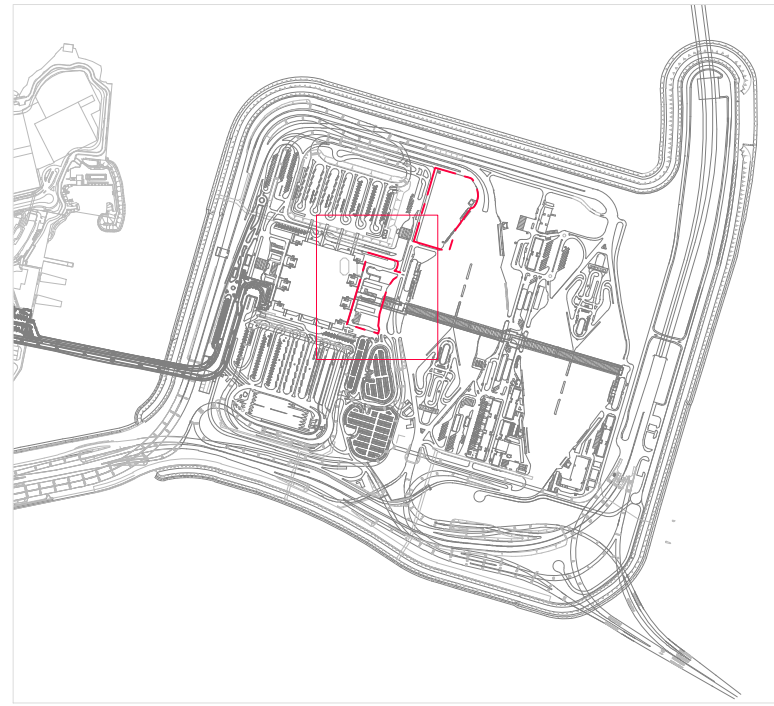
Consultant's Signatures for Approval	Date
Design Supervisor ZD	07/21
Checkers CY	07/21
Authorised Representative	

Key Plan

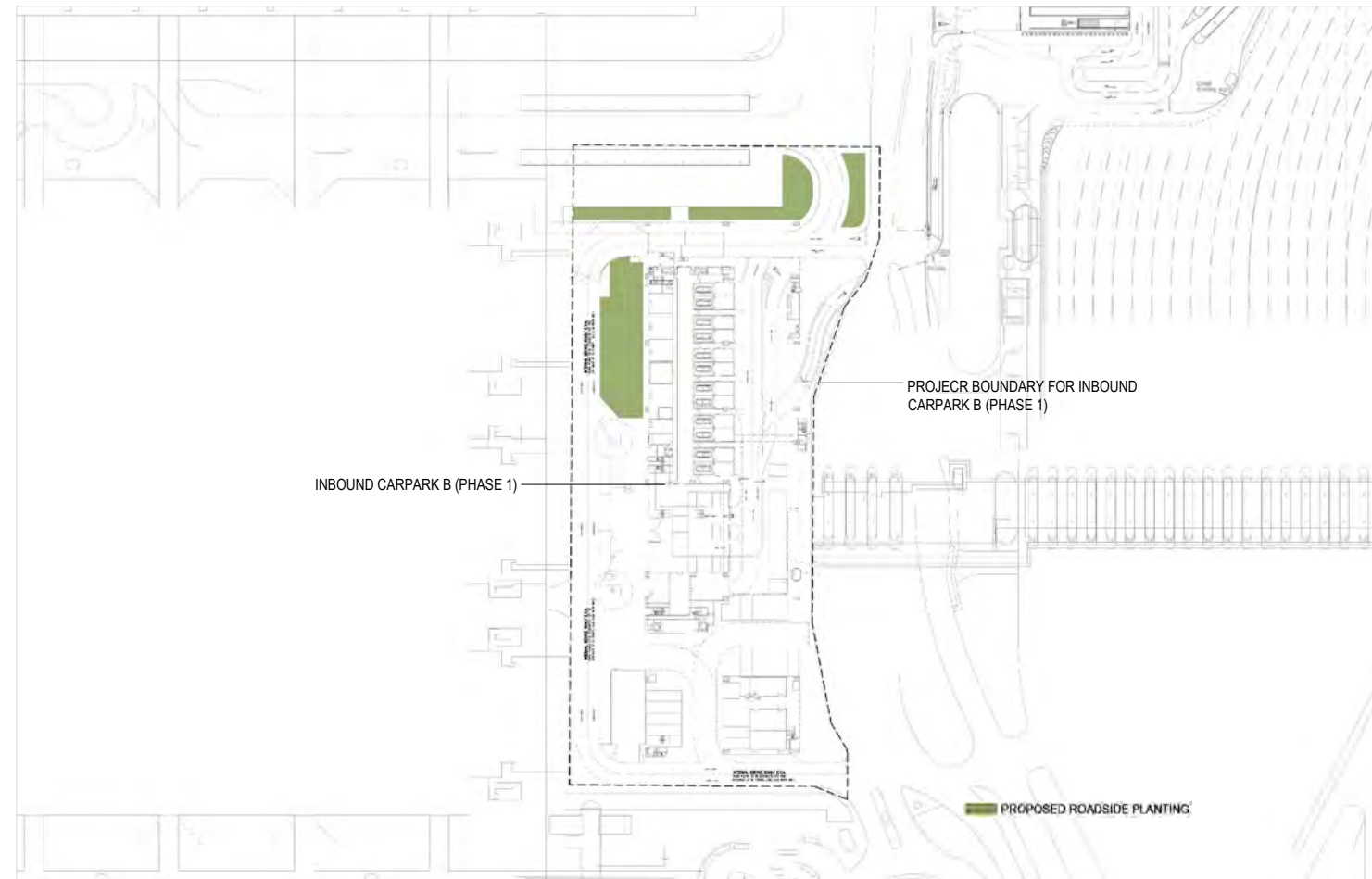
Title
ROADSIDE PLANTING REFERENCE OF
INBOUND CARPARK A (PHASE 1)

Drawing No.
FIGURE 4.5

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale	NTS		Rev.



KEY PLAN WITH PROPOSED ROADSIDE GREENERY LOCATION



PROPOSED ROADSIDE GREENERY LOCATION AT INBOUND CARPARK B (PHASE 1)



ROADSIDE PLANTING AROUND INBOUND CARPARK B (PHASE 1)

LEGEND

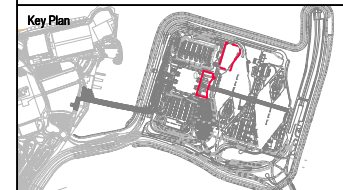


Hong Kong International Airport

Consultant

ARUP

Consultant's Signatures for Approval		Date
Design Supervisor	ZD	05/22
Checkers	CY	05/22
Authorised Representative		



Title
ROADSIDE PLANTING REFERENCE OF INBOUND CARPARK B (PHASE 1)

Drawing No.
FIGURE 4.6

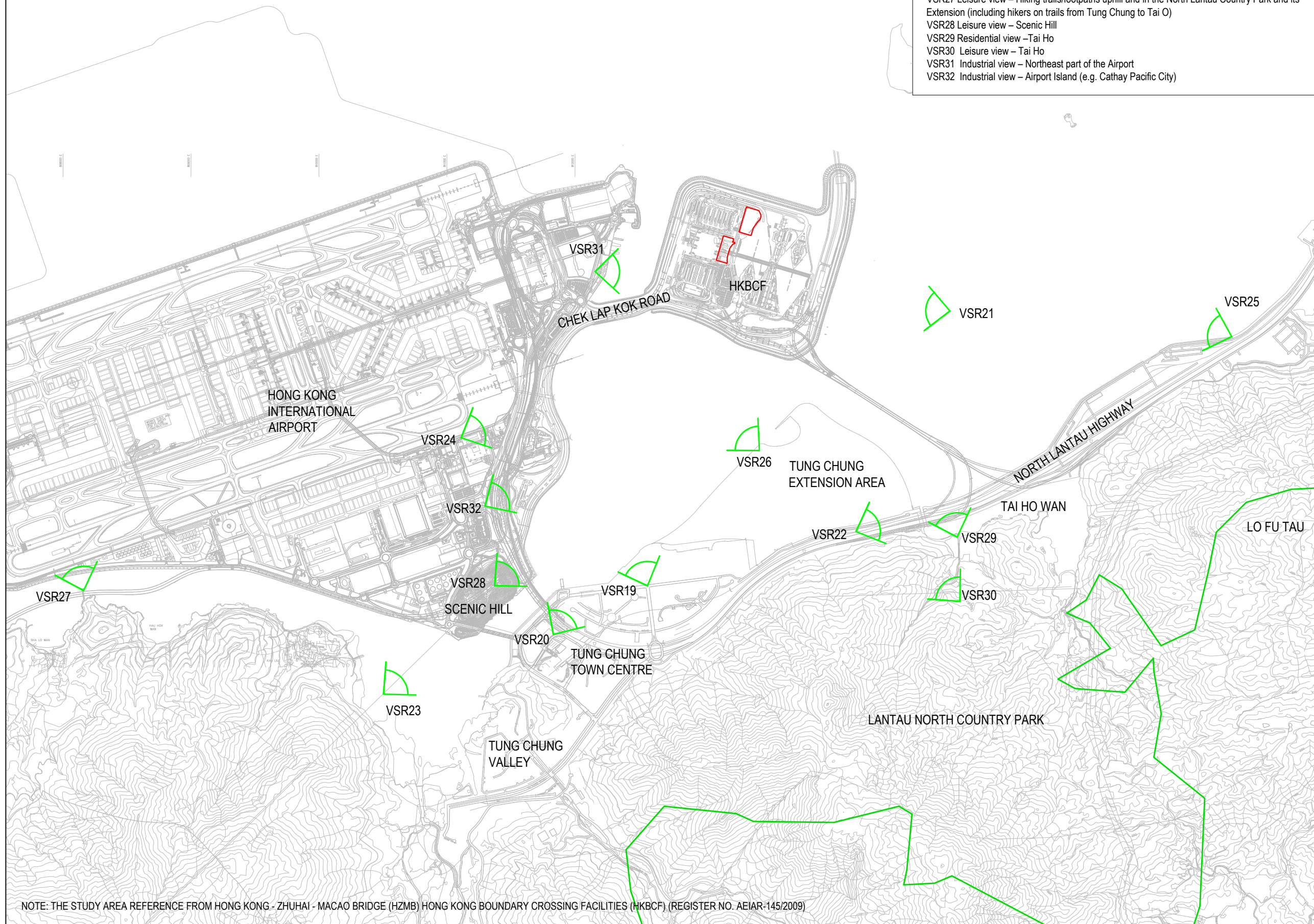
Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale	NTS		Rev.

VSRs OF HKBCF

- VSR19 Residential view – High-rise to the southeast of airport island
- VSR20 Residential view – Tung Chung town centre to the southeast of airport island
- VSR21 Traffic view – Ferry to/from Tung Chung
- VSR22 Traffic view – Vehicles and MTR along North Lantau Highway
- VSR23 Traffic view – Cable cars of Ngong Ping 360
- VSR24 Industrial view – Airport island (e.g. Cathay Pacific Catering Services)
- VSR25 Industrial view – The Topside Development of the Siu Ho Wan Depot
- VSR26 Residential view – Future Tung Chung East Development
- VSR27 Leisure view – Hiking trails/footpaths uphill and in the North Lantau Country Park and its Extension (including hikers on trails from Tung Chung to Tai O)
- VSR28 Leisure view – Scenic Hill
- VSR29 Residential view – Tai Ho
- VSR30 Leisure view – Tai Ho
- VSR31 Industrial view – Northeast part of the Airport
- VSR32 Industrial view – Airport Island (e.g. Cathay Pacific City)

LEGEND

- PROJECT BOUNDARY
- VISUAL ENVELOPE
- ∠ VSRs



NOTE: THE STUDY AREA REFERENCE FROM HONG KONG - ZHUHAI - MACAO BRIDGE (HZMB) HONG KONG BOUNDARY CROSSING FACILITIES (HKBCF) (REGISTER NO. AEIAR-145/2009)



Hong Kong International Airport

Consultant



Consultant's Signatures for Approval		Date
Design Supervisor	RH	05/22
Checkers	CY	05/22
Authorised Representative		

Key Plan

Title
VISUAL SENSITIVE RECEIVER PLAN

Drawing No. FIGURE 5.1				
Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale	1:30,000 on A3		Rev. 1



Existing Baseline Condition



Proposed Development without Mitigation Measures



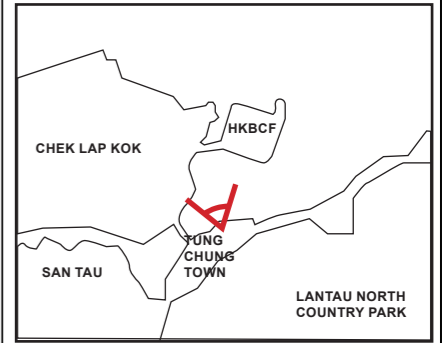
Proposed Development with Mitigation Measures (Day 1 of Operational Stage)



Proposed Development with Mitigation Measures (Year 10 of Operational Stage)

*Descriptions: The proposed development is fully screened by the Tung Chung Area 54 developments.

LEGEND



Hong Kong International Airport

Consultant

ARUP

Consultant's Signatures for Approval	Date
Design Supervisor: RH	06/21
Checkers: CY	06/21
Authorised Representative:	

Key Plan

Title

RECOMMENDED LANDSCAPE AND VISUAL MITIGATION MEASURES FOR VSR19

Drawing No.

FIGURE 5.2

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale	Rev.		



Existing Baseline Condition



Proposed Development without Mitigation Measures



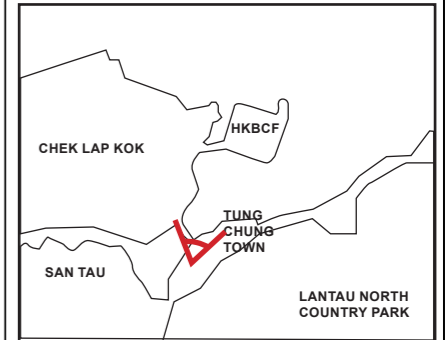
Proposed Development with Mitigation Measures (Day 1 of Operational Stage)



Proposed Development with Mitigation Measures (Year 10 of Operational Stage)

*Descriptions: The proposed development is fully screened by the existing vegetation.

LEGEND



Hong Kong International Airport

Consultant

ARUP

Consultant's Signatures for Approval		Date
Design Supervisor	RH	06/21
Checkers	CY	06/21
Authorised Representative		

Key Plan

Title

RECOMMENDED LANDSCAPE AND VISUAL MITIGATION MEASURES FOR VSR20

Drawing No.

FIGURE 5.3

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale	Scale	Scale	Rev.



Existing Baseline Condition



Proposed Development without Mitigation Measures

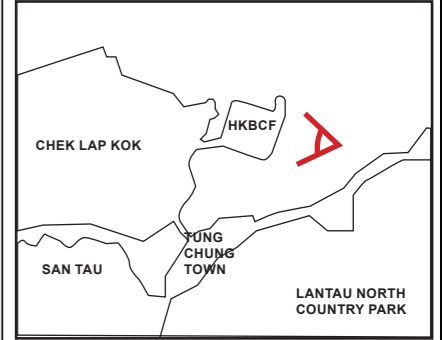


Proposed Development with Mitigation Measures (Day 1 of Operational Stage)



Proposed Development with Mitigation Measures (Year 10 of Operational Stage)

LEGEND



Hong Kong International Airport

Consultant

ARUP

Consultant's Signatures for Approval		Date
Design Supervisor	RH	06/21
Checkers	CY	06/21
Authorised Representative		

Key Plan

Title
RECOMMENDED LANDSCAPE AND VISUAL MITIGATION MEASURES FOR VSR21

Drawing No.
FIGURE 5.4

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale			Rev.



Existing Baseline Condition



Proposed Development without Mitigation Measures



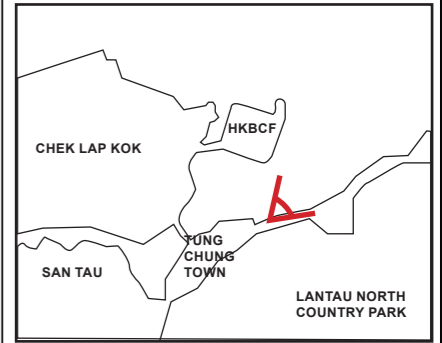
Proposed Development with Mitigation Measures (Day 1 of Operational Stage)



Proposed Development with Mitigation Measures (Year 10 of Operational Stage)

*Descriptions: The proposed development is fully screened by the existing vegetation.

LEGEND



Hong Kong International Airport

Consultant

ARUP

Consultant's Signatures for Approval		Date
Design Supervisor	RH	06/21
Checkers	CY	06/21
Authorised Representative		

Key Plan

Title

RECOMMENDED LANDSCAPE AND VISUAL MITIGATION MEASURES FOR VSR22

Drawing No.

FIGURE 5.5

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale	Rev.		



Existing Baseline Condition



Proposed Development without Mitigation Measures



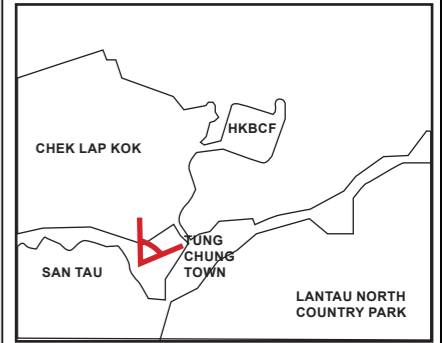
Proposed Development with Mitigation Measures (Day 1 of Operational Stage)



Proposed Development with Mitigation Measures (Year 10 of Operational Stage)

*Descriptions: Given the limited visibility and long viewing distance, it is anticipated that the Project will not generate any additional visual impacts.

LEGEND



Hong Kong International Airport

Consultant

ARUP

Consultant's Signatures for Approval		Date
Design Supervisor	RH	06/21
Checkers	CY	06/21
Authorised Representative		

Key Plan

Title
RECOMMENDED LANDSCAPE AND VISUAL MITIGATION MEASURES FOR VSR23

Drawing No.
FIGURE 5.6

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale			Rev.



Existing Baseline Condition



Proposed Development without Mitigation Measures

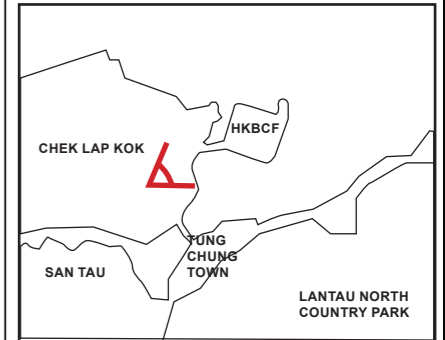


Proposed Development with Mitigation Measures (Day 1 of Operational Stage)



Proposed Development with Mitigation Measures (Year 10 of Operational Stage)

LEGEND



Hong Kong International Airport

Consultant

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Consultant's Signatures for Approval		Date
Design Supervisor	RH	06/21
Checkers	CY	06/21
Authorised Representative		

Key Plan

Title
RECOMMENDED LANDSCAPE AND VISUAL MITIGATION MEASURES FOR VSR24

Drawing No.
FIGURE 5.7

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale	Rev.		



Existing Baseline Condition



Proposed Development without Mitigation Measures



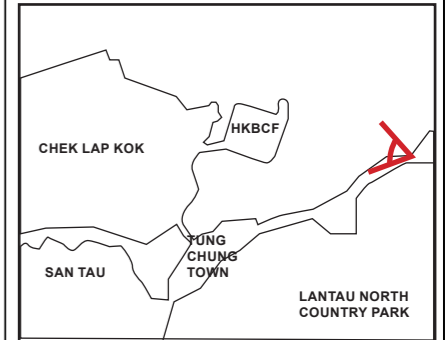
Proposed Development with Mitigation Measures (Day 1 of Operational Stage)



Proposed Development with Mitigation Measures (Year 10 of Operational Stage)

*Descriptions: Given the limited visibility and long viewing distance, it is anticipated that the Project will not generate any additional visual impacts.

LEGEND



Hong Kong International Airport

Consultant

ARUP

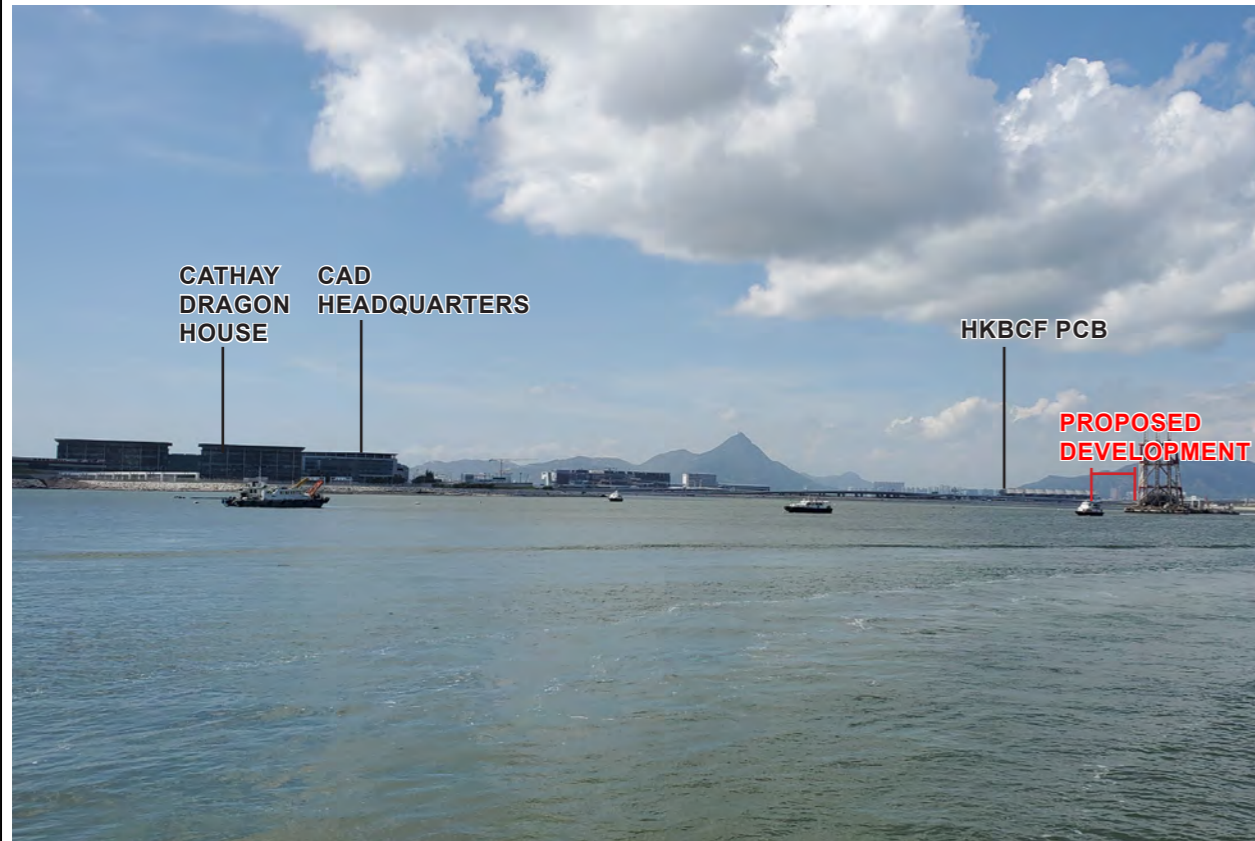
Consultant's Signatures for Approval		Date
Design Supervisor	RH	06/21
Checkers	CY	06/21
Authorised Representative		

Key Plan

Title
RECOMMENDED LANDSCAPE AND VISUAL MITIGATION MEASURES FOR VSR25

Drawing No.
FIGURE 5.8

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale			Rev.



Existing Baseline Condition



Proposed Development without Mitigation Measures



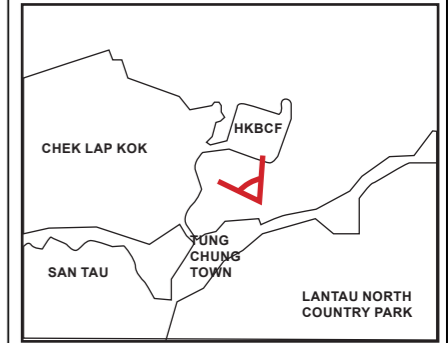
Proposed Development with Mitigation Measures (Day 1 of Operational Stage)



Proposed Development with Mitigation Measures (Year 10 of Operational Stage)

*Descriptions: Given the limited visibility and long viewing distance, it is anticipated that the Project will not generate any additional visual impacts.

LEGEND



Hong Kong International Airport

Consultant

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Consultant's Signatures for Approval		Date
Design Supervisor	RH	06/21
Checkers	CY	06/21
Authorised Representative		

Key Plan

Title
RECOMMENDED LANDSCAPE AND VISUAL MITIGATION MEASURES FOR VSR26

Drawing No.
FIGURE 5.9

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale			Rev.



Existing Baseline Condition



Proposed Development without Mitigation Measures



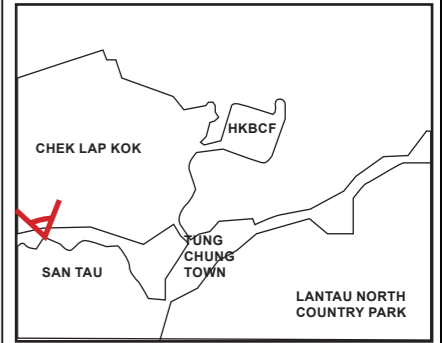
Proposed Development with Mitigation Measures (Day 1 of Operational Stage)



Proposed Development with Mitigation Measures (Year 10 of Operational Stage)

*Descriptions: The proposed development is fully screened by the existing vegetation.

LEGEND



Hong Kong International Airport

Consultant

ARUP

Consultant's Signatures for Approval		Date
Design Supervisor	RH	06/21
Checkers	CY	06/21
Authorised Representative		

Key Plan

Title
RECOMMENDED LANDSCAPE AND VISUAL MITIGATION MEASURES FOR VSR27

Drawing No.
FIGURE 5.10

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale			Rev.



Existing Baseline Condition



Proposed Development without Mitigation Measures



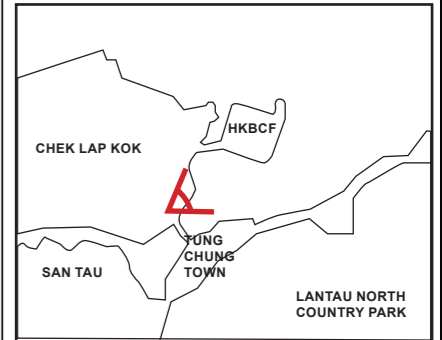
Proposed Development with Mitigation Measures (Day 1 of Operational Stage)



Proposed Development with Mitigation Measures (Year 10 of Operational Stage)

*Descriptions: Given the limited visibility and long viewing distance, it is anticipated that the Project will not generate any additional visual impacts.

LEGEND



Hong Kong International Airport

Consultant

ARUP

Consultant's Signatures for Approval		Date
Design Supervisor	RH	06/21
Checkers	CY	06/21
Authorised Representative		

Key Plan

Title
RECOMMENDED LANDSCAPE AND VISUAL MITIGATION MEASURES FOR VSR28

Drawing No.
FIGURE 5.11

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale	Scale	Scale	Rev.



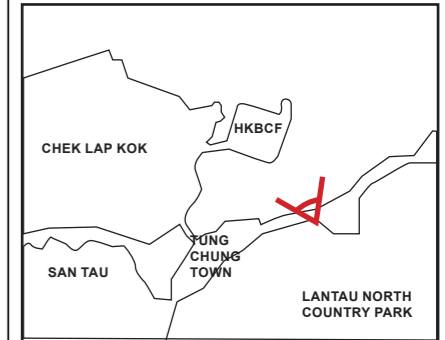
Existing Baseline Condition



Proposed Development without Mitigation Measures

*Descriptions: The proposed development is fully screened by the existing NLH highway.

LEGEND



Hong Kong International Airport

Consultant

ARUP

Consultant's Signatures for Approval		Date
Design Supervisor	RH	06/21
Checkers	CY	06/21
Authorised Representative		

Key Plan

Title

RECOMMENDED LANDSCAPE AND VISUAL MITIGATION MEASURES FOR VSR29

Drawing No.

FIGURE 5.12a

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale	Scale	Scale	Rev.



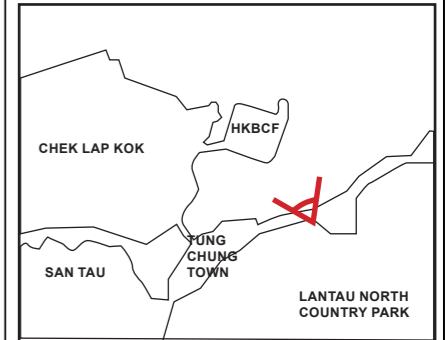
Proposed Development with Mitigation Measures (Day 1 of Operational Stage)



Proposed Development with Mitigation Measures (Year 10 of Operational Stage)

*Descriptions: The proposed development is fully screened by the existing NLH highway.

LEGEND



Hong Kong International Airport

Consultant

ARUP

Consultant's Signatures for Approval		Date
Design Supervisor	RH	06/21
Checkers	CY	06/21
Authorised Representative		

Key Plan

Title

RECOMMENDED LANDSCAPE AND VISUAL MITIGATION MEASURES FOR VSR29

Drawing No.

FIGURE 5.12b

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale	Scale	Scale	Rev.



Existing Baseline Condition



Proposed Development without Mitigation Measures



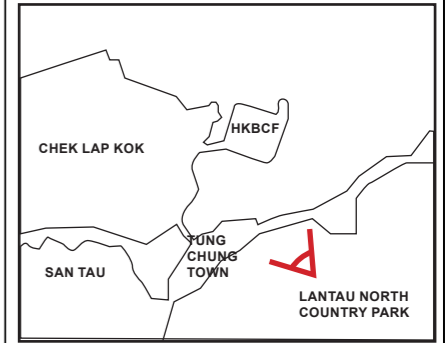
Proposed Development with Mitigation Measures (Day 1 of Operational Stage)



Proposed Development with Mitigation Measures (Year 10 of Operational Stage)

*Descriptions: Given the limited visibility and long viewing distance, it is anticipated that the Project will not generate any additional visual impacts.

LEGEND



Hong Kong International Airport

Consultant

ARUP

Consultant's Signatures for Approval		Date
Design Supervisor	RH	06/21
Checkers	CY	06/21
Authorised Representative		

Key Plan

Title
RECOMMENDED LANDSCAPE AND VISUAL MITIGATION MEASURES FOR VSR30

Drawing No.
FIGURE 5.13

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale			Rev.



Existing Baseline Condition



Proposed Development without Mitigation Measures



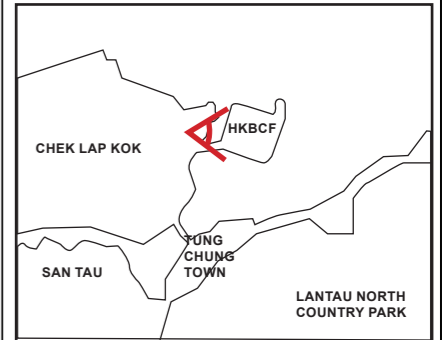
Proposed Development with Mitigation Measures (Day 1 of Operational Stage)



Proposed Development with Mitigation Measures (Year 10 of Operational Stage)

*Descriptions: The proposed development is screened by HKBCF PCB.

LEGEND



Hong Kong International Airport

Consultant

ARUP

Consultant's Signatures for Approval		Date
Design Supervisor	RH	06/21
Checkers	CY	06/21
Authorised Representative		

Key Plan

Title
RECOMMENDED LANDSCAPE AND VISUAL MITIGATION MEASURES FOR VSR31

Drawing No.
FIGURE 5.14

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale			Rev.



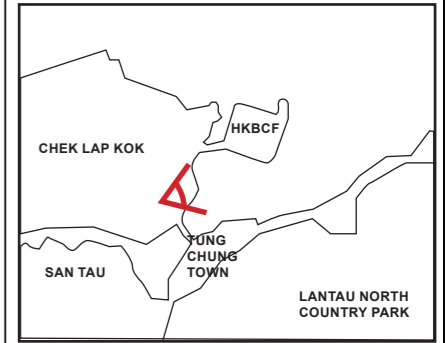
Existing Baseline Condition



Proposed Development without Mitigation Measures

*Descriptions: The proposed development is screened by CAD HEADQUARTERS.

LEGEND



Hong Kong International Airport

Consultant

ARUP

Consultant's Signatures for Approval		Date
Design Supervisor	RH	06/21
Checkers	CY	06/21
Authorised Representative		

Key Plan

Title

RECOMMENDED LANDSCAPE AND VISUAL MITIGATION MEASURES FOR VSR32

Drawing No.

FIGURE 5.15a

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale	Scale	Scale	Rev.



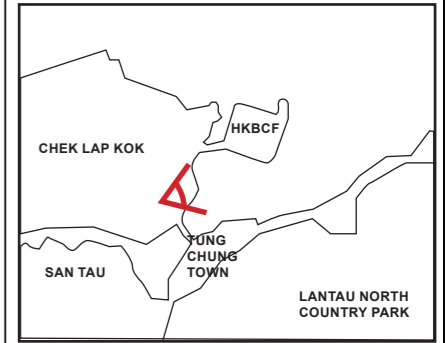
Proposed Development with Mitigation Measures (Day 1 of Operational Stage)



Proposed Development with Mitigation Measures (Year 10 of Operational Stage)

*Descriptions: The proposed development is screened by CAD HEADQUARTERS.

LEGEND



Hong Kong International Airport

Consultant

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Consultant's Signatures for Approval		Date
Design Supervisor	RH	06/21
Checkers	CY	06/21
Authorised Representative		

Key Plan

Title

RECOMMENDED LANDSCAPE AND VISUAL MITIGATION MEASURES FOR VSR32

Drawing No.

FIGURE 5.15b

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale			Rev.



LEGEND

	Site Boundary
	Shrubs and Groundcovers
	New Tree Planting

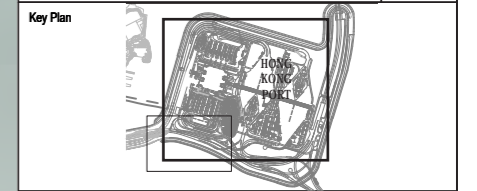
Mitigation Code	Mitigation Measures in the Approved EIA Report and EM&A Manual
G4	For HKBCF, providing aesthetic architectural design on the related buildings (e.g. similar materials for PCB building facade to Airport buildings, roof planting and subtle materials for other facilities buildings and so on), and the related infrastructure (e.g. parapet planting and transparent cover for elevated footbridges) to provide harmonic atmosphere of the HKBCF.
G5	Vegetation reinstatement and upgrading to disturbed areas.
G6	Maximize new tree, shrub and other vegetation planting to compensate tree felled and vegetation removed.



Hong Kong International Airport

Consultant
ARUP

Consultant's Signatures for Approval	Date
Design Supervisor: RH	03/24
Checkers: CY	03/24
Authorised Representative:	



Title
 LANDSCAPE AND VISUAL MITIGATION PLAN

Drawing No.
 FIGURE 6.1

Originator	Location	Discipline	Type	Dwg Sequence No.
Status	Scale	Scale	Rev.	

Appendix A1

**Certification Letter from the
Environmental Team Leader
(ETL)**

By Hand

Airport Authority Hong Kong
HKIA Tower, 1 Sky Plaza Road,
Hong Kong International Airport,
Lantau, Hong Kong

Level 5, Festival Walk
80 Tat Chee Avenue
Kowloon Tong, Kowloon
Hong Kong

t +852 2528 3031

d +852 2268 3437

f +852 2260 3380

ricky-kh.chui@arup.com

www.arup.com

Attention: Ms. Becky YAN

09 April 2024

Dear Becky,

**Hong Kong – Zhuhai – Macao Bridge Hong Kong Boundary Crossing Facilities
(HKBCF) – Inbound Carpark A (Phase 1) and Inbound Carpark B (Phase 1)
Environmental Permit No.: FEP-02/353/2009/K
Landscape and Visual Plan (LVP)**

This LVP has been reviewed and certified by the Environmental Team Leader (ETL) in accordance with Condition 1.9 of Environmental Permit No. FEP-02/353/2009/K.

If you require any further information, please do not hesitate to contact the undersigned at 2268 3437.

Yours faithfully,



Ricky Chui
Environmental Team Leader

Appendix A2

**Verification Letter from the
Independent Environmental
Checker (IEC)**

Your Ref: -
Our Ref: 60651125/C/FYW2404091

By Email

Airport Authority Hong Kong
HKIA Tower, 1 Sky Plaza Road,
Hong Kong International Airport,
Lantau, Hong Kong

Attn: Ms. Becky YAN

9 April 2024

Dear Becky,

**Hong Kong – Zhuhai – Macau Bridge Hong Kong Boundary Crossing Facilities (HKBCF) –
Inbound Carpark A (Phase 1) and Inbound Carpark B (Phase 1)
Environmental permit No.: FEP-02/353/2009/K
Landscape and Visual Plan (LVP)**

We would like to inform you that we have no adverse comment on Environmental Team's submission of Landscape and Visual Plan. Therefore we write to verify the captioned submission in accordance with the requirement stipulated in Condition 1.9 of FEP-02/353/2009/K.

Should you have any queries, please feel free to contact the undersigned at 3922 9366.

Yours faithfully,
AECOM Asia Co. Ltd.



Y W Fung
Independent Environmental Checker

Appendix B

**HKIA Approved Plant Species
List (APSL) (Revision 6.0
August 2021)**

Hong Kong International Airport

Approved Plant Species List

(Revision 6.0: August 2021)

1 Background

In accordance with the ICAO Airport Services Manual Part 3 (5th edition – 2020), Wildlife Hazard Management, Chapter 4, Para 4.4.2, a bird/wildlife management plan should be developed for the area, typically a 13 km (or 7NM) circle of the airport aerodrome reference point. In addition, in accordance with ICAO Annex 14, Volume I (8th edition – July 2018), Chapter 9, Para 9.4.5, States should give due consideration to aviation safety concerns related to land developments in the vicinity of the aerodrome that may attract wildlife.

Environmental management is integral to wildlife control, especially to reduce bird hazard, at the Hong Kong International Airport (“HKIA”). Given that the species planted for landscaping are directly correlated to the species and numbers of birds attracted, the Airfield Department of the Airport Authority Hong Kong (“AAHK”) in February 2000 engaged a consultant to issue and maintain an Approved Plant Species List (“APSL”) to reduce and limit the attractiveness of HKIA to birds.

In view of continuing large-scale developments and updated design proposals for future airside areas (i.e. The Third Runway Development), landside areas of the HKIA and in the vicinity of the airport island (e.g. The Hong Kong-Zhuhai-Macao Bridge Hong Kong Port (HKP)), the Airport Authority has issued this Revision 6.0 to guide project proponents in considering future planting proposals in all areas on the airport island and its vicinity.

The APSL aims to strike a balance between aviation safety and landscape attractiveness. The bird control service consultant engaged by AAHK reviews, as necessary, the suitability of any new plant species proposed, as well as the planting and vegetation management guidelines in HKIA.

2 General Principles

The aim of the airport bird strike reduction strategy at HKIA is to minimise the presence of bird species that may provide a significant hazard to aircraft or airport operations. Hazardous species are those that are more likely to cause damage to an aircraft; these are defined as species that are large, flocking or large and flocking. The planting prescriptions for all zones have been devised so that numbers of these hazardous species attracted to the airfield for foraging or resting are minimised.

In addition, all species listed in this APSL should be managed in accordance with the same principle of reducing attraction to birds via selective pruning and removal of fleshy fruits, and this principle must be observed in all landscape planning. Large-scale planting of any plant

species in Zones 1, 2 and 2a, even of approved species in the APSL, should be avoided to further minimise the potential attractiveness of extensive plant groups to birds. Plants that produce fleshy fruits should be avoided in future planting in Zone 1, 2, 2a and areas in Zone 3 close to the runway and the airfield. Should new fleshy fruit-bearing plant individuals be proposed and/or planted in these zones, strong justification for such proposal should be provided. In addition, all proposals for new landscape planting or new tree group transplanting should be submitted to the Airfield Department for review and approval on a case-by-case basis.

Considering that the plant community changes over time, planting criteria and management practice for existing plant species, which specify the plants exist in respective zones when APSL is effective already, and future planting and/or transplantation could be different so as to control the plant group size in the airport. Proposals for species not in this APSL or for planting of species that are not in the appropriate zones are subject to review and approval on a case-by-case basis, and they must be justified with due reference to bird strike issues and vegetation characteristics.

3 Third Runway development

The construction of a third runway (3RS) will create new airport areas that require to be placed in appropriate vegetation zones.

In addition, courtyard landscape would be developed at Terminal 2 Concourse (T2C). With adherence to general principles in Section 2, the proposals for species in courtyard landscape are subject to review and approval by Airfield Department on a case-by-case basis. Flora species approved for courtyard planning shall be documented, and from time to time supplemented, modified or replaced with the agreement of Airfield Department.

4 Hong Kong Port (HKP)

The HKP is a transportation hub connecting Hong Kong-Zhuhai-Macao Bridge (HZMB), the airport and other link roads. The artificial island is connected to the airport by Chek Lap Kok Road and is located at least 1.4 km away from the nearest end of the South Runway. Relatively few birds are likely to habitually use the approach corridor above HKP island, as well as the departure flight path, which is of a steeper gradient, and most of these will be small in size.

5 Zones

The airport island and HKP area is divided into five zones based on location airside or landside and distance from the runway centerline (**Figure 1**). Planting criteria in each zone are described below and summarized in **Table 1**. **All new landscape proposals should be submitted to Airfield Department for review and approval on a case-by-case basis. Proposals for species not in this APSL or for planting of species that are not in the appropriate zones shall be documented, and from time to time supplemented, modified or replaced with the**

agreement of Airfield Department. For the purposes of review and approval, the proposals may be forwarded to the Authority's other relevant departments.



Figure 1. Zoning of the airport island for existing platform and future Third Runway System (3RS)

Airside

Only grass of less than 200mm in height is permitted.

Future proposals for outdoor landscape planting adjacent to or within a passenger terminal structure (as may be required for a courtyard, external smoking area or balcony) in the Airside area shall be reviewed by AAHK's bird control service consultant and approved by AAHK on a case-by-case basis to avoid or minimise any bird attraction. Vegetation proposed should follow the management requirements stated in this APSL, or any specific management criteria as recommended in the landscape proposals and approved by AAHK.

Zone 1

Grass and ground cover of less than 200mm in height is permitted; climbers that do not produce fleshy fruit can be planted in areas not exceeding 25m², with regular pruning to control its spread; regularly pruned shrubs that do not produce fleshy fruit and are of less than 1.5m in height and 25m² in area are also allowed. Bird monitoring of any newly planted areas in Zone 1 is required to evaluate the attractiveness of the new planting to birds.

Zone 2

In this zone climbers, palms, cycads, trees or shrubs are acceptable only if they do not produce fleshy fruit. Species, height and canopy structure of most of the existing, planted palms, cycads and trees have been strictly reviewed and managed to control their spread and height so as not to be attractive to birds. With the support of routine bird monitoring data and practical tree maintenance practice, the majority of the existing palms, cycads and trees have been restricted to a height range of 5-10m. The exceptions are some areas with mature trees or tree groups (such as *Casuarina equisetifolia* along Chun Wan Road, and *Delonix regia* next to Catering Road West) that are at least 10m in height, which have been present since airport inception (**Figure 2**). These trees and tree groups are present along busy roads (e.g. Chun Wan Road and Catering Road West) and are separated from the runway by tall buildings. Implementing a height restriction (5-10m) on these existing trees may require excessive pruning of canopies, which could negatively influence overall tree structures. Routine bird monitoring has revealed that these areas are not very attractive to birds. In addition, for all existing planted palms, cycads and trees, their suitability and horticultural maintenance practice will be regularly reviewed by AAHK, and their attraction to birds will be monitored by AAHK's bird control service consultant.

As a precautionary measure and for effective horticultural maintenance, a height restriction of 5-10m applies to future planting of palms, cycads and trees; in addition, trees that could produce a spreading crown and/or develop a tall structure should be avoided. The selection of small trees is preferred as a long-term management and maintenance approach to future planting in this zone.

Future planting of palms, cycads, ravenala, bamboos and trees should be in groups of 50 individuals or fewer. The area of each tree group should not exceed 150m², and shrubs / climbers should be planted in areas of no more than 500m². Routine horticultural maintenance should be carried out to maintain vegetation groups of smaller sizes as far as practical. The height restriction of existing and newly-planted shrubs is 1.5m.

Existing planted palms, cycads, ravenala, bamboos, trees and shrubs are monitored by AAHK's bird control service consultant for usage by birds, and by AAHK. The planted area can be no more than 500 m² for palms, cycads ravenala, bamboos and trees, and 1,000m² for shrubs and climbers. The linear segregation for adjacent groups of palms, cycad, ravenala, bamboo, trees and shrubs should be at least 50m; however, this segregation restriction can be relaxed if the plantation is assessed as not creating significant or hazardous attraction to birds by AAHK's bird control service consultant.

Trees that produce fleshy fruits should be avoided in future planting in Zone 1, 2, 2a and areas in Zone 3 close to the runway and the airfield. Should new fleshy fruit-bearing tree individuals be proposed and/or planted in these zones, strong justification for such proposal should be provided.



Figure 2. Locations of the mature trees/ tree groups with height >10m in Zone 2

Zone 2a

Zone 2a has been formulated based on existing planting guidelines and maintenance practice in Zone 2, including a prohibition on planting fleshy fruit bearing plants and a requirement for regular shrub pruning, to avoid creating a habitat that might be used by large numbers of birds, in particular hazardous species. The relaxation of planting area for shrubs and trees releases landside area (e.g., planting areas underneath highways with high vertical clearance and considerable sunlight from both sides) for soft landscaping and tree transplanting in the future.

Most of the plant species that are acceptable in Zone 2 are permitted in Zone 2a. However, in view of the more exposed environment at HKP, trees that are vulnerable to strong wind should be avoided. Any landscape proposals for new tree planting or transplantation to this zone should take into account sensitivity to exposed sites, and be reviewed by the Airfield Department for approval on a case-by-case basis.

Future planting of shrubs and climbers should be in areas of no more than 1000m², while the height restriction on newly-planted shrubs remains at 1.5m. Planting of palms, cycads, ravenala, bamboos and trees should be in groups not exceeding 500m², with a linear separation of tree groups of at least 50m. The height restriction on palms, cycads and trees is 5-10m, and planting of small-sized palms, cycads and trees are preferable as a long-term plant management approach in this zone. Should tree species of a mature size exceeding 10m be planted in the future, routine horticultural maintenance should be carried out to control height.

Transplantation of trees from the airport island to the HKP is acceptable if the above principles are adopted. Planting guidelines and restrictions on newly planted trees in Zone 2a are also applicable to the trees transplanted to HKP.

Zone 3

Trees, shrubs and palms are allowed since much of this zone is relatively far from the runway centerline; in addition, management control of plant growth and planting works in Zone 2 has reduced bird occurrence in areas close to the airfield. Nonetheless, in regard to the potential increase in development projects and associated landscaping in Zone 3, certain restrictions on species selection and the implementation of horticultural maintenance practices should be followed.

For existing species, bird usage of large trees with a complex structure that could potentially encourage bird foraging or perching should be monitored. Existing plant species with fleshy fruits should also be monitored for bird attraction. In addition, to streamline long-term management and maintenance, in areas close to Zone 2 planting of large and continuous groups of trees, palms, cycads and ravenala that set fleshy fruits should be avoided. New planting of certain species, e.g. *Ficus benjamina* and *Ficus microcarpa*, which provide abundant fleshy fruit, should not be carried out. Any further transplantation of existing *Ficus* spp. to Zone 3 should be planned carefully (e.g. planted in areas far away from the runway and the airfield), and these trees should be transplanted in small groups to minimise their attractiveness to birds. Should AAHK's bird control consultant consider the transplanted *Ficus* trees attract a potentially hazardous number of birds, measures for removal of fleshy fruits from these trees should be adopted on regular basis.

6 Approved Plant Species List (APSL)

The plant species allowed in each zone are stated below in the Approved Plant Species List (APSL). The acceptability of each species and management strategy has been evaluated based on their growth form and attraction to wildlife, particularly birds. Plant species proposed in respective proposals should also be subject to review by Airfield department and other relevant departments. The APSL (**Table 2**) provides the most updated flora list to be followed in future planting proposals in each zone in the landside areas on the airport island.

On rare occasions, flora species not in the APSL may be proposed for assessment by AAHK's bird control service consultant. Approval may be granted, with conditions (such as appropriate vegetation management to control the tree spread and remove any potential attractive fleshy fruits), if appropriate, if the proposed species are not considered to pose unacceptable attraction to wildlife, particularly birds.

Natural colonization means that the plant community in the airport island will change over time. AAHK's bird control service consultant conducts monthly landside bird surveys and annual vegetation surveys, submits reports on the monitoring with reference to the APSL when required, and assesses whether vegetation at the Airport is appropriate in regard to its attraction to birds.

7 Bibliography

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Table 1. SUMMARY TABLE OF THE PLANTING GUIDELINES STIPULATED IN RESPECTIVE ZONES

	Existing plant species ¹	Future planting and transplantation ²
Airside	<ul style="list-style-type: none"> • Only grass of less than 200mm in height is permitted. 	
Zone 1	<ul style="list-style-type: none"> • Grass and ground cover of less than 200mm in height are permitted; • Climbers that do not produce fleshy fruit can be planted in areas not exceeding 25m², with regular pruning to control its spread; • Regularly pruned shrubs that do not produce fleshy fruit and < 1.5m in height and < 25m² in area are allowed; • Bird monitoring of any newly planted areas in Zone 1 is required to evaluate the attractiveness of the new planting to birds. 	
Zone 2	<ul style="list-style-type: none"> • Climbers, palms, cycads, trees or shrubs are acceptable only if they do not produce fleshy fruits. 	
	<ul style="list-style-type: none"> • Species, height and canopy structure of most of the existing, planted palms, cycads and trees have been strictly reviewed and managed to control their spread and height so as not to be attractive to birds; • The majority of the existing palms, cycads and trees have been restricted to a height range of 5-10m; • All existing planted palms, cycads and trees, their suitability and horticultural maintenance practice will be regularly reviewed by AAHK, and their attraction to birds will be monitored by AAHK's bird control service consultant; • The planted area of the existing planted area can be no more than 500m² for palms, cycads, ravenala, bamboos and trees, and 1,000m² for shrubs and climbers; • The linear segregation for adjacent groups of palms, cycad, ravenala, bamboo, trees and shrubs should be at least 50m. This segregation restriction can be relaxed if the plantation is assessed as not creating significant or hazardous 	<ul style="list-style-type: none"> • Selection of small trees is preferred as a long-term management and maintenance approach to future planting in this zone; • A height restriction of 5-10m applies to future planting of palms, cycads and trees. Trees that could produce a spreading crown and/or develop a tall structure should be avoided; • Future planting of palms, cycads, ravenala, bamboos and trees should be in groups of 50 individuals or fewer; • The area of each tree group should not exceed 150m², and shrubs/ climbers should be planted in areas of no more than 500m². • Routine horticultural maintenance should be carried out to maintain vegetation groups of smaller sizes as far as practical. The height restriction of existing and newly-planted shrubs is 1.5m. • Trees that produce fleshy fruits should be avoided in future planting in Zone 1, 2, 2a and areas in Zone 3 close to the runway and the airfield. Should new fleshy fruit-bearing tree individuals be proposed and/or planted in these zones, strong

	<p>attraction to birds by AAHK's bird control service consultant.</p> <ul style="list-style-type: none"> • Trees and tree groups (such as <i>Casuarina equisetifolia</i> and <i>Delonix regia</i>) that are of at least 10m in height are present since airport inception. They are present along busy roads and are separated from the runway by tall buildings. Close monitoring of these trees and tree groups is required since a height restriction (5-10m) on these trees may require excessive canopy reduction, resulting negative impact on the tree structure and health. 	<p>justification for such proposal should be provided.</p>
Zone 2a	<ul style="list-style-type: none"> • Zone 2a has been formulated based on existing planting guidelines and maintenance practice in Zone 2, including a prohibition on planting fleshy fruit bearing plants and a requirement for regular shrub pruning, to avoid creating a habitat that might be used by large numbers of birds, in particular hazardous species. • Most of the plant species that are acceptable in Zone 2 are permitted in Zone 2a, except those trees that are vulnerable to strong wind which should be avoided. • Any landscape proposals for new tree planting or transplantation to HKP should take into account sensitivity to exposed sites, and be reviewed by the Airfield Department for approval on a case-by-case basis. 	<ul style="list-style-type: none"> • Shrubs and climbers should be in areas of no more than 1,000m², while the height restriction on newly planted shrubs remains at 1.5m; • Planting of palms, cycads, ravenala, bamboos and trees should be in groups not exceeding 500m², with a linear separation of tree groups of at least 50m; • The height restriction on palms, cycads and trees is 5-10m, and planting of small-sized palms, cycads and trees are preferable as a long-term plant management approach;

		<ul style="list-style-type: none"> • Should tree species of a mature size exceeding 10m be planted in the future, routine horticultural maintenance should be carried out to control height. • Trees transplanted from the airport island to the HKP is acceptable if the above principles are adopted; • Planting guidelines and restrictions on newly planted trees in Zone 2a are also applicable to the trees transplanted to HKP.
Zone 3	<ul style="list-style-type: none"> • Trees, shrubs and palms are allowed in Zone 3, where is far away from the runway centerline. 	
	<ul style="list-style-type: none"> • Bird usage of large trees with a complex structure that could potentially encourage bird foraging or perching should be monitored; • Existing plant species with fleshy fruits should also be monitored for bird attraction. 	<ul style="list-style-type: none"> • Planting of large and continuous groups of trees, palms, cycads and ravenala that set fleshy fruits should be avoided; • New planting of certain species, e.g. <i>Ficus benjamina</i> and <i>Ficus microcarpa</i>, which provide abundant fleshy fruit, should not be carried out. • Transplantation of existing <i>Ficus</i> sp. to Zone 3 should be planned carefully (e.g. planted in areas far away from the runway and the airfield), and these trees should be transplanted in small groups to minimise their attractiveness to birds.

Notes:

1. Existing plant species refers to the species which have been planted after the commissioning of HKIA and exist in respective zones when APSL (Rev. 6.0) is in effective.
2. Future planting and transplantation refer to the plant species which will be proposed in future landscape proposal/plan after APSL (Rev. 6.0) is in effective.

Table 2. FLORA SPECIES APPROVED FOR FUTURE PLANTING IN AIRSIDE, ZONES 1, 2, 2a and 3

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
Trees							
<i>Acacia auriculiformis</i>	耳莢相思	N	N	N (only allowed for existing individuals already planted)	N	N (only allowed for existing individuals already planted)	This exotic species cannot be further planted in Zones 2 and 3 since existing environment will be changed due to development projects. Any existing individuals already planted in Zones 2 and 3 (areas away from runway and airfield in both zones) are allowed but should be regularly pruned to remove any fleshy fruits.
<i>Acacia confusa</i>	台灣相思	N	N	Y	Y	Y	Requires regular pruning in Zone 2.
<i>Acacia mangium</i>	馬占相思	N	N	N (only allowed for existing individuals already planted)	N	N (only allowed for existing individuals already planted)	This species cannot be further planted in Zones 2 and 3 since existing environment will be changed due to development projects. Any existing individuals already planted in Zones 2 and 3 (areas away from runway and airfield in both zones) are allowed but should be regularly pruned to remove any fleshy fruits.
<i>Acer palmatum</i> Jinling Huang-feng	金陵黃楓	N	N	Y	N	Y	It is recommended to use the cultivar that does not produce fruit.
<i>Acer palmatum</i> 'Atropurpureum'	紅楓	N	N	Y	N	Y	
<i>Albizia julibrissin</i>	合歡	N	N	Y	N	Y	This is a large tree with open canopy; its spreading structure, heavy flowering and insect load encourage bird's perching and foraging on trees. It is acceptable in small scale planting in areas away from runway and airfield in Zones 2 and 3.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Albizia lebbek</i>	大葉合歡	N	N	Y	N	Y	This is a large tree with open canopy; its spreading structure, heavy flowering and insect load encourage bird's perching and foraging on trees. It is acceptable in small-scale planting in areas away from runway and airfield in Zones 2 and 3.
<i>Aleurites montana</i>	皺桐	N	N	Y	Y	Y	This species can produce showy flowers and with maximum height up to 20m. Acceptable in limited use and small-scale planting in areas away from runway and airfield. AAHK should control the tree height as a long-term tree management approach in Zones 2, 2a and 3.
<i>Bauhinia x blakeana</i>	洋紫荆	N	N	Y	Y	Y	
<i>Bauhinia purpurea</i>	紅花羊蹄甲	N	N	Y	Y	Y	
<i>Bauhinia variegata</i> / Camel's foot tree	宮粉花羊蹄甲	N	N	Y	Y	Y	
<i>Bauhinia variegata</i> var. <i>candida</i>	白花羊蹄甲	N	N	Y	Y	Y	
<i>Brachychiton acerifolius</i>	槭葉酒瓶樹	N	N	Y	Y	Y	This species can produce showy flowers and with maximum height up to 20m. Acceptable in limited use and small-scale planting in areas away from runway and airfield. AAHK should control the tree height as a long-term tree management approach in Zones 2, 2a and 3.
<i>Brassaia actinophylla</i>	澳洲鴨腳木	N	N	Y	Y	Y	Same as <i>Schefflera actinophylla</i> ; this species can produce fruits which are eaten by many birds. Unless the flower spikes can be regularly removed once it is developed, this species is not recommended in any areas which are close to the runways and airfield.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Callistemon rigidus</i>	紅千層	N	N	Y	Y	Y	Flowers may be very attractive to small birds and produce perches for birds; only limited use and small-scale planting is allowed in Zones 2 and 2a, as well as the areas in Zone 3 which are away from Zone 2 and the airfield.
<i>Callistemon viminalis</i>	串錢柳	N	N	Y	Y	Y	
<i>Cassia fistula</i>	豬腸豆	N	N	Y	Y	Y	AAHK has to control the tree height as a long-term tree management approach in Zones 2, 2a and 3.
<i>Cassia nodosa</i> (New scientific name: <i>Cassia javanica</i> var. <i>indochinensis</i>)	爪哇旃那	N	N	Y	Y	Y	Requires regular pruning in Zones 2 and 2a.
<i>Cassia siamea</i>	鐵刀木	N	N	Y	Y	Y	
<i>Cassia spectabilis</i>	美國槐	N	N	Y	Y	Y	Requires regular pruning in Zones 2 and 2a.
<i>Cassia surattensis</i>	黃槐	N	N	Y	Y	Y	Requires regular pruning in Zones 2 and 2a.
<i>Casuarina equisetifolia</i>	木麻黃	N	N	Y	Y	Y	Requires regular pruning in Zones 2 and 2a.
<i>Cerasus</i> sp.	櫻花	N	N	Y	Y	Y	The cultivars and varieties of this <i>Cerasus</i> sp. for ornamental use usually do not produce fleshy fruits that attract birds. Therefore, this species is still accepted in Zones 2, 2a and 3. Please make sure that the chosen cultivated specimens of <i>Cerasus</i> sp. will not produce fruits so as to minimize its attraction to birds. Moreover, for those in Zones 2 and 2a, it should be monitored regularly for any production of fruits.
<i>Cerasus</i> cv. Guangzhou	櫻花(廣州櫻)	N	N	Y	Y	Y	The cultivars and varieties of <i>Cerasus</i> sp. for ornamental use usually do not produce fleshy fruits that attract birds. Any planted individuals, especially those planted in Zones 2 and 2a, should be monitored regularly for any production of fruits.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Cerasus</i> cv. Zhongguohong	櫻花 (中國紅)	N	N	Y	Y	Y	The cultivars and varieties of <i>Cerasus</i> sp. for ornamental use usually do not produce fleshy fruits that attract birds. Any planted individuals, especially those planted in Zones 2 and 2a, should be monitored regularly for any production of fruits.
<i>Cerbera manghas</i>	海芒果	N	N	Y	Y	Y	Recommend to have small-scale planting in Zones 2 and 2a; also planted in areas away from the public in view of the production of poisonous fruits.
<i>Chukrasia tabularis</i>	麻棟	N	N	Y	Y	Y	AAHK has to control the tree height as a long-term tree management approach in Zones 2, 2a and 3.
<i>Coccoloba uvifera</i>	海葡萄	N	N	Y	Y	Y	Removal any fleshy fruits wherever possible. Requires regular pruning if planted in Zones 2 and 2a.
<i>Crateva unilocularis</i>	樹頭菜	N	N	Y	Y	Y	Tree produces dry fruits which are not attractive and too large for birds to eat. This species is allowed in Zones 2, 2a and 3. Tree may able to grow more than 10m in the long-term, and AAHK has to control the tree height as tree management approach in the planting zones.
<i>Delonix regia</i>	鳳凰木	N	N	Y	N	Y	This species has open and spreading canopy. It is quite vulnerable to storm damage due to its brittle wood. It is only acceptable in small-scale planting in areas away from the airfield and Zone 1. It also requires regular pruning to control its spread in Zones 2 and 3.
<i>Euphorbia cotinifolia</i>	紅烏柏	N	N	Y	Y	Y	Requires regular pruning in Zones 2 and 2a.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Ficus benjamina</i>	垂葉榕	N	N	N (only allowed for existing individuals already planted)	N	N (only allowed for existing individuals already planted)	This species cannot be further planted in Zones 2, 2a and 3 since existing environment will be changed due to development projects. Any existing individuals already planted in Zones 2 and 3 (areas away from runway and airfield in both zones) can be allowed but they should be regularly pruned to remove any fleshy fruits.
<i>Ficus crassifolia</i>	厚葉榕	N	N	N (only allowed for existing individuals already planted)	N	N (only allowed for existing individuals already planted)	<i>Ficus crassifolia</i> is equivalent to <i>Ficus microcarpa</i> var. <i>crassifolia</i> . Depending on the type of cultivar, this could become a larger shrub/ tree. Any existing individuals already planted in Zones 2 and 3 (areas away from the runway and airfield in both zones) can be allowed but they should be regularly pruned to maintain a ball or cone shape, and any fleshy fruits should be removed during pruning.
<i>Ficus microcarpa</i>	細葉榕	N	N	N (only allowed for existing individuals already planted)	N	N (only allowed for existing individuals already planted)	This species cannot be further planted in any zones, or in any area close to the airfield due to its production of fruits which may attract birds. Depending on the type of cultivar, this could become larger shrub/ tree. Any existing individuals already planted in Zones 2 and 3 (areas away from the runway and airfield in both zones) can be allowed but they should be regularly pruned to remove all fleshy fruits.
<i>Ficus microcarpa</i> L.f	圓葉榕	N	N	Y	Y	Y	This <i>Ficus</i> species can be accepted in Zones 2, 2a and 3 only if its cultivar form (production of sterile fruits) is used and only small-scale planting (i.e. planting area can be no more than 1000 sq. meter) is allowed. Regular pruning of this species should be carried out in Zone 2 and areas close to the runway and the airfield to maintain its dense low canopy.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Grevillea banksii</i>	紅花銀樺	N	N	Y	Y	Y	This can produce large and open canopy. Acceptable only in small-scale planting. AAHK should control the tree height as a long-term tree management approach in Zones 2, 2a and 3.
<i>Grevillea robusta</i>	銀樺	N	N	Y	Y	Y	This can produce large and open canopy. Acceptable only in small-scale planting. AAHK should control the tree height as a long-term tree management approach in Zones 2, 2a and 3.
<i>Heteropanax fragrans</i>	幌傘楓	N	N	Y	N	Y	Acceptable in areas away from the airfield; AAHK should control the tree height as a long-term tree management approach in Zones 2 and 3.
<i>Hibiscus tiliaceus</i>	黃槿	N	N	Y	N	Y	This is a small tree that birds may use for shelter. Large-scale planting should be avoided, esp. in areas near Zone 1 and the runway. The planting area can be no more than 500 sq. meter following the restriction stipulated in APSL Rev. 6.
<i>Jacaranda acutifolia</i> (New scientific name: <i>Jacaranda mimosifolia</i>)	藍花楸	N	N	Y	N	Y	This species has a medium tree size and produces showy flowers, but is very vulnerable to storm damage due to its brittle wood. It is only acceptable in small-scale planting if it is planted in Zone 2.
<i>Juniperus chinensis</i>	龍柏	N	N	Y	Y	Y	Regular pruning to maintain height < 5m in Zone 2.
							Requires removal of fruits in Zones 2 and 2a.
<i>Juniperus formosana</i>	刺柏/ 針松	N	N	Y	Y	Y	Acceptable in areas away from the runway and the airfield only. Regular pruning should be applied in Zone 2.
<i>Koelreuteria bipinnata</i>	複葉欒樹	N	N	Y	N	Y	Acceptable in areas away from the airfield and runway; AAHK should control the tree height as a long-term tree management approach in Zones 2 and 3.
<i>Koelreuteria formosana</i>	台灣欒樹	N	N	Y	N	Y	Acceptable in areas away from the airfield and runway; AAHK should control the tree height as a long-term tree management approach in Zones 2 and 3.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Lagerstroemia speciosa</i>	大葉紫薇	N	N	Y	Y	Y	Acceptable in areas away from the runway and airfield only.
<i>Melaleuca bracteata</i>	黃金香柳	N	N	Y	Y	Y	Flowers of this species may be regularly visited by bird flocks, like tree <i>Melaleuca cajuputi</i> subsp. <i>cumingiana</i> . This species is acceptable in Zone 2, but regular pruning should be adopted to control its height as shrub or small tree, and monitoring of its attractiveness to birds is required.
<i>Melia azedarach</i>	苦楝	N	N	N (only allowed for existing individuals already planted)	N	Y	This species cannot be further planted in Zones 1 2, 2a or in any area close to the airfield, due to its production of fruits which may attract birds. Depending on the type of cultivar, this could become larger tree. Any existing individuals already planted in Zone 2 (areas away from the runway and airfield) can be allowed but they should be regularly pruned to remove all fleshy fruits.
<i>Michelia alba</i>	白玉蘭	N	N	Y	N	Y	This species has a spreading canopy which encourages bird's foraging. This species can only be accepted in small-scale planting in areas away from the airfield and runway.
<i>Michelia champaca</i>	黃玉蘭	N	N	Y	N	Y	This species has a spreading canopy which encourages bird's foraging. This species can only be accepted in small-scale planting in areas away from the airfield and runway.
<i>Michelia chapensis</i>	樂昌含笑	N	N	Y	N	Y	This species has a spreading canopy which encourages bird's foraging. This species can only be accepted in small-scale planting in areas away from the airfield and runway.
<i>Peltophorum pterocarpum</i>	盾柱木	N	N	Y	Y	Y	The large spreading open canopy may encourage bird perching; preferable to be planted in Zone 3 only, but can have limited use in Zones 2 and 2a areas away from the runway and landside. AAHK has to control the tree height as a long-term tree management approach in Zones 2, 2a and 3.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Plumeria obtusa</i> 'Pink Flower'	鈍葉雞蛋花	N	N	Y	Y	Y	Acceptable only in limited use in Zones, 2, 2a and 3 (areas away from the airfield and the runway in these zones).
<i>Plumeria rubra</i>	雞蛋花	N	N	Y	Y	Y	Acceptable only in limited use in areas away from the airfield and the runway.
<i>Podocarpus macrophyllus</i>	羅漢松	N	N	Y	Y	Y	Acceptable in areas away from the runway and the airfield if routine pruning and vegetation maintenance work is applied to this species so as to reduce its attraction to birds.
<i>Polyalthia longifolia</i> 'Pendula'	長葉暗羅	N	N	Y	Y	Y	
<i>Prunus</i> subgenus <i>Cerasus</i>	櫻花	N	N	Y	Y	Y	Only the cultivar forms with no fleshy fruits are allowed for planting in Zones 2, 2a and 3. Any planted individuals, especially those planted in Zones 2 and 2a, should be monitored regularly for any production of fruits if in case the source of the cultivar is in doubt.
<i>Saraca asoca</i>	無憂樹	N	N	Y	Y	Y	Acceptable in areas away from the airfield and runway. It should be emphasized that this species can grow into a tall tree with spreading canopy. AAHK has to control the tree height as a long-term tree management approach in Zones 2, 2a and 3.
<i>Sophora japonica</i> cv. Golden stem	黃金槐 (金枝槐)	N	N	Y	N	Y	Acceptable for sterile cultivar to be planted in areas away from the runway and airfield. Maximum height of this species can reach 25m, AAHK has to control the tree height as a long-term tree management approach in Zones 2 and 3.
<i>Spathodea campanulata</i>	火焰木	N	N	Y	Y	Y	This species can produce showy flowers attracting small to medium-sized birds. It can only be used in limited use in areas away from the runway and the airfield. AAHK has to control the tree height as a long-term tree management approach in Zones 2, 2a and 3.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Tabebuia argentea</i>	銀鱗風鈴木	N	N	Y	Y	Y	Acceptable in areas away from the airfield and runway. AAHK has to control the tree height as a long-term tree management approach in Zones 2, 2a and 3.
<i>Tabebuia chrysantha</i>	黃花風鈴木	N	N	Y	Y	Y	Acceptable in areas away from the airfield and runway. AAHK has to control the tree height as a long-term tree management approach in Zones 2, 2a and 3.
<i>Tabebuia impetiginosa</i>	紫花風鈴木	N	N	Y	Y	Y	Acceptable in areas away from the airfield and runway. AAHK has to control the tree height as a long-term tree management approach in Zones 2, 2a and 3.
<i>Tabebuia rosea</i>	紅花風鈴木	N	N	Y	Y	Y	Acceptable in areas away from the runways and airfield; recommend to have small-scale planting in Zones 2 and 2a.
<i>Tabebuia roseo-alba</i>	白玫瑰鐘木	N	N	Y	Y	Y	Acceptable in areas away from the runways and airfield.
<i>Terminalia mantaly</i> var. <i>tricolor</i>	花葉細葉欖仁樹	N	N	Y	Y	Y	Acceptable in areas away from the runway and airfield. Drupe fruits may be too large for birds, but possibly eaten by bats, suggest to remove the fruits if this tree has to be planted in Zone 2.
<i>Thespesia populnea</i>	繖楊	N	N	Y	Y	Y	Requires regular pruning if planted in Zones 2 and 2a.
<i>Thuja orientalis</i> cv. <i>Aurea Nana</i>	黃金側柏	N	N	Y	Y	Y	Acceptable in Zone 2 with regular pruning.
<i>Ulmus pumila</i> cv. <i>Jinye</i>	金葉榆	N	N	Y	N	Y	Acceptable only in small-scale planting and requires regular pruning to maintain dense low canopy in Zone 2.
SHRUBS/HERBS							
<i>Acacia podalyriifolia</i>	銀葉金合歡	N	Y	Y	Y	Y	This small tree can reach 6m or more when mature, and the fleshy arils of the dry seed pods are quite attractive to birds. Only small-scale planting is allowed in areas away from the runway and airfield. Regular pruning is required to control its height <1.5m, as well as removing its attractive seed pods.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Acalypha hispida</i>	狗尾紅	N	Y	Y	Y	Y	Acceptable in Zone 1 if regular pruning is carried out to maintain its small size of less than 1.5m.
<i>Ardisia fordii</i>	紫金牛	N	N	Y	Y	Y	Acceptable in areas away from the airfield and runway if regular and special pruning occur at the end of flowering season to remove all fruits.
<i>Agave</i> spp.	龍舌蘭	N	N	Y	N	Y	Its tall flower spike is very attractive to birds and needs regular removal. This species should not be planted at a large-scale. Flower spikes should also be removed.
<i>Agave americana</i>	黃邊龍舌蘭	N	N	Y	N	Y	Remove the flower spikes if planted in Zones 2 and 2a.
<i>Agave angustifolia</i>	狹葉龍舌蘭	N	N	Y	N	Y	Same as <i>Agave americana</i> .
<i>Aglaia odorata</i>	米仔蘭	N	N	Y	Y	Y	Regular pruning to maintain the shrubs to less than 1.5m should be adopted in Zones 2 and 2a.
<i>Aglaonema</i> 'Silver King'	銀皇后	N	Y	Y	Y	Y	
<i>Allamanda blanchetii</i>	紫花黃蟬	N	Y	Y	Y	Y	Regular pruning to maintain the shrubs to less than 1.5m should be adopted in Zone 1.
<i>Allamanda cathartica</i>	軟枝黃蟬	N	Y	Y	Y	Y	Regular pruning to maintain the shrubs to less than 1.5m should be adopted in Zone 1.
<i>Allamanda nerifolia</i> (New scientific name: <i>Allamanda schottii</i>)	硬枝黃蟬	N	Y	Y	Y	Y	Regular pruning to maintain the shrubs to less than 1.5m should be adopted in Zone 1.
<i>Allamanda</i> spp.	黃蟬類	N	Y	Y	Y	Y	Regular pruning to maintain the shrubs to less than 1.5m should be adopted in Zone 1.
<i>Alpinia purpurata</i> Pink	粉紅山姜	N	N	Y	Y	Y	
<i>Alpinia speciosa</i>	艷山薑	N	N	Y	Y	Y	

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
(New scientific name: <i>Alpinia zerumbet</i>)							
<i>Alternanthera versicolor</i>	錦繡莧	N	N	Y	Y	Y	
(New scientific name: <i>Alternanthera bettzickiana</i>)							
<i>Amaryllis</i> spp. (<i>Hippeastrum</i> spp.).	朱頂紅屬	N	N	Y	Y	Y	
<i>Asparagus sprengeri</i> (<i>Asparagus densiflorus</i> cv. <i>Sprengeri</i>)	非洲天門冬	N	N	Y	Y	Y	
<i>Barleria cristata</i>	假杜鵑	N	N	Y	Y	Y	
<i>Begonia</i> spp.	秋海棠屬	N	N	Y	Y	Y	
<i>Bougainvillea</i> spp.	勒杜鵑	N	Y	Y	Y	Y	Regular pruning to maintain dense low canopy in Zones 1 2 and 2a.
<i>Brunfelsia acuminata</i> Benth	鴛鴦茉莉	N	N	Y	Y	Y	
<i>Buddleja davidii</i>	大花醉魚草	N	N	Y	Y	Y	Acceptable only in limited use in Zone 2. This species is quite invasive in the planting areas.
<i>Caesalpinia pulcherrima</i>	洋金鳳	N	N	Y	Y	Y	Regular pruning to maintain dense low canopy in Zone 2.
<i>Calathea</i> spp.	肖竹芋屬	N	N	Y	Y	Y	
<i>Calliandra haematocephala</i>	紅絨球	N	N	Y	Y	Y	Regular pruning to maintain a dense low canopy in Zones 2 and 2a.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Calliandra harrisii</i>	澳洲粉樸	N	Y	Y	Y	Y	Regular pruning to maintain the shrubs to less than 1.5m should be adopted in Zone 1. Regular pruning to maintain a dense low canopy in Zones 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.
<i>Calliandra surinamensis</i> Benth	粉撲花	N	Y	Y	Y	Y	This species produces showy flowers and dry seeds, and can be regularly visited by small birds; acceptable only in small-scale planting with regular pruning to maintain its height less than 1.5m in Zone 1, and dense low canopy if it is planted in Zones 2 and 2a.
<i>Camellia japonica</i> (Red/white Flower)	山茶(紅/白花)	N	N	Y	Y	Y	This species is not appropriate for heavy pruning, and may form closed canopy structure to attract birds. This species can be in limited use, and accepted in small-scale planting in areas away from the runway and airfield.
<i>Camellia japonica</i> 'Albaplena' (White Flower)	山茶(白花)	N	N	Y	Y	Y	This species is not appropriate for heavy pruning, and may form closed canopy structure to attract birds. This species can be in limited use, and accepted in small-scale planting in areas away from the runway and airfield.
<i>Camellia japonica</i> 'Rosedale beauty' (Red/pink Flower)	山茶(紅花)	N	N	Y	Y	Y	This species is not appropriate for heavy pruning, and may form closed canopy structure to attract birds. This species can be in limited use, and accepted in small-scale planting in areas away from the runway and airfield.
<i>Canna indica</i>	美人蕉	N	N	Y	Y	Y	
<i>Canna x generalis</i>	大花美人蕉	N	N	Y	Y	Y	
<i>Carmona microphyll</i>	福建茶	N	Y	Y	Y	Y	Acceptable in Zones 1 2 and 2a only if regular pruning is adopted to maintain its dense low canopy.
<i>Cassia alata</i> (New scientific name: <i>Senna alata</i>)	有翅決明	N	N	Y	Y	Y	

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Cassia surattensis</i> (New scientific name: <i>Senna surattensis</i>)	黃槐	N	N	Y	N	Y	Requires regular pruning if planted in Zone 2.
<i>Catharanthus roseus</i>	長春花	N	N	Y	Y	Y	
<i>Clerodendrum quadriloculare</i>	煙火樹	N	N	Y	Y	Y	This shrub species can produce large quantity of fleshy fruits which are attractive and dispersed by birds. It can only be planted in small-scale, and in areas in Zone 2, 2a and 3 where are close to building blocks and away from airfield and runway. Removal of its fleshy fruits is required.
<i>Clerodendrum thomsonea</i>	龍吐珠	N	N	Y	Y	Y	
<i>Clerodendrum ugandense</i>	藍蝴蝶	N	N	Y	Y	Y	
<i>Codiaeum variegatum</i>	灑金榕	N	Y	Y	Y	Y	Accepted only cultivar form 'Indian Blanket' of this species with no production of fleshy fruits can be allowed in the airport island, future Third Runway area, and the infrastructural works to be completed near the airport island.
<i>Codiaeum variegatum</i> 'Indian Blanket'	彩霞變 葉木	N	N	Y	Y	Y	
<i>Coleus hybridus</i>	洋紫蘇	N	N	Y	Y	Y	
<i>Cordyline terminalis</i>	鐵樹	N	N	Y	Y	Y	Fleshy fruits can attract birds; acceptable only in small-scale planting in areas close to building blocks and away from the airfield and runway. Removal of fruits is also required in these areas.
<i>Cordyline terminalis</i> cv. Dolly	娃娃朱 蕉	N	N	Y	Y	Y	The cultivar form of this species may not produce fleshy fruits; acceptable only in small-scale planting in areas close to building blocks and away from the airfield and runway.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Cordyline terminalis</i> cv. Rubra	紅葉鐵樹	N	N	Y	Y	Y	The cultivar form of this species may not produce fleshy fruits; acceptable only in small-scale planting in areas close to building blocks and away from the airfield and runway.
<i>Cuphea</i> spp.	萼距花屬	N	N	Y	Y	Y	<i>Cuphea</i> spp. acceptable in Zone 2 with regular pruning.
<i>Cupressus macroglossus</i> cv. Goldcrest	香冠柏	N	Y	Y	Y	Y	Regular pruning is required for Zones 1 and 2; it should be pruned in ball or cone shape if used in Zone 1 and should be pruned to height less than 1.5m tall.
<i>Daphne odora</i> f. <i>marginata</i>	金邊瑞香	N	N	Y	Y	Y	
<i>Dieffenbachia amoena</i>	黛粉葉	N	N	Y	Y	Y	
<i>Dietes bicolor</i>	雙色非洲鳶尾	N	N	Y	Y	Y	
<i>Dracaena angustifolia</i>	狹葉龍血樹	N	N	N (only allowed for existing individuals already planted)	N	Y	Not recommended in Zones 2 and 2a as it can develop into heavy clump with fleshy fruit attractive to birds. Any existing individuals can be allowed in areas away from the airfield and runway, if they can be regularly pruned and any produced fleshy fruits are removed during the pruning.
<i>Dracaena marginata</i>	紅邊龍血樹	N	N	Y	N	Y	The species should be regularly pruned and any produced fleshy fruits would be removed during the pruning, if it is planted in Zone 2, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield. Please make sure that regular pruning practice would be maintained to remove the fleshy fruits.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Dracaena fragrans</i>	巴西鐵樹	N	N	Y	Y	Y	Fleshy fruits can attract birds; acceptable only in small-scale planting in areas close to building blocks and away from the airfield and runway. Removal of fruits is also required in these areas.
<i>Dracaena godffiana</i> 'Bausei'	黃道星點木	N	N	Y	Y	Y	The cultivar form of this species may not produce fleshy fruits; acceptable only in small-scale planting in areas close to building blocks and away from the airfield and runway.
<i>Dracaena marginata</i> 'Tricolor Rainbow'	彩虹竹蕉	N	N	Y	Y	Y	The cultivar form of this species may not produce fleshy fruits; acceptable only in small-scale planting in areas close to building blocks and away from the airfield and runway, if it is planted in Zone 2.
<i>Dracaena reflexa</i> 'Song of Jamaica'	百合竹	N	N	Y	Y	Y	The cultivar form of this species may not produce fleshy fruits; acceptable only in small-scale planting in areas close to building blocks and away from the airfield and runway, if it is planted in Zone 2.
<i>Dracaena reflexa</i> 'Variegata'	金邊百合竹	N	N	Y	Y	Y	The cultivar form of this species may not produce fleshy fruits; acceptable only in small-scale planting in areas close to building blocks and away from the airfield and runway, if it is planted in Zone 2.
<i>Dracaena sanderiana</i>	白邊萬年竹	N	N	Y	Y	Y	The cultivar form of this species may not produce fleshy fruits; acceptable only in small-scale planting in areas close to building blocks and away from the airfield and runway, if it is planted in Zone 2.
<i>Dracaena sanderiana</i> 'Golden Edge'	黃邊萬年竹	N	N	Y	Y	Y	The cultivar form of this species may not produce fleshy fruits; acceptable only in small-scale planting in areas close to building blocks and away from the airfield and runway, if it is planted in Zone 2.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Duranta repens</i>	假連翹	N	N	Y	Y	Y	Fruits are attractive to birds and regular removal of fruits by pruning is required, if it is planted in Zones 2 and 2a, as well as the areas in Zone 3 which are close to the airfield and runway.
<i>Duranta repens</i> cv. Marginata	金邊金露花	N	N	Y	Y	Y	Fruits are attractive to birds and regular removal of fruits by pruning is required if it is planted in Zones 2 and 2a, as well as the areas in Zone 3 which are close to the airfield and runway.
<i>Duranta repens</i> 'Golden Leaves'	金連翹	N	N	Y	Y	Y	Fruits are attractive to birds and regular removal of fruits by pruning is required, if it is planted in Zones 2 and 2a, as well as the areas in Zone 3 which are close to airfield and runway.
<i>Duranta repens</i> 'Variegata'	花葉假連翹	N	N	Y	Y	Y	Fruits are attractive to birds and regular removal of fruits by pruning is required, if it is planted in Zones 2 and 2a, as well as the areas in Zone 3 which are close to airfield
<i>Eupatorium fortunei</i>	佩蘭	N	Y	Y	Y	Y	
<i>Euphorbia leucocephala</i>	白雪木	N	N	Y	Y	Y	Regular pruning to maintain a dense low canopy in Zones 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.
<i>Excoecaria cochinchinensis</i>	紅背桂	N	Y	Y	Y	Y	
<i>Fagraea ceilanica</i>	非洲茉莉	N	N	Y	Y	Y	Regular pruning should be maintained to reduce its dense cover in Zones 2 and 2a.
<i>Fagraea ceilanica</i> 'Golden Leaves'	金葉灰莉	N	N	Y	Y	Y	Regular pruning should be maintained to reduce its dense cover in Zones 2 and 2a.
<i>Fatsia japonica</i>	八角金盤	N	N	Y	Y	Y	Fruits are attractive to birds. Pruning is required to remove all fruits. Only small scale planting is allowed in areas away from the airfield.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Ficus benjamina</i> 'Variegata'	白斑垂榕	N	N	Y	Y	Y	This <i>Ficus</i> species can be accepted only if its cultivar form (production of sterile fruits) is used, and only small-scale planting (i.e. planting area can be no more than 1000 sq. meter) is allowed. Regular pruning of this species should be carried out to maintain its dense low canopy.
<i>Ficus microcarpa</i> cv. Golden Leaves	金葉榕	N	N	Y	Y	Y	This <i>Ficus</i> species can be accepted only if its cultivar form (production of sterile fruits) is used and only small-scale planting (i.e. planting area can be no more than 500sq. meter for initial planting and 1000 sq. meter for existing planted groups) is allowed. Regular pruning of this species should be carried out to maintain its dense low canopy.
<i>Furcraea foetida</i>	黃紋萬年麻	N	N	Y	N	Y	Acceptable in limited use and removal of flower spikes is required in Zones 2 and 2a.
<i>Gardenia jasminoides</i>	白蟬	N	N	Y	Y	Y	Flowers are quite attractive to small birds. Acceptable only in small-scale planting and with regular pruning in Zones 2 and 2a, as well as areas in Zone 3 which are close to Zone 2 and the airfield.
<i>Gomphocarpus physocarpus</i>	汽球花	N	N	Y	Y	Y	
<i>Gordonia axillaries</i>	大頭茶	N	N	Y	Y	Y	Regular pruning to maintain height <1.5m in Zone 2.
<i>Hibiscus hamabo</i>	黃芙蓉	N	N	Y	Y	Y	
<i>Hibiscus mutabilis</i>	木芙蓉	N	N	Y	Y	Y	Showy flowers may be visited by sunbirds and this species is not suitable for heavy pruning. Limited use in Zone 2 is acceptable if it is planted in areas away from the runway and airfield.
<i>Hibiscus rosa sinensis</i> (red/orange/pink/yellow flowers)	大紅花 (紅花/白花/粉花/黃花)	N	N	Y	Y	Y	

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Hibiscus schizopetalus</i>	吊燈花	N	N	Y	Y	Y	Showy flowers may be visited by sunbirds and this species is not suitable for heavy pruning. Limited use in Zone 2 is acceptable if it is planted in areas away from the runway and airfield.
<i>Hibiscus syriacus</i>	木槿	N	N	Y	Y	Y	
<i>Iris tectorum</i>	鳶尾(雙色)	N	N	Y	Y	Y	
<i>Ixora chinensis</i>	龍船花	N	Y	Y	Y	Y	Regular pruning to maintain its height <1.5m and in small-scale planting in Zone 1. Regular pruning is required in other Zones, except areas in Zone 3 which are away from Zone 2 and the airfield.
<i>Ixora coccinea</i>	龍船花	N	Y	Y	Y	Y	Regular pruning to maintain its height <1.5m and in small-scale planting in Zone 1. Regular pruning is required in other Zones, except areas in Zone 3 which are away from Zone 2 and the airfield.
<i>Ixora duffii</i> 'Super King'	大王龍船花	N	Y	Y	Y	Y	The cultivar form may still produce fruits to attract birds, acceptable only in limited use and with regular pruning in Zones 1, 2 and 2a.
<i>Ixora parviflora</i>	白龍船花	N	Y	Y	Y	Y	The cultivar form may still produce fruits to attract birds, acceptable only in limited use and with regular pruning in Zones 1, 2 and 2a, as well as the areas in Zone 3 which are close to Zone 2 and the airfield.
<i>Ixora stricta</i>	細葉龍船花	N	Y	Y	Y	Y	The cultivar form may still produce fruits to attract birds, acceptable only in limited use and with regular pruning in Zones 1, 2 and 2a, as well as the areas in Zone 3 which are close to Zone 2 and the airfield.
<i>Ixora x westii</i>	宮粉龍船花	N	Y	Y	Y	Y	The cultivar form may still produce fruits to attract birds, acceptable only in limited use and with regular pruning in Zones 1, 2 and 2a, as well as the areas in Zone 3 which are close to Zone 2 and the airfield.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Jasminum mesnyi</i>	黄素馨	N	N	Y	Y	Y	Regular pruning work is required in Zones 2 and 2a, as well as the areas in Zone 3 which are close to Zone 2 and the airfield.
<i>Jasminum sambac</i>	茉莉	N	N	Y	Y	Y	Regular pruning work is required in Zones 2 and 2a, as well as the areas in Zone 3 which are close to Zone 2 and the airfield.
<i>Jatropha integerrima</i>	琴葉珊瑚	N	N	Y	Y	Y	Only allowed if planted in low number in areas close to the airfield.
<i>Jatropha pandurifolia</i>	日日櫻	N	N	Y	Y	Y	
<i>Lagerstroemia indica</i>	細葉紫薇	N	N	Y	Y	Y	
<i>Lagerstroemia indica</i> 'Pink velour'	美國天鵝絨細葉紫薇	N	N	Y	Y	Y	Acceptable in small-scale planting in areas away from the runway and airfield.
<i>Leucophyllum frutescens</i> (round shape)	紅花玉芙蓉 (圓形)	N	Y	Y	Y	Y	Only acceptable in Zone 1 with regular pruning to maintain its low dense form and height <1.5m.
<i>Ligustrum sinense</i> 'Variegatum'	花葉山指甲	N	N	Y	Y	Y	Acceptable in small-scale planting in areas away from the airfield and runway.
<i>Ligustrum ovalifolium</i>	卵葉女貞	N	Y	Y	Y	Y	Acceptable in small-scale planting in areas away from the airfield and runway. Regular pruning is required especially in Zone 1.
<i>Loropetalum chinensis</i> var. <i>rubrum</i>	紅繼木	N	Y	Y	Y	Y	Acceptable in small-scale planting in the areas away from runway and airfield. Regular pruning is required especially in Zone 1.
<i>Malvaviscus arboreus</i> var. <i>penduliflorus</i>	垂花懸鈴花	N	N	Y	Y	Y	

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Melastoma candidum</i>	野牡丹	N	N	Y	Y	Y	Allowed in the areas away from the airfield and runway. The species should be regularly pruned in Zones 2 and 2a, as well as the areas in Zone 3 which are close to Zone 2 and the airfield. Any produced fleshy fruits would be removed during the pruning. Please make sure that regular pruning practice would be maintained to remove the fleshy fruits to maintain the ball-cone shape of the species.
<i>Michelia figo</i>	含笑	N	Y	Y	Y	Y	Acceptable in small-scale planting in areas away from the airfield and runway. Regular pruning is required in Zone 1.
<i>Michelia figo</i> (Tree shape)	含笑樹	N	N	Y	Y	Y	Not suitable for heavy pruning, but acceptable in small-scale planting in Zones 2 and 2a
<i>Murraya paniculata</i>	九里香	N	N	Y	Y	Y	Regular pruning is required and small-scale planting of this species is acceptable in Zones 2 and 2a.
<i>Nandina domestica</i>	南天竺	N	N	Y	Y	Y	Regular pruning is required and small-scale planting of this species is acceptable in Zones 2 and 2a.
<i>Nephrolepis exaltata</i> (New scientific name: <i>Nephrolepis hirsutula</i>)	毛葉腎蕨	N	N	Y	Y	Y	
<i>Nerium oleander</i> (Also known as <i>Nerium indicum</i> as its synonym)	洋夾竹桃	N	Y	Y	Y	Y	Regular pruning is required and small-scale planting of this species is acceptable in Zones 1, 2 and 2a.
<i>Nerium oleander</i> 'Petite Pink'		N	N	Y	Y	Y	Acceptable but regular pruning to control its spread; this species is poisonous as a reminder
<i>Osmanthus fragrans</i>	桂花	N	Y	Y	Y	Y	Regular pruning is required and small-scale planting of this species is acceptable in Zone 1.
<i>Otacanthus coeruleus</i>	藍金花	N	Y	Y	Y	Y	
<i>Pentas lanceolata</i>	五星花	N	N	Y	Y	Y	

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Philodendron selloum</i>	春羽	N	N	Y	Y	Y	
<i>Phyllanthus myrtifolius</i>	瘤腺葉下珠	N	N	Y	Y	Y	
<i>Pilea nummularifolia</i>	古錢冷水花	N	N	Y	Y	Y	
<i>Pistacia weinmannifolia</i>	清香木	N	N	Y	Y	Y	The species planted in Zone 2, as well as the areas in Zone 3 which are close to Zone 2 and the airfield, should be regularly pruned. Any produced fleshy fruits would be removed in all planting zones. Regular pruning practice would be maintained to remove the fleshy fruits to maintain the ball-cone shape of the species.
<i>Pittosporum tobira</i>	海桐花	N	N	Y	Y	Y	Regular pruning is required if it is planted in Zones 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.
<i>Plumbago capensis</i>	藍雪花	N	N	Y	Y	Y	
<i>Polyscias fruticosa</i>	裂葉假沙梨	N	N	Y	Y	Y	
<i>Polyscias guilfoylei</i>	假沙梨	N	N	Y	Y	Y	
<i>Polyscias scutellaria</i>	圓葉假沙梨	N	N	Y	Y	Y	
<i>Raphiolepis indica</i>	車輪梅	N	N	Y	N	Y	Fruits are attractive to birds. Pruning is required to remove all fruits if this species must be planted in Zones 2 and 2a. Only small scale planting is allowed in Zones 2 and 2a but it is required to closely monitor its growing. Small-scale planting is allowed in Zone 3.
<i>Rhododendron</i> spp.	山杜鵑	N	Y	Y	Y	Y	Regular pruning to maintain the shrubs to less than 1.5m should be adopted in Zones 1, 2, 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Rhododendron farrerae</i>	丁香杜鵑	N	Y	Y	Y	Y	Regular pruning to maintain height < 1.5m is required in Zones 1, 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.
<i>Rhododendron hybridum</i>	西洋杜鵑	N	Y	Y	Y	Y	Regular pruning to maintain height < 1.5m is required in Zones 1, 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.
<i>Rhododendron indica</i>	皋月杜鵑	N	Y	Y	Y	Y	Regular pruning to maintain height < 1.5m is required in Zones 1, 2 and 2a as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.
<i>Rhododendron lapponicum</i>	高山杜鵑花	N	Y	Y	Y	Y	Showy flowers occasionally attract small birds. It is acceptable in Zones 1, 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield, if regular pruning is carried out to maintain the small shrub form.
<i>Rhododendron lateritum</i>	磚紅杜鵑	N	Y	Y	Y	Y	Regular pruning to maintain height < 1.5m is required in Zones 1, 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.
<i>Rhododendron mucronatum</i>	白杜鵑	N	Y	Y	Y	Y	Regular pruning to maintain height < 1.5m is required in Zones 1, 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.
<i>Rhododendron mucronatum</i> 'Akemono'	平戶杜鵑(粉紅)	N	Y	Y	Y	Y	Regular pruning to maintain height < 1.5m is required in Zones 1, 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.
<i>Rhododendron mucronatum</i> 'omuraski'	平戶杜鵑(紫紅)	N	Y	Y	Y	Y	Regular pruning to maintain height < 1.5m is required in Zones 1, 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.
<i>Rhododendron pulchrum</i>	紫花杜鵑	N	Y	Y	Y	Y	Regular pruning to maintain height < 1.5m is required in Zones 1, 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Rhododendron pulchrum</i> var. <i>phoeniceum</i>	紫杜鵑	N	Y	Y	Y	Y	Regular pruning to maintain height < 1.5m is required in Zones 1, 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.
<i>Rhododendron simsii</i>	紅花杜鵑	N	Y	Y	Y	Y	Regular pruning to maintain height < 1.5m is required in Zones 1, 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.
<i>Rhododendron simsii</i> "GR"	紅杜鵑	N	Y	Y	Y	Y	Regular pruning to maintain height < 1.5m is required in Zones 1, 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.
<i>Rondeletia odorata</i>	郎德木	N	N	Y	Y	Y	Regular pruning is required in Zones 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.
<i>Ruellia coerulea</i>	翠蘆莉	N	Y	Y	Y	Y	
<i>Ruellia elegans</i>	紅花蘆莉	N	N	Y	Y	Y	
<i>Ruellia rosea</i>	玫紅蘆莉	N	N	Y	Y	Y	
<i>Russelia equisetiformis</i>	吉祥草	N	N	Y	Y	Y	
<i>Saintpaulia idantha</i> (<i>ionantha</i>)	非洲紫蘿蘭	N	N	Y	Y	Y	
<i>Schefflera arboricola</i>	八葉	N	Y	Y	Y	Y	This cultivar species normally does not produce fleshy fruits. This is acceptable in the areas away from the runway and airfield, if it is regularly pruned to maintain its shrub form less than 1.5m tall. Also, all fleshy fruits produced (if any) should be removed.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Schefflera arboricola</i> 'Golden Marginata'	金邊鵝掌藤	N	N	Y	Y	Y	This cultivar species normally does not produce fleshy fruits. This is acceptable in the areas away from the runway and airfield, if it is regularly pruned to maintain its shrub form less than 1.5m tall. Also, all fleshy fruits produced (if any) should be removed.
<i>Schefflera arboricola</i> 'Variegata'	夏威夷花八葉	N	Y	Y	Y	Y	This cultivar species normally does not produce fleshy fruits. This is acceptable in the areas away from the runway and airfield, if it is regularly pruned to maintain its shrub form less than 1.5m tall. Also, all fleshy fruits produced (if any) should be removed.
<i>Schefflera octophylla</i> 'Var'	荷蘭鴨腳木	N	N	Y	Y	Y	This cultivar species normally does not produce fleshy fruits. This is acceptable in the areas away from the runway and airfield, if it is regularly pruned to maintain its shrub form less than 1.5m tall. Also, all fleshy fruits produced (if any) should be removed.
<i>Serissa japonica</i> 'Variegata'	金邊六月雪	N	N	Y	Y	Y	Regular pruning is required to maintain dense low canopy in Zones 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield.
<i>Spathiphyllum commutatum</i>	白掌	N	N	Y	Y	Y	
<i>Strelitzia nicolai</i>	大鶴望蘭	N	Y	Y	Y	Y	
<i>Strelitzia reginae</i>	鶴望蘭	N	N	Y	Y	Y	
<i>Stromanthe sanguinea</i> 'Tricolor'	三色竹芋	N	N	Y	Y	Y	
<i>Syzygium campanulatum</i>	星加坡楠	N	N	Y	Y	Y	This species can produce fleshy fruit potentially attractive to birds. This can be acceptable in areas away from runway and the airfield, if regular pruning and removal of fleshy fruit are applied in these areas.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Syzygium rehderianum</i>	紅枝蒲桃	N	N	Y	Y	Y	Allowed in small-scale planting in areas away from the runway and airfield. The species should be regularly pruned and any produced fleshy fruits would be removed during the pruning. Please make sure that regular pruning practice would be maintained to remove the fleshy fruits to maintain the ball-cone shape of the species.
<i>Tabernaemontana divaricata</i>	珍珠馬茶花	N	Y	Y	Y	Y	Small-scale planting and regular pruning to maintain dense low canopy are required in Zone 1.
<i>Tecoma stans</i>	黃鐘花	N	N	Y	Y	Y	
<i>Tecomaria capensis</i> (New scientific name: <i>Tecoma capensis</i>)	洋凌霄	N	N	Y	Y	Y	
<i>Thevetia peruviana</i>	黃花夾竹桃	N	N	Y	Y	Y	Acceptable in small-scale planting in Zones 2 and 2a.
<i>Thryallis glauca</i>	金英	N	N	Y	Y	Y	
<i>Tibouchina semidecandra</i>	巴西野牡丹	N	Y	Y	Y	Y	Small-scale planting and regular pruning to maintain dense low canopy are required in Zone 1.
<i>Vitex agnus-castus</i>	紫花牡荊	N	N	Y	Y	Y	
<i>Vitex rotundifolia</i>	海埔姜 / 單葉蔓荊	N	N	Y	Y	Y	Acceptable only on retaining walls at roadside; close monitoring on bird use and fruiting density; remove any fleshy fruits wherever practical in Zones 2 and 2a, as well as the areas in Zone 3 which are close to Zone 2 and the airfield.
<i>Yucca aloifolia</i>	王蘭	N	N	Y	Y	Y	
<i>Zamia furfuracea</i>	金錢樹	N	N	Y	Y	Y	Removal of any fruit produced is required, if the species is planted in Zones 2 and 2a, as well as the areas in Zone 3 area which are immediately next to Zone 2 and the airfield.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Zanthoxylum</i> 'Odorum'	胡椒木	N	Y	Y	Y	Y	Acceptable in Zones 1, 2 and 2a if regularly pruning is applied.
GROUNDCOVER							
<i>Acorus gramineus</i> 'Variegatus'	花葉石菖蒲	N	N	Y	Y	Y	
<i>Adenium obesum</i>	沙漠玫瑰	N	N	Y	Y	Y	
<i>Aerva sanguinolenta</i>	絹毛莧	N	N	Y	Y	Y	
<i>Alternanthera dentata</i> 'Ruby'	新加坡紅草	N	N	Y	Y	Y	
<i>Alternanthera ficoidea</i> 'Yellow Form'	綠草	N	N	Y	Y	Y	
<i>Arachis duranensis</i>	蔓花生	N	Y	Y	Y	Y	
<i>Asplenium nidus</i>	雀巢芒	N	N	Y	Y	Y	
<i>Buxus microphylla</i>	黃楊	N	N	Y	Y	Y	
<i>Chlorophytum capense</i>	吊蘭	N	N	Y	Y	Y	
<i>Coleus pumilus</i> (Mixed dwarfed)	小洋紫蘇	N	N	Y	Y	Y	
<i>Dianella ensifolia</i> 'Var'	花葉山管蘭	N	N	Y	Y	Y	
<i>Ipomoea brasiliensis</i> (New scientific name: <i>Ipomoea pes-caprae</i>)	馬鞍藤	N	N	Y	Y	Y	
<i>Iris</i> spp. (Blue folwer)	鳶尾	N	N	Y	Y	Y	
<i>Juniperus horizontalis</i>	地柏/ 雞翼松	N	N	Y	Y	Y	Regular pruning is required in the areas close to the airfield and runway in both Zones 2 and 3.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Lantana mista</i>	黃花馬櫻丹	N	Y	Y	Y	Y	Regular pruning is required to maintain dense low canopy in Zones 1 and 2.
<i>Lantana montevidensis</i>	鋪地臭金鳳	N	Y	Y	Y	Y	Regular pruning is required to maintain dense low canopy in Zones 1 and 2.
<i>Liriope spicata</i>	山麥冬	N	N	Y	Y	Y	Close monitoring on bird use and fruit production.
<i>Liriope spicata</i> 'Dwarf'	日本小蒲草	N	N	Y	Y	Y	
<i>Liriope spicata</i> 'Variegata'	花葉蒲草	N	N	Y	Y	Y	
<i>Maranta bicolor</i>	花葉竹芋	N	Y	Y	Y	Y	
<i>Neomarica gracilis</i>	巴西鳶尾	N	N	Y	Y	Y	
<i>Nephrolepis exaltata</i> 'Bostoniensis'	波斯頓蕨	N	N	Y	Y	Y	
<i>Nephrolepis exaltata</i> 'Compacta'	劍蕨	N	N	Y	Y	Y	
<i>Ophiopogon japonicus</i>	沿階草	N	Y	Y	Y	Y	
<i>Ophiopogon japonicus</i> 'Variegata'	花葉沿階草	N	Y	Y	Y	Y	
<i>Peperomia obtusifolia</i>	圓葉椒草	N	Y	Y	Y	Y	Should maintain regular pruning in Zones 1, 2 and 2a.
<i>Philodendron</i> (mini)	迷你春羽	N	N	Y	Y	Y	
<i>Phyllanthus myrtifolius</i>	錫蘭葉下珠	N	N	Y	Y	Y	
<i>Pilea cadierei</i>	冰水花	N	N	Y	Y	Y	

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Rhoeo discolor</i> 'Dwarf'	矮種蚌花	N	N	Y	Y	Y	
<i>Rhoeo discolor</i> (New scientific name: <i>Tradescantia spathacea</i>)	蚌花	N	N	Y	Y	Y	
<i>Scindapsus aureus</i> (New scientific name: <i>Epipremnum aureum</i>)	黃金葛	N	N	Y	Y	Y	Acceptable only on retaining walls at roadside.
<i>Setcreasea purpurea</i>	紫錦草	N	N	Y	Y	Y	
<i>Spathiphyllum</i> 'Clevelandii'	白掌	N	N	Y	Y	Y	
<i>Spathiphyllum</i> 'Rallas'	綠巨人	N	N	Y	Y	Y	
<i>Syngonium podophyllum</i> 'White butterfly'	白蝴蝶	N	Y	Y	Y	Y	
<i>Tradescantia zebrina</i>	水竹草	N	N	Y	Y	Y	
<i>Tulbaghia violacea</i>	蒜味草	N	N	Y	Y	Y	
<i>Wedelia trilobata</i>	南美蟛蜞菊	N	N	Y	Y	Y	Regular pruning is required to maintain dense low mat in Zones 2 and 2a.
<i>Zephyranthes candida</i>	玉簪	N	Y	Y	Y	Y	
<i>Zephyranthes candida</i> (white / pink flowers)	玉簪 (白花/粉花)	N	Y	Y	Y	Y	
<i>Zephyranthes rosea</i>	玫瑰玉簪	N	Y	Y	Y	Y	
CLIMBERS							

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Allamanda blanchetii</i>	紫花黃蟬	N	N	Y	Y	Y	
<i>Bauhinia glauca</i>	洋蹄甲藤	N	N	Y	Y	Y	
<i>Bougainvillea spectabilis</i>	簕杜鵑	N	Y	Y	Y	Y	Regular pruning is required to maintain dense low canopy in Zones 1, 2 and 2a.
<i>Clerodendrum thomsoniae</i>	龍吐珠	N	Y	Y	Y	Y	Regular pruning to maintain its dense low canopy and remove its fleshy fruits are required when planting in Zones 1 and 2.
<i>Dalbergia benthamii</i>	兩粵黃檀	N	N	Y	Y	Y	
<i>Ficus pumila</i>	薜荔	N	N	Y	Y	Y	Close monitoring on bird usage and fruiting density; remove any fleshy fruits wherever practical in Zones 2 and 2a, as well as the areas in Zone 3 which are close to Zone 2 and the airfield.
<i>Parthenocissus himalayana</i> (New scientific name: <i>Parthenocissus dalzielii</i>)	爬牆虎	N	N	Y	Y	Y	Acceptable only on retaining walls at roadside.
<i>Pseudocalymma alliaceum</i> (Synonyms: <i>Mansoa alliacea</i>)	蒜香藤	N	Y	Y	Y	Y	Regular pruning is required to maintain dense low canopy in Zones 1.
<i>Pyrostegia ignea</i> (New scientific name: <i>Pyrostegia venusta</i>)	炮仗花	N	Y	Y	Y	Y	Acceptable only on retaining walls at roadside.
<i>Scindapsus aureus</i> (New scientific name: <i>Epipremnum aureum</i>)	綠蘿	N	Y	Y	Y	Y	Acceptable only on retaining walls at roadside.
<i>Wisteria sinensis</i>	紫藤	N	N	Y	Y	Y	

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
PALMS/ BAMBOOS/ CYCADS/ RAVENALA							
<i>Bambusa multiplex</i>	鳳尾竹	N	N	Y	Y	Y	
<i>Bambusa ventricosa</i>	佛肚竹	N	N	Y	Y	Y	
<i>Bambusa vulgaris</i>	大佛肚竹	N	N	Y	Y	Y	
<i>Caryota ochlandra</i>	魚尾葵	N	N	Y	Y	Y	Only small scale planting is allowed in Zones 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield. The bundle of fruits should be removed regularly.
<i>Chamaedorea elegans</i>	袖珍椰子	N	N	Y	Y	Y	Acceptable in Zones 2 and 2a, but planted in small-scale.
<i>Chrysalidocarpus lutescens</i>	散尾葵	N	N	Y	Y	Y	Small-scale planting is acceptable with removal of any bunches of fruits throughout the maintenance period. And this species should be planted in areas away from the airfield and runways, or with building blocks between the airfield and the planting area.
<i>Cocos nucifera</i>	椰子樹	N	N	Y	Y	Y	
<i>Coryota mitis</i>	短穗魚尾葵	N	N	Y	Y	Y	Only small scale planting is allowed in Zones 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield. The bundle of fruits should be removed regularly.
<i>Cycas revoluta</i>	蘇鐵	N	N	Y	Y	Y	
<i>Elaeis guineensis</i>	油棕	N	N	Y	Y	Y	
<i>Livistona chinensis</i>	蒲葵	N	N	Y	Y		Only small scale planting is allowed in Zones 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield. The bundle of fruits should be removed regularly.

Scientific names	Common names	Airside	Approved in Zone 1	Approved in Zone 2 (Case by case review)	Approved in Zone 2a (Case by case review)	Approved in Zone 3 (Case by case review)	Remarks for planting and management
<i>Phoenix roebelenii</i>	日本葵	N	N	Y	Y	Y	Only small scale planting is allowed in Zones 2 and 2a, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield. The bundle of fruits should be removed regularly.
<i>Ravenala madagascariensis</i>	旅人蕉	N	N	Y	Y	Y	
<i>Rhapis excelsa</i>	棕竹	N	N	Y	Y	Y	
<i>Rhapis excelsa</i> var. <i>rastifolius</i>	大葉棕竹	N	N	Y	Y	Y	Only small scale planting is allowed in Zone 2, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield. The bundle of fruits should be removed regularly in all zones.
<i>Rhapis humilis</i>	細葉棕竹	N	N	Y	Y	Y	Only small scale planting is allowed in Zone 2, as well as the areas in Zone 3 which are immediately next to Zone 2 and the airfield. The bundle of fruits should be removed regularly in all zones.
GRASS							
<i>Chloris gayana</i>	非洲虎尾草/ 羅滋草	Y	N	N	N	N	Regular cutting to prevent seed head production.
<i>Cynodon dactylon</i>	百慕達草/ 狗牙根	Y	N	N	N	N	Regular cutting to prevent seed head production.
<i>Paspalum notatum</i>	百喜草	Y	N	N	N	N	Regular cutting to prevent seed head production.
<i>Zoysia</i> sp.	結縷草屬	Y	Y	Y	Y	Y	Regular cutting to prevent seed head production.

Appendix C

**Implementation Schedule of all
Landscape and Visual Design
and Mitigation Measures**

Appendix C Implementation Schedule of Landscape and Visual Design and Mitigation Measures

EIA Ref.	EM&A Log Ref	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
Landscape & Visual (Detailed Design Phase)							
S14.3.3.1	LV1	<u>General design measures include:</u>					
		• Roadside planting and planting along the edge of the reclamation is proposed;		Not applicable to the Project			
		• Transplanting of mature trees in good health and amenity value where appropriate and reinstatement of areas disturbed during construction by compensatory hydro-seeding and planting;		Not applicable to the Project			
		• Protection measures for the trees to be retained during construction activities;		Not applicable to the Project			
		• Optimizing the sizes and spacing of the bridge columns;		Not applicable to the Project			
		• Fine-tuning the location of the bridge columns to avoid visually sensitive locations;		Not applicable to the Project			
		• Aesthetic design of the bridge form and its structural elements for HKLR, e.g. parapet, soffit, columns, lightings and so on;		Not applicable to the Project			
		• Considering the decorative urban design elements for HKLR, e.g. decorative road lightings;		Not applicable to the Project			
		• Maximizing new tree, shrub and other vegetation planting to compensate tree felled and vegetation removed;	Minimise visual & landscape impact	Detailed designer	HKBCF	Design stage	Fully implemented
		• Providing planting area around peripheral of HKLR and HKBCF for tree planting screening effect;		Not applicable to the Project			
		• Providing salt-tolerant native trees along the planter strip at affected seawall and newly reclaimed coastline.		Not applicable to the Project			
		• For HKBCF, providing aesthetic architectural design on the related buildings (e.g. similar materials for PCB building facade to Airport buildings, roof planting and subtle materials for other facilities buildings and so on), and the related infrastructure (e.g. parapet planting and transparent cover for elevated footbridges) to provide harmonic atmosphere of the HKBCF.	Minimise visual & landscape impact	Detailed designer	HKBCF	Design stage	Fully implemented
		• Fine-tuning the sizes of the structural members to minimize the bulkiness of buildings and adjustment of building arrangement to minimise disturbance to surrounding vegetation in the HKBCF,	Minimise visual & landscape impact	Detailed designer	HKBCF	Design stage	Fully implemented

EIA Ref.	EM&A Log Ref	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
		<ul style="list-style-type: none"> For HKLR, providing aesthetic design on the viaduct, tunnel portals, at-grade roads and reclamation (e.g. subtle colour tone and slim form for viaduct to minimize the bulkiness of the structure and to blend the viaduct better with the background environment, featured form of tunnel portals, roadside planting along at-grade roads and landscape berm on & planting along edge of reclamation area) to beautify the HKLR alignment 		Not applicable to the Project			
Landscape & Visual (Construction Phase)							
S14.3.3.3	LV2	<u>Mitigate both Landscape and Visual Impacts</u>					
		G1. Grass-hydroseed bare soil surface and stock pile areas.		Not applicable to the Project			
		G2. Add planting strip and automatic irrigation system if appropriate at some portions of bridge or footbridge to screen bridge and traffic.		Not applicable to the Project			
		G3. For HKLR, providing aesthetic design on the viaduct, tunnel portals, at-grade roads and reclamation (e.g. subtle colour tone and slim form for viaduct, featured form of tunnel portals, roadside planting along at-grade roads and landscape berm on & planting along edge of reclamation area) to beautify the HKLR alignment.		Not applicable to the Project			
		G4. For HKBCF, providing aesthetic architectural design on the related buildings (e.g. similar materials for PCB building facade to Airport buildings, roof planting and subtle materials for other facilities buildings and so on), and the related infrastructure (e.g. parapet planting and transparent cover for elevated footbridges) to provide harmonic atmosphere of the HKBCF (see Figure 14.3.1 for example).	Minimise visual & landscape impact	AAHK/ Contractor	HKBCF	Construction stage	To be implemented
		G5. Vegetation reinstatement and upgrading to disturbed areas.	Minimise visual & landscape impact	AAHK/ Contractor	HKBCF	Construction stage	To be implemented
		G6. Maximize new tree, shrub and other vegetation planting to compensate tree felled and vegetation removed.	Minimise visual & landscape impact	AAHK/ Contractor	HKBCF	Construction stage	To be implemented
		G7. Provide planting area around peripheral of and within HKBCF and HKLR for tree screening buffer effect.		Not applicable to the Project			
		G8. Plant salt tolerant native tree and shrubs etc along the planter strip at affected seawall.		Not applicable to the Project			

EIA Ref.	EM&A Log Ref	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	
		G9. Reserve of loose natural granite rocks for re-use. Provide new coastline to adopt “natural-look” by means of using armour rocks in the form of natural rock materials and planting strip area accommodating screen buffer to enhance “natural-look” of the new coastline.	Not applicable to the Project					
S14.3.3.3	LV3	<u>Mitigate Visual Impacts</u>						
		V1. Minimize time for construction activities during construction period.	Minimise visual impact	AAHK/ Contractor	HKBCF	Construction stage	To be implemented	
		V2. Provide screen hoarding at the portion of the project site / works areas/ storage areas near VSRs who have close low-level views to the Project during HKLR & HKBCF construction.	Minimise visual impact	AAHK/ Contractor	HKBCF	Construction stage	To be implemented	
<i>Landscape & Visual (Operation Phase)</i>								
S14.3.3.3	LV4	<u>Mitigate both Landscape and Visual Impacts</u>						
		G10. Provide proper planting maintenance on the new planting areas to enhance the aesthetic degree.	Minimise visual & landscape impact	AAHK/ Contractor	HKBCF	Operation stage	To be implemented	
		<u>Mitigate Visual Impacts</u>						
		V3. Lighting design to minimize glare at night. Decorative road lighting to be considered during detailed design stage.	Minimise visual impact	AAHK/ Contractor	HKBCF	Operation stage	To be implemented	