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11. LANDSCAPE AND VISUAL IMPACT ASSESSMENT

11.1 Introduction

11.1.1 The assessment of potential landscape impact due to construction and operation of the Project and visual impact due to operation of the Project is presented in this chapter.

11.1.2 Based on the RODP, the identified DPs under Schedule 2 of EIAO are listed and described in **Section 2** of the EIA Report. Subject to environmental permit application under this Project (DP1, DP2 and DP3), the following DPs are included in this Landscape and Visual Impact Assessment:

- DP1 - Construction of Carriageway Bridge at TKO 132;
- DP2 – Reclamation works at TKO 137 and off TKO 132;
- DP3 – Construction and Operation of Effluent Polishing Plant;
- DP4 – Construction and Operation of Refuse Transfer Station;
- DP5 – Construction and Operation of Construction Waste Handling Facility; and
- DP6 – Construction and Operation of Electricity Facilities.

11.1.3 Landscape and visual impacts were assessed in accordance with the criteria and guidelines as stated in Annexes 10 and 18 of the Technical Memorandum on Environmental Impact Assessment (EIA) Process (EIAO-TM) and the latest version of Environmental Impact Assessment Ordinance (EIAO) Guidance Note No. 8/2023 on "Preparation of Landscape and Visual Impact Assessment under the Environmental Impact Assessment Ordinance" (EIAO).

11.2 Scope and Content of the Study

Assessment Area

11.2.1 The assessment area for landscape impact assessment includes all areas within 100m from the Project boundary in accordance with EIA SB (No. ESB-360/2023). The assessment area for the visual impact assessment is defined by the visual envelope (VE) of the Project. The landscape and visual impact study boundary are shown in **Figure 11.1** **and** **Figure 11.4** respectively.

Landscape Impact Assessment

11.2.2 As direct impacts on landscape with distinctive character/resources such as loss of water body due to reclamation works are anticipated, a landscape impact assessment is required. The existing and planned landscape resources and character within the assessment area were described, appraised, analyzed and evaluated. A system is derived for judging landscape and visual impact significance as required under the EIAO-TM. The sensitivity of the landscape framework and its ability to accommodate change are particularly focused on. The degree of compatibility of the Project with the existing and planned landscape setting was identified. The landscape impact assessment evaluated the potential landscape impact during both construction and operation phase within the assessment area so as to illustrate the significance of such impacts arising from the proposed Project. Clear mapping of the baseline landscape resources, landscape character areas and the landscape impact were provided.

Visual Impact Assessment

11.2.3 As pronounced visual change from key public viewing points or on existing visually sensitive areas and major visual resources enjoyed by the public is anticipated, a visual impact assessment is required. The visual impact of the Project was assessed. For aboveground structures of the Project, clear illustrations including mapping of visual impact are provided. The assessment adopts a systematic methodology and includes the following.

I. Identification and plotting of visual envelope of the Project;

II. Appraisal of existing visual resources and character as well as the future outlook of the visual system of the assessment area;

III. Identification and justification of the key groups of existing and planned sensitive receivers within the visual envelope and their views at sea level, ground level and elevated vantage points, and clearly indicate the sensitive receivers on a plan of appropriate scale;

IV. Evaluation of the magnitude of change in terms of visual composition, visual obstruction and visual change of the Project with the existing and planned visual context, and sensitivity of viewers in terms of types of viewers and value of existing views;

V. The visual impact of the Project with and without mitigation measures during operation phase shall be included and illustrated so as to demonstrate the effectiveness of the proposed mitigation measures across time; and

VI. Evaluation and explanation with supportive arguments of factors considered in arriving the significant thresholds of visual impacts. The visual impacts included the presentation of an evaluation matrix derived for judging impact significance.

Landscape and Visual Mitigation Measures

11.2.4 The merit of preservation in total or in parts of existing landscape and the establishment of a new landscape character are evaluated. Alternative construction methods and / or Project-related works or structure(s) that would avoid or reduce the identified landscape and visual impacts are considered and evaluated for comparison before adopting other mitigation or compensatory measures to alleviate the impacts. The mitigation measures proposed are not only concerned with damage reduction but also included consideration of potential enhancement of the existing landscape and visual quality. Mitigation measures to minimise the adverse effects identified, including provision of a landscape design, are recommended.

11.2.5 The mitigation measures such as the preservation and tree transplanting as far as practical, control of night-time lighting glare, erection of decorative screen hoarding that compatible with the surrounding setting, reinstatement of the affected hard and soft landscape area in like-for-like basis, aesthetic design of aboveground structure, provision of finishes to structure, colour scheme and texture of material used, tree compensation, provision of screen planting, roadside amenity planting, roof greening and reprovision of open spaces. Parties are identified for the on-going management and maintenance of the proposed mitigation works to ensure their effectiveness throughout the operation of the Project. A practical programme and funding proposal for the implementation of the recommended measures are provided.

Significance of Landscape and Visual Impact

11.2.6 Annotated illustration such as coloured perspective drawings, plans and section/elevation diagrams, oblique aerial photographs, photographs taken at vantage points and computer-generated photomontage are adopted where appropriate to illustrate the significance of the landscape and visual impacts of the aboveground ancillary structures of the Project.

11.3 Environmental Legislation, Standards and Guidelines

11.3.1 The following legislation, standards and guidelines are applicable to landscape and visual impact assessment associated with the construction and operation of the Project:

- Environmental Impact Assessment Ordinance (EIAO) (Cap.499 S.16) and the Technical Memorandum on EIA Process (EIAO-TM), particularly Annexes 10 and 18;
- Environmental Impact Assessment Ordinance Guidance Note No. 8/2023;
- Town Planning Ordinance (Cap. 131);
- Forests and Countryside Ordinance (Cap. 96) and its subsidiary legislations;
- Plant Varieties Protection Ordinance (Cap. 490);

- Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586);
- Hong Kong Planning Standards and Guidelines (HKPSG) Chapters 4, 10 and 11;
- Charter on External Lighting;
- Guideline on Industry Best Practices for External Lighting Installations;
- AFCD Nature Conservation Practice Note No. 2 - Measurement of Diameter at Breast Height (DBH);
- AFCD Nature Conservation Practice Note No. 3 - The Use of Plant Names;
- DEVB TC(W) No. 4/2020 – Tree Preservation;
- DEVB TC(W) No. 5/2020 - Registration and Preservation of Old and Valuable Trees;
- DEVB TC(W) No. 3/2024 - Allocation of Space for Quality Greening on Roads;
- DEVB TC(W) No. 6/2015 - Maintenance of Vegetation and Hard Landscape Features;
- DEVB TC(W) No. 9/2020 Blue-Green Drainage Infrastructure;
- LAO PN 6/2023 – Processing of Tree preservation and Removal Proposals for Building Development in Private Projects – Compliance with Tree Preservation Clause under Lease;
- GEO Publication 1/2011 - Technical Guidelines on Landscape Treatment for Slopes;
- GEO Publication (1999) - Use of Vegetation as Surface Protection on Slopes;
- Guidelines on Tree Transplanting (September 2014) issued by Greening, Landscape and Tree Management (GLTM) Section of DevB;
- Guidelines on Tree Preservation during Development (April 2015) issued by GLTM Section of DevB;
- Guidelines for Tree Risk Assessment and Management Arrangement issued by DEVB; and
- Study on Landscape Value Mapping of Hong Kong.

11.4 Assessment Methodology

Landscape Impact Assessment Methodology

11.4.1 The landscape impact was assessed according to the following procedures:

- ***Carry out Broad Brush Tree and Vegetation Survey on Old and Valuable Trees and trees of particular interest within the Assessment Area.*** The survey would be carried out within the 100m from the boundary of the Project, which is in accordance with the EIA SB (No. 360/2023), to identify the dominant tree species, maturity, rarity, and any plant species or particular flora species of conservation importance, etc. for the baseline study on the Landscape Resources (LR) and Landscape Character Areas (LCAs).
- ***Identification and description of the baseline LRs and LCAs found within the Assessment area.*** The assessment area includes all areas within 100m of the Project area. This is achieved by site visits and desktop study of topographical maps, information databases and photographs.
- ***Assessment of the degree of sensitivity of the LRs and LCAs.*** This is influenced by a number of factors including whether the resource/character is common or rare, whether it is considered to be of local, regional, national or global importance, whether there are any statutory or regulatory limitations/requirements relating to the resource, the quality of the resource/character, the maturity of the resource and the ability of the resource/character to accommodate change.

The sensitivity of each LR and LCA is classified as follows:

High: Important landscape resources and landscape character of particularly distinctive in character or high importance, sensitive to relatively small change.

Medium: Landscape resources and landscape character of moderately valued landscape characteristics reasonably tolerant to change.

Low: Landscape resources and landscape character, the nature of which is largely tolerant to change.

- ***Identification of potential sources of landscape impacts.*** These are the various elements of the construction works and operation procedures that would generate landscape impact.

  Assessment of the potential magnitude of landscape changes. Factors considered include:

  - the compatibility with the surrounding landscape;
  - the duration of the impact under construction and operational phases;
  - scale of development; and
  - reversibility of change.

  The magnitude of landscape changes is classified as follows:

  Substantial: The landscape resources and landscape character would incur a major change.

  Moderate: The landscape resources and landscape character would incur a moderate change.

  Slight: The landscape resources and landscape character would incur slight or barely perceptible change.

  Negligible: The landscape resources and landscape character would incur no discernible change.

- ***Identification of potential landscape mitigation measures.*** These may take the form of adopting basic engineering design to prevent and/or minimise adverse landscape impact before adopting other mitigation or compensatory measures to alleviate the impacts. Potential mitigation measures should also include the preservation of vegetation and natural landscape resources, transplanting trees with good condition and high amenity value, enhancement of existing landscape quality by providing of planting with screening, shading and ornamental value, re-vegetation of disturbed lands, compensatory planting, aesthetic design of aboveground structures including provision of finishes, colour scheme, texture of materials used and any measures to mitigate the impact on the existing and planned land use and visually sensitive receivers. A programme for the mitigation measures is provided. The agencies responsible for the funding, implementation, management and maintenance of the mitigation measures are identified.
- ***Prediction of the significance of impacts before and after the implementation of the mitigation measures.*** Potential mitigation measures suggested would alleviate the landscape impact and enhance the landscape quality by reinstating the disturbed lands and improve the compatibility with the surrounding. By synthesizing the magnitude of the change and the sensitivity of the various LRs and LCAs, it is possible to categorise impacts in a logical, well-reasoned and consistent fashion. **Table 11.1** shows the rationale for dividing the degree of significance into four thresholds, namely negligible, slight, moderate or substantial, depending on the combination of a negligible-slight-

moderate-substantial magnitude of change and a low-medium-high degree of sensitivity of landscape resource and character.

Table 11.1 Relationship between Sensitivity and Magnitude of Change in Defining Impact Significance

Magnitude of Change	Low	Medium	High
Substantial	Moderate	Moderate / Substantial	Substantial
Moderate	Slight / Moderate	Moderate	Moderate / Substantial
Slight	Negligible/ Slight	Slight / Moderate	Moderate
Negligible	Negligible	Negligible	Negligible

Sensitivity of Landscape Resource and Landscape Character Area

Note: All impacts are Adverse unless otherwise noted with Beneficial.

The significance of landscape impact is categorised as follows:

Substantial: Adverse / beneficial impact where the proposal would cause significant deterioration or improvement in existing landscape quality.

Moderate: Adverse / beneficial impact where the proposal would cause a noticeable deterioration or improvement in existing landscape quality.

Slight: Adverse / beneficial impact where the proposal would cause a barely perceptible deterioration or improvement in existing landscape quality.

Negligible: No discernible change in the existing landscape quality.

- ***Prediction of Acceptability of Impacts.*** An overall assessment of the acceptability, or otherwise, of the impacts according to the five criteria set out in Annex 10 of the EIAO-TM.

Visual Impact Assessment Methodology

11.4.2 Reference is drawn from EIAO GN No. 8/2023 – Preparation of Landscape and Visual Impact Assessment Under Environmental Impact Assessment Ordinance.

11.4.3 These various elements of the VIA are detailed below:

- ***Identification of the VE of the Project.*** This is achieved by site visit and desktop study of topographic maps and photographs. Size, distance and other factors will be considered, to determine the VE of the Project. The VE is expected to cover the fields of views from sensitive viewers in direct sight of the proposed sites; usually defined by natural ridgeline, man-made features, or road infrastructures, etc.

- ***Identification of the VPs within the Visual Envelope.*** These VPs are where members of the public or tourists can assess or view the site easily.

- ***Assessment of the degree of sensitivity to change of the viewers of the VPs.*** Factors considered include:

- Visual impact on sensitive public viewers from the most affected viewing points, include key pedestrian nodes, popular areas used by the public or tourists for outdoor activities, recreation, rest, sitting-out, leisure, walking, sight-seeing, and prominent travel routes where travellers' visual attention may be caught by the Project;

- People engaged in working activities are regarded as less sensitive to the visual changes;

- Viewing point should be at human eye level for a realistic presentation of the views;

- Key public viewing points may refer to Chapter 11 on Urban design Guidelines in the Hong Kong Planning Standards and Guidelines (HKPSG), the Explanatory Statement of the relevant statutory plans, adopted outline development plans and layout plans, and completed planning studies available for public reference; and

- Local viewpoints should be determined with reference to the setting of the project and views of local significance.

The sensitivity of viewers of the VPs is classified as follows:

High: The viewers of the VP are highly sensitive to any change in their viewing experience.

Medium: The viewers of the VP are moderately sensitive to any change in their viewing experience.

Low: The viewers of the VP are only slightly sensitive to any change in their viewing experience.

- ***Identification of existing visual elements***, this includes major physical structures, visual resources or attractors, and/ or visual eyesores or detractors that currently exist or area known to be planned within the assessment area. Different visual elements may enhance, degrade or neutralise the overall visual impact of the development being assessed.

- ***Appraisal of visual changes.*** Visual changes may be positive or negative and they are not necessarily mutually exclusive:

  - **Visual Composition:** the total visual effects of all the visual elements due to their variation in locations, massing, heights, dispositions, scales, forms, proportions and characters vis-a-viz the overall visual backdrop. It may result in visual balance, compatibility, harmony, unity or contrast. This appraisal should have due regard to the overall visual context and character within the wider and local contexts

  - **Visual Obstruction:** this appraisal should assess the degree of visual obstruction and loss of views or visual openness due to the Project from all key public viewing points within the assessment area. Blockage or partial blockage of views which substantially reduce visual permeability, existing panorama, vistas, visual resources or visual amenities should be avoided or minimised, in particular with regard to impact on prominent ridgelines, the harbour, natural coastlines, open sea horizon, skyline, scenic areas, valued landscape, special landmark, heritage features to be preserved, etc; and

  - **Visual Changes:** this appraisal should assess the impacts on changes with direct sightlines (considering degree of visibility and viewing distance) to the existing and future public views by comparing before and after the proposed sites.

The magnitude of visual changes is classified as follows:

Substantial: The viewers of the VP would suffer a major change in their viewing experience.

Moderate: The viewers of the VP would suffer a moderate change in their viewing experience.

Slight: The viewers of the VP would suffer a small change in their viewing experience.

Negligible: The viewers of the VP would suffer no discernible change in their viewing experience.

- ***Identification of potential visual mitigation measures.*** These may take the form of adopting basic engineering design to prevent and/or minimise adverse visual impact before adopting other mitigation or compensatory measures to alleviate the impacts. Potential mitigation measures should also include the preservation of vegetation and natural landscape resources, provision of screen planting, re-vegetation of disturbed lands, compensatory planting, aesthetic design of aboveground structures including provision of finishes, colour scheme, texture of materials used and any measures to mitigate the impact on the existing and planned land use and visually sensitive receivers. A programme for the mitigation measures is provided. The agencies responsible for the funding, implementation, management and maintenance of the mitigation measures are identified.

- ***Prediction of the significance of visual impacts before and after the implementation of the mitigation measures.*** By synthesizing the magnitude of the various visual impact and the sensitivity of the viewers, it is possible to categorise the degree of significance of the impacts in a logical, well-reasoned and consistent fashion. **Table 11.2** shows the rationale for dividing the degree of significance into four thresholds, namely, negligible, slight, moderate and substantial, depending on the combination of a negligible-small-intermediate-large magnitude of change and a low-medium-high degree of sensitivity of viewers. The assessment of visual impacts will be presented in a matrix format considering the factors including the location of the VPs, type and approximate number of viewers of the VP, description of existing view and degree of visibility of the proposed sites, the sensitivity of the viewers of the VPs, sources of visual impacts, minimum viewing distance of the viewers, magnitude of change, significance thresholds of potential visual impacts (before mitigation), mitigation measures and significance thresholds of residual impacts (upon mitigation) during operation phase on Day 1 and in Year 10.

Table 11.2 Relationship between VPs/ Viewers' Sensitivity and Magnitude of Change in Defining Impact Significance

Magnitude of Change	Low	Medium	High
Substantial	Moderate	Moderate / Substantial	Substantial
Moderate	Slight / Moderate	Moderate	Moderate / Substantial
Slight	Negligible/ Slight	Slight / Moderate	Moderate
Negligible	Negligible	Negligible	Negligible

Sensitivity of VPs / Viewers

Note: All impacts are Adverse unless otherwise noted with Beneficial.

The significance of visual impact is categorised as follows:

Substantial: Adverse / beneficial impact where the proposal would cause significant deterioration or improvement in existing visual quality.

Moderate: Adverse / beneficial impact where the proposal would cause a noticeable deterioration or improvement in existing visual quality.

Slight: Adverse / beneficial impact where the proposal would cause a barely perceptible deterioration or improvement in existing visual quality.

Negligible: No discernible change in the existing visual quality.

- ***Prediction of Acceptability of Impacts.*** An overall assessment of the acceptability, or otherwise, of the impacts according to the five criteria set out in Annex 10 of the EIAO-TM

11.5 Baseline Study

Physical Landscape Resources

Landform

11.5.1 The assessment area for on-site works areas generally comprises various types of landforms, from hillside upland at the northeast of Devil's Peak, to the coastal sandy shore and rocky shore at the Chiu Keng Wan, reclamation landscape at the southwest of Tseung Kwan O Innopark (TKOIP) and Fat Tong Chau.

Water Body

11.5.2 Within the assessment area, a vast sea water body is covered, including the Junk Bay in between Chiu Keng Wan and Joss House Bay.

Existing Trees

11.5.3 A broad-brush tree survey was carried out to identify the existing trees located within the assessment area (i.e. including 100m from the project boundary) and account the baseline condition of existing landscape resources at the time of EIA preparation. To quantify and safeguard the quality of broad-brush tree survey information, on-site survey at the nearest accessible areas in combination of aerial photo analysis and drone technology was adopted. For accessible areas (such as open spaces and roadside areas of Tiu Keng Leng, built-up

areas in TKOIP and roadside areas of TKO137 etc.), the tree survey information was collected by on-site visual inspection. For remaining areas with site constraints and safety/accessibility problems (such as hillside locations in TKO132, steep slopes at Fat Tong Chau and Tit Cham Chau, within private lots and fence off areas etc.), the tree quantity and tree information estimation were collected from aerial photos and drone photos of high resolution, with visual inspection at the nearest locations to quantify the findings as far as possible. Furthermore, existing trees would be carefully grouped in consideration of the extent of each LR, within site/ outside site location, plant composition and density, accessibility and geographical location of the tree group etc. Therefore, the conducted on-site broad-brush tree survey, in combination of aerial photo and drone technology to increase the accuracy, provides representative tree group information for effective analysis.

11.5.4 Based on the broad-brush tree survey information, approximate 5,497 trees has been surveyed within the assessment area, in which approximate 1,766 trees are within project boundary. None of these are Registered Old and Valuable Trees (OVTs). Tree species that commonly found in Hong Kong can be identified, including *Acacia auriculiformis, Acacia confusa, Celtis sinensis, Eucalyptus spp., Ficus microcarpa, Leucaena leucocephala, Macaranga tanarius var. tomentosa, Rhus succedanea* and *Schefflera heptaphylla* etc. Among the identified species, there are no endangered or rare tree species and no trees with DBH over 1m, which are considered as Tree of Particular Interest (TPI). The broad-brush tree survey finding including tree survey plans and tree schedule are illustrated in **Appendix 11.1.** Apart from the broad-brush tree survey, a few shrub individuals (about 6 nos.) *Diospyros vaccinioides*, in species of conservation importance, is identified within 100m assessment area in the vegetation survey of **Section 9** of the EIA Report. This shrub species is classified as “Critically Endangered” under the IUCN Red List of Threatened Species. About 4 individuals are identified in the shrubland of Fat Tong Chau (LR3) within the project boundary, and the other 2 individuals are identified in the shrubland of Tit Cham Chau (LR3). Details are discussed under the **Section 9** of the EIA Report.

Landscape Resources

11.5.5 Baseline landscape resources (LR) which will be potentially affected by the Project are described and appraised, together with their sensitivity are analysed and evaluated in **Table 11.3**. The locations of LR are mapped in **Figure 11.2.3**. Photographs of the LR are provided in **Figure 11.2.1**-**11.2.2**.

Table 11.3 Landscape Resources and Their Sensitivity

ID No.	Landscape Resources	Description	Sensitivity	Approx. Area (ha)
LR1	Vegetation within TKO 137	This LR refers to the vegetation identified within the reclaimed land TKO 137. The extensive coastal lowland is predominately covered by mosaic shrubland, ruderal and weedy herbs scattered along the access roads. Dominant tree species include *Leucaena leucocephala, Macaranga tanarius var. tomentosa, Carica papaya, Acacia confusa* and *Ficus microcarpa*, which are common species of Hong Kong. The quality of this LR is fair to low due to the constant human disturbance with relatively high tolerance to change. The ability to accommodate change is high. Hence, the sensitivity is considered as Low.	Low	93.0 (approx. 252 trees)
LR2	Hillside Vegetation at Devil’s Peak	This LR refers to the hillside vegetation located within the Study Area at Tiu Keng Leng Upland and Tin Ha Au Upland adjacent to the Clear Water Bay country park. Due to the limited human disturbance, these trees are mature and of medium to large sizes. The common species mainly consists of *Acacia confusa, Celtis sinensis, Cratoxylum cochinchinense, Eucalyptus spp., Ficus hispida, Leucaena leucocephala,*	High	7.0 (approx. 324 trees)

ID No.	Landscape Resources	Description	Sensitivity	Approx. Area (ha)
		Sterculia lanceolata, Schefflera heptaphylla, Mallotus paniculatus, Macaranga tanarius var. tomentosa. The vegetation mixed with the grassland, shrubland and trees form a green backdrop in the vicinity and serve as an important green vista and visual amenity for the regions. The quality and significance of this landscape resources are high with relatively low tolerance to change. The ability to accommodate change is relatively low. Hence, the sensitivity of this LR is considered as High.		
LR3	Shrubland at Tit Cham Chau and Fat Tong Chau	This LR refers to the hillside shrubland and grassland mosaic located at Tit Cham Chau and Fat Tong Chau adjacent to the TKOIP and the reclaimed land TKO 137. Trees of medium to mature size are scattered along the access roads at the foothills due to low human disturbance. Trees surveyed are the common plant species of Hong Kong, including *Celtis sinensis, Cratoxylum cochinchinense, Sterculia lanceolata, Mallotus paniculatus, Bridelia tomentosa, Macaranga tanarius var. tomentosa, Acacia confusa, Acacia auriculiformis, and Eucalyptus spp.,* etc. The vegetation forms a green backdrop in the vicinity and serve as an important green vista and visual amenity for the regions. The ability to accommodate change of this man-made landscaping is moderate, hence the sensitivity is considered as Medium.	Medium	27.0 (approx. 2,335 trees)
LR4	Vegetation along Drainage Channel	This LR refers to the vegetation identified along the sections of modified water courses within TKO 137 and natural water courses at the Tin Ha Au foothill. Vegetation is identified along the watercourse at the Tin Ha Au foothill. The modified watercourse are channelised with concrete bedding and surrounded by man-made slopes with plantation which consists of limited shrubs and small trees. The quality of this LR is fair to low while the ability to accommodate change is high. Hence, the sensitivity is considered as Low.	Low	2.2 (approx. 98 trees)
LR5	Hillside Vegetation along Eastern Boundary of TKO 137	This LR refers to the hillside vegetation located along the easter boundary of TKO 137. Due to the limited human disturbance, these trees are mature and of medium to large sizes. The common species mainly consists of *Mallotus paniculatus, Macaranga tanarius var. tomentosa* and *Acacia confusa*. The vegetation mixed with the grassland, shrubland and trees form a green backdrop in the vicinity and serve as an important green vista and visual amenity for the regions. The quality and significance of this landscape resources are high with relatively low tolerance to change. The ability to accommodate change is relatively low. Hence, the sensitivity of this LR is considered as High.	High	1.2 (approx. 170 trees)
LR6	Coastal Water	This LR refers to the vast waterbody in the Junk Bay (i.e. at the east of Devil's Peak and West of Joss House Bay) and between Tiu Keng Leng and Tseung Kwan O. This LR comprises the natural shoreline, artificial seawalls and the cluster of	High	150.0 (nil trees)

ID No.	Landscape Resources	Description	Sensitivity	Approx. Area (ha)
		vegetation in a form of shrub planting and ruderal and weedy herbs along the shoreline. No trees are surveyed under the broad-brush tree survey. The quality and significance of this landscape resources are relatively high and little tolerance to changes. Hence, the sensitivity of this LR is considered as High.		
LR7	SENT Landfill	This LR refers to the SENT landfill area under restoration which is covered by plantation. The man-made slopes surround and extend along the peripheries of the SENT landfill. Despite the fair to poor conditions of trees, the plantation with continuous tree canopy provides greenery to the area. The common species mainly consists of *Leucaena leucocephala, Eucalyptus spp.* and *Acacia confusa.* This man-made landscaping is in fair quality and high ability to accommodate the changes. Hence, the sensitivity is considered as Medium.	Medium	2.0 (approx. 160 trees)
LR8	Roadside Planting	The roadside amenity plantings within the TKOIP are the key landscape resources of this LR. Trees surveyed including *Ficus altissima, Garcinia subelliptica, Tabebuia spp. and Wodyetia bifurcata while* shrub and groundcover planting for visual screening and ornamental purpose. The vegetation is in fair to good condition. The ability to accommodate change of this man-made landscaping is moderate, hence the sensitivity is considered as Medium.	Medium	1.5 (approx. 95 trees)
LR9	Rocky Shore along Western Coastline of Junk Bay	This LR refers to the rocky coastline along western coastline of Junk Bay (i.e. along the foothill of the Devil's Peak and Chiu Keng Wan Shan) within the Study Area. These existing landscape resources are naturally formed under years of shoreline erosion. Cluster of vegetation, mainly shrub and coastal plant species can be found between the gaps of the rocks. No trees are surveyed under the broad-brush tree survey. The quality and significance of these natural coastlines are high with relatively low tolerance to change. Hence, the sensitivity of this LR is considered as High.	High	3.0 (nil trees)
LR10	Vegetation on Modified Slope and Amenity Planting	This LR refers to the vegetation planted on the engineered slope of the Tseung Kwan O - Lam Tin Tunnel. Most of the vegetation are on slope or retaining structures, complies with cluster of plantations, exotic trees species and shrub and ruderal herbs and weeds. Tree species include *Acacia confusa, Acacia auriculiformis, Casuarina equisetifolia, Schefflera heptaphylla, Macaranga tanarius var. tomentsa and Leucaena leucocephala,* etc. Despite the fair to poor conditions of trees, the tree canopies of roadside trees provide some green screening between the roads and the man-made slopes. Its quality and significance are relatively low while the ability to accommodate change is high and hence the sensitivity is considered as Low.	Low	5.3 (approx. 730 trees)
LR11	Hillside Vegetation	This LR refers to the hillside vegetation located within the Study Area at Chiu Keng Wan Shan.	High	5.0

ID No.	Landscape Resources	Description	Sensitivity	Approx. Area (ha)
	at Chiu Keng Wan Shan	The vegetation mixed with the grassland, shrubland and trees form a green backdrop in the vicinity and serve as an important green vista and visual amenity for the regions. Trees surveyed include *Acacia confusa, Acacia auriculiformis, Eucalyptus spp., Schefflera heptaphylla, Leucaena leucocephala, Macaranga tanarius var. tomentosa, etc.* The quality and significance of this landscape resources are high with relatively low tolerance to change. The ability to accommodate change is relatively low. Hence, the sensitivity of this LR is considered as High.		(approx. 648 trees)
LR12	Orchard/ Vegetation Near Rural Settlement	This LR refers to the amenity planting. Vegetations are planted for ornamental purpose and served as the amenity feature to the residents. The common species mainly consists of *Macaranga tanarius var. tomentosa, Celtis sinensis, Cratoxylum cochinchinense, Dimocarpus longan, Sterculia lanceolata* and *Leucaena leucocephala*. The man-made landscaping is in low to fair quality, and moderate ability to accommodate the changes. Hence, the sensitivity is considered as Medium.	Medium	2.6 (approx. 392 trees)
LR13	Sandy Shore along Western Coastline of Junk Bay	This LR refers to the sandy shore located along western coastline of Junk Bay (i.e. along the foothill of the east of Chiu Keng Wan Shan and Devil's Peak) within the Study Area. The beaches are formed under natural deposition of the settlement along the shoreline of the Tiu Keng Ling. No trees are found under the broad-brush tree survey. The quality and significance of these sandy beaches are high with relatively little tolerance to change, hence the sensitivity of the landscape resources is High.	High	0.7 (approx. nil trees)
LR14	Vegetation in Developed Area	The vegetation found along the edges of development plots in TKOIP and within landscaped area in housing developments in Tiu Keng Leng is the key landscape resources of this LR. Small clusters of vegetation are planted for ornamental purpose and served as amenity features to visitors. The common species in TKOIP mainly consists of *Ficus microcarpa, Erythrina variegata* and *Leucaena leucocephala*. while the common species in Tiu Keng Leng is *Archontophoenix alexandrae, Callistemon viminalis, Delonix regia, Elaeocarpus hainanensis, Ficus benjamina, Juniperus chinensis* and *Terminalia mantaly*, . The quality of these vegetation is fair with moderate tolerance to changes. Hence, the sensitivity is considered as Low to Medium.	Low to Medium	16.0 (approx. 293 trees)

Landscape Character Areas

11.5.6 Landscape character areas (LCAs) were identified within the assessment area in accordance with the "A Study on Landscape Value Mapping of Hong Kong". LCAs which will be potentially affected by the Project are described and appraised, together with their sensitivity analysed and evaluated in **Figure 11.4**. The locations of LCAs are mapped in **Figure 11.3.3**. Photographs of the LCAs are presented in **Figure 11.3.1-11.3.2.**

Table 11.4 Landscape Character Areas and Their Sensitivity

ID No.	Landscape Character Area	Descriptions	Sensitivity	Approx. Area (ha)
LCA1	Fat Tong O Reclamation Landscape	This LCA refers to the reclamation works at the temporary public fill area, which is located to the south of TKOIP. The facilities found mainly access roads, public fill stockpiles and loading and unloading areas. Vegetation mostly found at the periphery of the access roads with mostly weedy plant and scattered trees. Given the high human disturbance to the area with vegetation of low amenity value, and high ability to accommodate change, the sensitivity of this LCA considered as Low	Low	78.8
LCA2	Fat Tong Chau and Tin Ha Au Upland and Hillside Landscape	This LCA characterised predominantly by its extensive hillside vegetation coverage at south of the TKOIP, Fat Tong Chau and Tin Ha Au adjacent to the SENT landfill and Clear Water Bay Country Park. Vegetation is dominated by shrubby grassland and mature vegetations found along the foothills. Such vegetation forms a natural green backdrop to residents at Tseung Kwan O. This LCA is important and significant to the adjacent district with low ability to accommodate change, and hence its sensitivity is considered as High.	High	25.1
LCA3	Chiu Keng Wan Upland and Hillside Landscape	This LCA characterised predominantly by its lush and extensive vegetation coverage at the Tiu Keng Leng Upland. Vegetation is dominated by shrubby grassland and patches of plantation near rural settlements. Matures vegetation may found at the southwest portion. Such vegetation forms a natural green backdrop to the viewer at the natural trail and visitors at Devil's peak and Junk Bay Chinese Permanent Cemetery. This LCA is important and significant to the adjacent district with low ability to accommodate change, and hence its sensitivity is considered as High.	High	22.5

ID No.	Landscape Character Area	Descriptions	Sensitivity	Approx. Area (ha)
LCA4	Tathong Channel and Joss House Bay Inshore Water Landscape	These are areas of coastal water lying close to the shores of Fat Tong O Reclamation Landscape. This LCA characterised predominantly by the coastal waters adjacent to artificial seawalls along Fat Tong O Reclamation Landscape. To the south, the waters open out to the open sea. Such open and natural landscape provides valuable views to adjacent receivers from Tseung Kwan O and hikers from Clear Water Bay Country Park. This LCA is important and significant to the adjacent district with low ability to accommodate change, and hence its sensitivity is considered as High.	High	55.5
LCA5	Junk Bay Bay Landscape	These are areas of coastal water lying close to the shores of Chiu Keng Wan and Devil's Peak. This LCA characterised predominantly by the coastal waters, rocky shoreline and sandy beaches with relatively low human disturbance. Such setting form an open, tranquil and natural landscape which provide valuable views to adjacent residential receivers from Tseung Kwan O and hikers from Devil's Peak. This LCA is important and significant to the adjacent district with low ability to accommodate change, and hence its sensitivity is considered as High.	High	104.0
LCA6	SENT Landfill and Ongoing Major Development Landscape	This LCA refers to the SENT landfill area which consists of active landfill areas and partly restored areas located at the man-made slopes along the Wan Po Road. A small portion of vegetation are found consisting mainly plantations for greenery provision. Given the high human disturbance to the majority of the area with moderate amenity value of the vegetation and high ability to accommodate change, the sensitivity is considered as Low.	Low	13.6
LCA7	Tseung Kwan O Industrial Urban Landscape	This LCA refers to the industrial developments and relevant works at industrial area in TKOIP which is located on a partly reclaimed land. The facilities found mainly warehouses, dockyards and access roads. Vegetation mostly found at the periphery of the developed plots while mainly weedy plants or some individual trees. Given the urbanised nature of the area with low amenity value of the vegetation and high ability to accommodate change, the sensitivity of this LCA considered as Low.	Low	3.8

ID No.	Landscape Character Area	Descriptions	Sensitivity	Approx. Area (ha)
LCA8	Fat Tong O Industrial Urban Landscape	This LCA refers to the desalination plant and associated site offices which all clustered at the periphery of the SENT landfill. The facilities found mainly site offices, storage areas and access roads. The area is partly under construction, vegetation mostly found at the periphery of the offices while mainly lawn, weedy plant and some individual trees. Given the urbanised nature of the area with low amenity value of the vegetation and high ability to accommodate change, the sensitivity of this LCA considered as Low.	Low	10.3
LCA9	Tseung Kwan O Transportation Corridor Landscape	This LCA refers to the transportation corridor within the assessment area, including the connection from Tseung Kwan O - Lam Tin tunnel to Tseung Lam Highway. Those generally are characterised by their linear form and served as a major traffic connection across the Junk Bay. Plantations are found mainly along the quarried tunnel opening with relatively low amenity value and high ability to accommodate change. Hence, the sensitivity is considered as Low.	Low	16.0
LCA10	Junk Bay Cemetery Landscape	This LCA refers to the developed area at the edges of the Junk Bay Cemetery, which is located in Tiu Keng Leng, adjacent to Devil's Peak. Vegetation found mainly man-made either for amenity purpose or greenery provision. Its quality is considered as fair with moderate ability to accommodate change, and hence the sensitivity is considered as Medium.	Medium	1.8
LCA11	Tiu Keng Leng Urban Residential Landscape	This LCA refer to the developed urban residential area in Tiu Keng Leng. It comprises of high-rise residential developments such as Ocean Shores and Metro Town with podium landscape in general. Sufficient amenity landscape areas are contained in the residential developments. Its quality is considered as fair with moderate ability to accommodate change, and hence the sensitivity is considered as Medium.	Medium	8.6

Visual Envelope

11.5.7 The VE of the Project has been identified by desktop study maps, photographs and site visit to determine visibility of the project site from various locations. Subject to the location of the proposed works which is in between TKOIP, Clear Water Bay Country Park, and Junk Bay, the VE is relatively extensive, confined along Hang Hau Man Kuk Lane Park and Tseung Kwan O Sports Centre to the north; along Po Yap Road and ridgeline along Devil's Peak Trail to the northwest; Island Eastern Corridor, ridgeline along the Dragon's Back Trail, Shek O Road, and Shek O Village Road to the west; the ridgeline of the hillside along the High Junk Peak Country Trail to the east, waterfront of Joss House Bay; and the ridgeline of Tung Lung

Chau to the south. The VE of the Project during the operational phase is illustrated in **Figure 11.4.0** and will further review subject to the latest design development.

Existing Visual Condition and Key Visual Elements

11.5.8 The VE encloses developments in LOHAS Park, Tseung Kwan O, Tiu Keng Leng, and Chai Wan as well as portions of more natural landscapes such Shek O Country Park, Devil's Peak, Clear Water Bay Country Park, and Tung Lung Chau. Within the VE, there is a mix of urban waterfront, hillsides, and beaches. The major visual resource and landmark within the VE is Junk Bay, Cross Bay Link, continuous ridgelines with dense vegetation as green backdrops of most of the key public views, and sea views.

Visually Sensitive Receivers (VSRs)

11.5.9 There are three types of VSRs identified within the VE, namely Recreational, Occupational and Travelling are identified within the proximity of the Project.

11.5.10 The Recreational VSRs include recreational users of Tseung Kwan O Promenade, waterfront of LOHAS Park, Siu Sai Wan Promenade and Heng Fa Chuen Promenade, and hikers of Devil's Peak, Tin Ha Shan, Dragon's Back Trail and Tung Lung Chau Lookout. The occupational VSRs include users at TKOIP. The remaining VSR is traveller which include commuter along the ferry route along the Tathong Channel.

Identified Public Viewing points (VPs)

11.5.11 Within the VE, the following VPs are identified:

1) VP1 – View from Dragon's Back Trail, viewing at TKO 137 (elevated vantage point)
2) VP2 – View from Siu Sai Wan Promenade, viewing at both TKO 137 for VP2B and TKO 132 for VP2A (ground level)
3) VP3 – View from Waterfront of LOHAS Park, viewing at TKO 137 (ground level)
4) VP4 – View from Tseung Kwan O Waterfront Park, viewing at TKO 132 (ground level)
5) VP5 – View from LOHAS Park, viewing at TKO 132 (ground level)
6) VP6 – View from Tseung Kwan O InnoPark, viewing at TKO 132 (ground level)
7) VP7– View from Lookout of the Devil's Peak, viewing at both TKO 137 and TKO 132 (elevated vantage point)
8) VP8 – View from Tin Ha Shan, viewing at TKO 137 (elevated vantage point)
9) VP9 – View from Tung Lung Chau Lookout, viewing at both TKO 137 and TKO 132 (elevated vantage point)
10) VP10 – View from the traveller along the ferry route along the Tathong Channel, viewing at both TKO 137 and TKO 132 (sea level)
11) VP11 - View from the Heng Fa Chuen Promenade, viewing at both TKO 137 for VP11B and TKO 132 for VP11A (ground level)
12) VP12 - View from the Tseung Lam Highway Garden, viewing at TKO 132 (ground level)

Based on the locations of the proposed aboveground structures, the VPs from key public viewers are mapped in **Figure 11.4.0** with their descriptions and sensitivities evaluated in **Table 11.5** as follow.

Table 11.5 Key Public Viewers and Their Sensitivity

VP. ID	Location of VPs and Description	Type of Viewers	Description and Value of Existing Views	Viewer Sensitivity (Low, Medium, High)
VP1	View from Dragon's Back Trail - Elevated vantage point viewing at TKO 137 - Located at around 4300m from the Project - Approx. no. of viewers: Medium	Recreational (Hiker)	- The general view of this VP consists of a few private residences along Big Wave Road on the coastline, and Tathong Channel at the foreground; and the Cape Collinson Correctional Institution at the corner of the cape in the middle ground. - Meanwhile, the ridgeline along High Junk Peak Country Trail, a partial view of the LOHAS Park skyline, the entire TKO 137 brownfield area, Clearwater Bay Golf and Country Club, and a portion of Tung Lung Chau are in the background. - Value of existing view: Fair to good	High
VP2	View from Siu Sai Wan Promenade - Ground level VP viewing at both TKO 137 and TKO 132 - Located at around 2000m from the Project - Approx. no. of viewers: Many	Recreational	- The viewers of this VP can enjoy a panoramic view from Devil's Peak at the left to the Tit Cham Chau at the right, covering the Junk Bay in the foreground; the ridgeline along Devil's Peak, the Junk Bay Chinese Permanent Cemetery, TKO CBL, LOHAS Park, TKOIP, Fat Tong Chau, and the entire TKO 137 brownfield area at the middle ground. - The built development of Tiu Keng Leng, TKO South are to the left side of the background while the ridgeline along High Junk Peak Country Trail is at the right side of the background. - The duration of view is long as visitors would likely linger on the promenade for various recreational activities. - Value of existing view: Good	High
VP3	View from Waterfront of LOHAS Park - Ground level VP viewing at TKO 137 - Located at around 2000m from the Project - Approx. no. of viewers: Few	Recreational	- The general view of this VP consists of Junk Bay in the foreground; the buildings of TKOIP and Fat Tong Chau in the middle ground; and Island Resort development and Pottinger Peak ridgeline in the background. - TKO 137 is completely concealed by Fat Tong Chau. - The duration of view is transient to short as this waterfront viewpoint mainly comprises the CBL and a short sidewalk. - Value of existing view: Fair	Low
VP4	View from Tseung Kwan O Waterfront Park - Ground level VP viewing at TKO 132 - Located at around 1000m from the Project - Approx. no. of viewers: Many	Recreational	- The general view of this VP consists of Junk Bay and Ocean Shores towers in the foreground; the CBL and hillside with Junk Bay Chinese Permanent Cemetery in the middle ground; and the ridgeline of Mount Parker and waterfront developments of Chai Wan at the background. The duration of view is long as many visitors would likely linger in the waterfront park for various recreational activities. - The duration of view is medium to long as there is a pedestrian corridor with cycleway along this part of the waterfront. - Value of existing view: Good	High

VP. ID	Location of VPs and Description	Type of Viewers	Description and Value of Existing Views	Viewer Sensitivity (Low, Medium, High)
VP5	View from LOHAS Park - Ground level VP viewing at TKO 132 - Located at around 1600m from the Project - Approx. no. of viewers: Many	Recreational	- The general view of this VP consists of Junk Bay and CBL in the foreground; the ridgeline along Devil's Peak, hillside with slope maintenance, and Junk Bay Chinese Permanent Cemetery partially covered by the bridge arch in the middle ground; and the ridgeline of Mount Parker in the background. - The duration of view is medium to long as there is a pedestrian corridor with cycleway along this part of the waterfront. - Value of existing view: Good	High
VP6	View from Tseung Kwan O InnoPark - Ground level VP viewing at TKO 132 - Located at around 2000m from the Project - Approx. no. of viewers: Few	Occupational	- The general view of this VP consists of Junk Bay in the foreground; Junk Bay Chinese Permanent Cemetery on the hillside, ridgeline along Devil's Peak, hillside with slope maintenance, CBL, and Ocean Shores towers in the background. Sai Wan Ho skyline and Black Hill ridgeline are in the far background. - The duration of view is transient as most viewers of the viewpoint are industrial estate workers travelling on the roads nearby. - Value of existing view: Fair	Low
VP7	View from Lookout of the Devil's Peak - Elevated vantage point viewing at both TKO 137 and TKO 132 - Located at around 550m (TKO 132) – 3500m (TKO 137) from the Project - Approx. no. of viewers: Few	Recreational (Hiker)	- The general view of this VP consists of Junk Bay Chinese Permanent Cemetery, and Junk Bay in the foreground; CBL, LOHAS Park, and TKOIP in the middle ground; and ridgeline of Clear Water Bay Country Park, TKO 137 brownfield area partially covered by Fat Tong Chau, and ridgeline of Tung Lung Chau in the background. - The duration of view is transient and short as most of the viewers will only have short rest at the lookout point and then continue their hiking journey. - Value of existing view: Fair to good	Medium
VP8	View from Tin Ha Shan - Elevated vantage point viewing at TKO 137 - Located at around 1200m from the Project - Approx. no. of viewers: Few	Recreational (Hiker)	- The general view of this VP consists of the TKO 137 surrounded by Tit Cham Chau, Fat Tong Chau, and TKOIP in the foreground; Junk Bay in the middle ground; and the Siu Sai Wan developments and ridgeline along Dragon's Back Trail in the background. - The existing view featured with unobstructed view towards harbor and ridgeline of Hong Kong Island. - The duration of view is transient and short as most of the viewers will only have short rest at the lookout point and then continue their hiking journey. - Value of existing view: Good	High
VP9	View from Tung Lung Chau Lookout	Recreational (Hiker)	- The general view of this VP consists of Joss House Bay at the foreground; Tit Cham Chau, TKO 137, Fat Tong Chau, and Tin Ha Shan ridgeline in the middle ground; and the Siu Sai Wan developments, Heng Fa Chuen estate	Medium

VP. ID	Location of VPs and Description	Type of Viewers	Description and Value of Existing Views	Viewer Sensitivity (Low, Medium, High)
	- Elevated vantage point viewing at both TKO 137 and TKO 132 - Located at around 2000m – 5700m from the Project - Approx. no. of viewers: Few		development, Junk Bay, Devil's Peak ridgeline, and Junk Bay Chinese Permanent Cemetery in the background. - The LOHAS Park skyline in the background is partially covered by the Tin Ha Shan ridgeline. - The duration of view is transient and short as most of the viewers will only have short rest at the lookout point and then continue their hiking journey. - Value of existing view: Good	
VP10	View from the traveller along the ferry route along the Tathong Channel - Sea level VP viewing at both TKO 137 and TKO 132 - Located at around 1400m – 4500m from the Project - Approx. no. of viewers: Few	Traveller	- The general view of this VP consists of Tathong Channel at the foreground; Tit Cham Chau, TKO DP, and Tin Ha Shan foothill in the middle ground; and Devil's Peak ridgeline, Heng Fa Chuen, and LOHAS Park skyline in the far background. - The duration of view is transient as the viewers are travelling on ferry trip. - Value of existing view: Fair to good	Medium
VP11	View from the Heng Fa Chuen Promenade - Gound level VP viewing at both TKO 137 and TKO 132 - Located at around 1500m (TKO 132) – 3000m (TKO 137) from the Project - Approx. no. of viewers: Many	Recreational	- This VP is a panoramic view from Devil's Peak at the left to the Tit Cham Chau at the right, covering the Devil's Peak hillside and Junk Bay in the foreground; the Junk Bay Chinese Permanent Cemetery, CBL, LOHAS Park, TKOIP, and Fat Tong Chau area at the middle ground. The built development of Tiu Keng Leng, TKO South are to the left side of the background while the TKO 137 brownfield and ridgeline along High Junk Peak Country Trail are at the right side of the background. - The duration of view is long as visitors would likely linger on the promenade for various recreational activities. - Value of existing view: Fair to good	High
VP12	View from the Tseung Lam Highway Garden - Gound level VP viewing at TKO 132 - Located at around 600m from the Project - Approx. no. of viewers: Medium	Recreational	- This VP is a view of the CBL projecting from the Tseung Lam Highway Garden which located at the east of Ocean Shores. - The planting area of the Tseung Lam Highway Garden occupies most of the view in the foreground while the bridge interchange, planting at the promenade and hillside vegetation of Devil's Peak occupies the middle ground. - The duration of view is short to medium as visitors would likely walk-by from the Tseung Lam Highway Garden to adjacent promenade. - Value of existing view: Fair	Medium

11.6 Landscape Impact Assessment

Sources of Landscape Impact

11.6.1 The sources of landscape impact arising from the Project would create various levels of landscape impact during construction and operational phases of the Project. Potential impacts would result from the temporary and permanent works during the construction phase and permanent aboveground structure elements during operational phase.

11.6.2 The sources of landscape impact in the construction phase would include:

- Construction of viaduct at TKO 132;
- Construction of public facilities at TKO 132 namely Electricity Facilities (EFs), Refuse Transfer Station (RTS), Concrete Batching Plant (CBP), Construction Waste Handling Facility (CWHF), Public Fill Transfer Facility (PFTF), and Sewage Pumping Station (SPS);
- Associated road works, natural terrain and slope works, and reclamation works for the proposed construction works at TKO 132 and TKO 137;
- Construction of public facilities namely Fresh Water Service Reservoirs (FWSR), Salt Water Service Reservoir (SWSR), Effluent Polishing Plant (EPP), and associated ancillary buildings at TKO;
- Underground piping works for connecting the existing sewerage network and existing water distribution networks along Tong Yin Street of Tiu Keng Leng;
- Minor modification works of the existing footpath along existing maintenance access road of Tseung Lam Highway; and
- Removal of existing trees and other vegetation due to the construction works.

11.6.3 The sources of landscape impact in the operational phase would include:

- Aboveground structures of TKO 132 and TKO 137 including viaduct structures and ancillary buildings, etc; and
- Permanent removal of existing trees and other vegetation.

Magnitude of Landscape Change

11.6.4 The magnitude of unmitigated landscape changes associated with the construction and operational phases of the Project were assessed and are described in **Table 11.6**.

Table 11.6. Magnitude of Landscape Changes during Construction and Operation

Landscape Resources						
ID No.	**Landscape Resources/ Landscape Character Areas**	**Description of Works**	**Description of Impacts**	**Number of trees to be affected by the proposed works**	**Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)**	
					Construction	**Operation**
LR1	Vegetation within TKO 137	• Site formation works for reclamation within TKO 137 • Construction of public facilities i.e. EPP and road works of TKO 137.	• Approx. 84% (i.e. 77.8ha) of this LR area would be affected permanently and vegetation to be removed	Approx. 232 nos.	Substantial	Substantial
LR2	Hillside Vegetation at Devil's Peak	• Site formation works for reclamation at the western coastline of Junk Bay of TKO 132 • Temporary and permanent works for natural terrain mitigation measures and slope cutting works of TKO 132	• Approx. 5% (i.e. 0.3 ha) of this LR area would be affected permanently • A small portion of existing vegetation would be affected permanently, especially the vegetation near the coastline.	Approx. 30 nos.	Slight	Slight
LR3	Shrubland at Tit Cham Chau and Fat Tong Chau	• Construction of public facilities i.e. FWSR and SWSR in TKO 137 • Construction of associated road works, including temporary and permanent slope works of TKO 137	• Approx. 22% (i.e. 5.9 ha) of this LR area would be affected permanently • A small portion of existing vegetation would be affected, especially the vegetation at the south of Fat Tong Chau.	Approx. 675 nos.	Moderate	Moderate
LR4	Vegetation along Drainage Channel	• Site formation works for reclamation within TKO 137 and associated road works	• Approx. 63% (i.e. 1.4ha) of man-made drainage channel of this LR area would be affected permanently • Only minimal vegetation in undesirable species at the edges of the man-made drainage channel within TKO 137 would be affected.	Approx. 98 nos. (mostly undesirable tree species)	Slight	Slight
LR5	Hillside Vegetation along Eastern Boundary of TKO 137	• No temporary works and permanent works proposed	• Nil	Nil	Negligible	Negligible

Landscape Resources						
ID No.	**Landscape Resources/ Landscape Character Areas**	**Description of Works**	**Description of Impacts**	**Number of trees to be affected by the proposed works**	**Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)**	
					Construction	**Operation**
LR6	Coastal Water	• Site formation works for reclamation at the western coastline of Junk Bay of TKO 132 and at TKO 137 • Construction of public facilities i.e. EFs, RTS, CBP, CWHF, PFTF, SPS and road works in TKO 132 • Construction of marine viaduct in TKO 132	• A portion of water bodies which approx. 26% (i.e. 39 ha) of this LR area would be permanently taken up by the reclamation works.	Nil	Moderate	Moderate
LR7	SENT Landfill	• No temporary works and permanent works proposed	• Nil	Nil	Negligible	Negligible
LR8	Roadside Planting	• Site formation works and road works in TDO 137	• A portion of roadside planting which approx. 5% (i.e. 0.1ha) of this LR area would be permanently taken up.	Approx. 5 nos.	Slight	Slight
LR9	Rocky Shore along Western Coastline of Junk Bay	• Site formation works for reclamation at the western coastline of Junk Bay of TKO 132, including construction of seawall • Construction of viaduct pier for marine viaducts connected to the Tseung Lam Highway in TKO 132 • Temporary and permanent works for natural terrain mitigation measures and slope cutting works of TKO 132	• Approx. one-third of natural rocky shore (i.e. approx. 32% of this LR) would be permanently taken up by the reclamation works • A portion of the rocky shoreline in a length of approx. 512m (out of total 1600m natural shoreline) and existing coastal vegetation that close to the marine viaduct works would be affected. • No tree would be affected.	Nil	Moderate	Moderate
LR10	Vegetation on Modified Slope and Amenity Planting	• No temporary works and permanent works proposed	• Nil	Nil	Negligible	Negligible
LR11	Hillside Vegetation at Chiu Keng Wan Shan	• Temporary works for construction of viaduct pier for marine viaducts connected to the Tseung Lam Highway in TKO 132	• A portion of existing vegetation, which approx. 26% (i.e. 1.3 ha) of this LR area, would be affected,	Approx. 194 nos.	Slight	Slight

Landscape Resources						
ID No.	**Landscape Resources/ Landscape Character Areas**	**Description of Works**	**Description of Impacts**	**Number of trees to be affected by the proposed works**	**Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)**	
					Construction	**Operation**
		• Temporary and permanent works for natural terrain mitigation measures and slope cutting works of TKO 132	especially the vegetation adjoining proposed road works to/ from the Tseung Lam Highway.			
LR12	Orchard/ Vegetation Near Rural Settlement	• Temporary and permanent works for natural terrain mitigation measures and slope cutting works of TKO 132	• A small portion of existing vegetation, which approx. 5% (i.e. 0.1 ha) of this LR area, would be affected temporarily.	Approx. 16 nos.	Slight	Slight
LR13	Sandy Shore along Western Coastline of Junk Bay	• Temporary works for construction of viaduct pier for marine viaducts connected to the Tseung Lam Highway in TKO 132 • Temporary and permanent works for natural terrain mitigation measures and slope cutting works of TKO 132	• A small portion of the sandy shore (i.e. 17% of this LR) close to proposed works would be temporarily affected. • No tree would be affected.	Nil	Slight	Slight
LR14	Vegetation in Developed Area	• Only temporary works but no permanent works proposed	• No tree would be affected.	Nil	Negligible	Negligible

Landscape Character Area					
ID No.	**Landscape Resources/ Landscape Character Areas**	**Description of Works**	**Description of Impacts**	**Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)**	
				Construction	**Operation**
LCA1	Fat Tong O Reclamation Landscape	• Site formation works for reclamation within TKO 137 • Site formation and road works for facilitate future development such as open space, housing developments, public transport interchange (RODP), electricity substation and sub-divisional fire	• Approx. 98% (i.e. 78 ha) of this LCA area would be permanently affected • The LCA will be substantially replaced by a new residential urban landscape character in TKO 137.	Substantial	Substantial

Landscape Character Area					
ID No.	**Landscape Resources/ Landscape Character Areas**	**Description of Works**	**Description of Impacts**	**Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)**	
				Construction	**Operation**
		station etc. in TKO 137			
LCA2	Fat Tong Chau and Tin Ha Au Upland and Hillside Landscape	• Construction of public facilities i.e. FWSR and SWSR in TKO 137 • Construction of associated road works, including temporary and permanent slope works of TKO 137	• Approx. 23% (i.e. 5.9 ha) of this LCA area would be affected • The change will not alert the landscape character of this LCA.	Slight	Slight
LCA3	Chiu Keng Wan Upland and Hillside Landscape	• Site formation works for reclamation at the western coastline of Junk Bay of TKO 132 • Temporary works for construction of viaduct pier for marine viaducts connected to the Tseung Lam Highway in TKO 132 • Temporary and permanent works for natural terrain mitigation measures and slope cutting works of TKO 132	• Approx. 12% (i.e. 2.8ha) of this LCA area would be permanently affected • A small portion of the LCA would be replaced as part of TKO 132 Reclamation landscape and Tseung Kwan O transportation corridor landscape.	Slight	Slight
LCA4	Tathong Channel and Joss House Bay Inshore Water Landscape	• Site formation works for reclamation at TKO 137	• Approx. 36% (i.e. 20ha) of this LCA area would be permanently affected • Some portion of the LCA would be replaced as part of a new residential urban landscape character in TKO 137	Moderate	Moderate
LCA5	Junk Bay Bay Landscape	• Site formation works for reclamation at the western coastline of Junk Bay of TKO 132 • Construction of public facilities i.e. EFs, RTS, CBP, CWHF, PFTF, SPS and road works in TKO 132 • Construction of marine viaduct in TKO 132	• Approx. 18% (i.e. 19 ha) of this LCA area would be permanently affected • Some portion of the LCA would be permanently replaced as TKO 132 reclamation landscape and Tseung Kwan O transportation corridor landscape	Moderate	Moderate
LCA6	SENT Landfill and Ongoing	• No temporary works and	• Nil	Negligible	Negligible

Landscape Character Area					
ID No.	**Landscape Resources/ Landscape Character Areas**	**Description of Works**	**Description of Impacts**	**Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)**	
				Construction	**Operation**
	Major Development Landscape	permanent works proposed			
LCA7	Tseung Kwan O Industrial Urban Landscape	• No temporary works and permanent works proposed	• Nil	Negligible	Negligible
LCA8	Fat Tong O Industrial Urban Landscape	• Construction of public facilities i.e. EPP and road works of TKO 137	• Approx. 40% (i.e. 4ha) of this LCA area would be permanently affected with proposed public facilities • The character of is LCA would remain the same as the existing due to the similar development nature, hence the magnitude of change is slight	Slight	Slight
LCA9	Tseung Kwan O Transportation Corridor Landscape	• Construction of marine viaducts connected to the Tseung Lam Highway in TKO 132 • Underground piping works for connecting the existing sewerage network and existing water distribution networks along Tong Yin Street of Tiu Keng Leng • Minor modification works of the existing footpath along existing maintenance access road of Tseung Lam Highway	• The coverage area of this LCA would be increased (i.e. approx. 0.8 ha) due to the expansion of the existing transportation corridor along the Tseung Lam Highway. • The character of is LCA would remain the same as the existing due to the similar development nature.	Slight	Slight
LCA10	Junk Bay Cemetery Landscape	• No temporary works and permanent works proposed	• Nil	Negligible	Negligible
LCA11	Tiu Keng Leng Urban Residential Landscape	• No temporary works and permanent works proposed	• Nil	Negligible	Negligible

Significance of Unmitigated Landscape Impact

11.6.5 The significance of landscape impact, before implementation of mitigation measures, in the construction and operational phases are assessed and presented in this report.

11.6.6 The initial significance of unmitigated impacts on the affected LRs and LCAs would vary from substantial to negligible. They are described as below.

LR 1 - Vegetation within TKO 137

11.6.7 LR 1 is the vegetation identified within the reclaimed land TKO 137. The sensitivity of this LR is identified as low due to the existing poor to fair quality of existing vegetation. During the construction stage, existing small cluster of vegetated area would be permanently affected for site formation, construction of access roads and proposed developments. The designated land uses of this LR include Private Housing, Public Housing, Government, Institution or Community (G/IC), Education, Open Space and Amenity. Upon completion of works, the reclaimed land would be redeveloped, and the affected vegetated area are assumed to be provided in the Open Space land use or roadside greenery subject to the future development scheme. The compatibility of the proposed works is medium to high and the changes are irreversible. The magnitude of impact on this LR due to the Project is considered as substantial. Hence, the resultant unmitigated impact during construction and operational phases is moderate.

LR 2 – Hillside Vegetation at Devil's Peak

11.6.8 LR 2 is the hillside vegetation identified at Tiu Keng Leng Upland and Tin Ha Au Upland adjacent to the Clear Water Bay country park. The sensitivity of this LR is identified as high due to the existing mature vegetation of limited human disturbance. Among the extensive vegetated cover, only a small portion along the coastline at the east of the Chiu Keng Wan would be affected by the proposed reclamation works and road works during the construction phase. Upon the completion of works, a small portion of the existing vegetation along the east coastline of Chiu Keng Wan would be removed permanently and replaced by roads. The compatibility of the proposed works is low while changes are irreversible. Considered that the proposed works are localised and relatively small in scale, the magnitude of impact on this LR due to the Project is considered as slight. It is assumed that the resultant unmitigated impact during construction and operational phases would be moderate.

LR 3 - Shrubland at Tit Cham Chau and Fat Tong Chau

11.6.9 LR 3 is the hillside vegetation at the located at Tit Cham Chau and Fat Tong Chau. The sensitivity of this LR is identified as medium. During the construction phase, it is assumed that a portion of existing hillside vegetation would be affected permanently by the slope cutting for the construction of the public facilities and associated access roads. Upon the completion of works, the disturbed natural hillside would be replaced as man-made slope permanently due to the associated slope cutting works and construction works. The periphery of the proposed structures would be fence off for security purpose. The compatibility of the proposed works is moderate to the surrounding natural landscape and change is irreversible. The magnitude of impact on this LR due to the Project is considered as moderate and the resultant unmitigated impact during construction and operational phases is moderate.

LR 4 – *Vegetation along drainage channel*

11.6.10 The vegetation along the watercourse within TKO 137 and Tin Ha Au foothill are the key landscape resources of this LR. During the construction stage, the proposed works including site formation, construction of access roads and proposed developments, would potentially affect the existing channelised watercourses located within TKO 137. Existing vegetation, mainly undesirable species, would be removed permanently. Meanwhile, vegetation and watercourse identified in the foothill of Tin Ha Au would be preserved. Upon completion of works, the reclaimed land would be redeveloped, and the affected vegetated area are assumed to be provided in the Open Space land use as amenity planting or roadside greenery subject to the future development scheme. The compatibility of the proposed works is slight and the changes are irreversible. Considered that the sensitivity of this channelised watercourse is low while the magnitude of impact on this LR due to the Project is considered as slight and localised. The resultant unmitigated impact during construction and operational phases is slight.

LR 5 – Hillside Vegetation along Eastern Boundary of TKO 137

11.6.11 LR 5 is the hillside vegetation identified at easter boundary of TKO 137 adjacent to Tin Ha Au Upland. The sensitivity of this LR is identified as high due to the existing mature vegetation of limited human disturbance. Since no works would be proposed during both construction and operational phases, the degree of compatibility is high, hence the magnitude of impact on these LRs due to the Project is considered as negligible. The resultant unmitigated impact during construction and operational phases is negligible.

LR 6 – Coastal Water

11.6.12 This LR refer to the vast waterbody at the east of Devil's Peak and west of Joss House Bay and between Tiu Keng Leng and Tseung Kwan O. The sensitivity of this LR is high. During the construction stage, the reclamation work would be conducted and taken up a relatively small portion of the waterbody for the site formation and construction of proposed development. Upon the completion of works, the reclaimed site of TKO 132 would be permanently located at the southeast of Chiu Keng Wan alternating the profile of the natural rocky shoreline while the reclamation at the southwest of TKO 137 would be considered as an extension of the existing reclaimed public facility site. The compatibility of the works is relatively low due to nature of works and the change is irreversible. Considered that affected area is relatively localised, the magnitude of impact on this LR is moderate. It is assumed that the resultant unmitigated impact during construction and operational phases would be moderate.

LR 7 – SENT Landfill

11.6.13 This LR refers to the plantations along the man-made slopes of the SENT landfill under restoration. The sensitivity of this LR is medium. Considered that no works would be proposed during both the construction and operational phase within this LR, the degree of compatibility is high, the magnitude of impact from the Project to this LR is negligible and the unmitigated landscape impact on this LR during construction and operational phases is considered as negligible.

LR 8 – Roadside Planting

11.6.14 This LR refers to the roadside amenity planting within the TKOIP and in Tiu Keng Leng. The sensitivity of this LR is medium. Only small portion of roadside vegetation would be affected with high compatibility of the proposed works, the magnitude of impact from the Project to this LR is slight and the unmitigated landscape impact on this LR during construction and operational phases is considered as slight.

LR 9 – Rocky Shore along Western Coastline of Junk Bay

11.6.15 This LR refer to the rocky coastline at the foothill of southeast of Devil's Peak within the Study Area. The sensitivity of this LR is considered as high due to its natural formation characteristics. Approx. one-third of the coastline would be affected by the proposed reclamation works and road works for TKO 132 during the construction phase due to the proposed reclamation works and road works. Upon the completion of works, some of the existing vegetation along the coastline would be removed permanently and replaced by artificial seawall. The compatibility of the proposed works is low while changes are irreversible. Considered that the proposed works are relatively in large scale, the magnitude of impact on this LR due to the Project is considered as moderate. The it is assumed that the resultant unmitigated impact during construction and operational phases would be moderate.

LR 10 – Vegetation on Modified Slope and Amenity Planting

11.6.16 This LR refers to the man-made vegetation on the engineered slope along the Tseung Kwan O - Lam Tin Tunnel and Tseung Lam Highway. The sensitivity of this LR is low due to the existing poor to fair quality of existing vegetation. Since no works would be proposed during both construction and operational phases, the degree of compatibility is high, hence the magnitude of impact on this LR due to the Project is considered as negligible. The resultant unmitigated impact during construction and operational phases is negligible.

LR 11 – Hillside Vegetation at Chiu Keng Wan Shan

11.6.17 LR 11 is the vegetation within the study area at the east of Chiu Keng Wan Shan. The sensitivity of this LR is identified as high. During the construction phase, it is assumed that a small portion of existing hillside vegetation would be affected by the slope works and natural terrain mitigation measures. Upon the completion of works, the disturbed natural hillside would be replaced by roads and man-made slope and associated natural terrain mitigation measures. The compatibility of the proposed works is low to the surrounding natural landscape. In view of the affected area is localised, the magnitude of impact on this LR due to the Project is considered as slight and the resultant unmitigated impact during construction and operational phases is moderate.

LR 12 – Orchard/ Vegetation Near Rural Settlement

11.6.18 This LR refers to the amenity planting around the rural settlements on the Chiu Keng Wan Shan. The sensitivity of this LR is medium due to the existing poor to fair quality of existing vegetation. A small portion of existing vegetation would be affected by the slope works and natural terrain mitigation measures. In view of the affected area is localised with medium compatibility of the project works, the magnitude of impact on this LR due to the Project is considered as slight and the resultant unmitigated impact during construction and operational phases is slight.

LR 13 – Sandy Shore along Western Coastline of Junk Bay

11.6.19 The natural coastal features of this LR mainly located at the foothill of the east of Chiu Keng Wan and Devil's Peak within the Study Area. A small portion of this LR may potentially be affected by the construction works of the proposed roads connecting to Tseung Lam Highway during the construction. Upon completion of works, a small portion of the sandy beaches and the associated vegetation may be permanently replaced by viaduct structures. The changes would be irreversible while the degree of compatibility of the proposed works is considered as low. The magnitude of change on this LR due to the Project is considered as slight and localised. Given to its high sensitivity, the resultant unmitigated impact during construction and operational phases is moderate.

LR 14 – Vegetation in Developed Area

11.6.20 This LR refer to the vegetation found within the developed area including the industrial area within the TKOIP and landscape area within residential built-up area in Tiu Keng Leng. The sensitivity of this LR is low to medium due to the existing poor to fair quality of existing vegetation. Considered that only temporary works with high compatibility but no permanent works proposed within this LR, and no existing trees would be affected, the magnitude of impact from the Project to this LR is negligible and the unmitigated landscape impact on this LR during construction and operational phases is considered as negligible.

LCA 1 – Fat Tong O Reclamation Landscape

11.6.21 This LCA refers to the reclamation works at the temporary public fill area, namely TKO 137. During the construction stage, the existing public facilities (i.e. a public fill transfer facility (PFTF), a concrete batching plant (CBP) and associated access roads and loading and unloading areas) would be permanently relocated to open up space for the construction of proposed development. The vegetation mainly consists of weedy plants and scattered trees would be permanently removed. The existing barren flatland would be replaced as an urbanised area with multiples building structures and public facilities. The changes are irreversible, and compatibility of works is low to medium. The magnitude of impact to this LCA is considered as substantial. Considered that the sensitivity of this LCA is identified as low, hence resultant unmitigated impact during construction and operational phases is moderate.

LCA 2 – Fat Tong Chau and Tin Ha Au Upland and Hillside Landscape

11.6.22 This LCA refers to the existing lush and densely vegetated hillsides at Fat Tong Chau and Tin Ha Au Upland. During the construction stage, a small portion of the vegetation at Fat Tong

Chau would be affected for the construction works of public facilities. Upon the completion of works, the disturbed natural hillside would be replaced as man-made slope permanently due to the associated slope cutting works and construction works. The nature of the Project is not similar as the existing character with medium compatibility of the proposed works. Given that the changes are localised, the magnitude of impact on this LR due to the Project is considered as slight. Considered that the sensitivity of this LCA is identified as high, hence resultant unmitigated impact during construction and operational phases is moderate.

LCA 3 – Chiu Keng Wan Upland and Hillside Landscape

11.6.23 This LCA refers to the existing lush and densely vegetated hillsides at Chiu Keng Wan Upland. During the construction stage, a small portion of the vegetation at Chiu Keng Wan Upland, particularly those close to the coastline would be affected for the construction works of proposed reclamation works and road works. Upon the completion of works, the disturbed natural hillside along coast would be removed permanently and replaced by the modified slopes or artificial seawalls. The nature of the Project is not similar as the existing character with medium compatibility of the proposed works. Given that the changes are localised, the magnitude of impact on this LR due to the Project is considered as slight. Considered that the sensitivity of this LCA is identified as high, hence resultant unmitigated impact during construction and operational phases is moderate.

LCA 4 – Tathong Channel and Joss House Bay Inshore Water Landscape

11.6.24 This LCA refers to the water body lying close to the shores of Fat Tong O Reclamation Landscape. Its sensitivity is considered as high due to its open and natural landscape characteristic. During the construction stage, the reclamation work would be conducted and taken up a certain portion of the waterbody for the site formation and construction of proposed development. Upon the completion of works, the reclaimed site would be permanently located at the southwest of TKO 137 would be considered as an extension of the existing reclaimed landscape. The changes are irreversible and compatibility of works is low. The magnitude of impact to this LCA is considered as moderate. The unmitigated landscape impact on this LCA during construction and operation phases is considered as moderate.

LCA 5 – Junk Bay Bay Landscape

11.6.25 This LCA refers to the water body lying close to the shores of Chiu Keng Wan and Devil's Peak. Its sensitivity is considered as high due to its open and natural landscape characteristic. During the construction stage, the reclamation work would be conducted and taken up a relatively small portion of the waterbody for the site formation, construction of proposed development and road works. Upon the completion of works, the reclaimed site would be permanently located at the southeast of Chiu Keng Wan alternating the profile of the natural rocky shoreline. The changes are irreversible and compatibility of works is low. Considered the affected area is relatively extensive, hence, the magnitude of impact to this LCA is considered as moderate. The unmitigated landscape impact on this LCA during construction and operation phases is considered as moderate.

LCA 6 – SENT Landfill and Ongoing Major Development Landscape

11.6.26 This LCA refers to the southwest portion of the SENT which consists of active landfill areas and plantations on man-made slopes under restoration. Its sensitivity is considered as low. Considered that no works would be proposed during both the construction and operational phase within this LCA, the degree of compatibility is high, the magnitude of impact from the Project to this LCA is negligible and the unmitigated landscape impact on this LCA during construction and operational phases is considered as negligible.

LCA 7 – Tseung Kwan O Industrial Urban Landscape

11.6.27 This LCA refers to the industrial developments at the TKOIP. Its sensitivity is considered as low. Considered that no works would be proposed during both the construction and operational phase within this LCA, the degree of compatibility is high, the magnitude of impact

from the Project to this LCA is negligible and the unmitigated landscape impact on this LCA during construction and operational phases is considered as negligible.

LCA 8 – Fat Tong O Industrial Urban Landscape

11.6.28 This LCA refers to the Tseung Kwan O desalination plant and associated site offices adjacent to the SENT landfill. Its sensitivity is considered as low. During the construction stage, the existing industrial facilities including site offices and storage areas in the northwest of the desalination plant would be temporarily removed or relocated to eastward for the construction of the proposed sewage treatment works. The changes are irreversible, and compatibility of works is high. Since the changes are localised and the proposed works are in similar nature, hence, the magnitude of impact to this LCA is considered as slight. The unmitigated landscape impact on this LCA during construction and operation phases is considered as slight.

LCA 9 – Tseung Kwan O Transportation Corridor Landscape

11.6.29 Tsueng Kwan O – Lam Tin Tunnel and Tseung Lam Highway are the key elements of this LCA. Plantations along the quarried tunnel opening are found. Its sensitivity is considered as low. Due to the proposed construction works of roads, a small portion of the vegetation may be affected, and the road alignment would be slightly alternated upon completion. Since the proposed works are in similar nature of the existing highway infrastructure with high compatibility of the proposed works, the magnitude of impact to this LCA is considered as slight. The unmitigated landscape impact on this LCA during construction and operational phases is considered as slight.

LCA 10 – Junk Bay Cemetery Landscape

11.6.30 This LCA refers to the Junk Bay Cemetery and the amenity planting within the area. Its sensitivity is considered as medium. Considered that no works would be proposed during both the construction and operational phase within this LCA, the degree of compatibility is high, the magnitude of impact from the Project to this LCA is negligible and the unmitigated landscape impact on this LCA during construction and operational phases is considered as negligible.

LCA 11 – Tiu Keng Leng Urban Residential Landscape

11.6.31 This LCA refers to the landscaped area within the residential development in Tiu Keng Leng. Its sensitivity is considered as medium. Considered that no works would be proposed during both the construction and operational phase within this LCA, the degree of compatibility is high, the magnitude of impact from the Project to this LCA is negligible and the unmitigated landscape impact on this LCA during construction and operational phases is considered as negligible.

11.7 Visual Impact Assessment

Sources of Visual Impact

11.7.1 The sources of visual impact during operational phase of the Project would create varying levels of visual impact. Potential impacts would be resulted from the permanent aboveground structure elements during operational phase.

11.7.2 The sources of visual impact in the operational phase would include:

- Aboveground structures of viaduct at TKO 132;
- Aboveground structures of public facilities at TKO 132 namely Electricity Facilities (EFs), Refuse Transfer Station (RTS), Concrete Batching Plant (CBP), Construction Waste Handling Facility (CWHF), Public Fill Transfer Facility (PFTF), and Sewage Pumping Station (SPS);
- Associated road works, natural terrain and slope works and reclamation works at TKO 132 and TKO 137;
- Aboveground structures of public facilities namely Fresh Water Service Reservoirs (FWSR), Salt Water Service Reservoir (SWSR), Effluent Polishing Plant (EPP), and

associated ancillary buildings at TKO 137; and
- Permanent removal of existing trees and other vegetation.

Future Outlook of the Visual System

11.7.3 To avoid "wall effect" development along the coastal area as far as possible, a stepped building height strategy is applied to ensure visual compatibility, and to align with key vistas and visual element to create visual interest for the future outlook of the developments. A diminution in development height from the hinterland to the waterfront area has been adopted to enhance variety in building height and massing of development. A stepped building height profile descending from the northeast to the southwest and towards the waterfront is proposed with respect to the mountain backdrop in TKO 137, and avoiding uniform building height to form a pleasant vertical image of the waterfront viewing to TKO 132.

11.7.4 The locations and development details of key permanent aboveground structures that would cause potential visual impact are summarised in **Table** .

Table 11.7 Locations and Development Details of Key Permanent Aboveground Structures

Location	Proposed Building Height Restriction (mPD)
TKO 137	
Subsidised Residential Developments	Ranged from +175mPD, +180mPD, +190mPD to +200mDP*
Private Residential Developments	Ranged from +120mPD, +155mPD, +175mPD to +190mDP*
Divisional Police Station	+110mPD*
EPP	+30mPD*
FWSR**	+80mPD*
SWSR**	+80mPD*
TKO 132 * **	
EFs	+70mPD* (proposed building height +67mPD)
RTS	+60mPD* (+45mPD for on-shore crane)
CWHF	+30mPD* (proposed building height +27mPD)
PFTF	+35mPD* (proposed building height +32mPD)
CBP	+35mPD*
SPS	+6mPD*

** Exact levels, heights and dimensions based on the RODP version dated 2024.07 and 2024.07.12 for TKO 137 and TKO 132 respectively, subject to detailed design development.*
*** Site formation level subject to confirmation with WSD and the absolute building height shall not exceed 20m.*
**** Proposed building height of TKO 132 based on a formation level of +6.7mPD, subject to detailed design development.*

Magnitude of Visual Changes on existing VPs

11.7.5 The magnitude of visual changes during operational phase would be assessed and descripted subject to the visual composition, visual obstruction and visual change in text and shown in **Table 11.8** in accordance with the latest version of EIAO GN. Photomontages are prepared for the proposed VPs as per the requirements of the Study.

11.7.6 The criteria for the selection of representative viewpoints for photomontages include:

- the viewpoints which cover the aboveground structure(s) viewed from major public viewpoint would be potentially affected by the proposed permanent structures; and
- the viewpoints should be able to represent the worst-case scenarios and demonstrate the compatibility of the aboveground structures to the adjacent visual context and illustrate the visual effect during Day 1 without mitigation measures, Day 1 with mitigation measures and Year 10 with mitigation measures.

Significance of Unmitigated Visual Impact

11.7.7 The significance of visual impact, before implementation of mitigation measures, in the operational phases will be assessed and presented in **Table 11.12**.

Table 11.8 Magnitude of Visual Change during Operational Phase

VP. ID	Location of VPs	Source of Visual Impact	Visual Composition	Visual Obstruction	Visual Change	Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)
VP1	View from Dragon's Back Trail	Site reclamation of TKO137 and proposed development	- This is an elevated view of the Tathong Channel framed by a highly natural environment of green ridgelines. - Existing developments are limited to low-rise structures such as private houses along Big Wave Bay Road and the Big Wave Bay village along the coastline in the foreground. The proposed TKO 137 development would be occupying the large brownfield site fronting Tin Ha Shan in the middle of the background. It would appear as a skyline from this VP. - Although the development contrasts with the environment and the visual compatibility is low, it would replace an unsightly component and would become a key visual element in the view.	- A portion of Tin Ha Shan hillside would be blocked by the proposed development. - The Tin Ha Shan and High Junk Peak Country Trail ridgelines would still be visible in the far background. - The vast water body, ridgeline, and coastline in the foreground and middle ground would remain visible.	- The value of this view is primarily attached to the vast water body, surrounding ridgelines, and open sky. - The proposed development would alter the background of the view by removing the brownfield and blocking the hillside of Tin Ha Shan. - The elements in the foreground would be remain the same. - The sense of openness, vast sea view, and continuous ridgeline at the distance would be preserved. - The existing view and overall visual character currently enjoyed by trail visitors would still be maintained. - The development would be small due to the long viewing distance. - Effect of visual change on the public viewers: Slight - Degree of visibility: Full - Minimum viewing distance: Far (around 4300m from the Project)	Slight
VP2	View from Siu Sai Wan Promenade	Site reclamation of TKO137 & 132 and proposed development	- This is an at-grade view of the Junk Bay panorama viewing at the Promenade. - The view is dominated by Junk Bay in the foreground and an open sky.	- Mainly the foot of the Devil's Peak will be blocked from view as the building mass of the TKO132 is relatively low. - The Devil's Peak ridgeline and Junk Bay Chinese Permanent Cemetery would remain visible from the promenade.	- The value of this view is primarily attached to the vast water body, urban skylines continuous ridgeline, and open sky. - The proposed development would alter the middle ground by the addition of public facilities of	Moderate

VP. ID	Location of VPs	Source of Visual Impact	Visual Composition	Visual Obstruction	Visual Change	Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)
			- The horizon is characterised by a mix of urban waterfront areas and natural hills, with urban areas concentrated to the left where the entire length of CBL can also be seen. The TKO 132 will occupy the coastline at the foot of Devil's Peak to the left. - The development would slightly compatible with the grey hillside of Junk Bay Chinese Permanent Cemetery, and developments of TKO. - Meanwhile, the TKO 137 would occupy the brownfield to the right in contrast to natural ridgelines of Fat Tong Chau and Tin Ha Shan. It can be viewed as an extension of the more urbanised skylines on the left side of the panorama. - The compatibility of the development with the surrounding context is medium.	- View towards Tin Ha Shan and small portion of sky would be blocked by TKO137.	the TKO132 to the left and the replacement of brownfield with a waterfront and urban development to the right. - The TKO137 would be considered as an extension of current developed area of LOHAS Park and TKOIP and blend in with the existing urban skylines. - The elements in the foreground and overall character of the background will remain the same. - Effect of visual change on the public viewers: Slight to moderate - Degree of visibility: Full - Minimum viewing distance: Far (around 2000m from the Project)	
VP3	View from Waterfront of LOHAS Park	Proposed development of TKO137	- This is an at-grade view of the Junk Bay and TKOIP. Island Resort development and Pottinger Peak ridgeline are in the background. - Meanwhile, the buildings within the industrial area dominate the middle of the view. Some of the taller towers of TKO137 would be visible above the Fat Tong Chau ridgeline and estate buildings harmonious with the industrial context.	- Only a small portion development is seen from this VP. - Except for a slight intrusion of the open sky by the towers behind Fat Tong Chau, majority of the view and its overall quality remain the same.	- The value of this view is primarily attached to the open sky, vast water body, and continuous ridgeline in the background, which all remain the same. - The proposed development, majority of which would be blocked by the industrial area, only slightly alters the existing visual amenity. - Effect of visual change on the public viewers: Slight	Slight

VP. ID	Location of VPs	Source of Visual Impact	Visual Composition	Visual Obstruction	Visual Change	Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)
			- The developments would be considered as an extension of the current built environment, hence the compatibility of the Project with surrounding environment is high.		- - Degree of visibility: Partial - Minimum viewing distance: Far (around 2000m from the Project)	
VP4	View from Tseung Kwan O Waterfront Park	Site reclamation of TKO132 and proposed development	- This at-grade view from the waterfront is a portion of Junk Bay enclosed by Ocean Shores, the hillside featuring the Junk Bay Chinese Permanent Cemetery, and CBL - The ridgeline of Mount Parker and waterfront developments of Chai Wan are at the background partially screened by the CBL - The TKO 132 would occupy the coastline below the cemetery. Mainly composed of low-rise buildings, the development would be located behind the bridge structure. - Although it contrasts with the natural hillside, the development is harmonious with the bridge, nearby urban waterfront, and Chai Wan developments in the background. - The visual compatibility of the proposed works with the surrounding context is medium.	- As the building mass of the TKO132 is relatively low, only a small portion of view toward the foothill of Devil's Peak, which is already screened by the CBL, would be partially further blocked by the proposed works. - The view of the ridgelines in the middle ground and background will remain the same.	- The value of this view is primarily attached to the open sky, enclosed water body, and natural hillside. - The proposed development would slightly alter a portion of the view that is already obscured by the presence of the CBL. The tops of the buildings project slightly above the bridge deck. - Since the building mass of development is relatively short and would partially be hidden by the link bridge, the proposed works would barely noticeable by the viewers. - Visual amenity such as the foreground water body, ridgelines, hillside, and open sky would be maintained. - Effect of visual change on the public viewers: Slight - Degree of visibility: Glimpse - Minimum viewing distance: Medium (around 1000m from the Project)	Slight
VP5	View from LOHAS Park	Site reclamation of TKO132 and proposed development	- This waterfront view is a portion of Junk Bay enclosed the CBL with the bridge arch prominently	- The TKO 132 slightly obstructs the view of the natural lower hillside and coastline behind the bridge structure.	- The value of this view is primarily attached to the open sky, enclosed water body, and natural hillside.	Slight

VP. ID	Location of VPs	Source of Visual Impact	Visual Composition	Visual Obstruction	Visual Change	Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)
			visible at the centre. The hillside with Junk Bay Chinese Permanent Cemetery and Devil's Peak in the middle ground and the ridgeline of Mount Parker in the background complete the scene. - TKO 132 would be occupying the coastline below the cemetery. - The development would be located behind the bridge structure. The compatibility with the natural coastline is low. - However, the development is harmonious with other visible elements such as the bridge structure, the grey hillside of Junk Bay Chinese Permanent Cemetery, the adjacent slope maintenance, and Heng Fa Chuen in the far background. - The visual compatibility of the proposed works with the surrounding context is medium.	- Given the low-rise building massing, the development does not protrude beyond the bridge deck leaving the landmark arch visually permeable. - The view of Junk Bay in the foreground, upper portion of Devil's Peak, and ridgeline in the background will remain the same.	- The proposed development would slightly alter a portion of the view that is already obscured by the presence of the CBL. The tops of the buildings project slightly above the bridge deck. - Since the building mass of development is relatively short and would partially be hidden by the link bridge, the proposed works would barely noticeable by the viewers. - Visual amenity such as the foreground water body, ridgelines, hillside, and open sky would be maintained. - Effect of visual change on the public viewers: Slight - Degree of visibility: Partial - Minimum viewing distance: Medium (around 1600m from the Project)	
VP6	View from Tseung Kwan O InnoPark	Site reclamation of TKO132 and proposed development	- This waterfront fronts Junk Bay, the hillside with Junk Bay Chinese Permanent Cemetery, and Devil's Peak. - TKO 132 would occupy the coastline below the cemetery. Most of the hillside remains natural, but the cemetery and adjacent slope maintenance have turned large portions of it grey.	- TKO 132 would partially obstruct the view of the natural lower hillside and coastline of Devil's Peak. - The view of Junk Bay in the foreground, upper portion of Devil's Peak, Tseung Kwan O Cross Bay Link, and areas in the background will remain the same.	- The value of this view is primarily attached to the open sky, water body, and ridgeline. The proposed development would slightly alter the view of the lower portion the natural hillside and coastline across. - However, the overall sense of openness and visual character will remain the same. - Effect of visual change on the public viewers: Slight	Slight

VP. ID	Location of VPs	Source of Visual Impact	Visual Composition	Visual Obstruction	Visual Change	Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)
			- Although the development's compatibility with the natural coastline is low, the composition echoes those areas in the background in which urban areas front ridgelines.		- Degree of visibility: Full - Minimum viewing distance: Far (around 2000m from the Project)	
VP7	View from Lookout of the Devil's Peak	Site reclamation of TKO137 & 132 and proposed development	- This is an elevated view of the Junk Bay with the hillside of Devil's Peak in the foreground and the ridgelines of Clear Water Bay Country Park and Tung Lung Chau in the background. - TKO 132 will abut the green hillside below the cemetery and occupy the open waters below. Hence, it contrasts with the immediate natural context. - Meanwhile, TKO 137 will replace the brownfield behind Fat Tong Chau. Its skyline will appear as an extension of the existing waterfront developments fronting the Clear Water Bay Country Park ridgeline such as LOHAS Park and TKOIP. - The development's compatibility with the overall context is medium.	- TKO 132 would partially block the view of Junk Bay immediately below the hillside in the foreground. - The waters beyond as well as the entire length of CBL would remain the same. - Meanwhile, TKO 137's skyline would partially block the view of Tung Lung Chau and a small portion of the open sky in the background.	- Mainly the open sea view below the cemetery would be impacted by the addition of TKO 132. - The proposed development would moderately alter a portion of Junk Bay and replace the brownfield in the background with a high-rise urban area and waterfront. - Existing view toward the Tit Cham Chau and Tung Lung Chau would be blocked. - Effect of visual change on the public viewers: Substantial - Degree of visibility: Partial to full - Minimum viewing distance: Near to TKO 132, far from TKO 137 (around 550m – 3500m from the Project)	Substantial
VP8	View from Tin Ha Shan	Site reclamation of TKO137 and proposed development	- This is an elevated view of the Tathong Channel with Siu Sai Wan and the ridgeline of Dragon's Back Trail in the background.	- TKO 137 will dominate the view and its towers would partially obstruct the Tathong Channel and coastline of Siu Sai Wan, a portion of Fat Tong Chau and Tit Cham Chau.	- The value of this view is primarily attached to the water channel, natural hillsides, ridgelines, and open sky. - The proposed development would alter the middle ground of	Moderate

VP. ID	Location of VPs	Source of Visual Impact	Visual Composition	Visual Obstruction	Visual Change	Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)
			- TKO 137 will front the natural hillside and replace the existing brownfield between Tit Cham Chau and Fat Tong Chau. - Although its compatibility with the adjacent natural hillsides and ridgeline beyond is low, it is complementary to the TKOIP abutting Fat Tong Chau. - Moreover, the development echoes Siu Sai Wan in the background.	- However, the continuous ridgeline of Mount Parker, Pottinger Peak and Dragon's Back at the background and ridgeline of Tin Ha Au at the foreground would remain visible.	the view and blocking the view of the water channel. - Hence, the visual change is significant and visual permeability would be moderately reduced, but the development will replace an unsightly component and would become a key visual element in the view. - The sense of openness from the sky as well as the continuous ridgeline at the distance will be preserved. - Effect of visual change on the public viewers: Moderate - Degree of visibility: Full - Minimum viewing distance: Medium (around 1200m from the Project)	
VP9	View from Tung Lung Chau Lookout	Site reclamation of TKO137 & 132 and proposed development	- This is an elevated view of the Tathong Channel, Joss House Bay, Junk Bay and the landforms that surround these water bodies. - The foot of Devil's Peak and Siu Sai Wan and Heng Fa Chuen estate at the foothills of Mount Parker across the channel are visible in the background. - Meanwhile, in the middle ground, the TKO 137 will replace the brownfield beside Tin Ha Shan, with high-rise urban development.	- With the building massing and waterfront promenade of TKO 137, the TKO 132 would not be visible from this VP. - The TKO 137 would be blocking the view of Fat Tong Chau, and partially obstructing the Devil's Peak ridgeline in the background and small portion of the open sky. - Joss House Bay and the channel will remain fully visible while Junk Bay in the background will be blocked by the proposed development.	- The value of this view is primarily attached to the confluence of the three water bodies, ridgelines, variety of skylines, and the open sky. - The development alters the brownfield in the middle ground by replacing it with a high-rise urban development. - However, the overall visual character of the scene, sense of openness, and vast waters in the foreground will be maintained. - Effect of visual change on the public viewers: Moderate - Degree of visibility: Full	Moderate

VP. ID	Location of VPs	Source of Visual Impact	Visual Composition	Visual Obstruction	Visual Change	Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)
			- Its compatibility with the surrounding context is medium, but it complementary to the other high-rise skylines seen in the background such as LOHAS Park, Siu Sai Wan, and Tai Koo beyond.		- Minimum viewing distance: Medium to TKO 137, far from TKO 132 (around 2000m – 5700m from the Project)	
VP10	View from the traveller along the ferry route along the Tathong Channel	Site reclamation of TKO137 & 132 and proposed development	- This is a sea-level view from Tathong Channel of the corner where Tit Cham Chau and TKO 137 converge. - The Devil's Peak ridgeline and the proposed TKO 132 development at the coastline below are seen in the background. - Given the highly natural context from this viewing angle, the development's visual compatibility is low. - However, the development would become a key visual element in the view.	- The TKO 132 partially obstructs the coastline and lower hillside in the background. - Meanwhile, TKO 137 dominates the foreground as the towers partially block the open sky and background ridgeline as well as screen Fat Tong Chau from the approaching view. - The vast water body in the foreground and background as well as Tit Cham Chau remain fully visible.	- The value of this view is primarily attached to the water channel, Tit Tam Chau, and ridgeline in the background. - Although the addition of TKO 132 in the background is negligible, the TKO 137 significantly alters the corner beside Tit Cham Chau through the addition of high-rise development and an urban waterfront in the place of the brownfield. - Effect of visual change on the public viewers: Moderate to substantial depends on the viewing distance and visibility along the ferry travelling route - Degree of visibility: Partial to full - Minimum viewing distance: Medium to TKO 137, far from TKO 132 (around 1400m – 4500m from the Project)	Moderate to Substantial
VP11	View from the Heng Fa Chuen Promenade	Site reclamation of TKO137 & 132 and proposed development	- This is an at-grade view of the Junk Bay panorama. The prominent feature of the view is Junk Bay in the middle of the foreground	- Mainly the foot of the Devil's Peak will be blocked from view as the building mass of the TKO132 is relatively low. - The Devil's Peak ridgeline and Junk Bay Chinese Permanent Cemetery will	- The value of this view is primarily attached to the vast water body, urban skylines, continuous ridgeline, and open sky. - The proposed development would moderately alter the	Moderate

VP. ID	Location of VPs	Source of Visual Impact	Visual Composition	Visual Obstruction	Visual Change	Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)
			beneath an expansive open sky. - TKO 132 located at the coastline below Junk Bay Chinese Permanent Cemetery and appears harmonious with the highly urban scene in the left of the background. - Meanwhile, the TKO 137 contrasts with the natural ridgelines of Fat Tong Chau, Tin Ha Shan, and Tung Lung Chau. - However, it can be viewed as an extension of the existing skyline and balances the high-rise profile of LOHAS Park. - The compatibility of the development with the surrounding context is medium.	remain visible from the promenade. - The entire length of CBL and background skyline will also remain visible. - The TKO137 will partially block the open sky view between the Tin Ha Shan and Tung Lung Chau and a portion of the ridgeline.	middle ground by the addition of a new platform for public facilities to the left. - It will also alter the open sky to the right of the background through the extension of a high-rise skyline profile. - Effect of visual change on the public viewers: Slight to moderate in view of the medium to far viewing distance - Degree of visibility: Partial to full - Minimum viewing distance: Medium to TKO 132, far from TKO 137 (around 1500m – 3000m from the Project	
VP12	View from the Tseung Lam Highway Garden	Site reclamation of TKO132	- This is an at-grade view of the CBL from the Tseung Lam Highway Garden next to the Ocean Shores. - The vegetated planter at the front ground as well as the bridge interchange and vegetated foothill of Devil's Peak occupy most of the view. - The continuous ridgeline and developments of the east of Hong Kong Island occupy the far background.	- As the building mass of the TKO132 is relatively small and low in building height, only a small portion of view toward the developments of Heng Fa Chuen would be blocked. - The view of the ridgeline in the background and open sky will remain the same.	- The value of this view is primarily attached to the ridgeline and open sky. The building mass is barely visible from this viewing angle, only the proposed road works will be partially visible. - Effect of visual change on the public viewers: Slight - Degree of visibility: Partial - Minimum viewing distance: Near to TKO 132 (around 600m from the Project)	Slight

VP. ID	Location of VPs	Source of Visual Impact	Visual Composition	Visual Obstruction	Visual Change	Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)
			- The TKO132 is barely visible to the viewers, and the proposed road works are blend in with the existing infrastructure at foothill. - The compatibility of the project with the surrounding landscape is considered as medium.			

11.8 Landscape and Visual Mitigation Measures

Landscape and Aesthetic External Design Measures in the Proposed Scheme

11.8.1 The proposed landscape and visual mitigation measures, together with an indication of funding, implementation and maintenance agencies, during the construction and operational phases are listed in **Table 11.9** and **Table 11.10** below. On top of the overall landscape and visual mitigation measures proposed, the proposed mitigation measures during operational phase specifically for individual DPs (i.e. DP1, DP2 and DP3) under this EIA Study are listed in **Table 11.11**, **Table 11.12** and **Table 11.13** respectively. The proposed mitigation measures are illustrated in the Landscape and Visual Mitigation Plans in **Figures 11.5.0** to **11.5.7**. The mitigation measures proposed would be further reviewed subject to the design development of the Project and the management and maintenance agencies are identified as per DEVB TC(W) No. 6/2015.

Table 11.9 Proposed Landscape Mitigation Measures for Construction Phase (Overall for Schedule 3 DP and Schedule 2 DPs)

ID No.	Landscape and Visual Mitigation Measures	Relevant DPs	Funding Agency	Implementation Agency
CM1	**Tree Preservation and Transplantation** Tree without impact from the proposed works should be retained and any existing trees unavoidably affected by the works should be transplanted following the prevailing mechanism (e.g. DEVB TC(W) – 4/2020). Any existing trees to be pruned by the Project should follow the Tree Management Practice Note No. 3: Tree Pruning issued by GLTMS of DEVB.	Schedule 3 DP and Schedule 2: DP1, DP2, DP3	CEDD and DSD (for DP3)	CEDD and DSD (for DP3) (via contractor)
CM2	**Preservation of Natural Coastline** Natural Coastline without impact from the proposed works should be retained.	Schedule 3 DP and Schedule 2: DP1, DP2	CEDD	CEDD (via contractor)
CM3	**Erection of Decorative Screen Hoarding** Erection of decorative screen hoarding or hoarding compatible with the surrounding setting.	Schedule 3 DP and Schedule 2: DP1, DP2, DP3	CEDD and DSD (for DP3)	CEDD and DSD (for DP3) (via contractor)
CM4	**Management of Construction Activities and Facilities** Construction facilities and activities on work sites and areas should be carefully managed and controlled to minimise any potential adverse landscape impacts.	Schedule 3 DP and Schedule 2: DP1, DP2, DP3	CEDD and DSD (for DP3)	CEDD and DSD (for DP3) (via contractor)

ID No.	Landscape and Visual Mitigation Measures	Relevant DPs	Funding Agency	Implementation Agency
CM5	**Reinstatement of the affected landscaped area** Reinstatement of affected vegetated area within assessment area would be implemented to restore the existing natural environment.	Schedule 3 DP and Schedule 2: DP1, DP2, DP3	CEDD and DSD (for DP3)	CEDD and DSD (for DP3) (via contractor)

Table 11.10 Proposed Landscape and Visual Mitigation Measures for Operational Phase (Overall for Schedule 3 DP and Schedule 2 DPs)

ID No.	Landscape and Visual Mitigation Measures	Relevant DPs	Funding Agency	Implemen-tation Agency	Maintenance/ Management Agency*
OM1	**Aesthetically pleasing design of Aboveground Structures** Aesthetically pleasing design as regard to the form, material, finishes and building façade should be incorporated to buildings and aboveground structures such as bridges, ancillary buildings and other associated engineering facilities so as to blend in the structures to the adjacent landscape and visual context.	Schedule 3 DP and Schedule 2: DP1, DP3	For public works: CEDD, DSD, EDB, EPD, FSD, HKPF, HyD, LCSD and WSD	For public works: ArchSD, CEDD, DSD, EDB, EPD, HyD and WSD	For public works: ArchSD, DSD, EDB, operator of EFs, EPD, FSD, HKPF, HyD, LCSD and WSD
			For private works, by respective proponent[1]		
OM2	**Buffer Screen Planting** Buffer screen planting, including shrub to provide screening.	Schedule 3 DP and Schedule 2: DP1, DP2, DP3	CEDD, DSD, EDB, EPD, FSD, HKPF, HyD, LCSD and WSD	ArchSD, CEDD, DSD, EDB, EPD, HyD and WSD	ArchSD, DSD, EDB, operator of EFs, EPD, FSD, HKPF, HyD, LCSD and WSD
			For private works, by respective proponent[1]		
OM3	**Roof Greening** Roof Greening should be proposed to the roof area of the propose structures as far as practical to enhance the landscape quality of the structures and mitigate any	Schedule 3 DP and Schedule 2: DP3	CEDD, DSD, EDB, EPD, FSD, HKPF, LCSD and WSD	ArchSD, CEDD, DSD, EDB, EPD and WSD	ArchSD, DSD, EDB, operator of EFs, EPD, FSD, HKPF, LCSD and WSD

[1] CEDD would coordinate with LandsD and PlanD to impose appropriate land sale conditions and planning conditions which future private developers would be bound to provide necessary landscape and visual mitigation measures.

ID No.	Landscape and Visual Mitigation Measures	Relevant DPs	Funding Agency	Implemen-tation Agency	Maintenance/ Management Agency*
	potential visual impact on adjacent public viewers.		For private works, by respective proponent[1]		
OM4	**Roadside Greening** Roadside soft landscape should be incorporated to the station buildings and associated engineering facilities. Shade tolerant plants with tall to medium height should be planted to under the viaduct to soften the hard building edges and provide screening.	Schedule 3 DP and Schedule 2: DP1	CEDD	CEDD	HyD and LCSD
OM5	**Open Space provision** Provision of new open space for recreational use in TKO137. An integrated network of linked open spaces, in approx. 18.82ha**, shall be created to connect the open spaces with the waterfront and other green networks in TKO in accordance with the principles adopted in the Report on Master Urban Design Plan and Landscape Master Plan. Landscape and visual features shall be carefully placed at suitable locations as landmarks or focal points to serve as iconic features and enhance the community identity.	Schedule 3 DP	CEDD and LCSD	ArchSD and CEDD	ArchSD, EMSD and LCSD
			For private works, by respective proponent[1]		
OM6	**Compensatory Tree Planting** As far as practicable, compensatory tree planting for compensation of felled	Schedule 3 DP and Schedule 2: DP1, DP2, DP3	CEDD/ LCSD, and DSD	CEDD/ ArchSD, and DSD	ArchSD, DSD, LCSD and WSD

[1] CEDD would coordinate with LandsD and PlanD to impose appropriate land sale conditions and planning conditions which future private developers would be bound to provide necessary landscape and visual mitigation measures.

ID No.	Landscape and Visual Mitigation Measures	Relevant DPs	Funding Agency	Implemen-tation Agency	Maintenance/ Management Agency*
	trees would be implemented following the prevailing mechanism (e.g. DEVB TC(W) 4/2020). Tree compensation strategy would be proposed along the proposed roadside planter, amenity area, greenery at open space, greenery at EPP and slope treatment in accordance with the latest design layout. Reference shall be made to Greening Master Plan issued by CEDD, Street Tree Selection Guide, and Guiding Principles on Use of Native Plant Species in Public Works Projects promulgated by DEVB to optimise the use of native species and/or species with ecological value to enhance biodiversity.		For private works, by respective proponent[1]		
OM7	**Landscape Treatments on Slope or Retaining Structure** Landscape treatments on slope or retaining structure should be made reference to GEO Publication No. 1/2011 – Technical Guidelines on Landscape Treatment for Slopes and be adopted subject to detail design of the slope/retaining structure. Mix of native species will be proposed as far as practicable in reference to Guiding Principles on Use of Native Plant Species in Public Works Projects promulgated by DEVB.	Schedule 3 DP and Schedule 2: DP1, DP2, DP3	CEDD and WSD	CEDD and WSD	CEDD, DSD, HyD, LandsD and WSD
OM8	**Shoreline Treatment** Eco-shoreline design to be adopted on artificial seawall to enhance its landscape and ecological value.	Schedule 3 DP and Schedule 2: DP2	CEDD	CEDD	CEDD and MD

[1] CEDD would coordinate with LandsD and PlanD to impose appropriate land sale conditions and planning conditions which future private developers would be bound to provide necessary landscape and visual mitigation measures.

** Management and Maintenance Agencies are identified as per DEVB TC(W) No. 6/2015.*
*** The data is based on the RODP version dated 2024.07.*

Table 11.11 Proposed Landscape and Visual Mitigation Measures for Operational Phase (DP1 - Construction of Carriageway Bridge at TKO 132)

ID No.	Landscape and Visual Mitigation Measures	Relevant DPs	Funding Agency	Implemen-tation Agency	Maintenance/ Management Agency*
OM1	**Aesthetically pleasing design of Aboveground Structures** Aesthetically pleasing design as regard to the form, material, finishes and building façade should be incorporated to buildings and aboveground structures such as bridges, ancillary buildings and other associated engineering facilities so as to blend in the structures to the adjacent landscape and visual context.	Schedule 2: DP1	CEDD	CEDD	HyD
OM2	**Buffer Screen Planting** Buffer screen planting, including shrub to provide screening.	Schedule 2: DP1	CEDD	CEDD	LCSD and HyD
OM4	**Roadside Greening** Roadside soft landscape should be incorporated to the station buildings and associated engineering facilities. Shade tolerant plants with tall to medium height should be planted to under the viaduct to soften the hard building edges and provide screening.	Schedule 2: DP1	CEDD	CEDD	LCSD and HyD
OM6	**Compensatory Tree Planting** As far as practicable, compensatory tree planting for compensation of felled trees would be implemented following the prevailing mechanism (e.g. DEVB TC(W) 4/2020). Tree compensation strategy would be proposed along the proposed roadside planter, amenity area, greenery at open space, and slope treatment in accordance with the latest design layout. Reference	Schedule 2: DP1	CEDD	CEDD	LCSD and HyD

ID No.	Landscape and Visual Mitigation Measures	Relevant DPs	Funding Agency	Implemen-tation Agency	Maintenance/ Management Agency*
	shall be made to Greening Master Plan issued by CEDD, Street Tree Selection Guide, and Guiding Principles on Use of Native Plant Species in Public Works Projects promulgated by DEVB to optimise the use of native species and/or species with ecological value to enhance biodiversity.				
OM7	**Landscape Treatments on Slope or Retaining Structure** Landscape treatments on slope or retaining structure should be made reference to GEO Publication No. 1/2011 – Technical Guidelines on Landscape Treatment for Slopes and be adopted subject to detail design of the slope/retaining structure. Mix of native species will be proposed as far as practicable in reference to Guiding Principles on Use of Native Plant Species in Public Works Projects promulgated by DEVB.	Schedule 2: DP1	CEDD	CEDD	HyD

** Management and Maintenance Agencies are identified as per DEVB TC(W) No. 6/2015.*

Table 11.12 Proposed Landscape and Visual Mitigation Measures for Operational Phase (DP2 - Reclamation works at TKO 137 and off TKO 132)

ID No.	Landscape and Visual Mitigation Measures	Relevant DPs	Funding Agency	Implemen-tation Agency	Maintenance/ Management Agency*
OM8	**Shoreline Treatment** Eco-shoreline design to be adopted on artificial seawall to enhance its landscape and ecological value.	Schedule 2: DP2	CEDD	CEDD	CEDD and MD

** Management and Maintenance Agencies are identified as per DEVB TC(W) No. 6/2015.*

Table 11.13 Proposed Landscape and Visual Mitigation Measures for Operational Phase (DP3 - Construction and Operation of Effluent Polishing Plant)

ID No.	Landscape and Visual Mitigation Measures	Relevant DPs	Funding Agency	Implemen-tation Agency	Maintenance/ Management Agency*
OM1	**Aesthetically pleasing design of Aboveground Structures** Aesthetically pleasing design as regard to the form, material, finishes and building façade should be incorporated to buildings and aboveground structures such as bridges, ancillary buildings and other associated engineering facilities so as to blend in the structures to the adjacent landscape and visual context.	Schedule 2: DP3	DSD	DSD	DSD
OM2	**Buffer Screen Planting** Buffer screen planting, including shrub to provide screening.	Schedule 2: DP3	DSD	DSD	DSD
OM3	**Roof Greening** Roof Greening should be proposed to the roof area of the propose structures as far as practical to enhance the landscape quality of the structures and mitigate any potential visual impact on adjacent public viewers.	Schedule 2: DP3	DSD	DSD	DSD
OM6	**Compensatory Tree Planting** As far as practicable, compensatory tree planting for compensation of felled trees would be implemented following the prevailing mechanism (e.g. DEVB TC(W) 4/2020). Tree compensation strategy would be proposed in the greenery at EPP and slope treatment in accordance with the latest design layout. Reference shall be made to Greening Master Plan issued by CEDD, Street Tree Selection Guide, and Guiding Principles on Use of Native Plant Species in Public Works Projects	Schedule 2: DP3	DSD	DSD	DSD

ID No.	Landscape and Visual Mitigation Measures	Relevant DPs	Funding Agency	Implemen-tation Agency	Maintenance/ Management Agency*
	promulgated by DEVB to optimise the use of native species and/or species with ecological value to enhance biodiversity.				
OM7	**Landscape Treatments on Slope or Retaining Structure** Landscape treatments on slope or retaining structure should be made reference to GEO Publication No. 1/2011 – Technical Guidelines on Landscape Treatment for Slopes and be adopted subject to detail design of the slope/retaining structure. Mix of native species will be proposed as far as practicable in reference to Guiding Principles on Use of Native Plant Species in Public Works Projects promulgated by DEVB.	Schedule 2: DP3	DSD	DSD	DSD

** Management and Maintenance Agencies are identified as per DEVB TC(W) No. 6/2015.*

Programme of Implementation of Landscape and Visual Mitigation Measures

11.8.2 The construction phase mitigation measures listed above should be adopted from the commencement of construction and should be in place throughout the construction period (i.e. refer to the commencement date(s) of the construction programme in **Appendix 2.2**). While the operational phase mitigation measures listed above should be adopted during the detailed design stage and should be built as part of the construction works so that they are in place at the date of commissioning of the Project (i.e. refer to the completion date(s) of the construction programme in **Appendix 2.2**). However, it should be noted that the full effect of the soft landscape mitigation measures would not be appreciated for several years.

11.8.3 Viewpoint locations of the photomontages are shown in **Figure 11.4.0**. The photomontages intend to demonstrate only the scale and massing of the Project and the effect of the proposed mitigation measures. The architectural design finishes or any other related detailed design components are subject to refinement and changes during the detailed design stage. Photomontages of the Project without and with mitigation measures illustrating the appearance on day 1 and after 10 years of the Project are shown in **Figure 11.4.1 to 11.4.14**.

11.9 Residual Impacts

11.9.1 After implementation of recommended mitigation measures shown in the Landscape and Visual Mitigation Plans in **Figures 11.5.0** to **11.5.7**, residual landscape impact of significance during construction and operational phases are provided in **Table 11.14** and described below. The landscape impacts are shown in the Landscape Resource Impact Plan and Landscape Character Area Impact Plan in **Figures 11.2.3** and **11.3.3** respectively.

Landscape Resources

11.9.2 For LR 5, LR 7, LR10 and LR14 there would be no residual impact on these LRs during construction and operation as no construction works would be conducted in these LRs.

11.9.3 For LR 1 will be permanently lost due to the proposed development primarily for housing provision. During the operational phase, the existing vegetation which is mostly self-seeded would be reinstated in the designated land uses including open spaces. Roof greening would be provided on the building structure strategically. Hard and soft landscape provision shall also be provided along the pedestrian walkways. It is considered that the residual impact on this LR is moderate during the construction phase, and mitigated as slight upon implementation of planting works in Day 1 of operation, and reduced to negligible when the proposed planting is fully established in Year 10 of operation with the implementation of mitigation measures.

11.9.4 For LR 2, LR8, LR10 and LR11, a small portion of the existing vegetation at the fringe will be permanently removed due to the proposed construction of the roads or slope works and natural terrain mitigation measures. During the operational phase, the affected trees shall be reinstated as roadside planting or landscaping within the Open Space land use. Landscape treatments on slopes shall also be provided along the roads. It is considered that the residual impact on these LRs is moderate during the construction phase and on Day 1 of operation, mitigated to slight upon implementation of the planting work on Day 1 of operation, and reduced to negligible when the proposed planting is fully established in Year 10 of operation, with the implementation of mitigation measures.

11.9.5 For LR 3, a small portion of the existing vegetation at the fringe will be permanently lost due to the proposed construction of the public facilities and access roads. During the operational phase, mitigation measures of roof greening and buffer screen planting would be provided on the building structure. Landscape treatments on the man-made engineered slopes shall also be provided along the access roads to compensate the loss of vegetation. It is considered that the residual impact on this LR is moderate during the construction phase, and mitigated as slight upon implementation of planting works in Day 1 of operation, and reduced to negligible when the proposed planting is fully established in Year 10 of operation with the implementation of mitigation measures.

11.9.6 For LR4, the existing man-made drainage channel within TKO137 area will be permanently removed due to the proposed works. The natural water courses at the Tin Ha Au foothill would not be affected. During the operational phase, the affected vegetation would be reinstated in the designated open space or roadside amenity area. Roof greening would be provided on the building structure strategically. Hard and soft landscape provision shall also be provided along the pedestrian walkways. It is considered that the residual impact on this LR is slight during the construction phase and in Day 1 of operation, and reduced to negligible when the proposed planting is fully established in Year 10 of operation with the implementation of mitigation measures.

11.9.7 For LR 6 and LR13, a small portion of the existing water body and natural sandy shoreline will be permanently lost to the proposed development primarily for housing provision without mitigation measures. Reclamation method should avoid massive destruction to the existing seabed and its habitat. Mitigation measures to adopt the eco-shoreline design to enhance the landscape and ecological value to the new reclaimed land is one of the factors to mitigate the disturbed shoreline amenity. It is considered that the residual impact on LR13 is moderate during the construction phase and in Day 1 of operation, but slight in Year 10 of operation with the implementation of mitigation measures. In view of the loss of water area to LR 6 is irreversible, the residual impact on LR6 is moderate during the construction phase, and maintain as moderate in Day 1 and Year 10 of operation with the implementation of mitigation measures.

11.9.8 For LR 9, a portion of the natural rocky shoreline will be permanently lost similarly to LR 6 and LR 13. The mitigation measures for LR6 and LR 13 should be applied to LR 9. Due to the relatively larger portion, it is considered that the residual impact on this LR is moderate during

the construction phase and in Day 1 of operation, but moderate to slight in Year 10 of operation with the implementation of mitigation measures when the shoreline treatment with eco-design and buffer screen planting is well-established.

Landscape Character Areas

11.9.9 For LCA 6, LCA 7, LCA 10 and LCA 11, there would be no residual landscape impact during the construction phase as there is no works to be conducted in the LCA. During the operational phase, the residual landscape impact would be negligible in both Day 1 and Year 10 of operation.

11.9.10 For LCA 1, there will be moderate residual landscape impact during the construction phase due to the construction of the proposed housing and infrastructure development. Upon completion of the proposed works, the original reclaimed area would be reprovisioned with enhanced landscape works in the proposed development. With the implementation of mitigation measures, the residual landscape impact is considered as slight in Day 1 of operation, and future reduced as negligible in Year 10 of operation when the landscape works are well established.

11.9.11 For LCA 2 and 3, there will be moderate residual landscape impact during the construction phase due to the construction of the proposed roads and public facilities. A small portion of vegetated hillside along the coastline will be affected by the proposed works. The disturbed vegetation would be reprovisioned with enhanced landscape works in the proposed development. With the implementation of mitigation measures, the residual landscape impact is considered as slight in Day 1 and negligible in Year 10 with implementation of landscape mitigation measures.

11.9.12 For LCA 4 and 5, there will be moderate residual landscape impact during the construction phase due to the proposed construction of housing development and public facilities respectively. The affect area of water bodies is relatively larger in LCA4 than LCA5. In view of the loss of water area is irreversible, the impact caused by the proposed works are maintained as moderate in Day 1 and Year 10 for LCA4 and LCA5 with implementation of landscape mitigation measures.

11.9.13 For LCA 8 and 9, there will slight residual landscape impact during the construction phase due to the proposed construction of roads and public facilities. Areas of site offices, open storage areas and access roads will be demolished and replaced by the proposed devotement with enhanced landscape works in proposed development. With the implementation of mitigation measures, the residual landscape impact is considered as slight in Day1 of operation, and feature reduced as negligible in Year 10 of operation when the landscape works are well established.

Table 11.14 Significance of Landscape Impact during Construction and Operational Phases

ID No.	Landscape Resource / Landscape Character Areas	Sensitivity (Low, Medium, High)		Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)		Impact Significance before Mitigation (Substantial/ Moderate / Slight/ Negligible)		Recommended Mitigation Measures	Significance of Residual Impact after Mitigation (Substantial/ Moderate / Slight/ Negligible)		
		Construction	Operation	Construction	Operation	Construction	Operation		Construction	Operation	
										Day 1	Year 10
Landscape Resources (LRs)											
LR1	Vegetation within TKO 137	Low	Low	Substantial	Substantial	Moderate	Moderate	CM1-CM5, OM1, OM3-OM6, OM8	Moderate	Slight	Negligible
LR2	Hillside Vegetation at Devil's Peak	High	High	Slight	Slight	Moderate	Moderate	CM1, CM3, CM5, OM2, OM4, OM6, OM7	Moderate	Slight	Negligible
LR3	Shrubland at Tit Cham Chau and Fat Tong Chau	Medium	Medium	Moderate	Moderate	Moderate	Moderate	CM1, CM3, CM5, OM2, OM4, OM6, OM7	Moderate	Slight	Negligible
LR4	Vegetation along Drainage Channel	Low	Low	Slight	Slight	Slight	Slight	CM1, CM3, CM5, OM2, OM5, OM6	Slight	Slight	Negligible
LR5	Hillside Vegetation along Eastern Boundary of TKO 137	High	High	Negligible	Negligible	Negligible	Negligible	NA	Negligible	Negligible	Negligible
LR6	Coastal Water	High	High	Moderate	Moderate	Moderate	Moderate	CM2, CM4, OM8	Moderate	Moderate	Moderate
LR7	SENT Landfill	Medium	Medium	Negligible	Negligible	Negligible	Negligible	NA	Negligible	Negligible	Negligible
LR8	Roadside Planting	Medium	Medium	Slight	Slight	Slight	Slight	CM1, CM3, CM5, OM2, OM4, OM6	Slight	Slight	Negligible
LR9	Rocky Shore along Western Coastline of Junk Bay	High	High	Moderate	Moderate	Moderate	Moderate	CM2, CM4, CM5, OM2, OM7, OM8	Moderate	Moderate	Slight
LR10	Vegetation on Modified Slope and Amenity Planting	Low	Low	Negligible	Negligible	Negligible	Negligible	NA	Negligible	Negligible	Negligible

ID No.	Landscape Resource / Landscape Character Areas	Sensitivity (Low, Medium, High)		Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)		Impact Significance before Mitigation (Substantial/ Moderate / Slight/ Negligible)		Recommended Mitigation Measures	Significance of Residual Impact after Mitigation (Substantial/ Moderate / Slight/ Negligible)		
		Construction	Operation	Construction	Operation	Construction	Operation		Construction	Operation	
										Day 1	Year 10
LR11	Hillside Vegetation at Chiu Keng Wan Shan	High	High	Slight	Slight	Moderate	Moderate	CM1, CM3, CM4, CM5, OM2, OM6, OM7	Moderate	Slight	Negligible
LR12	Orchard/ Vegetation Near Rural Settlement	Medium	Medium	Slight	Slight	Slight	Slight	CM1, CM3, CM4, CM5, OM2, OM6, OM7	Slight	Slight	Negligible
LR13	Sandy Shore along Western Coastline of Junk Bay	High	High	Slight	Slight	Moderate	Moderate	CM2, CM4, CM5, OM2, OM7, OM8	Moderate	Moderate	Slight
LR14	Vegetation in Developed Area	Low to Medium	Low to Medium	Negligible	Negligible	Negligible	Negligible	NA	Negligible	Negligible	Negligible
Landscape Character Area (LCAs)											
LCA1	Fat Tong O Reclamation Landscape	Low	Low	Substantial	Substantial	Moderate	Moderate	CM1-CM5, OM1, OM3-OM6, OM8	Moderate	Slight	Negligible
LCA2	Fat Tong Chau and Tin Ha Au Upland and Hillside Landscape	High	High	Slight	Slight	Moderate	Moderate	CM1, CM3, CM5, OM2, OM4, OM6, OM7	Moderate	Slight	Negligible
LCA3	Chiu Keng Wan Upland and Hillside Landscape	High	High	Slight	Slight	Moderate	Moderate	CM1, CM3, CM5, OM2, OM4, OM6, OM7	Moderate	Slight	Negligible
LCA4	Tathong Channel and Joss House Bay Inshore Water Landscape	High	High	Moderate	Moderate	Moderate	Moderate	CM2, CM4, OM8	Moderate	Moderate	Moderate
LCA5	Junk Bay Bay Landscape	High	High	Moderate	Moderate	Moderate	Moderate	CM2, CM4, OM8	Moderate	Moderate	Moderate

ID No.	Landscape Resource / Landscape Character Areas	Sensitivity (Low, Medium, High)		Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)		Impact Significance before Mitigation (Substantial/ Moderate / Slight/ Negligible)		Recommended Mitigation Measures	Significance of Residual Impact after Mitigation (Substantial/ Moderate / Slight/ Negligible)		
		Construction	Operation	Construction	Operation	Construction	Operation		Construction	Operation	
										Day 1	Year 10
LCA6	SENT Landfill and Ongoing Major Development Landscape	Low	Low	Negligible	Negligible	Negligible	Negligible	NA	Negligible	Negligible	Negligible
LCA7	Tseung Kwan O Industrial Urban Landscape	Low	Low	Negligible	Negligible	Negligible	Negligible	NA	Negligible	Negligible	Negligible
LCA8	Fat Tong O Industrial Urban Landscape	Low	Low	Slight	Slight	Slight	Slight	CM1, CM2, CM3, CM4, CM5, OM1, OM2, OM3, OM6	Slight	Slight	Negligible
LCA9	Tseung Kwan O Transportation Corridor Landscape	Low	Low	Slight	Slight	Slight	Slight	CM2, CM3, CM4, CM5, OM1	Slight	Slight	Negligible
LCA10	Junk Bay Cemetery Landscape	Medium	Medium	Negligible	Negligible	Negligible	Negligible	NA	Negligible	Negligible	Negligible
LCA11	Tiu Keng Leng Urban Residential Landscape	Medium	Medium	Negligible	Negligible	Negligible	Negligible	NA	Negligible	Negligible	Negligible

Residual Visual Impact to existing VPs

11.9.14 After the implementation of the recommended mitigation measures shown in the Landscape and Visual Mitigation Plans in **Figures 11.5.0 to 11.5.7**, residual visual impact of significance during operational phase is provided in **Table 11.15** and described below. Photomontages illustrating the potential visual impact during operation with and without mitigation measures from the VPs are shown in **Figures 11.4.1 to 11.4.14.** The visual impact is shown in the Visual Impact Plan in **Figure 11.4.15.**

VP1 – View from Dragon's Back Trail

11.9.15 Since the scale of proposed development are relatively small due to far viewing distance, the anticipated magnitude of change to this VP would be considered as slight. As the visual sensitivity is high, the visual impact before mitigation is moderate. With implementation of mitigation measure such as aesthetic pleasing design of the aboveground structure and provision of greenery at open space, it is expected that residual impact after mitigation would be slight in Day 1 and negligible in year 10.

VP2 – View from Siu Sai Wan Promenade (VP2A for TKO132 and VP2B for TKO137)

11.9.16 Despite to the far viewing distance, it is anticipated that the visual changes would be intermediate due to significance change in the urban city skyline and partially blockage of the ridgeline of Tin Ha Shan. To alleviate the visual impact, mitigation measures proposed in TKO132 and TKO137 such as aesthetic pleasing design of the aboveground structures and shoreline treatment, reinstatement of the affected landscape in TKO132 and provision of open space and greenery along the promenade of TKO137. Hence, it is expected that residual impact after implementation of mitigation measure would be moderate in Day 1 and reduce to slight in the Year 10 of operation phase.

VP3 – View from Waterfront of LOHAS Park

11.9.17 Since the nature and scale of proposed development are in similar to the adjacent built context and the anticipated visual change would be considered as an extension of existing developments of TKOIP, the magnitude of change to this VP would be considered as slight. Within implementation of mitigation such as aesthetic pleasing design of the aboveground structures, it is expected that residual impact after mitigation would be slight in Day 1 and reduce to negligible in Year 10 of operation phase.

VP4 – View from Tseung Kwan O Waterfront Park

11.9.18 Despite the building mass is relatively small and low in profile while the proposed development would be partially blocked by the existing CBL, the existing view toward the Mount Parker would be partially blocked by TKO132. The magnitude of change to this VP would be considered as slight. As the visual sensitivity is high, the visual impact before mitigation is moderate. With implementation of mitigation measure such as provision of buffer greening and the aesthetically pleasing design on the building façade, the visual intrusion by the proposed developments would be alleviate and help blend in with the surrounding. Hence, it is expected that residual impact after implementation of mitigation measure would be slight in Day 1 and reduce to negligible in Year 10 of operation phase.

VP5 – View from LOHAS Park

11.9.19 Given to the relatively small and low building profile while is locate behind the Cross Bay Link, only a small portion of proposed works in TKO132 would be noticeable by viewers. Existing vegetation at the foothill of Devil's Peak and natural shoreline would be preserved to minimise the alternation of existing visual elements. As the visual sensitivity is high, the visual impact before mitigation is moderate. Aesthetic pleasing design on the proposed development would be adopted. With implementation of the mitigation measures, it is expected that residual impact after implementation of mitigation measure would be slight in Day 1 and reduce to negligible in Year 10 of operation phase.

VP6 – View from Tseung Kwan O InnoPark

11.9.20 Subject to the far viewing distance and relatively small and low building profile of the proposed development in TKO132, existing view towards to the Devil's Peak and open sky view would be largely preserved. Only a small portion of view toward the vegetated slope of Devil's Peak would be blocked by TKO 132. Hence, the magnitude of change to this VP would be considered as slight. Within implementation of mitigation measures such as adopting aesthetic pleasing design on building façade, it is expected that residual impact after implementation of mitigation measure would be slight in Day 1 and reduce to negligible in Year 10 of operation phase.

VP7 – View from Lookout of the Devil's Peak

11.9.21 Given to the close viewing distance, TKO132 would occupy the front ground of this VP significantly while TKO137 would partially block the existing view toward the Tung Lung Chau. The magnitude of change to this VP would be considered as substantial with medium sensitivity. The unmitigated impact would be considered as substantial. To alleviate the visual changes caused by the proposed development, several mitigation measures would be proposed, including the provision of green roof and vertical greening on the proposed buildings of TKO132, provision of greenery along planned open spaces at TKO137, etc. Within implementation of mitigations, it is expected that residual impact would be substantial in Day 1 and reduce to moderate in Year 10 of operation phase.

VP8 – View from Tin Ha Shan

11.9.22 Given to the relatively close viewing distance, TKO137 would occupy the mid-ground of this VP significantly, blocking the view towards the Tathong Channel and some of the built development at the Siu Sai Wan. The continuous ridgeline at Hong Kong Island and open sky view can still be remained. The magnitude of change to this VP would be considered as moderate with high sensitivity. The unmitigated impact would be considered as substantial. To alleviate the visual changes caused by the proposed works, mitigation measures such as buffer screen planting, roadside greening, open space provision and tree compensation planting within the TKO137, it is anticipated that the residual impact would be substantial in Day 1 and reduce to moderate in Year 10 of operation phase.

VP9 – View from Tung Lung Chau Lookout

11.9.23 Since TKO137 is relatively large in scale and hence can be fully visible from Tung Lung Chau Lookout from far reviewing distance. A portion of continuous ridgeline of Devil's Peak would be blocked while the existing urban skyline would be extended connecting with LOHAS Park. The magnitude of change to this VP would be considered as moderate with medium sensitivity. The unmitigated impact would be considered as moderate. Apart from implementing aesthetically pleasing design for the proposed development, provision of greenery at the planned open space and promenade would be proposed to alleviate the visual impacts. Hence, it is anticipated that the residual impact would be moderate in Day 1 and reduce to slight in Year 10 of operation phase.

VP10 – View from the traveller along the ferry route along the Tathong Channel

11.9.24 Given to the relatively close viewing distance, the proposed development of TKO137 would be occupied the mid-ground of this VP significantly, blocking the view toward the ridgeline of Devil's Peak and a portion of open sky view. The magnitude of change to this VP would be considered as moderate to substantial with medium sensitivity. The unmitigated impact would be considered as substantial. With implementation of shoreline treatment and greenery provision along the planned open space, it is anticipated that that residual impact would be substantial in Day 1 and reduce to moderate in Year 10 of operation phase.

VP11 – View from the Heng Fa Chuen Promenade (VP11A for TKO132 and VP11B for TKO137)

11.9.25 Despite to the far viewing distance, it is anticipated that the visual changes would be moderate due to significance change in the urban city skyline and partially blockage of the ridgeline of Tin Ha Shan and the foothill of Devil's Peak. To alleviate the visual impact, mitigation measures proposed in TKO132 and TKO137 such as aesthetic pleasing design of the aboveground structures and shoreline treatment, reinstatement of the affected landscape in TKO132 and provision of greenery along the promenade of TKO137. Hence, it is expected that residual impact after implementation of mitigation measure would be moderate in Day 1 and reduce to slight in the Year 10 of operation phase.

VP12 – View from Tseung Lam Highway Garden

11.9.26 Considered that the only a small portion of TKO132 would be visible to viewers while the most of the existing visual elements such as hillside vegetation, highway structure of CBL and open space view would be remain unchanged. Hence, the magnitude of change to this VP would be considered as slight. With the implementation of the mitigation measures, it is expected that residual impact after implementation of mitigation measure would be slight in Day 1 and reduce to negligible in the Year 10 of operation phase.

Table 11.15 Significance of Visual Impact during Operational Phase

VP ID.	Location of VPs / Key Public Viewers	Sensitivity (High / Medium / Low)	Magnitude of Change (Substantial/ Moderate / Slight/ Negligible)	Impact Significance before Mitigation (Substantial/ Moderate / Slight/ Negligible)	Recommended Mitigation Measures	Significance of Residual Impact after Mitigation (Substantial/ Moderate / Slight/ Negligible)	
						Day 1	Year 10
VP1	View from Dragon's Back Trail	High	Slight	Moderate	OM1, OM2, OM5, OM6, OM8	Slight	Negligible
VP2	View from Siu Sai Wan Promenade	High	Moderate	Moderate	OM1, OM2 OM3, OM5, OM6, OM7, OM8	Moderate	Slight
VP3	View from Waterfront of LOHAS Park	Low	Slight	Slight	OM1	Slight	Negligible
VP4	View from Tseung Kwan O Waterfront Park	High	Slight	Moderate	OM1, OM3	Slight	Negligible
VP5	View from LOHAS Park	High	Slight	Moderate	OM1, OM2, OM3, OM8	Slight	Negligible
VP6	View from Tseung Kwan O InnoPark	Low	Slight	Slight	OM1, OM2, OM3, OM8	Slight	Negligible
VP7	View from Lookout of the Devil's Peak	Medium	Substantial	Substantial	OM1, OM2, OM3, OM5, OM6, OM8	Substantial	Moderate
VP8	View from Tin Ha Shan	High	Moderate	Substantial	OM1, OM2, OM3, OM4, OM5, OM6, OM8	Substantial	Moderate
VP9	View from Tung Lung Chau Lookout	Medium	Moderate	Moderate	OM1, OM5, OM8	Moderate	Slight
VP10	View from the traveller along the ferry route along the Tathong Channel	Medium	Moderate to Substantial	Substantial	OM1, OM5, OM8	Substantial	Moderate
VP11	View from the Heng Fa Chuen Promenade	High	Moderate	Moderate	OM1, OM2, OM3, OM5, OM6, OM7, OM8	Moderate	Slight
VP12	View from the Tseung Lam Highway Garden	Medium	Slight	Slight	OM1, OM3	Slight	Negligible

Evaluation of the Residual Landscape and Visual Impacts

11.9.27 Considering the scale and nature of the Project, it would inevitably result in certain levels of residual landscape and visual impacts in relation to the loss of water body and loss of natural shorelines (i.e. LR6, LR9, LR13, LCA4 and LCA5) and the views from hilltop and from sea level (i.e. VP2, VP7, VP8, VP9, VP10 and VP11). The residual landscape and visual impacts are evaluated below in accordance with Section 4.4.3 of EIAO-TM:

i) Effects on public health and health of biota or risk to life:

The residual landscape and visual impacts would not cause adverse effects on public health and the health of biota or pose risk to life.

ii) The magnitude of the adverse environmental impacts:

The magnitude of residual landscape and visual impacts of LR9, LR13, VP2, VP9, VP11 are slight and minor in scale. The residual landscape impacts on LR6, LCA4 and LCA5 related to loss of water body and loss of natural shorelines are moderate, considering the scale and nature of reclamation works transforming the water area to land formation. The residual visual impacts on VP7 and VP8 are moderate as these overlook the proposed developments from elevated hilltop locations, while the residual visual impact on VP10 is also moderate due to the short viewing distance. Nevertheless, the proposed development incorporating the design principles set in the RODP and urban design and landscape frameworks such as provisions of open spaces, blue-green network, breezeways, view corridors, massing control, building height restrictions, greenery coverage etc. to ameliorate the overall landscape and visual qualities.

iii) The geographic extent of the adverse environmental impacts:

The geographic extent of LR6, LCA4 and LCA5 includes around 39ha of reclamation area in total. LR13 and LR9 involved approx. 512m natural shorelines also taken up by the reclamation works. These affected extents are localized and had been already minimized further through the several adjustments and engineering options with reductions in the reclamation extent in TKO132 and in affected areas along the natural shorelines in TKO132. For VP2, VP7, VP8, VP9, VP10 and VP11, all the residual visual impacts are confined within the visual envelope.

iv) The duration and frequency of the adverse environmental impacts:

The residual landscape and visual impacts are long term and permanent due to the nature of reclamation works, transforming the water area to land formation. The durations of view on VP7, VP8, VP9 and VP10 are short and transient, as most of the public viewers (VP7, VP8 and VP9) will only take short rest at the lookout point and then continue their hiking journey, while public viewers of VP10 are travelling on ferry. The durations of view are long for VP2 and VP11 as visitors likely to perform various recreational activities on the promenade.

v) The likely size of the community or the environment that may be affected by the adverse impacts:

The residual landscape impacts are localised and confined to the loss of natural shorelines and water body in the reclamation extent only. No existing community in TKO132 and TKO137 would be involved, and no country park and coastal protection area would be affected. The residual visual impacts on VP7, VP8, VP9 and VP10 involved relatively few public viewers, mainly hikers in lookout of Devil's Peak, Tin Ha Shan and Tung Lung Chau Lookout, and travellers along the ferry route. Although the residual visual impacts on VP2 and VP11 involved relatively large numbers of public

viewers from Siu Sai Wan Promenade and Heng Fa Chuen Promenade, the viewing distances to the proposed development are long.

vi) The degree to which the adverse environmental impacts are reversible:

The residual landscape impacts are irreversible due to the nature of reclamation works, transforming the water area to land formation. The residual visual impacts are also long term and irreversible with the introduction of new development in the area. Nevertheless, the resultant new landscape and visual characters would provide a community incorporating the design principles set in the RODP and urban design and landscape framework which enhance the overall quality of life for residents.

vii) The ecological context:

The residual landscape and visual impacts would not occur in ecologically fragile areas such as country park and coastal protection area.

viii) The degree of disruption to sites of cultural heritage:

The residual landscape and visual impacts would not disrupt any cultural heritage context.

ix) International and regional importance:

The residual landscape and visual impacts would not involve any distinctive landscape resource, landscape character and vantage viewing point with international or regional importance.

x) Both the likelihood and degree of uncertainly of adverse environmental impacts:

The residual landscape and visual impacts would be foreseeable without uncertainty at the time of EIA preparation.

11.9.28 As discussed above, the residual landscape and visual impacts ranged from slight to moderate magnitude, long term and irreversible due to the nature of reclamation works transforming the water area to land formation, are inevitable. Nevertheless, the residual landscape impacts are localised and limited to the reclamation extent only without affecting existing community, while the residual visual impacts are confined within the visual envelope either involving few numbers of public viewers along hiking trail and ferry route, or relatively large numbers of public viewers along promenade but viewing at long distance. Although not all landscape and visual impacts can be fully reduced or eliminated through the implementation of mitigation measures, the design principles set in the RODP and urban design and landscape framework of this Project provided enhancement by specifically outlining and dedicating areas for open spaces, roadside amenity areas, blue-green network, breezeways, view corridors, massing control, building height restrictions, aesthetic above-ground structure design, greenery coverage, provision of compensatory planting proposal etc. The design, construction and operation of the Project would also fully comply with relevant ordinances, regulations, standards and guidelines as stated in **Section 11.3**. In view of the above, with full implementation of the recommended mitigation measures, unacceptable adverse residual landscape and visual impacts are not expected, as evaluated based on the relevant factors in Section 4.4.3 of the EIAO-TM.

11.10 Cumulative Impacts from Concurrent Projects

11.10.1 Cumulative landscape and visual impacts during construction and operational phases from other key concurrent projects in the vicinity were assessed. The planned construction period and a brief description of the projects identified has been summarised in Section 2 of the EIA report. Many of the projects will be completed in advance of the construction programme for this Project while some would be constructed as underground utilities, and due to their nature, potential cumulative landscape and visual impacts with this Project were not anticipated.

11.10.2 Concurrent projects with cumulative impacts identified for the Project are summarised below.

Desing, Build and Operate First Stage of Tseung Kwan O Desalination Plant under WSD Contract 13/WSD/17

11.10.3 The design and build period commenced in December 2019 and started supplying portable water to public from December 2023. As it is under operational phase, it is assumed that the cumulative landscape and visual impacts would be negligible.

Second Stage of Desalination Plant at Tseung Kwan O – Investigation, Design and Construction under WSD, Contract CE 92/2022 (WS)

11.10.4 Construction of the second stage of desalination plant is expected to complete in 2031. The proposed works include the expansion of existing facilities with associated landscaping. Considered the proposed works are relatively low in building profile and is in similar nature to the existing facilities while is located at the foothill of Tin Ha Shan, the proposed works would not be noticeable to the key public views viewing from far viewing distance or at the hiking track of Tin Ha Shan. In additions, the existing development of desalination plant is fully occupied by building footprint, it is anticipated that no existing landscape resources would be affected. During operational phase, with the implementation of mitigation measures of this report, the desalination plant would be blend in with the urbanised environment as one of the public facilities of TKO 137. Hence, it is assumed that the cumulative landscape and visual impacts would be slight to negligible during both construction and operational phases.

Implementation of a Large Scale Solar Farm at South East New Territories Landfill (SENT) for Supplying Renewable Energy to the Tseung Kwan O Desalination Plant - Investigation, Design and Construction under WSD Agreement No. CE 39/2022 (EM)

11.10.5 The construction of the Large Scale Solar Farm is expected to be completed in 2028. The proposed works include the construction of a solar farm at the South East New Territories Landfill (SENT), which will exclusively generate renewable energy for the desalination plant. Given that the nature of the development involves restoration work, replacing the existing barren brownfield with the Solar Farm are anticipated to be low in profile. Since the natural landscape can either obstruct or enhance visibility and situated in a valley or behind a ridge, which located at the foothills of Tin Ha Shan the proposed works would not be noticeable from key public views, whether viewed from a distance or along the hiking trails. During the operational phase, with the implementation of the mitigation measures outlined in this report, the solar farm work is expected to blend into the urban environment as one of the public facilities within the TKO 137. Therefore, it is assumed that the cumulative landscape and visual impacts during both construction and operational phases will be slight to negligible.

Existing SENTX

11.10.6 During the construction period of this Project, the construction works of SENTX would be under construction processes and target to be completed before the completion of this Project. After the completion of this concurrent project, the landscaping would be new landscape and visual elements to the planned user of proposed development of TKO 137. Considered that the nature of development is restoration works by replacing the existing barren brownfield with open space and greenery while the proposed structures such as open space facilities is anticipated to small in scale and low in profile. It is anticipated that there would not no adverse

cumulative impact on landscape and visual impact during both the construction and operational phase to surrounding landscape resources and key public viewpoint. During operational phases, with the implementation of mitigation measures of this report, the landfill restoration work would be blend in with the urbanised environment as one of the public facilities of TKO 137. Hence, it is assumed that the cumulative landscape and visual impacts would be slight to negligible during both construction and operational phases.

SENT Landfill

11.10.7 SENT Landfill commenced in September 1994. It was exhausted and closed on 21 November 2021. At present, only restoration works for the closed SENT Landfill are on-going. Hence, it is assumed that the cumulative landscape and visual impacts would be negligible.

Construction of Relocated Berthing Facilities and Associated Structures within Tseung Kwan O Area 137 Fill Bank

11.10.8 During the construction period of this Project, the construction works would be under construction processes and target to be completed before the completion of this Project. After the completion of this concurrent project, the landscaping would be new landscape and visual elements to the planned user of TKO 137. Considered the proposed works are relatively low in building profile small in scale and low in profile while is located at the foothill of Tin Ha Shan, the proposed works would not be noticeable to the key public views viewing from far viewing distance or at the hiking track of Tin Ha Shan. During operational phase, with the implementation of mitigation measures of this report, the proposed works would be blend in with the urbanised environment as one of the public facilities of TKO 137. Hence, it is assumed that the cumulative landscape and visual impacts would be slight to negligible during both construction and operational phases.

Cavern Development in Area around Tseung Kwan O

11.10.9 The cavern development project is under planning and expected to complete in 2032 and beyond. Considered most of the proposed works are implemented underground, it is assumed that only the entrance portals of the development would be visible to key public view while the affected vegetation would be reinstated or compensated as slope greenery or provide screening to the exposed structured. Hence it is anticipated that there would be slight cumulative impacts on landscape and visual during the construction and operational phases of this project, but can be reduced to negligible after implementation of mitigation measures.

Proposed Tseung Kwan O Line Southern Extension

11.10.10 The proposed railway system is scheduled to commence in 2028 and is expected to be completed by 2038. Upon completion of this concurrent project, the landscaping will introduce new visual elements to TKO137. The proposed works will primarily consist of low-profile buildings and small-scale structures, mostly located underground. The exits of the proposed stations are expected to be integrated with future residential or commercial developments, minimizing their visibility from key public viewpoints, such as those from a distance or along the hiking trails of Tin Ha Shan. During the operational phase, the railway extension is anticipated to blend into the urban environment as a public facility within the TKO 137 with implementation of mitigation measures. Therefore, it is assumed that the cumulative landscape and visual impacts during both the construction and operational phases will be slight to i negligible.

Proposed Tseung Kwan O – Yau Tong Tunnel

11.10.11 The proposed tunnel is under planning and expected to complete in 2039 and beyond. The proposed location will be closed to Tiu Keng Leng in central TKO, and will become the third

external major connection. In view of the nature of tunnel work, it is anticipated that the landscape and visual impact will be minimal as most of the works to be carried out underground. Therefore, it is assumed that the cumulative landscape and visual impacts during both the construction and operational phases will be negligible.

Existing explosives off-loading pier at Fat Tong O

11.10.12 The explosives off-loading pier at Fat Tong O is currently in operation and the tentatively end date of operation is end of 2029. The pier is localised and not expected to significantly impact or be noticeable from key public views in the TKO. Therefore, it is anticipated that the pier in localised location will not adversely affecting the scenic quality of the area or the experiences of individuals using nearby public viewpoints.

Fill bank at Tseung Kwan O Area 137 - Handling of Surplus Public Fill

11.10.13 The fill bank has been operational since 2002. The long-standing presence of the fill bank may have led to a degree of acclimatisation among local residents and visitors is expected not to significantly affect or be noticeable to key public views in the TKO. Its low elevation, strategic location at the foothills of Tin Ha Shan, and ongoing mitigation measures contribute to its minimal visual impact. As such, it is assumed that the fill bank will blend into the urban landscape without adversely affecting the scenic quality of the area or the experiences of individuals using nearby public viewpoints.

11.11 Environmental Monitoring and Audit

11.11.1 The detailed landscape and engineering design of the Project shall be undertaken so as to ensure compliance with the landscape and visual mitigation measures described in **Section 11.8**.

11.11.2 Implementation of the recommended mitigation measures would be regularly audited during construction phase and the 12-month establishment period during operation phase. Details of environmental monitoring and audit requirement are stated in **Section 16.10** of the EIA Report.

11.12 Conclusion

11.12.1 The Project will inevitably result in some landscape and visual impacts during construction and operational phases. These impacts were minimised through the consideration on minimisation of works areas, incorporation of aesthetic external designs and landscape treatments in the proposed infrastructures.

11.12.2 Due to the proposed works, a portion of vegetation areas would be affected inevitably. Within the proposed works area, approximately 1,250 existing trees, out of total 5,497 trees surveyed, would be directly affected by the proposed works and proposed to be removed or transplanted as far as practicable. Tree compensation strategy would be proposed along the proposed roadside planter, amenity area, greenery at open space, greenery at EPP and slope treatment in accordance with the latest design layout. Tree compensation in a ratio of 1:1 will be achieved in accordance with the requirement stipulated in DEVB TC(W) No. 4/2020 as far as possible. No off-site compensatory tree planting is proposed. Reference shall be made to Greening Master Plan issued by CEDD, Street Tree Selection Guide, and Guiding Principles on Use of Native Plant Species in Public Works Projects promulgated by DEVB to optimise the use of native species and/or species with ecological value to enhance biodiversity and integrity of the landscape network/ open spaces and Project as a whole.

11.12.3 In terms of the landscape impact, a number of LRs and LCAs would be preserved in total (i.e. LR5, LR7, LR10, LR14, LCA6, LCA7, LCA10 and LCA11). Among the remaining LRs, vegetation within TKO 137 (LR1), hillside vegetation at Devil's Peak (LR2), shrubland at Tit Cham Chau and Fat Tong Chau (LR3), coastal water (LR6), rocky shore along western

coastline of Junk Bay (LR9), hillside vegetation at Chiu Keng Wan Shan (LR11) and sandy shore along western coastline of Junk Bay (LR13) would have moderate impact significance. Nevertheless, after the completion of works, landscape mitigation measures such as tree compensation where space is available, reinstatement of affected landscaping area in like for like basis and provision of buffer screen planting, greenery provision at planned open space and roof greening would be implemented as appropriate. With the implementation of these mitigation measures, it is considered that residual impacts on most of these LRs would be maintained as moderate to slight in Day 1 and slight to negligible in Year 10 of the operation. However, the loss of water body of coastal water (LR6) is irreversible and the residual impacts would maintain as moderate in Year 10 of the operation. Meanwhile, vegetation along drainage channel (LR4), roadside planting (LR8) and orchard/ vegetation near rural settlement (LR12) would have slight impact significance due to the proposed development. Considered that impacts caused by the proposed development to these LRs would be considered as slight, hence it is assumed that residual impacts on these LRs would be slight in Day 1 and reduced to negligible in Year 10 of operation after the implementation of mitigation measures.

11.12.4 For the landscape character area (LCA), the most permanent works such as reclamation and building of the Public Facilities and roadworks would be located within Fat Tong O Reclamation (LCA1), Fat Tong Chau and Tin Ha Au upland and hillside landscape (LCA2), Chiu Keng Wan upland and hillside landscape (LCA3), water body of Tathong Channel and Joss House Bay (LCA4) and Junk Bay (LCA5). Hence, it is anticipated that the impact significance before mitigation would be moderate. With the implementation of mitigation measures, the residual impact of most of these LCAs would be reduced from moderate to slight in Day 1 and negligible in Year 10 of operational phase. However, the loss of water body of Tathong Channel and Joss House Bay (LCA4) and Junk Bay (LCA5) are irreversible and the residual impacts would maintain as moderate in Year 10 of the operation. Some proposed works such as constructing EPP within Fat Tong O industrial urban landscape (LCA8) and provision of marine viaduct connecting to the existing TKO transportation corridor (LCA9) would slightly alter the existing landscape character. It is assumed that there would be slight impact significance to these LCAs. With the implementation of mitigation measures, the residual impact would be slight in Day 1 and reduced to negligible in Year 10 of operational phase. The present barren reclamation landscape character in Fat Tong O (LCA1) would be substantially changed and replaced by a new residential urban landscape character of TKO 137, while a portion of western coastline of Junk Bay bay landscape character (LCA5) would be altered to TKO transportation corridor landscape character (LCA9) and a new reclamation landscape character of TKO 132 to accommodate Public Facilities away from existing and planned residential developments. The resultant new landscape character would provide a community incorporating environmental and biodiversity initiatives which enhancing the overall quality of life for residents.

11.12.5 In terms of the visual impact, considered that TKO 132 and TKO 137 are relatively extensive in terms of development scale, it is anticipated that the existing visual context of the selected VPs would be affected inevitably in various levels.

11.12.6 For the VPs (i.e. VP1, VP3, VP8, VP9 and VP10) that viewing at the proposed development of TKO137, the proposed development would be considered as new urbanised visual context at Fat Tong O, contrasting with the existing natural scenery. Given to the development scale, the proposed development would be visible from various viewing distance, while some of the existing natural visual elements such as continuous ridgeline, open sky view and water bodies would be replaced by the proposed development of TKO137. The magnitude of visual change is expected to be substantial to slight and hence the unmitigated impact significance would be ranging from substantial to slight. With implementation of mitigation measures, it is anticipated that residual visual impact of VP1 and VP3 would be slight in Day 1 and reduce to negligible in Year 10 of operational phase, residual visual impact of VP9 would be moderate in Day 1 and reduce to slight in Year of operational phase, while VP8 and VP10 would be substantial in Day 1 and still be moderate residual impact in Year 10 of operational phase.

11.12.7 For the VPs (i.e. VP4, VP5, VP6 and VP12) that viewing to TKO 132, the proposed development would be considered as new visual elements to the viewers and would partially block the existing view toward the foothill of the Devil's Peak. Given to the relatively small and

low building profile, the visual openness of the viewer currently enjoyed would be largely remained unchanged. The magnitude of visual change is expected to be slight. It is anticipated that residual visual impact would be slight in Day 1 and reduce to negligible in Year 10 of operational phase.

11.12.8 For the VPs (i.e. VP2, VP7 and VP11) that viewing to both TKO 132 and TKO 137, the proposed development would be considered as the extension of existing urbanised area (i.e. LOHAS Park, Tiu Keng Leng and TKO). Despite the sense of visual openness and view to the vast water body can be maintained, a portion of vegetated foothill of Chiu Keng Wan Shan and a portion of Tin Ha Shan would be blocked by TKO 132 and TKO 137 respectively. Hence, it is expected there would be a moderate to substantial magnitude of visual change. With implementation of mitigation measures, it is anticipated that residual visual impact of VP2 and VP11 would be moderate in Day 1 and reduced to slight in Year 10 of operational phase, while VP7 would be substantial in Day 1 and still be moderate residual impact in Year 10 of operational phase.

11.12.9 Considering the scale and nature of the Project, it would inevitably result in certain levels of residual landscape and visual impacts in relation to the loss of water body, loss of natural shorelines and the views from hilltop and from sea level. Nevertheless, the residual landscape impacts are localized and limited to the reclamation extent only without affecting existing community, while the residual visual impacts are confined within the visual envelope either involving few numbers of public viewers along hiking trail and ferry route, or relatively large numbers of public viewers along promenade but viewing at long distance. With the implementation of the proposed landscape and visual mitigation measures, the overall landscape residual impacts would be from negligible to moderate in Day 1 and Year 10 of operational phase, and the overall visual residual impacts would be from slight to substantial in Day 1 and from negligible to moderate in Year 10 of operational phase. With full implementation of the recommended mitigation measures, unacceptable adverse residual landscape and visual impacts are not expected.