12. Landscape and Visual Impact Assessment

12.1 Introduction

This section assesses the likely landscape and visual impacts that may arise from the construction and operation of the Project and associated works and proposes strategic mitigation measures to alleviate the anticipated potential impacts. This includes the description of landscape resources (LRs), landscape character areas (LCAs) and visual sensitive receivers (VSRs). The potential landscape and visual impacts are assessed in accordance with the criteria and guidelines stated in Annexes 10 and 18 of the EIAO-TM. Mitigation measures were proposed to mitigate the potential adverse impacts to an acceptable level.

12.2 Environmental Legislation, Standards and Guidelines

The environmental legislations, standards and guidelines below are relevant to the landscape and visual impact assessment for this Project.

- Environmental Impact Assessment Ordinance (Cap.499.S.16) – Technical Memorandum on EIA Process (EIAO-TM), particularly Annexes 10 and 18;
- EIAO Guidance Note (GN) No. 8/2010;
- Town Planning Ordinance (Cap.131);
- ETWB TC (Works) No. 29/2004 - Registration of Old and Valuable Trees, and Guidelines for their Preservation;
- Lands Administration Office Practice Note No. 7/2007;
- Hong Kong Planning Standards and Guidelines, particular Chapter 4, Chapter 8 and Chapter 11; and
- Study on Landscape Value Mapping of Hong Kong.

12.3 Assessment Area

Landscape Impact Assessment Area

In accordance with EIAO GN No. 8/2010 and Clause 3.4.12.2 of the EIA Study Brief No. ESB-261/2013, the Landscape Impact Assessment Area includes all areas within 500m extended from the boundary of the Project area. The Landscape Assessment Area is shown in **Figure 12.1**.

Visual Impact Assessment Area

The Visual Impact Assessment Area is identified by the visual envelope of this Project and its associated works as specified in Clause 3.4.12.2 of the EIA Study Brief No. ESB-261/2013. By definition of EIAO GN No. 8/2010, the visual envelope (zone of visual influence) is generally the viewshed formed by natural or manmade features such as ridgeline or building blocks. It contains areas which are fully, partially visible or unseen from this Project and its associated works. The Visual Impact Assessment Area is illustrated in **Figure 12.2**.

12.4 Assessment Methodology

The landscape and visual impact assessment (LVIA) is based on the criteria and guidelines stated in Annexes 10 and 18 of the EIAO-TM and covered in the scope outlined in Section 3.4.12 and Appendix H of the EIA Study Brief No. ESB-261/2013. The main elements include:

- Identification of the scope of works
- Review of relevant planning and development control framework
- Baseline study of LRs, LCAs and VSRs
- Identification of potential landscape and visual impacts during the construction and operation phases
- Recommendation on mitigation measures
- Identification of residual impacts during the construction and operation phases
- Assessment on acceptability according to the criteria set out in Annex 10 of the EIAO-TM

The LVIA makes reference to the EIAO GN No. 8/2010 "Preparation of Landscape and Visual Impact Assessment under the EIAO" for evaluation of the landscape and visual impact significance from the construction and operation of the Project. **Chapter 2** of this EIA report describes the details of the Project and this section assesses the landscape and visual impacts that may arise from the Project. The methodology for the LVIA is described in the following sub-sections.

Review of Planning and Development Control Framework

A review of the existing planning studies and documents has been undertaken to gain an insight to the future outlook of the area affected so as to assess whether the Project can fit into surrounding setting. The assessment does not consider all of the areas zoned on the relevant OZP(s) but focuses on those that may be directly affected by the proposed works. The study reviews the following information:

- Plan title/number;
- Land use zonings;
- Potential impacts and approximate area of the land use zones to be affected by the Project;
- Design and conservation intention; and
- Mitigation measures and future outlook of the area.

Landscape Impact Assessment

Landscape impacts are quantified as much as possible to predict the magnitude and significance of impacts arising from this Project and its associated works. LRs and LCAs identified are numbered and assessed by a combination of desktop studies and site surveys. The difference between mitigated and

unmitigated conditions is properly highlighted to demonstrate the effectiveness of recommended mitigation measures.

Landscape elements that are in consideration include:

- Local topography;
- Woodland extent and type;
- Other vegetation types;
- Built form;
- Patterns of settlement;
- Land use;
- Scenic spots;
- Details of local materials, styles, streetscapes, etc.;
- Prominent watercourses; and
- Cultural and religious identity.

After identification of baseline LRs and LCAs, each of the LRs and LCAs is analyzed and evaluated by the following factors:

Sensitivity of landscape framework

To analyze sensitivity, a number of factors need to be evaluated. These factors include:

- the quality, maturity, condition and value of LRs or LCAs
- importance and rarity of LRs or LCAs
- whether the site is considered to be of local, regional, national or global significance
- any statutory or regulatory limitations or requirements relating to the LRs or LCAs on this site
- ability of LRs and LCAs to accommodate change

The above factors are considered and analyzed before each of the LRs and LCAs is classified into the following three categories:

High: LR or LCA has a distinctive character or is of high importance and sensitive to relatively small changes.

Medium: LR or LCA has a moderately valued landscape character that is reasonably tolerant to change.

Low: LR or LCA has a low-valued landscape character that is highly tolerant to change.

Magnitude of change on landscape impact arising from this Project

A number of factors can influence the magnitude of change on landscape impact. They are as follows:

- duration of impact, i.e. whether it is temporary or long-term
- scale of impact
- reversibility of change
- compatibility of the Project and associated works with existing and planned landscape

The above factors will be analyzed carefully and the results of each of the LRs and LCAs will be classified into four different categories. They are as follows:

Large: Landscape resource or area will suffer a major change.

Intermediate: Landscape resource or area will suffer a moderate change.

Small: Landscape resource or area will suffer a slight change.

Negligible: Landscape resource or area will suffer no discernible change.

It should be noted that the landscape impact assessment for construction phase and operation phase is conducted separately due to the different potential sources affecting the magnitude of change on landscape impacts.

Evaluation of the sensitivity and magnitude of change on various LRs and LCAs is conducted in a logical, reasonable and consistent manner for both construction and operation phases. Each of the LRs and LCAs is given a degree of impact significance depending on the severity of sensitivity and magnitude. **Table 12.1** illustrates the underlying principle for each of the four significance thresholds.

Table 12.1: Sensitivity and Magnitude of Change on the Degree of Impact Significance

	Sensitivity		
Magnitude of Change	**Low**	**Medium**	**High**
Large	Moderate	Moderate / Significant	Significant
Intermediate	Slight / Moderate	Moderate	Moderate / Significant
Small	Slight	Slight / Moderate	Moderate
Negligible	Insubstantial	Insubstantial	Insubstantial

Note: Significant – Adverse / beneficial impact where the Project would cause significant deterioration or improvement.
Moderate – Adverse / beneficial impact where the Project would cause noticeable deterioration or improvement.
Slight – Adverse / beneficial impact where the Project would cause barely noticeable deterioration or improvement.
Insubstantial – The Project would cause no discernible change.

Tree Survey

In accordance with Lands Administration Office Practice Note No. 7/2007, all existing trees with trunk diameter measuring 95mm or more at a height of 1.3m above ground level within the Landscape Impact Assessment Area were included in the tree survey.

Every tree surveyed is recorded with the following information:

- Species – botanical and Chinese names of surveyed tree recorded
- Height – full height measured from ground level to top branch in meters
- Crown spread – diameter of tree canopy in meters
- Trunk diameter – diameter of main trunk measured at a height of 1300mm above ground level
- Tree form – estimated according to canopy, branch and trunk. This will be rated as good, fair or poor.
- Amenity value – estimated according to species, age, size health condition and tree form. This will be rated as high, medium or low.
- Health condition – estimated according to foliage, exposed roots, branches and trunk. This will be rated as good, fair or poor.
- Survival rate after transplanting – Estimated according to condition of tree, size, maturity, species, access and location. This will be rated as high, medium or low.
- Special features – supplementary special site features identified on site, as well as tree defects, physical characteristics and ground conditions area recorded.

Visual Impact Assessment

First, visual assessment is conducted by identifying key VSRs. Second, assessment of the severity of impact in terms of nature, distance and the number and type of sensitive receivers is conducted. Third, the visual compatibility or impact magnitude of this Project and its associated works with the existing and planned users and possible interference with key views is analyzed. Each of the VSRs is given an identity number and used in all relevant tables and figures. The difference between mitigated and unmitigated conditions is properly highlighted to demonstrate the effectiveness of proposed recommended mitigation measures.

<u>Type of visual sensitive receivers</u>

Type of visual sensitive receivers is classified according to the activities, the number, availability of alternative views, duration and frequency of the view and the degree of visibility from a sensitive receiver's point of view. In general, the type of receivers can be separated into five categories:

- Residents – These VSRs can view the impact from their homes. They are considered to be highly sensitive as their visual perception has a substantial effect on their quality of life and home environment.

- Workers – These VSRs can view the impact from their workplace or school. They are considered to be moderately sensitive as the visual perception is less important and has a lesser effect on their quality of life. The degree of impact is dependant on the type of workplace, i.e. industrial, retail or commercial.
- Outdoor leisure activity participants – These VSRs can view the impact whilst taking part in an outdoor leisure activity. The degree of sensitivity is denoted by the type and duration of the leisure activity.
- Travellers – These VSRs can view the impact whilst travelling to another location. The degree of sensitivity is dependant on the duration and speed of their travel.
- Community – These VSRs can view the impact whilst in a community building. The degree of sensitivity is dependant on the type of activities and services that takes place.

Sensitivity of Visual Sensitive Receivers

To analyze sensitivity of VSRs, a number of factors needs to be evaluated. These factors include:

- Value and quality of existing views;
- Availability and amenity of alternative views;
- Type of VSRs
- Number of VSRs;
- Duration and frequency of view; and
- Degree of visibility.

The above factors are considered and analyzed before the sensitivity of each of the VSRs is classified into the following three categories:

High: The VSRs are highly sensitive to any changes in their visual experience.

Medium: The VSRs are moderately sensitive to any changes in their visual experience.

Low: The VSRs are slightly sensitive to any changes in their viewing experience.

Magnitude of change

Magnitude of change for VSRs is evaluated by a number of different factors such as:

- Duration of impact, i.e. whether the impact is temporary or permanent
- The number of sensitive receivers
- Reversibility of the impact
- Scale and distance of the impact from the viewer

- Degree of visibility of the impact
- Compatibility of the project with the surrounding landscape

The above factors are carefully analyzed and classified in the following categories:

Large: The VSRs will suffer a major change in their visual experience.

Intermediate: The VSRs will suffer a moderate change in their visual experience.

Small: The VSRs will suffer a slight change in their visual experience.

Negligible: The VSRs will suffer no discernible change in their visual experience.

The visual impact assessment is conducted individually for the construction phase and operation phase due to the disparate visual experience from different potential sources of visual impact from this Project and its associated works.

Evaluation of the sensitivity and magnitude of VSRs is conducted in a logical, reasonable and consistent manner for both construction and operation phases. Each of the VSRs is given a degree of visual impact significance depending on the severity of sensitivity and magnitude. The rationale for categorising the degree of visual impact significance into four thresholds is illustrated in **Table 12.1**.

Mitigation Measures

After identifying LRs, LCAs and VSRs that require mitigation measures to reduce the degree of impact, possible mitigation measures that can be implemented for this Project and its associated works will be reviewed and evaluated. Identification of potential mitigation measures may include:

- Alternative design or revisions to basic engineering or architecture design to prevent or minimise adverse impacts
- Remedial measures during and after construction phase
- Compensatory measures for unavoidable adverse impacts and attempt to generate beneficial long term impacts

Recommended mitigation measures are evaluated for comparison before adopting as mitigation or compensatory measures. This is conducted through evaluating possible mitigation measures by the degree of residual impact assessment to illustrate mitigation effectiveness.

Residual Impact Assessment

Residual impacts are evaluated by the sensitivity and magnitude of change for both landscape and visual impact assessment after the implementation of proposed mitigation measures. In accordance to Annex 10 of EIAO-TM, overall assessment of residual landscape and visual impacts for this Project is placed into one of the following five thresholds.

- **Beneficial** – The Project complements the landscape and visual character of its setting and follows the relevant planning objectives. It will improve overall landscape or visual quality.
- **Acceptable** – There are no significant effects on landscape or visual effects caused by this Project.
- **Acceptable with mitigation measures** – There will be some adverse effects that may be eliminated, reduced, or offset by specific mitigation measures.
- **Unacceptable** – The adverse effects are considered to be excessive with implemented mitigation measures.
- **Undetermined** – Significant adverse effects are likely but the extent of which they occur or may be mitigated cannot be determined from this study. Further detailed study may be required.

12.5 Review of Planning and Development Control Framework

A review of the existing and planned development for the proposed works and for the surroundings has been undertaken. It aims in identifying issues with neighbouring planned land uses, identifying potential resources and sensitive receivers and ensuring a high compatibility between the Project and the surroundings.

The assessment covers areas shown on the Outline Zoning Plan (OZP) number S/H15/28 – Aberdeen and Ap Lei Chau. Zoning in this OZP is overlaid onto the Landscape Impact Assessment Area and illustrated in **Figure 12.3**. A review on this OZP reveals that the entire Project Area is within the land use type "Other Specified Uses" "OU" for "Ocean Park" only. The planning intention of this zone is primarily for comprehensively planned low-density and generally low- to medium-rise marine-themed park development in Hong Kong with related retail, dining and entertainment facilities serving visitors as well as the general public. There is a height restrictions for buildings in this zone which states that "No new development, or addition, alteration and / or modification to or redevelopment of an existing building shall result in a total development and / or redevelopment in excess of the maximum building height in terms of number of storey(s) as stipulated on the Plan, or the height of the existing building, whichever is the greater".

Since all the proposed works of the Project are low- to medium-rise development of marine-themed retail, dining and entertainment facilities within Ocean Park, the Project is in line with the planning intention of this "OU" zone. No re-zoning under Section 12A of the Town Planning Ordinance will be required for the implementation of the Project. However, should the building height restriction of this "OU" zone be violated by the proposed redevelopment, planning application under Section 16 of the Town Planning Ordinance will be required. **Table 12.2** summarises the findings of the planning and development control review on areas within the Landscape Impact Assessment Area.

Table 12.2: Review of Existing Planning and Development Control Framework

Land Use Zonings	Landscape Planning, Design and Conservation Intention of Zoning	Potential Impacts	Mitigation Measures and Future Outlook of the Area with the Proposed Works
Outline Zoning Plan number S/H15/28 – Aberdeen and Ap Lei Chau (**Figure 12.3**)			
1. Other Specified Uses "OU" for "Ocean Park" only	This zone encompasses the Ocean Park. Part of this zone is within the Project Area, which has been operated as Middle Kingdom, Aviary, Flamingo Pond, and Bird Paradise till January 2011. This zone is intended primarily for comprehensively planed low-density and generally low- to medium-rise marine-themed park development in Hong Kong with related retail, dining and entertainment facilities serving visitors as well as the general public.	Part of this zone, which includes the Middle Kingdom, Aviary, Flamingo Pond, and Bird Paradise, and part of the shrubland in the periphery, is proposed to be redeveloped into a Water Park. The Water Park will comprise (i) an indoor zone with a wave pool; lazy river, play structure, water slides, surf-rider, various pools, F&B facilities, E&M utilities, back of house and car-parking; (ii) an outdoor zone with a wave pool, lazy river, water slides, ride platforms, various pools, 'sea turtle' exhibit and some small-scale F&B facilities; (iii) a general approach area with coach and taxi drop-off point and EVA; and (iv) sewerage facilities including sewage sump pit and twin above-ground rising mains of 150mm diameter each. Rezoning under Section 12A of the Town Planning Ordinance is not required for the implementation of this Project. However, planning application under Section 16 of the Town Planning Ordinance will be required if building height restriction is violated.	The future overall outlook of this zone in operation stage is expected to be similar with the existing conditions, with vegetated slopes surrounding man-made structures. However, the Project will have an outlook which is less natural compared to the existing facilities such as the Aviary, Flamingo Pond and Bird Paradise. Proposed mitigations measures are listed in **Table 12.13**, and **Table 12.14**.
2. Coastal Protection Area "CPA"	This zone encompasses the natural coastal areas at Sham Shui Kok. This zone is intended to conserve, protect and retain the natural coastlines and the sensitive coastal natural environment, including attractive geological features, physical landform or area of high landscape, scenic or ecological value, with a minimum of built development. It may also cover areas which serve as natural protection areas sheltering nearby developments against the effects of coastal erosion.	This zone is outside the Project Area. No impact to this zone due to this Project is anticipated.	This zone is outside the Project Area. The proposed works of this Project will not affect the future outlook of this zone. No mitigation measure is proposed.

Land Use Zonings	Landscape Planning, Design and Conservation Intention of Zoning	Potential Impacts	Mitigation Measures and Future Outlook of the Area with the Proposed Works
3. Green Belt "GB"	This zone encompasses Nam Long Shan (Brick Hill) and an adjacent vegetated slope between Shum Wan Road and Nam Long Shan Road north of Ocean Park. This zone is intended primarily for defining the limits of urban and sub-urban development areas by natural features, to protect the natural landscape and environment, as well as to provide a countryside recreational outlet for the local population and visitors. There is a general presumption against development within this zone.	This zone is outside the Project Area. No impact to this zone due to this Project is anticipated.	This zone is outside the Project Area. The proposed works of this Project will not affect the future outlook of this zone. No mitigation measure is proposed.
4. Government, Institution or Community "G/IC"	This zone encompasses the areas occupied by Po Chong Wan Temporary Industrial Area, Victoria Shanghai Academy, Canadian International School and Hong Kong Juvenile Care Centre. This zone is intended primarily for the provision of Government, institution or community facilities to serve the needs of local residents and/or a wider district, region or the territory. It is also intended to provide land for uses directly related to or in support of the work of the Government, organisations providing social services to meet community needs, and other institutional establishments.	This zone is outside the Project Area. No impact to this zone due to this Project is anticipated.	This zone is outside the Project Area. The proposed works of this Project will not affect the future outlook of this zone. No mitigation measure is proposed.
5. Industrial "I"	This zone encompasses the areas occupied by shipyards and Hospital Authority Shum Wan Laundry. This zone is intended primarily for general industrial uses to ensure an adequate supply of industrial floor space to meet demand from production-oriented industries. Information technology and telecommunications industries and office related to industrial use are also always permitted in this zone.	This zone is outside the Project Area. No impact to this zone due to this Project is anticipated.	This zone is outside the Project Area. The proposed works of this Project will not affect the future outlook of this zone. No mitigation measure is proposed.

12.6 Tree Survey Findings

Findings on Existing Trees

A survey of existing trees covering areas within the Project boundary was conducted between April and November 2013. A total of 3,167 nos. of trees are identified within and in close proximity to the survey area. The average size of the trees surveyed is around 6.6m in height, 4.2m wide crown spread and with average trunk diameter of approximately 0.18m.

There were a total of 102 tree species surveyed inside the survey area. The general conditions of the trees were found to be fair to poor. The dominant tree species are *Pinus massoniana* and *Acacia confusa*, which were widespread throughout. *Polyspora axillaris*, *Leucaena leucocephala*, *Schefflera heptaphylla*, *Macaranga tanarius* var. *tomentosa*, *Sterculia lanceolata* and dead trees are also quite common as well.

No registered Old and Valuable Tree (OVT) or potentially registrable OVT was found in the tree survey.

Table 12.3 summarises the quantity of all tree species identified in the tree survey, in descending order of abundance. Tree assessment schedule and tree survey plan are appended in **Appendix 12.1**.

Table 12.3: Summary of Tree Survey Findings

Botanical Name	Chinese Name	Qty
Pinus massoniana	馬尾松	571
Acacia confusa	台灣相思	549
Polyspora axillaris	大頭茶	258
Leucaena leucocephala	銀合歡	200
Schefflera heptaphylla	鵝掌柴	163
Sterculia lanceolata	假蘋婆	159
Dead tree	枯樹	110
Macaranga tanarius var. *tomentosa*	血桐	100
Livistona chinensis	蒲葵	55
Cratoxylum cochinchinense	黃牛木	53
Celtis sinensis	朴樹	51
Casuarina equisetifolia	木麻黃	46
Caryota mitis	短穗魚尾葵	42
Pinus elliottii	濕地松	42
Mallotus paniculatus	白楸	41
Schima superba	木荷	41
Ficus microcarpa	細葉榕	35
Aporusa dioica	銀柴	34
Araucaria heterophylla	異葉南洋杉	34
Delonix regia	鳳凰木	33
Dimocarpus longan	龍眼	32
Rhus succedanea	木蠟樹	32
Syzygium jambos	蒲桃	28
Microcos nervosa	破布葉	27

Botanical Name	Chinese Name	Qty
Tetradium glabrifolium	楝葉吳茱萸	26
Itea chinensis	老鼠刺	20
Ravenala madagascariensis	旅人蕉	18
Choerospondias axillaris	南酸棗	17
Ficus hispida	對葉榕	16
Roystonea regia	王棕	16
Acronychia pedunculata	山油柑	15
Distylium racemosum	蚊母樹	14
Ficus subpisocarpa	筆管榕	14
Archontophoenix alexandrae	假檳榔	12
Ficus benjamina	垂葉榕	12
Archidendron lucidum	亮葉猴耳環	11
Bridelia tomentosa	土蜜樹	11
Lithocarpus glaber	柯	11
Grevillea robusta	銀樺	10
Bauhinia purpurea	紅花羊蹄甲	9
Carallia brachiata	竹節樹	9
Ficus variegata	青果榕	9
Ficus virens	黃葛樹	9
Garcinia subelliptica	菲島福木	9
Spathodea campanulata	火焰樹	9
Juniperus chinensis 'Kaizuca'	龍柏	8
Vernicia montana	木油樹	8
Cinnamomum camphora	樟樹	7
Pongamia pinnata	水黃皮	7
Antirhea chinensis	毛茶	6
Vitex quinata	山牡荊	6
Cocos nucifera	椰子	5
Garcinia oblongifolia	嶺南山竹子	5
Strychnos angustiflora	牛眼馬錢	5
Chrysalidocarpus lutescens	散尾葵	4
Cyclobalanopsis myrsinifolia	小葉青岡	4
Hyophorbe lagenicaulis	酒瓶椰子	4
Litsea glutinosa	潺槁樹	4
Plumeria rubra	雞蛋花	4
Podocarpus macrophyllus	羅漢松	4
Reevesia thyrsoidea	梭羅樹	4
Styrax suberifolius	栓皮安息香	4
Washingtonia robusta	華盛頓葵	4
Lagerstroemia speciosa	大花紫薇	3
Machilus velutina	絨毛潤楠	3
Melia azedarach	楝	3
Pandanus utilis	馬達加斯加露兜	3
Schefflera actinophylla	傘樹	3

Botanical Name	Chinese Name	Qty
Alangium chinense	八角楓	2
Albizia lebbeck	大葉合歡	2
Aquilaria sinensis	土沉香	2
Bombax ceiba	木棉	2
Celtis timorensis	假玉桂	2
Clausena lansium	黃皮	2
Juniperus chinensis	圓柏	2
Ligustrum lucidum	女貞	2
Neodypsis decaryi	三角椰子	2
Rhaphiolepis indica	石斑木	2
Trema tomentosa	山黃麻	2
Aleurites moluccana	石栗	1
Artocarpus hypargyreus	白桂木	1
Bauhinia variegata	宮粉羊蹄甲	1
Bougainvillea spectabilis	簕杜鵑	1
Celtis biondii	紫彈朴	1
Cinnamomum burmannii	陰香	1
Citrus maxima	柚	1
Diospyros morrisiana	羅浮柿	1
Dracaena concinna	紅邊龍血樹	1
Dracaena marginata	紅邊鐵樹	1
Duranta erecta	假連翹	1
Eurya nitida	細齒葉柃	1
Fraxinus insularis	苦櫪木	1
Ilex pubescens	毛冬青	1
Jatropha pandurifolia	琴葉珊瑚	1
Machilus chekiangensis	浙江潤楠	1
Malus sp.	薔薇科蘋果屬	1
Michelia x alba	白蘭	1
Pandanus tectorius	露兜樹	1
Pyrus sp.	薔薇科梨屬	1
Rhus chinensis	鹽膚木	1
Sapium discolor	山烏桕	1
Scolopia saeva	廣東刺柊	1
Sinosideroxylon wightianum	革葉鐵欖	1
	Total:	**3,167**

Recommended Treatment of Existing Trees

Among the 3,167 nos. of trees identified in the tree survey, 1,418 of them are not in direct conflict with the proposed works and can be retained and preserved on site. For the remaining 1,749 trees, 70 of them are dead trees which are proposed to be removed; 1 of them is proposed to be retained on site with pruning due to conflict of part of the tree with the proposed works; 65 of them are proposed to be transplanted. The remaining 1,613 trees are not suitable to be transplanted and therefore proposed to be felled for the implementation of the proposed works.

Compensatory Tree Planting Proposal

Among the 1,613 trees to be felled, 84 of them are *Leucaena leucocephala*, which is a self-seeded invasive undesirable species preventing the natural succession of native vegetation. Owing to the invasive nature, the loss of *Leucaena leucocephala* will only be compensated in term of number but not in DBH. Compensatory tree planting proposal is therefore required for the compensation of the 1,613 nos. of felled trees and the aggregated DBH of 290.02m.

The large number and DBH of the affected trees are due to the significant density of the existing trees. A high percentage of these affected trees were originally planted as whip trees with small spacing in support of Ocean Park's earlier use of the site for tourist attractions. They were planted some time ago and have since developed into trees of large DBH. Therefore, trees affected by this Project are large in number and aggregated DBH despite the small vegetated area being affected. To allow sufficient space for future healthy growth and establishment of the compensatory trees, a minimum of approximately 4m spacing between proposed compensatory heavy standard trees will be provided. However, such provision of suitable spacing limits the number of on-site tree compensation.

Provision of on-site tree compensation is constrained by a few factors, such as the limited available space within the Project boundary. A significant proportion of the compensatory tree planting for this Project is required to be whip tree planting as the existing natural terrain is very steep, and re-formed / stabilised slopes can only be planted with whip trees. On-site compensatory tree planting is also restricted on the ground level along the coastal area due to insufficient soil depth because of high basement level.

The density of the existing tree planting in areas unaffected by the Project and adjoining the site is already high. Therefore, there are very limited opportunities for additional tree planting. Most of these areas are on steep slopes and not suitable for tree planting, but whip tree planting may be feasible. However, many of these areas, both within and adjoining the Project boundary, are already earmarked for compensatory tree planting for the Repositioning project.

Despite the site constraint, on-site compensatory tree planting will be provided as far as practicable to compensate for the proposed felling of 1,613 nos. of existing trees with aggregated DBH of 290.02m for this Project. The maximised on-site tree compensation will consist of approximately 608 nos. of heavy standard trees and approximately 18,202 nos. of whip trees. The numbers and locations of compensatory trees would be determined and agreed with relevant authorities in the tree removal application process under LAO PN No. 7/2007 - Tree Preservation and Tree Removal Application for Building Development in Private Projects.

Part of the compensatory tree planting area for the Repositioning project of Ocean Park is within the Project boundary of this Project and will be affected. Therefore, among the proposed compensatory trees, 227 nos. of heavy standard trees and 109 nos. of whip trees are considered compensatory planting for the Repositioning project. The remaining 381 nos. of heavy standard trees and 18,093 nos. of whip trees are considered compensatory planting for the loss of 1,613 nos. of trees due to this Project.

This results in a compensation ratio of 1:11.45 in terms of tree number. Since a significant number of proposed compensatory trees are whip trees, an alternative view on the level of compensatory planting provision could consider 10 whip trees at 0.01m DBH being equivalent to one heavy standard tree at 0.1m DBH in terms of number. This would mean that the total number of 18,093 whip trees could be considered to be equivalent to 1,809 heavy standard trees in terms of number. This calculation method results in a

compensation ratio of 1:1.36 in terms of tree number. In terms of girth size, the aggregated DBH of proposed compensatory trees for this Project is 219.03m (38.1m+180.93m), which results in a compensation ratio of 1:0.76 in DBH.

Other than on-site tree compensation, off-site compensation will be further explored as far as practicable within the lot boundary of Ocean Park, such as at the area currently occupied by the project site office. Approximately 1,700 m^2 could be vacated at the existing project site office at Nam Long Shan Road which has a potential of accommodating approximately 120 nos. of heavy standard trees. With the addition of 120 nos. of heavy standard trees, the compensation ratio will increase from 1:1.36 to 1:1.43 in terms of number, and from 1:0.76 to 1:0.80 in terms of DBH.

Notwithstanding the above, OPC will further explore suitable locations for off-site compensation outside Ocean Park as far as practicable. The availability of off-site locations for tree compensation is subject to further investigation and agreement with relevant authorities.

12.7 Baseline Study

Aerial photograph showing the extent of the Project Area and the Landscape Impact Assessment Area is presented in **Figure 12.4**.

Landscape Resources

Twelve LRs have been identified. They are mapped on **Figure 12.5**. Photographs of the LRs are illustrated in **Figure 12.6a** to **Figure 12.6b**.

LR1.1 – Tall shrubland

This LR is approximately 7.42ha in size. It is mainly located along the west-facing down slope of Nam Long Shan east of the Project area. This LR is co-dominated by shrubs and trees. Dominant species include *Acronychia pedunculata*, *Alangium chinense*, *Aporusa dioica*, *Breynia fruticosa*, *Bridelia tomentosa*, *Celtis sinensis*, *Cratoxylum cochinchinense*, *Dalbergia hancei*, *Diospyros vaccinioides*, *Ilex asprella*, *Litsea glutinosa*, *Litsea rotundifolia*, *Macaranga tanarius*, *Mallotus paniculatus*, *Melastoma sanguineum*, *Microcos nervosa*, *Polyspora axillaris*, *Rhaphiolepis indica*, *Rhodomyrtus tomentosa*, *Rhus hypoleuca*, *Rhus succedanea*, *Sageretia thea*, *Schima superb*, *Sinosideroxylon wightianum* and *Sterculia lanceolata*. There are approximately 1,000 trees in this LR with heights mainly range from 3m to 5m. This type of landscape resource is common in this area. The amenity value of this LR is medium. Since this LR is natural and semi-mature, sensitivity is considered **medium**.

LR1.2 – Shrubland

This LR is approximately 43.72ha in size. It is located on the upper slopes of Brick Hill and the coastal hill slopes east and south of Ocean Park. This LR is dominated by shrubs and herbaceous plants, with *Polyspora axillaris* being the dominant species. Other common species include *Acronychia pedunculata, Aporusa dioica, Baeckea frutescens, Breynia fruticosa, Cratoxylum cochinchinense, Cyclobalanopsis myrsinifolia, Dalbergia hancei, Diospyros vaccinioides, Ilex asprella, Litsea rotundifolia, Mallotus paniculatus, Melastoma sanguineum, Melodinus suaveolens, Phyllanthus cochinchinensis, Polyspora axillaris, Rhaphiolepis indica, Rhodomyrtus tomentosa, Rhus hypoleuca, Rhus succedanea, Sageretia thea, Schima superb, Sinosideroxylon wightianum, Strophanthus divaricatus*, and *Strychnos angustiflora*.

Heights of vegetation predominantly range from 1m to 2m. There are approximately 900 trees in this LR. This type of landscape resource is common in this area. The amenity value of this LR is medium. Since this LR is natural and semi-mature, sensitivity is considered **medium**.

LR1.3 – Hillside grassland

This LR is approximately 0.89ha in size. It is artificially established and maintained on the eastern hillside. This LR is dominated by the grass species *Paspalum notatum* which is widely used for hydroseeding. Other floral species include *Melastoma malabathricum*, *Melastoma sanguineum*, *Rhodomyrtus tomentosa* and *Polyspora axillaris*. This type of landscape resource is common in this area. The amenity value of this LR is low. Since this LR is young, artificially maintained and easily replaceable, sensitivity is considered **low**.

LR1.4 – Woodland

This LR is approximately 8.78ha in size. It is mainly located along the down slope of Nam Long Shan north and northwest of the Project area. This LR is dominated by young trees. Dominant species include *Acronychia pedunculata, Alangium chinense, Aporusa dioica, Bridelia tomentosa, Celtis sinensis, Cratoxylum cochinchinense, Mallotus paniculatus, Pinus massoniana, Polyspora axillaris, Psychotria asiatica, Rhus hypoleuca, Rhus succedanea, Schima superb* and *Sterculia lanceolata*. There are approximately 5,500 trees in this LR with heights mainly range from 6m to 10m. This type of landscape resource is common in Hong Kong. The amenity value of this LR is high. Since this LR is natural and dominated by young trees, sensitivity is considered **high**.

LR2.1 – Planting on modified slopes

This LR is approximately 6.56ha in size. It is predominately located on slopes around Flamingo Pond and Bird Paradise. It is dominated by exotic tree plantation with *Acacia auriculiformis*, *Acacia confusa*, *Casuarina equisetifolia* and *Eucalyptus citriodora*. The weedy tree species *Leucaena leucocephala* is also very common in this LR. There are approximately 3,700 trees in this LR with heights mainly range from 10m to 16m. This type of resource is very common in this area. The amenity value for this LR is medium. Although this LR is artificial, it is semi-mature with high vegetation coverage. Sensitivity is therefore considered **medium**.

LR2.2 – Roadside planting

This LR is approximately 0.24ha in size. It includes young to semi-mature trees and amenity shrub planting along Shum Wan Road. Dominant tree species include *Archontophoenix alexandrae*, *Ficus microcarpa* and *Cinnamomum camphora* and dominant shrubs include *Ficus microcarpa* 'Golden Leaves'. There are approximately 100 trees with heights range from 9m to 12m in this LR. This type of landscape is very common in the area. The amenity value of this resource is medium. Although this LR is artificial, trees in this LR are semi-mature and properly maintained. Sensitivity is therefore considered **medium**.

LR2.3 – Amenity planting

This LR is approximately 3.44ha in size. It includes the amenity tree and shrub planting inside Ocean Park. Dominant species include *Acacia confusa*, *Alternanthera philoxeroides*, *Cyperus involucratus*, *Hibiscus rosa-sinensis*, *Ixora chinensis*, *Livistona chinensis*, *Macaranga tanarius*, *Philodendron selloum*,

Phyllanthus myrtifolius and *Wedelia trilobata*. There are approximately 2,100 trees in this LR with heights range from 5m to 18m. This type of landscape is common in this area. Although the amenity value of this LR is high with well-maintained landscape planting, it is easily replaceable. Sensitivity is therefore considered **medium**.

LR3.1 – Floral species of conservation interest

There are a total of 17 floral species of conservation interest within the Landscape Impact Assessment Area, namely *Ania hongkongensis*, *Aristolochia thwaitesii*, *Artocarpus hypargyreus*, *Arundina graminifolia*, *Brainea insignis*, *Cymbidium ensifolium*, *Eulophia graminea*, *Geodorum densiflorum*, *Goodyera viridiflora*, *Habenaria dentate*, *Habenaria linguella*, *Ixonanthes reticulate*, *Lilium brownie*, *Peristylus calcaratus*, *Platycodon grandiflorus*, *Spathoglottis pubescens* and *Spiranthes hongkongensis*. These floral species are all found in natural habitats and the majority of them are locally uncommon or rare. Many of these floral species of conservation interest have visually attractive flowers. The amenity value of this resource is high. Due to its rarity, its sensitivity is considered **high**.

LR4.1 – Coastal open water

This LR is approximately 43.30ha in size. It includes the open waters in Aberdeen South Typhoon Shelter and Aberdeen Channel. The water quality of this resource is high with clean and clear seawater with little floating refuse. This type of landscape is common in the area. The amenity value of this resource is high. Due to its susceptibility to potential impacts from deteriorated water quality, sensitivity of this LR is considered **high**.

LR4.2 – Pond

This LR is approximately 0.25ha in size. It includes two disused man-made ponds with well-defined artificial banks, which were previously used as “Flamingo Pond” and “Bird Paradise Pond”, and a pond in the Japanese-style garden “Garden of Joy” within Ocean Park. Water is observed flowing from streams into the “Flamingo Pond” and “Bird Paradise”. The water quality of these two ponds is moderate with water visibly turbid. Fish is observed in these two ponds. For the pond in “Garden of Joy”, water quality is good with visible clear water. Overall, this type of landscape is uncommon in the local context but common in the regional context. The amenity value of this resource is medium. Sensitivity is considered **medium**.

LR4.3 – Stream

This LR is approximately 0.16ha in size. It includes two rocky streams within the Project area, one flowing from the east, another from the north on the hill slope of Brick Hill. The eastern one was observed to be of flowing water throughout the wet and dry seasons and is the main water source feeding the ponds inside the Ocean Park. The northern stream is seasonal. Both streams are partially modified as pipe culvert or box culvert with a length of approximately 250m remaining natural. Water quality in these two streams is good and visibly clear. Small sections of modified streams are also found north of the Project area beside Shum Wan Road. This type of landscape is common in the area. The amenity value of this resource is medium. Since the streams have limited water flow, sensitivity is considered **medium**.

LR5.1 – Natural coastline

This LR is approximately 1.3km in length. It is located along the eastern side of Aberdeen Channel, extending from the south of the bay of TSW along Sham Shui Kok to the western side of Deep Water Bay at the Headland Area. This exposed shore comprises bedrock and large boulders. This type of landscape is common in the area. The amenity value of this resource is medium. Although locally common, this LR is natural and not readily replaceable. The sensitivity is therefore considered **high**.

Landscape Character Areas

Five LCAs have been identified within the Landscape Impact Assessment Area. LCAs are mapped and illustrated on **Figure 12.7**. Photographs of LCAs are shown in **Figure 12.8**.

LCA1 – Theme park

This LCA is approximately 51.42ha in size. It comprises Ocean Park which includes a variety of recreational features, such as rides, buildings and structures in different shapes, colours, styles and scales. Well-maintained amenity tree and shrub planting is also common in this LCA. These features in this LCA form a distinct, complex landscape character which is colourful and heterogeneous. This type of landscape character is uncommon in the local context but common in the regional context. The amenity value is considered high. Since this LCA is mostly artificial and easily replaceable, even though its amenity value is high, sensitivity is considered **medium**.

LCA2 – Natural hillside

This LCA is approximately 37.51ha in size. It is located north and east of the Project area, mainly on hill slopes of Brick Hill. This LCA consists of hillsides, knolls, streams, ridges and spurs. It is dominated by shrubby type of vegetation with occasional rock outcrops. Man-made features such as footpaths, roads, retaining walls and modified slopes are also present. As this LCA is dominated by natural vegetation and natural coastline, the amenity value is high. Its sensitivity is also considered **high** since the natural landscape can hardly be replaced once disturbed.

LCA3 – Open water

This LCA is approximately 42.47ha in size. It includes part of the Aberdeen Channel. This LCA is open sea partially enclosed by landmasses on the west and east side. Ferry traffic and recreational waterborne activities are present in low frequencies. As this LCA is dominated by natural open sea with infrequent human activities, the amenity value is high. Sensitivity is also considered **high** due to its susceptibility to potential impacts from deteriorated water quality.

LCA4 – Typhoon shelter

This LCA is approximately 12.67ha in size. It is bordered by urban coastline on the north side and surrounded by stone armoured breakwaters on the south side. Vessels in this typhoon shelter include freighters, fishing boats, pleasure crafts and sampans. Other features such as jetties, pontoons and navigational features are also found in this LCA. Though the landscape is dominated by open water, human activities are intensive with vessels forming a substantial part of the landscape. Amenity value of

this LCA is medium. Sensitivity is also considered **medium** due to frequent human activities within this LCA.

LCA5 – Urban non-residential development

This LCA is approximately 7.57ha in size. It is dominated by low-rise non-residential development such as Po Chong Wan Industrial Area, shipyards, Shum Wan Laundry, Victoria Shanghai Academy and Hong Kong Juvenile Care Centre. Amenity and roadside planting are scattered in this LCA. As this LCA is largely developed with few landscape features, the amenity value is low. Sensitivity is also considered **low**.

Table 12.4 and **Table 12.5** summarise the sensitivity of all LRs and LCAs.

Table 12.4: Sensitivity of Landscape Resources

ID No.	Name	Quality of existing landscape (Low / Medium / High)	Importance / Rarity of landscape elements (Low / Medium / High)	Ability to accommodate change (Low / Medium / High)	Maturity of Landscape (Young / Semi-mature / Mature)	Significance of change in local context (Low / Medium / High)	Significance of change in regional context (Low / Medium / High)	Sensitivity (Low / Medium / High)
LR1.1	Tall shrubland	Medium	Low	Medium	Semi-mature	Medium	Low	Medium
LR1.2	Shrubland	Medium	Low	Medium	Semi-mature	Medium	Low	Medium
LR1.3	Hillside grassland	Low	Low	High	young	Low	Low	Low
LR1.4	Woodland	Medium	Low	Low	Semi-mature	High	Medium	High
LR2.1	Planting on modified slopes	Medium	Low	Medium	Semi-mature	Medium	Low	Medium
LR2.2	Roadside planting	Medium	Low	Medium	Semi-mature	Medium	Low	Medium
LR2.3	Amenity planting	High	Low	High	Semi-mature	Medium	Low	Medium
LR3.1	Floral species of conservation interest	High	High	Low	Mature	Medium	High	High
LR4.1	Coastal open water	High	Low	Low	Mature	High	Medium	High
LR4.2	Pond	Medium	Medium	Low	Semi-mature	Medium	Low	Medium
LR4.3	Stream	Medium	Low	Medium	Semi-mature	Medium	Low	Medium
LR5.1	Natural coastline	Medium	Low	Low	Mature	High	Medium	High

Table 12.5: Sensitivity of Landscape Character Areas

ID No.	Name	Quality of existing landscape (Low / Medium / High)	Importance / Rarity of landscape elements (Low / Medium / High)	Ability to accommodate change (Low / Medium / High)	Maturity of Landscape (Young / Semi-mature / Mature)	Significance of change in local context (Low / Medium / High)	Significance of change in regional context (Low / Medium / High)	Sensitivity (Low / Medium / High)
LCA1	Theme park	High	High	High	Semi-mature	Medium	Low	Medium
LCA2	Natural hillside	High	Low	Low	Semi-mature	High	Medium	High
LCA3	Open water	High	Low	Low	Mature	High	Medium	High
LCA4	Typhoon shelter	Medium	Medium	Medium	Semi-mature	Medium	Low	Medium
LCA5	Urban non-residential development	Low	Low	High	Semi-mature	Low	Low	Low

Visual Envelope and Zone of Visual Influence

The visual envelope (VE) for the Project area is largely defined by natural topography on the north, east and south sides. To the west side of the Project area, the VE is mostly confined by hills of Yuk Kwai Shan and Ap Lei Pai. Within this VE, the extent of existing views is determined by factors such as the presence of intervening visual obstacles, such as buildings and roadside trees. The VE is mapped on **Figure 12.2**.

Visual Sensitive Receivers

Fourteen VSRs have been identified within the VE. These VSRs are mapped and illustrated in **Figure 12.2**. Photographs showing the existing views of the Project area from the VSRs are shown in **Figure 12.9a** to **Figure 12.9b**.

VSR1.1 – Residents at Larvotto

There are 9 residential building blocks ranging from 25 to 29 floors in Larvotto on the west side of Ap Lei Chau Praya Road. Block 1 has the most direct and unobstructed view of the Project area. The shortest viewing distance is approximately 700m. The existing view as shown in **Figure 12.9a** was taking from the Sky Garden on the 19th floor of Block 1, Larvotto, which could represent the clearest view of the Project area among all residents in this VSR. Since the sensitive receivers are residents and the existing view of the Project area is unobstructed, the sensitivity of this VSR is therefore considered **high**.

VSR1.2 – Residents at Lei Tung Estate

In Lei Tung Estate, the views of the Project area from most residents are substantially blocked by buildings (e.g. those of Larvotto) or natural topography (e.g. Yuk Kwai Shan). The relatively unobstructed views are visible from Tung Yat House with a viewing distance of approximately 1,000m and substantial blockage by Block 1, Larvotto, as shown in **Figure 12.9a**. With the long viewing distance and the substantial blockage of view, the sensitivity of this VSR is considered **low** even though the sensitive receivers are residents.

VSR2.1 – Workers at Ocean Park

This VSR includes all the working staff, both indoor and outdoor workers, of the Ocean Park. In most parts of the Ocean Park, the view of the Project area is substantially blocked by existing vegetation. The clearest view of the Project area is observable from near the “Mine Train” with a viewing distance of approximately 50m, which is a shared view with VSR2.2 and shown in **Figure 12.9a**. In places where access by park visitors is restricted, the Project area is visible from the Staff Canteen with a viewing distance of approximately 100m as shown in **Figure 12.9a**. Such view is not visible when sitting down but only observable when standing next to the windows. As the sensitive receivers are workers, the visual perception is not very important and does not have a significant effect on their quality of life. Also, they will overlook the site from a significant height (>50m) and not from the same level. The sensitivity of this VSR is therefore considered **low**.

VSR2.2 – Staff and temporary residents at the planned Spa Hotel

The planned location of the Spa Hotel is at the location of the existing “Mine Train”. Information such as the layout and height of this planned hotel is yet not available. The existing view as shown in **Figure 12.9a**

was taken from the footpath beside the "Mine Train" to represent the view from the location of the planned Spa Hotel at a height of approximately 80m with a horizontal viewing distance of approximately 10m. The existing view of the Project area is partially obstructed by vegetation on the slope beside the footpath. As the sensitive receivers are workers and temporary residents, the visual perception is not very important and does not have a significant effect on their quality of life. Also, they will overlook the site from a significant height (>50m) and not from the same level. The sensitivity of this VSR is therefore considered **low**.

VSR2.3 – Staff and temporary residents at the planned Fisherman's Wharf Hotel

The planned location of the Fisherman's Wharf Hotel is next to the TSW entrance of the Ocean Park. Information such as the layout and height of this planned hotel is yet not available. The existing view as shown in **Figure 12.9a** was taken from the footpath beside the planned Fisherman's Wharf Hotel to represent the view from the planned Fisherman's Wharf Hotel at ground level from within the Project area. The existing view of the Project area is partially obstructed by roadside trees. However, the visual obstruction by roadside trees will be less substantial when viewing from a significant height at the same location. As the sensitive receivers are workers and temporary residents, the visual perception is not very important and does not have a significant effect on their quality of life. The sensitivity of this VSR is therefore considered **low**.

VSR2.4 – Workers at shipyards along the east coast of Yuk Kwai Shan

This VSR is located along the coastline between Yuk Kwai Shan and Aberdeen South Typhoon Shelter. Views of the Project area from this VSR are often obstructed by the breakwaters and the vessels within the typhoon shelter, with a viewing distance of approximately 700m as shown in **Figure 12.9a**. As the sensitive receivers are workers, the visual perception is not very important and does not have a significant effect on their quality of life. Also, the views of the Project area are often obstructed. The sensitivity of this VSR is therefore considered **low**.

VSR3.1 – Recreational users in Ocean Park

This VSR includes all the recreational users of the Ocean Park. In most parts of the Ocean Park, the view of the Project area is substantially blocked by existing vegetation. Similar to VSR2.2, a clear view of the Project area is observable from near the "Mine Train" with a viewing distance of approximately 50m as shown in **Figure 12.9a**. Also, at the "Ocean Park Tower", a clear unobstructed view of the Project area is also visible with a viewing distance of approximately 200m as shown in **Figure 12.9a**. As the sensitive receivers are recreationists, the visual perception is not very important and does not have a significant effect on their quality of life. Also, they will overlook the site from a significant height (>50m) and not from the same level. The sensitivity of this VSR is therefore considered **low**.

VSR3.2 – Hikers on Yuk Kwai Shan

This VSR includes hikers on the footpaths of Yuk Kwai Shan. At most locations along the footpath, the natural hillside dominates the foreground view with the Project area visible in the background. The most unobstructed views of the Project area are available from the hill top with a viewing distance of approximately 1,000m as shown in **Figure 12.9a**. As the sensitive receivers are outdoor leisure activity participants, the quality of views are important for their enjoyment. However, given the long viewing distance and the transient nature of the views along the hiking trail, the sensitivity of this VSR is considered

medium. In night-time, hiking activities are not expected on this hiking trail because this trail is steep, not properly paved and not equipped with any lighting. The sensitivity is therefore considered **low** for night-time.

VSR3.3 – Hikers on the beach between Yuk Kwai Shan and Ap Lei Pai

The VSR is located between Yuk Kwai Shan and Ap Lei Pai. It includes not only the hikers going from Yuk Kwai Shan to Ap Lei Pai but also recreationists fishing on the rocky shore. To the east, the Project area is clearly visible with no obstruction as shown in **Figure 12.9a**. The viewing distance is approximately 800m. Views of open waters are also available to the west. As the sensitive receivers are outdoor leisure activity participants, the quality of views are important for their enjoyment. However, given the long viewing distance, the short duration of views and the availability of similar alternative views, the sensitivity of this VSR is considered **medium**. In night-time, hiking activities are not expected on this hiking trail because this trail is steep, not properly paved and not equipped with any lighting. The sensitivity is therefore considered **low** for night-time.

VSR3.4 – Hikers on Ap Lei Pai

This VSR includes hikers on the footpaths of Ap Lei Pai. At most locations along the footpath, the natural hillside dominates the foreground view with the Project area visible in the background. The most unobstructed views of the Project area are available from the hill top with a viewing distance of approximately 700m as shown in **Figure 12.9b**. As the sensitive receivers are outdoor leisure activity participants, the quality of views are important for their enjoyment. However, given the long viewing distance and the transient nature of the views along the hiking trail, the sensitivity of this VSR is considered **medium**. In night-time, hiking activities are not expected on this hiking trail because this trail is steep, not properly paved and not equipped with any lighting. The sensitivity is therefore considered **low** for night-time.

VSR3.5 – Hikers on Brick Hill

This VSR includes hikers on the footpaths of Brick Hill. At most locations along the footpaths, the Project area is visually blocked by the natural hill slopes and vegetation. The most unobstructed views of the Project area are available along the footpath from Nam Long Shan Road Rest Garden to the hill top of Nam Long Shan with a viewing distance of approximately 100m to 700m as shown in **Figure 12.9b**. As the sensitive receivers are outdoor leisure activity participants, the quality of views are important for their enjoyment. However, given the short duration of the views along the hiking trail, the sensitivity of this VSR is considered **low**.

VSR4.1 – Travellers along Shum Wan Road

The VSR includes all the travellers, including drivers, passengers and pedestrians along Shum Wan Road, part of which is within the Project area. The existing view as shown in **Figure 12.9b** was taken from approximately 130m from the Project area where visual obstruction by roadside trees is minimal. Part of Shum Wan Road is within the Project area. The shortest viewing distance is approximately 120m. As the sensitive receivers are travellers and the views are partially blocked in most parts along Shum Wan Road, the sensitivity of this VSR is considered **low**.

VSR4.2 – Travellers along Ap Lei Chau Praya Road

This VSR includes motorists, passengers and pedestrians along Ap Lei Chau Praya Road. Since the east side of Ap Lei Chau Praya Road is dominated by building structures of shipyards, the Project area is barely visible by travellers along Ap Lei Chau Praya Road except at the end of the road near the roundabout, where the views of the Project area is sometimes partially obstructed by vessels in the typhoon shelter as shown in **Figure 12.9b**. The viewing distance of the Project area from this roundabout is approximately 700m. As the sensitive receivers are travellers and the views are substantially blocked in most parts along Ap Lei Chau Praya Road, the sensitivity of this VSR is considered **low**.

VSR4.3 – Boat users in Aberdeen Channel

This VSR includes sensitive receivers on boats in the Aberdeen Channel. Views of the Project area from this VSR are unobstructed with a shortest viewing distance of approximately 200m. The existing view as shown in **Figure 12.9b** was taken from the end of the southern breakwater of Aberdeen South Typhoon Shelter to represent the views of the boat users. Although the Project area is clearly observable with no obstruction, since the sensitive receivers are travellers and the views are transient in nature, the sensitivity of this VSR is considered **low**.

Table 12.6 summarises the description and sensitivity of selected VSRs to accommodate changes.

Table 12.6: Sensitivity of Visual Sensitive Receivers

ID No.	VSR Name	Type of Receivers (Residents / Students / Workers / Recreationists / Travellers)	Population of Receivers (Small / Medium / Large)	Amenity Value of Existing View (Low / Moderate / High)	Availability of Alternative View (Yes / No)	Amenity of Alternative View (Low / Moderate / High)	Duration of view (Short / Medium / Long)	Frequency of view (Low / Medium / High)	Degree of visibility (Low / Medium / High)	Sensitivity (Low / Medium / High)
VSR1.1	Residents at Larvotto	Residents	Large	High	Yes	Medium	Long	High	High	High (daytime and night-time)
VSR1.2	Residents at Lei Tung Estate	Residents	Large	Medium	Yes	Medium	Long	High	Low	Low (daytime and night-time)
VSR2.1	Workers at Ocean Park	Workers	Medium	Medium	Yes	Medium	Long	Low	Low	Low (daytime and night-time)
VSR2.2	Staff and temporary residents at the planned Spa Hotel	Workers and temporary residents	Large	Medium	Yes	Medium	Long	Medium	Medium	Low (daytime and night-time)
VSR2.3	Staff and temporary residents at the planned Fisherman's Wharf Hotel	Workers and temporary residents	Large	Medium	Yes	Medium	Long	Medium	High	Low (daytime and night-time)
VSR2.4	Workers at shipyards along the east coast of Yuk Kwai Shan	Workers	Small	Medium	Yes	Low	Medium	Low	Medium	Low (daytime and night-time)
VSR3.1	Recreational users in Ocean Park	Outdoor leisure activity participants	Large	Medium	Yes	Medium	Short	Medium	Low	Low (daytime and night-time)
VSR3.2	Hikers on Yuk Kwai Shan	Outdoor leisure activity participants	Small	High	Yes	High	Medium	High	High	Medium in daytime; low in night-time

ID No.	VSR Name	Type of Receivers (Residents / Students / Workers / Recreationists / Travellers)	Population of Receivers (Small / Medium / Large)	Amenity Value of Existing View (Low / Moderate / High)	Availability of Alternative View (Yes / No)	Amenity of Alternative View (Low / Moderate / High)	Duration of view (Short / Medium / Long)	Frequency of view (Low / Medium / High)	Degree of visibility (Low / Medium / High)	Sensitivity (Low / Medium / High)
VSR3.3	Hikers on the beach between Yuk Kwai Shan and Ap Lei Pai	Outdoor leisure activity participants	Small	High	Yes	High	Medium	High	High	Medium in daytime; low in night-time
VSR3.4	Hikers on Ap Lei Pai	Outdoor leisure activity participants	Small	High	Yes	High	Medium	High	High	Medium in daytime; low in night-time
VSR3.5	Hikers on Brick Hill	Outdoor leisure activity participants	Small	High	Yes	High	Short	Medium	Medium	Low (daytime and night-time)
VSR4.1	Travellers along Shum Wan Road	Travellers	Large	Medium	Yes	Medium	Short	Low	Medium	Low (daytime and night-time)
VSR4.2	Travellers along Ap Lei Chau Praya Road	Travellers	Medium	Low	Yes	Medium	Short	Low	Low	Low (daytime and night-time)
VSR4.3	Boat users in Aberdeen Channel	Travellers	Small	Medium	Yes	High	Short	Low	High	Low (daytime and night-time)

Vantage Points

Photographs were taken from 7 selected vantage points to show the representative visual context of VSRs. These photographs are illustrated in **Figures 12.12a to 12.12j**.

Vantage Point A – from the hill top of Yuk Kwai Shan

This vantage point is selected to show the view of the Project area from the hill tops visible by hikers. It represents the potentially most affected view by VSR3.2 – Hikers on Yuk Kwai Shan and VSR3.5 – Hikers on Brick Hill. The view is characterised by an unobstructed view overseeing the Project area from a height of approximately 180m with a viewing distance of approximately 1,000m.

Vantage Point B – the beach between Yuk Kwai Shan and Ap Lei Pai

This vantage point is selected to show the direct view of the Project area from sea level from the west. It represents the most unobstructed view from the eastern shoreline of Yuk Kwai Shan and Ap Lei Pai, which includes the potentially most affected view of VSR3.3 – Hikers on the beach between Yuk Kwai Shan and Ap Lei Pai. The viewing distance is approximately 800m.

Vantage Point C – from the hill top of Ap Lei Pai

This vantage point, which is taken from the hill top of Ap Lei Pai, shows the view of the Project area from the most direct angle where the entire Project area, rather than only part of the Project area, is directly visible, with no obstruction and a viewing distance of approximately 700m. It represents the potentially most affected view of VSR3.4 – Hikers on Ap Lei Pai.

Vantage Point D – from the end of the southern breakwaters in Aberdeen South Typhoon Shelter

This vantage point is selected to represent the views of VSR4.3 – Boat users in Aberdeen Channel with a viewing distance of approximately 200m from the west. The view of this vantage point is similar to that of vantage point B from a similar direction toward the Project area, but with a shorter viewing distance which better represent the views of boat users. This vantage point could also represent the potentially most affected view of VSR 2.4 – Workers at shipyards along the east coast of Yuk Kwai Shan and VSR4.2 – Travellers along Ap Lei Chau Praya Road due to a similar direction from the Project area and at similar levels.

Vantage Point E – from the Sky Garden on 19/F, Block 1, Larvotto

This vantage point is taken from the Sky Garden on the 19th floor of Block 1, Larvotto. It shows the potentially most affected view of VSR1.1 – Residents at Larvotto, which is an unobstructed view of the Project area from approximately 700m with an elevation of approximately 90m. The potentially most affected views from VSR1.2 – Residents at Lei Tung Estate are similar to that of this vantage point, but with longer viewing distance and substantial visual obstruction by the residential buildings of Larvotto.

Vantage Point F – from the planned Fisherman's Wharf Hotel

This vantage point is taken from the proposed location of the planned Fisherman's Wharf Hotel just outside the TSW entrance of the Ocean Park beside Shum Wan Road. It shows the existing view of the planned VSR2.3 – Staff and temporary residents at the planned Fisherman's Wharf Hotel from within the Project area. It also represents the close-up view of VSR4.1 – Travellers along Shum Wan Road.

Vantage Point G – from the planned Spa Hotel

This vantage point is selected to show the view of the Project area from the planned VSR2.2 – Staff and temporary residents at the planned Spa Hotel. Since the Mine Train is situated at the proposed location of the planned Spa Hotel, this vantage point is taken from the footpath adjacent to the Mine Train to show an elevated view from a height of approximately 80m from the ground level of the planned Spa Hotel. This vantage point is also a representative view of VSR2.1 – Workers at Ocean Park and VSR3.1 – Recreational users in Ocean Park.

12.8 Sources of Potential Impacts and Magnitude of Change

Sources of Potential Impacts

During the construction phase, sources of potential landscape and visual impacts would arise from the following:

- Site clearance for the proposed structures, particularly at the existing woodland and tall shrubland area.

During the operation phase, sources of potential landscape and visual impacts would arise from the following:

- Operation of the Indoor Zone of the Water Park (with a wave pool, lazy river, play structure, water slides, surf-rider, various pools, F&B facilities, E&M utilities, back of house and car-parking;
- Operation of the Outdoor Zone of the Water Park (with a wave pool, lazy river, water slides, ride platforms, various pools, 'sea turtle' exhibit and some small-scale F&B facilities; and
- Operation of the General Approach Area with coach and taxi drop-off point and EVA.

Magnitude of Change for Landscape Resources

LR1.1 – Tall shrubland

Approximately 0.11ha out of 7.42ha in this LR will be cleared for the proposed works of the Project. Approximately 1 *Leucaena leucocephala* and approximately 21 other trees (with aggregated DBH of approximately 3.49m) out of 1,000 trees will need to be removed. The magnitude of change for this LR is expected to be **adversely small**.

LR1.2 – Shrubland

Approximately 0.17ha out of 43.72ha in this LR will be cleared for the proposed works of the Project. Approximately 6 trees (with aggregated DBH of approximately 0.75m) out of 900 trees will need to be removed. The magnitude of change for this LR is expected to be **adversely small**.

LR1.3 – Hillside grassland

This LR is located entirely outside the Project area. Therefore, this LR is expected to have a **negligible** magnitude of change.

LR1.4 – Woodland

Approximately 1.53ha out of 8.78ha in this LR will be cleared for the proposed works of the Project. Approximately 8 *Leucaena leucocephala* and 439 other trees (with aggregated DBH of approximately 79.23m) out of 5,500 trees will need to be removed. The magnitude of change for this LR is expected to be **adversely large**.

LR2.1 – Planting on modified slopes

Approximately 0.28ha out of 6.56ha in this LR will be cleared for the proposed works of the Project. Approximately 158 trees (with aggregated DBH of approximately 31.56m) out of 3,700 trees will need to be removed. The magnitude of change for this LR is expected to be **adversely intermediate**.

LR2.2 – Roadside planting

Approximately 0.09ha out of 0.24ha in this LR will be cleared for the proposed works of the Project. Approximately 43 trees (with aggregated DBH of approximately 7.57m) out of 100 trees will need to be removed. The magnitude of change of this LR is expected to be **adversely large**.

LR2.3 – Amenity planting

Approximately 1.74ha out of 3.44ha in this LR will be cleared for the proposed works of the Project. Approximately 37 *Leucaena leucocephala* and 699 other trees (with aggregated DBH of approximately 146.13m) out of 2,100 trees will need to be removed. The magnitude of change for this LR is expected to be **adversely large**.

LR3.1 – Floral species of conservation interest

Out of the 17 identified floral species of conservation interest, only one of them, which is *Platycodon grandiflorus*, is found within the Project area. The *Platycodon grandiflorus* is located at the southern end on the hillside of the Project area, which will not be directly affected by the construction activities. Hence, this LR is expected to have a **negligible** magnitude of change.

LR4.1 – Coastal open water

This LR is located entirely outside the Project area. Also, the Project does not involve any reclamation, dredging or any seawall construction. Therefore, this LR is expected to have a **negligible** magnitude of change.

LR4.2 – Pond

The "Flamingo Pond" and "Bird Paradise Pond" within the Project area, covering approximately 0.24ha out of 0.25ha in this LR, will be removed for the commencement of this Project. The pond in the "Garden of Joy" which is approximately 0.01ha outside the Project area will be unaffected by the proposed works of this Project. The magnitude of change for this LR is expected to be **adversely large**.

LR4.3 – Stream

The natural sections of approximately 75m in length (out of 250m) of one of the two streams within the Project area will be intercepted by the proposed structures and diverted to drainage channels. Approximately 28m of existing box culvert of the other stream will be demolished with flow diverted to drainage pipe. Other parts of these two streams and the streams outside the Project area will not be affected. The magnitude of change for this LR is expected to be **adversely large**.

LR5.1 – Natural coastline

This LR is located entirely outside the Project area. Also, the Project does not involve any reclamation, dredging or any seawall construction. Therefore, this LR is expected to have a **negligible** magnitude of change.

Magnitude of Change for Landscape Character Areas

LCA1 – Theme park

Approximately 6.55ha out of 51.42ha in this LCA will be cleared for the proposed works of the Project. Approximately 84 *Leucaena leucocephala* and 1,529 other trees (with aggregated DBH of approximately 290.02m) out of 6,000 trees will need to be removed. The magnitude of change for this LCA is expected to be **adversely large**.

LCA2 – Natural hillside

This LCA is located entirely outside the Project area. Therefore, this LCA is expected to have a **negligible** magnitude of change.

LCA3 – Open water

This LCA is located entirely outside the Project area. Also, the Project does not involve any reclamation, dredging or any seawall construction. Therefore, this LCA is expected to have a **negligible** magnitude of change.

LCA4 – Typhoon shelter

This LCA is located entirely outside the Project area. Also, the Project does not involve any reclamation, dredging or any seawall construction. Therefore, this LCA is expected to have a **negligible** magnitude of change.

LCA5 – Urban non-residential development

This LCA is located entirely outside the Project area. Therefore, this LCA is expected to have a **negligible** magnitude of change.

Table 12.7 and **Table 12.8** summarise the magnitude of change for all LRs and LCAs respectively. The magnitude of change for all LRs and LCAs is expected to be the same for construction and operation phases.

Table 12.7: Magnitude of Change of Landscape Resources

ID No.	Name	Scale of Works (Negligible / Small / Medium / Large)	Reversibility (Reversible / Irreversible)	Compatibility with surrounding landscape (Low / Medium / High)	Duration of impacts (Short / Medium / Long)	Magnitude of Change (Negligible / Small / Intermediate / Large)
LR1.1	Tall Shrubland	Small	Irreversible	Medium	Long	Adversely small
LR1.2	Shrubland	Small	Irreversible	Medium	Long	Adversely small
LR1.3	Hillside grassland	Negligible	N.A.	N.A.	N.A.	Negligible
LR1.4	Woodland	Medium	Irreversible	Low	Long	Adversely large
LR2.1	Planting on modified slopes	Medium	Irreversible	Medium	Long	Adversely intermediate
LR2.2	Roadside planting	Large	Irreversible	Medium	Long	Adversely large
LR2.3	Amenity planting	Large	Irreversible	Medium	Long	Adversely large
LR3.1	Floral species of conservation interest	Negligible	N.A.	N.A.	N.A.	Negligible
LR4.1	Coastal open water	Negligible	N.A.	N.A.	N.A.	Negligible

ID No.	Name	Scale of Works (Negligible / Small / Medium / Large)	Reversibility (Reversible / Irreversible)	Compatibility with surrounding landscape (Low / Medium / High)	Duration of impacts (Short / Medium / Long)	Magnitude of Change (Negligible / Small / Intermediate / Large)
LR4.2	Pond	Large	Irreversible	Low	Long	Adversely large
LR4.3	Stream	Large	Irreversible	Low	Long	Adversely large
LR5.1	Natural coastline	Negligible	N.A.	N.A.	N.A.	Negligible

Table 12.8: Magnitude of Change of Landscape Character Areas

ID No.	Name	Scale of Works (Negligible / Small / Medium / Large)	Reversibility (Reversible / Irreversible)	Compatibility with surrounding landscape (Low / Medium / High)	Duration of impacts (Short / Medium / Long)	Magnitude of Change (Negligible / Small / Intermediate / Large)
LCA1	Theme park	Large	Irreversible	Medium	Long	Adversely large
LCA2	Natural hillside	Negligible	N.A.	N.A.	N.A.	Negligible
LCA3	Open water	Negligible	N.A.	N.A.	N.A.	Negligible
LCA4	Typhoon shelter	Negligible	N.A.	N.A.	N.A.	Negligible
LCA5	Urban non-residential development	Negligible	N.A.	N.A.	N.A.	Negligible

Magnitude of Change for Visual Sensitive Receivers during Construction

VSR1.1 – Residents at Larvotto

The existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to a construction site which is clearly visible in daytime by residents in Block 1, Larvotto. In night-time, the lighting from the Project area will also be visible by this VSR. However, since night-time construction activities are not expected, only minimal lighting, which is similar to the existing lighting in the Project area, is expected to be provided. The magnitude of change is considered **adversely small** for daytime and night-time during the construction phase.

VSR1.2 – Residents at Lei Tung Estate

Since the existing view of this VSR is dominated by the residential buildings of Larvotto, and the view of the Project area is barely visible, the magnitude of change, both in the daytime and night-time, are considered **negligible** during the construction phase.

VSR2.1 – Workers at Ocean Park

At locations where the Project area is visible within Ocean Park, the existing view, which is largely dominated by dense vegetation, will be replaced by the view of a construction site. However, since the vegetation within the park often partially screens the view of the Project area, the magnitude of change is considered **adversely small** during the construction phase for both daytime and night-time.

VSR2.2 – Staff and temporary residents at the planned Spa Hotel

Since the planned Spa Hotel is at a preliminary planning stage, no construction programme is currently available. Construction of this hotel is not anticipated to complete before completion of this Project. This VSR will not be present during construction of this Project. Magnitude of change is therefore not applicable to this VSR during construction phase.

VSR2.3 – Staff and temporary residents at the planned Fisherman's Wharf Hotel

Since the planned Fisherman’s Wharf Hotel is at a preliminary planning stage, no construction programme is currently available. Construction of this hotel is not anticipated to complete before completion of this Project. This VSR will not be present during construction of this Project. Magnitude of change is therefore not applicable to this VSR during the construction phase.

VSR2.4 – Workers at shipyards along the east coast of Yuk Kwai Shan

The existing view of the Project area, which is largely dominated by dense vegetation but often partially obstructed by vessels in Aberdeen South Typhoon Shelter, will change to a construction site which is visible in daytime. In night-time, the lighting from the Project area will also be partially visible by this VSR. However, since night-time construction activities are not expected, only minimal lighting, which is similar to the existing lighting in the Project area, is expected to be provided. Also, the lighting from vessels will be more prominent than that from the Project area. The magnitude of change is considered **adversely small** during the construction phase for both daytime and night-time.

VSR3.1 – Recreational users in Ocean Park

At locations where the Project area is visible within Ocean Park, the existing view, which is largely dominated by dense vegetation, will be replaced by the view of a construction site. However, since the vegetation within the park often partially screens the view of the Project area, the magnitude of change is considered **adversely small** during the construction phase for both daytime and night-time.

VSR3.2 – Hikers on Yuk Kwai Shan

The existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to a construction site which is clearly visible in daytime. In night-time, hiking activities are not expected on this hiking trail because this trail is steep, not properly paved and not equipped with any lighting. The magnitude of change is therefore considered **adversely small** for daytime and night-time during construction.

VSR3.3 – Hikers on the beach between Yuk Kwai Shan and Ap Lei Pai

The existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to a construction site which is clearly visible in daytime. In night-time, hiking activities are not expected on this hiking trail because this trail is steep, not properly paved and not equipped with any lighting. The magnitude of change is therefore considered **adversely small** for daytime and night-time during construction.

VSR3.4 – Hikers on Ap Lei Pai

The existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to a construction site which is clearly visible in daytime. In night-time, hiking activities are not expected on this hiking trail because this trail is steep, not properly paved and not equipped with any lighting. The magnitude of change is therefore considered **adversely small** for daytime and night-time during construction.

VSR3.5 – Hikers on Brick Hill

The existing partially obstructed view of the Project area, which is largely dominated by dense vegetation, will change to a construction site which is clearly visible in daytime. In night-time, hiking activities are not expected in most parts of the hiking trails, but night-time visitors to the Nam Long Shan Road Rest Garden, particularly in special occasions, such as the Mid-autumn Festival, is expected. However, the overall number of night-time visitors is expected to be low. The magnitude of change is therefore considered **adversely small** for both daytime and night-time during construction.

VSR4.1 – Travellers along Shum Wan Road

The existing partially obstructed view of the Project area, which is largely dominated by dense vegetation, will change to a construction site which is clearly visible in daytime. In night-time, the lighting from the Project area will also be visible by this VSR. However, since night-time construction activities are not expected, only minimal lighting, which is similar to the existing lighting in the Project area, is expected to be provided. The magnitude of change is considered **adversely small** during the construction phase for both daytime and night-time.

VSR4.2 – Travellers along Ap Lei Chau Praya Road

The existing view of the Project area, which is largely dominated by dense vegetation, will change to a construction site which is visible in daytime, but only near the end of Ap Lei Chau Praya Road near the roundabout. In night-time, the lighting from the Project area will also be partially visible by this VSR at the same location. However, since night-time construction activities are not expected, only minimal lighting, which is similar to the existing lighting in the Project area, is expected to be provided. Also, the lighting from vessels will be more prominent than that from the Project area. The magnitude of change is considered **adversely small** during the construction phase for both daytime and night-time.

VSR4.3 – Boat users in Aberdeen Channel

Without mitigation, the existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to a construction site which is clearly visible in daytime. In night-time, the lighting from the Project area will also be visible by this VSR. However, since night-time construction activities are not expected, only minimal lighting, which is similar to the existing lighting in the Project area, is expected to be provided. The potential visual impact is considered **slight adverse** during the construction phase for both daytime and night-time.

Magnitude of Change for Visual Sensitive Receivers during Operation

VSR1.1 – Residents at Larvotto

The existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will be replaced by the view of the Water Park dominated by hard structures such as pools as shown in **Figure 12.12e**. In night-time, the lighting from the Project will also be visible by this VSR. However, the overall lighting of the Water Park is expected to be similar to the existing lighting in the Project area as shown in **Figure 12.12f**. The magnitude of change is considered **adversely small** for daytime and night-time during the operation phase.

VSR1.2 – Residents at Lei Tung Estate

Since the existing view of this VSR is dominated by the residential buildings of Larvotto, and the view of the Project area is barely visible. The magnitude of change, both in the daytime and night-time, are considered **negligible** during the operation phase even without mitigation.

VSR2.1 – Workers at Ocean Park

At locations where the Project area is visible within Ocean Park, the existing view, which is largely dominated by dense vegetation, will be replaced by the view of the predominant hard structures of the Water Park. However, since the vegetation within Ocean Park often partially screens the view of the Project area, the magnitude of change is considered **adversely small** during the operation phase for both daytime and night-time.

VSR2.2 – Staff and temporary residents at the planned Spa Hotel

Since the planned Spa Hotel is at a preliminary planning stage, no construction programme is currently available. Construction of this hotel is not anticipated to complete before completion of this Project. This

VSR will not be present by Day 1 of operation. Magnitude of change is therefore considered not applicable to this VSR by Day 1 of operation. However, by Year 10 of operation, it is assumed that the Spa Hotel will have been in operation. The existing view of the Project area, which is dominated by dense vegetation but partially blocked by existing vegetation, will be replaced by the view of the predominant hard structures of the Water Park as shown in **Figure 12.12i** and **Figure 12.12j**. The magnitude of change is considered **adversely small** by Year 10 of operation for both daytime and night-time.

VSR2.3 – Staff and temporary residents at the planned Fisherman's Wharf Hotel

Since the planned Fisherman's Wharf Hotel is at a preliminary planning stage, no construction programme is currently available. Construction of this hotel is not anticipated to complete before completion of this Project. This VSR will not be present by Day 1 of operation. Magnitude of change is therefore considered not applicable to this VSR by Day 1 of operation. However, by Year 10 of operation, it is assumed that the Fisherman's Wharf Hotel will have been in operation. The existing view of the Project area, which is dominated by dense vegetation but partially screened by roadside trees, will be replaced by the view of the predominant hard structures of the Water Park as shown in **Figure 12.12g** and **Figure 12.12h**. The magnitude of change is considered **adversely small** by Year 10 of operation for both daytime and night-time.

VSR2.4 – Workers at shipyards along the east coast of Yuk Kwai Shan

The existing view of the Project area, which is largely dominated by dense vegetation but often partially obstructed by vessels in Aberdeen South Typhoon Shelter, will change to the predominate hard structures of the Water Park which is visible in daytime. In night-time, the lighting from the Water Park will also be partially visible by this VSR. However, the lighting from vessels will be more prominent than that from the Water Park. The magnitude of change is considered **adversely small** during the operation phase for both daytime and night-time.

VSR3.1 – Recreational users in Ocean Park

At locations where the Project area is visible within Ocean Park, the existing view, which is largely dominated by dense vegetation, will be replaced by the view of the predominant hard structures of the Water Park. However, since the vegetation within Ocean Park often partially screens the view of the Project area, the magnitude of change is considered **adversely small** during the operation phase for both daytime and night-time.

VSR3.2 – Hikers on Yuk Kwai Shan

The existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to the predominant hard structures of the Water Park which is clearly visible in daytime as shown in **Figure 12.12a**. In night-time, hiking activities are not expected on this hiking trail because this trail is steep, not properly paved and not equipped with any lighting. The magnitude of change is therefore considered **adversely small** for daytime and night-time during operation.

VSR3.3 – Hikers on the beach between Yuk Kwai Shan and Ap Lei Pai

The existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to the predominant hard structures of the Water Park which is clearly visible in daytime as shown

in **Figure 12.12b**. In night-time, hiking activities are not expected on this hiking trail because this trail is steep, not properly paved and not equipped with any lighting. The magnitude of change is therefore considered **adversely small** for daytime and night-time during operation.

VSR3.4 – Hikers on Ap Lei Pai

The existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to the predominant hard structures of the Water Park which is clearly visible in daytime as shown in **Figure 12.12c**. In night-time, hiking activities are not expected on this hiking trail because this trail is steep, not properly paved and not equipped with any lighting. The magnitude of change is therefore considered **adversely small** for daytime and night-time during operation.

VSR3.5 – Hikers on Brick Hill

The existing partially obstructed view of the Project area, which is largely dominated by dense vegetation, will change to the predominant hard structures of the Water Park which is clearly visible in daytime. In night-time, hiking activities are not expected in most parts of the hiking trails, but night-time visitors to the Nam Long Shan Road Rest Garden, particularly in special occasions, such as the Mid-autumn Festival, is expected. However, the overall number of night-time visitors is expected to be low. Also, the overall lighting of the Water Park is expected to be similar to the existing lighting in the Project area. The magnitude of change is therefore considered **adversely small** for daytime and night-time during operation.

VSR4.1 – Travellers along Shum Wan Road

The existing partially obstructed view of the Project area, which is largely dominated by dense vegetation, will change to the predominant hard structures of the Water Park which is clearly visible in daytime. In night-time, the lighting from the Water Park will also be visible by this VSR. However, the overall lighting of the Water Park is expected to be similar to the existing lighting in the Project area. The magnitude of change is considered **adversely small** during the operation phase for both daytime and night-time.

VSR4.2 – Travellers along Ap Lei Chau Praya Road

The existing view of the Project area, which is largely dominated by dense vegetation, will change to the predominant hard structures of the Water Park which is visible in daytime, but only near the end of Ap Lei Chau Praya Road near the roundabout. In night-time, the lighting from the Water Park will also be partially visible by this VSR at the same location. However, the overall lighting of the Water Park is expected to be similar to the existing lighting in the Project area. Also, the lighting from vessels will be more prominent than that from the Project area. The magnitude of change is considered **adversely small** during the operation phase for both daytime and night-time.

VSR4.3 – Boat users in Aberdeen Channel

The existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to the predominant hard structures of the Water Park which is clearly visible in daytime as shown in **Figure 12.12d**. In night-time, the lighting from the Water Park will also be visible by this VSR. However, the overall lighting of the Water Park is expected to be similar to the existing lighting in the Project area. The magnitude of change is considered **adversely small** during the operation phase for both daytime and night-time.

Table 12.9 summarises the magnitude of change for all VSRs.

Table 12.9: Magnitude of Change for Visual Sensitive Receivers

ID No.	VSR Name	Scale of Works (Small / Medium / Large)	Reversibility (Reversible / Irreversible)	Blockage (None / Partial / Substantial)	Minimum Viewing Distance (m)	Compatibility with surrounding landscape (Low / Medium / High)	Duration of impacts (Construction) (Short / Medium / Long)	Duration of impacts (Operation) (Short / Medium / Long)	Magnitude of Change (Construction) (Negligible / Small / Intermediate / Large)	Magnitude of Change (Operation) (Negligible / Small / Intermediate / Large)
VSR1.1	Residents at Larvotto	Small	Irreversible	Partial for most receivers; none for ~5% of receivers	700	High	Short	Long	Adversely small	Adversely small
VSR1.2	Residents at Lei Tung Estate	Small	Irreversible	Substantial	1,000	High	Short	Long	Negligible	Negligible
VSR2.1	Workers at Ocean Park	Medium	Irreversible	Partial	0	High	Short	Medium	Adversely small	Adversely small
VSR2.2	Staff and temporary residents at Spa Hotel	Medium	Irreversible	Partial	10	High	Short	Medium	N/A	N/A for Day 1; adversely small for Year 10
VSR2.3	Staff and temporary residents at Fisherman's Wharf Hotel	Medium	Irreversible	Partial	10	High	Short	Medium	N/A	N/A for Day 1; adversely small for Year 10
VSR2.4	Workers at shipyards along the east coast of Yuk Kwai Shan	Small	Irreversible	Partial	500	High	Short	Medium	Adversely small	Adversely small
VSR3.1	Recreational users in Ocean Park	Medium	Irreversible	Partial	0	High	Short	Short	Adversely small	Adversely small
VSR3.2	Hikers on Yuk Kwai Shan	Small	Irreversible	None	800	High	Short	Short	Adversely small	Adversely small
VSR3.3	Hikers on the beach between Yuk Kwai Shan and Ap Lei Pai	Small	Irreversible	None	800	High	Short	Short	Adversely small	Adversely small
VSR3.4	Hikers on Ap Lei Pai	Small	Irreversible	None	700	High	Short	Short	Adversely small	Adversely small
VSR3.5	Hikers on Brick Hill	Small	Irreversible	Partial	100	High	Short	Short	Adversely small	Adversely small

ID No.	VSR Name	Scale of Works (Small / Medium / Large)	Reversibility (Reversible / Irreversible)	Blockage (None / Partial / Substantial)	Minimum Viewing Distance (m)	Compatibility with surrounding landscape (Low / Medium / High)	Duration of impacts (Construction) (Short / Medium / Long)	Duration of impacts (Operation) (Short / Medium / Long)	Magnitude of Change (Construction) (Negligible / Small / Intermediate / Large)	Magnitude of Change (Operation) (Negligible / Small / Intermediate / Large)
VSR4.1	Travellers along Shum Wan Road	Medium	Irreversible	Partial	0	High	Short	Short	Adversely small	Adversely small
VSR4.2	Travellers along Ap Lei Chau Praya Road	Small	Irreversible	Substantial	700	High	Short	Short	Adversely small	Adversely small
VSR4.3	Boat users in Aberdeen Channel	Medium	Irreversible	None	200	High	Short	Short	Adversely small	Adversely small

12.9 Potential Impact without Mitigation

Potential Landscape Impacts without Mitigation

The potential landscape impacts without mitigation measures for individual LRs and LCAs are derived from the sensitivities and magnitude of changes in accordance with **Table 12.1** and summarised in **Table 12.10** and **Table 12.11** respectively. The potential impacts are expected to be the same for construction and operation phases.

Table 12.10: Potential Landscape Impacts on Landscape Resources Without Mitigation Measures

ID No.	Name	Sensitivity (Low / Medium / High)	Magnitude of Change (Negligible / Small / Intermediate / Large)	Significant Threshold (Unmitigated) (Insubstantial / Slight / Moderate / Significant)
LR1.1	Tall Shrubland	Medium	Adversely small	Slight adverse
LR1.2	Shrubland	Medium	Adversely small	Slight adverse
LR1.3	Hillside grassland	Low	Negligible	Insubstantial
LR1.4	Woodland	High	Adversely large	Significant adverse
LR2.1	Planting on modified slopes	Medium	Adversely intermediate	Moderate adverse
LR2.2	Roadside planting	Medium	Adversely large	Significant adverse
LR2.3	Amenity planting	Medium	Adversely large	Significant adverse
LR3.1	Floral species of conservation interest	High	Negligible	Insubstantial
LR4.1	Coastal open water	High	Negligible	Insubstantial
LR4.2	Pond	Medium	Adversely large	Significant adverse
LR4.3	Stream	Medium	Adversely large	Significant adverse
LR5.1	Natural coastline	High	Negligible	Insubstantial

Table 12.11: Potential Landscape Impacts on Landscape Character Areas Without Mitigation Measures

ID No.	Name	Sensitivity (Low / Medium / High)	Magnitude of Change (Negligible / Small / Intermediate / Large)	Significant Threshold (Unmitigated) (Insubstantial / Slight / Moderate / Significant)
LCA1	Theme park	Medium	Adversely large	Moderate adverse
LCA2	Natural hillside	High	Negligible	Insubstantial
LCA3	Open water	High	Negligible	Insubstantial
LCA4	Typhoon shelter	Medium	Negligible	Insubstantial
LCA5	Urban non-residential development	Low	Negligible	Insubstantial

Potential Visual Impacts without Mitigation

The potential landscape impacts without mitigation measures for individual VSRs are derived from the sensitivities and magnitude of changes in accordance with **Table 12.1** and summarised in **Table 12.12**.

Table 12.12: Potential Landscape Impacts on Visual Sensitive Receivers Without Mitigation Measures

ID No.	Name	Sensitivity (Low / Medium / High)	Magnitude of Change (Negligible / Small / Intermediate / Large)		Significant Threshold (Unmitigated) (Insubstantial / Slight / Moderate / Significant)	
			Construction	Operation	Construction	Operation
VSR1.1	Residents at Larvotto	High (daytime and night-time)	Adversely small	Adversely small	Moderate adverse (daytime and night-time)	Moderate adverse (daytime and night-time)
VSR1.2	Residents at Lei Tung Estate	Low (daytime and night-time)	Negligible	Negligible	Insubstantial (daytime and night-time)	Insubstantial (daytime and night-time)
VSR2.1	Workers at Ocean Park	Low (daytime and night-time)	Adversely small	Adversely small	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)
VSR2.2	Staff and temporary residents at Spa Hotel	Low (daytime and night-time)	Negligible	Adversely small	N/A	N/A for Day 1; slight adverse (daytime and night-time) for Year 10
VSR2.3	Staff and temporary residents at Fisherman's Wharf Hotel	Low (daytime and night-time)	Negligible	Adversely small	N/A	N/A for Day 1; slight adverse (daytime and night-time) for Year 10
VSR2.4	Works at shipyards along the east coast of Yuk Kwai Shan	Low (daytime and night-time)	Adversely small	Adversely small	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)
VSR3.1	Recreational users in Ocean Park	Low (daytime and night-time)	Adversely small	Adversely small	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)
VSR3.2	Hikers on Yuk Kwai Shan	Medium in daytime; low in night-time	Adversely small	Adversely small	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)
VSR3.3	Hikers on the beach between Yuk Kwai Shan and Ap Lei Pai	Medium in daytime; low in night-time	Adversely small	Adversely small	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)
VSR3.4	Hikers on Ap Lei Pai	Medium in daytime; low in night-time	Adversely small	Adversely small	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)
VSR3.5	Hikers on Brick Hill	Low (daytime and night-time)	Adversely small	Adversely small	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)

ID No.	Name	Sensitivity (Low / Medium / High)	Magnitude of Change (Negligible / Small / Intermediate / Large)		Significant Threshold (Unmitigated) (Insubstantial / Slight / Moderate / Significant)	
			Construction	Operation	Construction	Operation
VSR4.1	Travellers along Shum Wan Road	Low (daytime and night-time)	Adversely small	Adversely small	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)
VSR4.2	Travellers along Ap Lei Chau Praya Road	Low (daytime and night-time)	Adversely small	Adversely small	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)
VSR4.3	Boat users in Aberdeen Channel	Low (daytime and night-time)	Adversely small	Adversely small	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)

12.10 Recommended Mitigation Measures

Mitigation measures for potential landscape and visual impacts have been carefully considered to achieve the following:

- Avoid impacts on important landscape resources and visual sensitive receivers;
- Lessen unavoidable impacts by location, design and reducing the extent of works; and
- Enhancement of existing landscape resources and visual quality.

Recommended mitigation measures for construction and operation phase impacts are summarised in **Table 12.13** and **Table 12.14** respectively. The construction phase mitigation measures listed below shall be adopted from the commencement of construction and throughout the entire construction period. The operation phase mitigation measures shall be adopted during detailed design and built as part of the construction works so that they shall be in place at the Day 1 of operation phase.

Table 12.13: Recommended Construction Phase Mitigation Measures

Mitigation Code	Responsible Agent for Mitigation Implementation	Mitigation Measure	Target LR(s), LCA(s) and / or VSR(s)
CP01	OPC via Contractor	**Minimisation of Construction Period** – The construction programme should be carefully designed to minimise the length of the construction period.	VSR1.1; VSR2.1; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3
CP02	OPC via Contractor	**Minimisation of Works Areas** – The footprint of the proposed hard structures as well as the extent of temporary works areas should be minimised as far as practicable.	VSR1.1; VSR2.1; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3
CP03	OPC via Contractor	**Construction Site Controls** – Construction site controls should be enforced, where possible, to ensure that the landscape and visual impacts arising from the construction phase activities, such as the storage of materials, the location and appearance of site accommodation, etc. are minimised.	VSR1.1; VSR2.1; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3

Mitigation Code	Responsible Agent for Mitigation Implementation	Mitigation Measure	Target LR(s), LCA(s) and / or VSR(s)
CP04	OPC via Contractor	**Preservation of Existing Vegetation** – The development proposal should avoid disturbance to existing vegetation as far as practicable. A formal tree removal application should be submitted for approval by relevant authorities in accordance with LAO PN No. 07/2007 "Tree Preservation and Tree Removal Application for Building Development in Private Projects" during the detailed design phase of the Project. Where possible, all trees which are not in direct conflict with the development proposals should be retained *in situ*.	LR1.1; LR1.2; LR1.4; LR2.1; LR2.2; LR2.3; LCA1; VSR1.1; VSR2.1; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3
CP05	OPC via Contractor	**Transplantation of Existing Trees** – Trees which are in direct conflict with the development proposals and suitable for transplantation should be transplanted as far as practicable. A tree transplantation proposal should be submitted together with the tree removal application. Trees proposed to be transplanted should preferably be transplanted from their original locations directly to their final recipient locations in one go. If this is infeasible, the trees should be held in a temporary tree nursery, preferably within the Project area, where the trees will be properly maintained.	LR2.1; LR2.2; LR2.3; LCA1; VSR1.1; VSR2.1; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3
CP06	OPC via Contractor	**No Intrusion Zones** – Where practicable, "no intrusion zones" should be designated within the Project area for protection of existing vegetation. Durable boundary fences should be erected to clearly demarcate these "no intrusion zones". No construction activities, storage of materials and vehicular access will be allowed within the "no intrusion zones" to prevent potential damage to canopies and root zones of vegetation.	LR1.1; LR1.2; LR1.4; LR2.1; LR2.2; LR2.3; LCA1
CP07	OPC via Contractor	**Temporary Tree Nurseries** – Temporary tree nurseries may be set up within the Project area at an early stage to allow small trees to grow during the construction period. By the time these trees are needed for landscape planting at the end of the construction phase, they will have grown larger, require minimal pruning and suffer much less damage during transplanting, as the moving distance from an on-site rather than off-site nursery will be much smaller. The temporary tree nurseries can also temporarily hold the existing trees to be transplanted if direct transplantation from their original locations to the final recipient location is impracticable. The locations of the temporary tree nurseries should be carefully selected so that the trees can also act as screen planting to block the views of the Project area from the VSRs during the construction phase, if practicable.	LR2.3; LCA1; VSR1.1; VSR2.1; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3
CP08	OPC via Contractor	**Advance Planting** – Advance planting should be undertaken at the earliest possible stage of the construction phase of the project. Plant species, preferably native ones, should be carefully selected to blend in with the existing preserved vegetation. Landscape planting in movable planters should also be considered as a temporary greening measure for the Project area.	LR1.1; LR1.2; LR1.4; LR2.1; LR2.2; LR2.3; LCA1; VSR1.1; VSR2.1; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3

Mitigation Code	Responsible Agent for Mitigation Implementation	Mitigation Measure	Target LR(s), LCA(s) and / or VSR(s)
CP09	OPC via Contractor	**Construction Site Hoardings** – Two types of hoardings should be considered. One is used for areas in close contact with visitors and for areas where visual intrusion is a key concern. It should be graphical and thematic, and visually 'impermeable' to block the views of construction activities from the VSRs. The other is used for areas to be viewed at a distance. It should be subtle and camouflaged so that it blends in with the surrounding landscape.	VSR1.1; VSR2.1; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3
CP10	OPC via Contractor	**Dust and Erosion Control for Exposed Soil** – Exposed soil shall be covered or "camouflaged" and watered frequently. Areas that are expected to be left with bare soil for a long period of time should be hydroseeded and / or covered with suitable protective fabrics.	LR1.1; LR1.2; LR1.4; LR2.1; LR2.2; LR2.3; LCA1; VSR1.1; VSR2.1; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3
CP11	OPC via Contractor	**Appearance of Construction Plant / Machinery** – To minimise the visual intrusion of construction activities to visitors and other VSRs, a suitable colour scheme of construction machines and plants should be adopted where possible.	VSR1.1; VSR2.1; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3
CP12	OPC via Contractor	**Construction Lighting Control** - All security floodlights for construction sites should be equipped with adjustable shield, frosted diffusers and reflective covers, and be carefully controlled to minimise light pollution and night-time glare to the VSRs.	VSR1.1; VSR2.1; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3
CP13	OPC via Contractor	**Appearance of Construction Workers** – To protect Ocean Park's image, construction workers should be required to enter the park areas with their helmets and safety vests properly stored or carried in non-transparent bags. They should also dress properly and cleanly.	VSR2.1; VSR3.1

Table 12.14: Recommended Operation Phase Mitigation Measures

Mitigation Code	Responsible Agent for Mitigation Implementation	Mitigation Measure	Target LR(s), LCA(s) and / or VSR(s)
OP01	OPC via Contractor	**Sensitive Design and Disposition** – All proposed hard structures should be sensitively designed in a manner that responds to the existing and planned landscape context, and minimises potential adverse landscape and visual impacts. The structural design should seek to reduce the apparent visual mass through the use of natural materials such as wooden frame and semi-transparent panels. Subdued tones should be considered for the colour palette with non-reflective finishes to reduce glare effect. Site specific measures, such as the disposition of the key structures closer to the northern slopes, the design of building forms as extension along the existing slope topography, the use of concave roof form and the location of ride platforms on or near the slopes to minimise structural support, should also be considered for better integration with the surroundings and minimisation of potential visual impacts.	VSR1.1; VSR2.1; VSR2.2; VSR2.3; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3

Mitigation Code	Responsible Agent for Mitigation Implementation	Mitigation Measure	Target LR(s), LCA(s) and / or VSR(s)
OP02	OPC via Contractor	**Compensatory Tree Planting** – Existing trees to be felled should be compensated as far as practicable. Native species should be proposed as far as practicable to re-create a native landscape, restore the ecological habitats and blend in with the existing native vegetation. A compensatory tree planting proposal should be submitted together with the tree removal application for approval by relevant authorities in accordance with LAO Practice Note No. 7/2007. It is recommended that approximately 608 heavy standard trees and approximately 18,202 whip trees could be planted on-site. The availability of off-site compensatory tree planting area is still subject to further investigation and agreement with relevant authorities.	LR1.1; LR1.2; LR1.4; LR2.1; LR2.2; LR2.3; LCA1; VSR1.1; VSR2.1; VSR2.2; VSR2.3; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3
OP03	OPC via Contractor	**Enhancement Planting** – Other than compensatory tree planting, additional trees, shrubs, groundcovers and lawn should also be considered to maximise greening within the redevelopment area.	LR1.1; LR1.2; LR1.4; LR2.1; LR2.2; LR2.3; LCA1; VSR1.1; VSR2.1; VSR2.2; VSR2.3; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3
OP04	OPC via Contractor	**Green Roofs and Vertical Greening** – Green Roofs and Vertical Greening should be provided where feasible and appropriate to screen and soften the hard edges of building structures.	LR2.3; LCA1; VSR1.1; VSR2.1; VSR2.2; VSR2.3; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3
OP05	OPC via Contractor	**Reprovision of Flamingo Pond** – A pond is recommended to replace the demolished Flamingo Pond as compensation for the loss of semi-natural ponds, where wildlife, such as birds, can utilise.	LR4.2; LCA1

Mitigation Code	Responsible Agent for Mitigation Implementation	Mitigation Measure	Target LR(s), LCA(s) and / or VSR(s)
OP06	OPC via Contractor	**Responsive Lighting Design** – Overall lighting design would carefully consider a reasonable level of functional and thematic lighting with due consideration of possible light pollution and night-time glare to the surroundings. Consideration shall be made by the lighting designers to the following measures: - Lighting shall be designed with due consideration of mounting height and direction of light fixtures so as not to point directly towards any sensitive receiver. - Lighting shall be arranged with due consideration of reflectance so as to avoid glare effect. - Lighting shall be regularly monitored during operation. - Lights located adjacent or in proximity to neighbours shall be carefully designed to prevent possible light intrusion. - Lighting operation schedule shall specify only lights necessary for security to be left on after business hours. - Paving materials should be selected as necessary to reduce potential glare from surface reflectance. - Particular attention should be paid to the use of lighting having a high intensity or harsher tone (e.g. metal halide lamps). - Lights shall generally be models having precise cut-off range (such as full cut-off optics where available and practicable) and if necessary be fitted with adjustable anti-glare shields.	VSR1.1; VSR2.1; VSR2.2; VSR2.3; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3
OP07	OPC via Contractor	**Woodland Compensation** – 1.53ha of affected woodland is recommended to be reinstated / compensated by 1.62ha of whip tree planting adjacent to the existing unaffected woodland and tall shrubland. Native species should be proposed as far as practicable to re-create a native landscape, restore the ecological habitats and blend in with the existing native vegetation. This is also an ecological mitigation measure as discussed in detail in **Section 10.7.3**.	LR1.4; LCA1; VSR1.1; VSR2.1; VSR2.2; VSR2.3; VSR2.4; VSR3.1; VSR3.2; VSR3.3; VSR3.4; VSR3.5; VSR4.1; VSR4.2; VSR4.3

12.11 Potential Impacts with Mitigation

Photomontages

Series of computer generated images or photomontages have been prepared to illustrate the proposed works and recommended mitigation measures. The locations of the vantage points A to G used for these images have been identified on **Figure 12.2**.

The photomontages are presented in **Figures 12.12a to 12.12j**. The photomontages show the existing conditions, after the completion of the construction phase when the primary mitigation measures have been implemented, Day 1 and Year 10 of the operation phase with the implementation of the secondary mitigation measures. Year 10 of the operation phase is designed to demonstrate predicted residual impacts, which would exist in the design year during the operation phase, 10 years after the completion of the construction phase.

Potential Landscape Impacts with Mitigation during Construction

LR1.1 – Tall shrubland

By preserving existing vegetation (CP04), setting up no intrusion zone to protect existing vegetation (CP06), advance planting (CP08) and implementing erosion control measures (such as hydroseeding) on exposed slopes (CP10), unnecessary disturbance to this LR will be minimised. However, site clearance and tree removal are unavoidable and the impact cannot be fully offset by the proposed mitigation measures. This LR is still expected to receive a **slight adverse** landscape impact during construction phase.

LR1.2 – Shrubland

By preserving existing vegetation (CP04), setting up no intrusion zone to protect existing vegetation (CP06), advance planting (CP08) and implementing erosion control measures (such as hydroseeding) on exposed slopes (CP10), unnecessary disturbance to this LR will be minimised. However, site clearance and tree removal are unavoidable and the impact cannot be fully offset by the proposed mitigation measures. This LR is still expected to receive a **slight adverse** landscape impact during construction phase.

LR1.3 – Hillside grassland

This LR is located entirely outside the Project area. No direct landscape impact is expected. No construction mitigation measure is proposed for this LR. It is expected to receive an **insubstantial** landscape impact during construction phase.

LR1.4 – Woodland

By preserving existing vegetation (CP04), setting up no intrusion zone to protect existing vegetation (CP06), advance planting (CP08) and implementing erosion control measures (such as hydroseeding) on exposed slopes (CP10), unnecessary disturbance to this LR will be minimised. However, site clearance and tree removal are unavoidable and the impact cannot be fully offset by the proposed mitigation measures. This LR is still expected to receive a **moderate adverse** landscape impact during construction phase.

LR2.1 – Planting on modified slopes

By preservation of existing vegetation (CP04), transplanting affected trees (CP05), setting up no intrusion zone to protect existing vegetation (CP06), advance planting (CP08) and implementing erosion control measures (such as hydroseeding) on exposed slopes (CP10), unnecessary disturbance to this LR will be minimised. However, site clearance and tree removal are unavoidable and the impact cannot be fully offset by the proposed mitigation measures. This LR is still expected to receive a **moderate adverse** landscape impact during construction phase.

LR2.2 – Roadside planting

By preservation of existing vegetation (CP04), transplanting affected trees (CP05), setting up no intrusion zone to protect existing vegetation (CP06), advance planting (CP08) and implementing erosion control

measures (such as hydroseeding) on exposed soil (CP10), unnecessary disturbance to this LR will be minimised. However, site clearance and tree removal are unavoidable and the impact cannot be fully offset by the proposed mitigation measures. This LR is still expected to receive a **significant adverse** landscape impact during construction phase.

LR2.3 – Amenity planting

By preservation of existing vegetation (CP04), transplanting affected trees (CP05), setting up no intrusion zone to protect existing vegetation (CP06), setting up temporary tree nursery (CP07), advance planting (CP08) and implementing erosion control measures (such as hydroseeding) on exposed soil (CP10), unnecessary disturbance to this LR will be minimised. However, site clearance and tree removal are unavoidable and the impact cannot be fully offset by the proposed mitigation measures. This LR is still expected to receive a **moderate adverse** landscape impact during construction phase.

LR3.1 – Floral species of conservation interest

Out of the 17 identified floral species of conservation interest, only one of them, which is *Platycodon grandiflorus*, is found within the Project area. The *Platycodon grandiflorus* is located at the southern end on the hillside of the Project area, which will not be affected by the construction activities. No direct landscape impact is expected. Hence, no mitigation measure is proposed for this LR, which is expected to receive an **insubstantial** landscape impact during construction phase.

LR4.1 – Coastal open water

This LR is located entirely outside the Project area. Also, the Project does not involve any reclamation, dredging or any seawall construction. No direct landscape impact is expected. Therefore, no construction mitigation is proposed for this LR. This LR is expected to receive an **insubstantial** landscape impact during construction phase.

LR4.2 – Pond

The “Flamingo Pond” and “Bird Paradise Pond” will be demolished for the implementation of the proposed construction works. No mitigation measure is considered practicable to mitigate the temporary loss of these ponds. This LR is expected to receive a **significant adverse** landscape impact during construction phase.

LR4.3 – Stream

No specific mitigation measure is considered practicable to directly mitigate the temporary loss of the natural stream section of 75m in length. This LR is expected to receive a **significant adverse** landscape impact during construction phase.

LR5.1 – Natural coastline

This LR is located entirely outside the Project area. Also, the Project does not involve any reclamation, dredging or any seawall construction. No direct landscape impact is expected. Therefore, no construction mitigation is proposed for this LR. This LR is expected to receive an **insubstantial** landscape impact during construction phase.

LCA1 – Theme park

By preservation of existing vegetation (CP04), transplanting affected trees (CP05), setting up no intrusion zone to protect existing vegetation (CP06), setting up temporary tree nursery (CP07), advance planting (CP08) and implementing erosion control measures (such as hydroseeding) on exposed slopes (CP10), unnecessary disturbance to this LCA will be minimised. However, site clearance and tree removal are unavoidable and the impact cannot be fully offset by the proposed mitigation measures. Given the scale of the Project, this LCA is still expected to receive a **moderate adverse** landscape impact during construction phase.

LCA2 – Natural hillside

This LCA is located entirely outside the Project area. No direct landscape impact is expected. Therefore, no construction mitigation is proposed for this LCA. This LCA is expected to receive an **insubstantial** landscape impact during construction phase.

LCA3 – Open water

This LCA is located entirely outside the Project area. Also, the Project does not involve any reclamation, dredging or any seawall construction. No direct landscape impact is expected. Therefore, no construction mitigation is proposed for this LCA. This LCA is expected to receive a**n insubstantial** landscape impact during construction phase.

LCA4 – Typhoon shelter

This LCA is located entirely outside the Project area. Also, the Project does not involve any reclamation, dredging or any seawall construction. No direct landscape impact is expected. Therefore, no construction mitigation is proposed for this LCA. This LCA is expected to receive an **insubstantial** landscape impact during construction phase.

LCA5 – Urban non-residential development

This LCA is located entirely outside the Project area. No direct landscape impact is expected. Therefore, no construction mitigation is proposed for this LCA. This LCA is expected to receive an **insubstantial** landscape impact during construction phase.

Potential Landscape Impacts with Mitigation during Operation

LR1.1 – Tall shrubland

By compensatory tree planting (OP02) and enhancement planting (OP03), the affected landscape will be partially restored by planting approximately 1,796 whip trees. The tree compensation ratio will be approximately 1:5.14 in terms of DBH. Although the aggregated DBH of the compensatory planting is approximately 5 times the aggregated DBH of trees lost, in Day 1 of operation, the planting in reinstated areas will be young compared to the removed tall shrubland. The landscape impact is still expected to be **slight adverse**. However, in Year 10 of operation, when the replacement planting matures and fully blends in with the existing tall shrubland, the landscape impact is expected to be **insubstantial**.

LR1.2 – Shrubland

By compensatory tree planting (OP02) and enhancement planting (OP03), the affected landscape will be partially restored by planting approximately 4 heavy standard tree and approximately 1,208 whip trees. The tree compensation ratio will be approximately 1:16.62 in terms of DBH. Although the aggregated DBH of the compensatory planting is more than 16 times the aggregated DBH of trees lost, in Day 1 of operation, the planting in reinstated areas will be young compared to the removed shrubland. The landscape impact is still expected to be **slight adverse**. However, in Year 10 of operation, when the replacement planting matures and fully blends in with the existing shrubland, the landscape impact is expected to be **insubstantial**.

LR1.3 – Hillside grassland

This LR is located entirely outside the Project area. No direct landscape impact is expected. No operation mitigation measure is proposed for this LR. It is expected to receive an **insubstantial** landscape impact during operation phase (Day 1 and Year 10).

LR1.4 – Woodland

By compensatory tree planting (OP02), enhancement planting (OP03) and woodland compensation (OP07), the affected landscape will be partially restored by planting approximately 13 heavy standard trees and approximately 8,930 whip trees. The tree compensation ratio will be approximately 1:1.14 in terms of DBH. Although the aggregated DBH of the compensatory planting is more than the aggregated DBH of trees lost, in Day 1 of operation, the planting in reinstated areas and the woodland compensation area will be young compared to the trees removed in the woodland. The landscape impact is still expected to be **moderate adverse**. However, in Year 10 of operation, when the replacement planting matures and starting to blend in with the existing woodland, the landscape impact is expected to be **slight adverse**.

LR2.1 – Planting on modified slopes

By compensatory tree planting (OP02) and enhancement planting (OP03), the affected landscape will be partially restored by planting approximately 74 heavy standard trees and approximately 584 whip trees. The tree compensation ratio will be approximately 1:0.42 in terms of DBH. In Day 1 of operation, the planting in reinstated areas will be young compared to the removed trees on modified slopes. The landscape impact is still expected to be **moderate adverse**. However, in Year 10 of operation, when the replacement planting matures, the landscape impact is expected to be **slight adverse**.

LR2.2 – Roadside planting

By compensatory tree planting (OP02) and enhancement planting (OP03), the affected landscape will be partially restored by planting approximately 10 heavy standard trees. The tree compensation ratio will be approximately 1:0.13 in terms of DBH. In Day 1 of operation, the planting in reinstated areas will be young compared to the removed roadside planting. The landscape impact is still expected to be **moderate adverse**. However, in Year 10 of operation, when the replacement planting matures, the landscape impact is expected to be **slight adverse**.

LR2.3 – Amenity planting

By compensatory tree planting (OP02), enhancement planting (OP03) and green roof and vertical greening (OP04), the affected landscape will be partially restored by planting approximately 87 heavy standard trees and approximately 5,983 whip trees. The tree compensation ratio will be approximately 1:0.47 in terms of DBH. In Day 1 of operation, the planting in reinstated areas will be young compared to the removed amenity planting. The landscape impact is still expected to be **moderate adverse**. However, in Year 10 of operation, when the replacement planting matures, the landscape impact is expected to be **slight adverse**.

LR3.1 – Floral species of conservation interest

All the identified floral species of conservation interest will not be affected by the construction activities. No direct landscape impact is expected. Hence, no mitigation measure is proposed for this LR, which is expected to receive an **insubstantial** landscape impact during operation phase (Day 1 and Year 10).

LR4.1 – Coastal open water

This LR is located entirely outside the Project area. No direct landscape impact is expected. Therefore, no operation mitigation measure is proposed for this LR. This LR is expected to receive an **insubstantial** landscape impact during operation phase (Day 1 and Year 10).

LR4.2 – Pond

The two removed semi-natural ponds “Flamingo Pond” and “Bird Paradise Pond” will be replaced by artificial indoor and outdoor pools of the Project. A new “Flamingo Pond” will be reprovided (OP05) in the existing developed area. This LR is expected to receive a **slight adverse** landscape impact during operation phase (Day1 and Year 10).

LR4.3 – Stream

No specific mitigation measure is proposed to directly compensate for the loss of the natural stream section of 75m in length. However, some parts of the diverted drainage channel are adjacent to the compensatory planting areas. Also, the preserved existing natural stream sections are partly within the woodland compensation areas. The compensatory planting will therefore enhance the overall landscape quality of the diverted drainage channels and the natural stream sections. This LR is therefore expected to receive a **moderate adverse** landscape impact during operation phase (Day 1 and Year 10).

LR5.1 – Natural coastline

This LR is located entirely outside the Project area. No direct landscape impact is expected. Therefore, no operation mitigation measure is proposed for this LR. This LR is expected to receive an **insubstantial** landscape impact during operation phase (Day 1 and Year 10).

LCA1 – Theme park

By compensatory tree planting (OP02), enhancement planting (OP03), green roof and vertical greening (OP04), reprovision of “Flamingo Pond” (OP05) and woodland compensation (OP07), the affected landscape will be largely restored. Planting of approximately 608 heavy standard trees and approximately

18,202 whip trees will be provided. Upon completion of the Project, the original landscape, which is predominantly covered with vegetation, will be replaced with hard structures of the Project with landscape planting, green roofs and vertical greening. Although the coverage of hard structures will increase, the overall landscape character as a theme park will remain unchanged. The landscape impact is therefore expected to be **slight adverse** in Day 1 of operation. In Year 10 of operation, the hard structures will still be prominent in the Project area, but the planting will blend in with the surrounding environment. The landscape impact will be **insubstantial** in Year 10 of operation.

LCA2 – Natural hillside

This LCA is located entirely outside the Project area. No direct landscape impact is expected. Therefore, no operation mitigation measure is proposed for this LCA. This LCA is expected to receive an **insubstantial** landscape impact during operation phase (Day 1 and Year 10).

LCA3 – Open water

This LCA is located entirely outside the Project area. No direct landscape impact is expected. Therefore, no operation mitigation measure is proposed for this LCA. This LCA is expected to receive an **insubstantial** landscape impact during operation phase (Day 1 and Year 10).

LCA4 – Typhoon shelter

This LCA is located entirely outside the Project area. No direct landscape impact is expected. Therefore, no operation mitigation measure is proposed for this LCA. This LCA is expected to receive an **insubstantial** landscape impact during operation phase (Day 1 and Year 10).

LCA5 – Urban non-residential development

This LCA is located entirely outside the Project area. No direct landscape impact is expected. Therefore, no operation mitigation measure is proposed for this LCA. This LCA is expected to receive an **insubstantial** landscape impact during operation phase (Day 1 and Year 10).

Table 12.15 and **Table 12.16** summarise the results of the landscape impact assessment for LRs and LCAs respectively, which are also illustrated in **Figure 12.10**. **Figure 12.13** shows a preliminary schematic landscape plan which also illustrates the proposed landscape mitigation measures.

Table 12.15: Impact Assessment for Landscape Resources

ID No.	LR Name	Significance Threshold (Unmitigated) (Insubstantial / Slight / Moderate / Significant)		Proposed Mitigation Measures	Significance Threshold (Mitigated) (Insubstantial / Slight / Moderate / Significant)		
		Construction	Operation		Construction	Operation (Day 1)	Operation (Year 10)
LR1.1	Tall shrubland	Slight adverse	Slight adverse	CP04; CP06; CP08; CP10; OP02; OP03	Slight adverse	Slight adverse	Insubstantial
LR1.2	Shrubland	Slight adverse	Slight adverse	CP04; CP06; CP08; CP10; OP02; OP03	Slight adverse	Slight adverse	Insubstantial
LR1.3	Hillside grassland	Insubstantial	Insubstantial	-	Insubstantial	Insubstantial	Insubstantial
LR1.4	Woodland	Significant adverse	Significant adverse	CP04; CP06; CP08; CP10; OP02; OP03; OP07	Moderate adverse	Moderate adverse	Slight adverse
LR2.1	Planting on modified slopes	Moderate adverse	Moderate adverse	CP04; CP05; CP06; CP08; CP10; OP02; OP03	Moderate adverse	Moderate adverse	Slight adverse
LR2.2	Roadside planting	Significant adverse	Significant adverse	CP04; CP05; CP06; CP08; CP10; OP02; OP03	Significant adverse	Moderate adverse	Slight adverse
LR2.3	Amenity planting	Significant adverse	Significant adverse	CP04; CP05; CP06; CP07; CP08; CP10; OP02; OP03; OP04	Moderate adverse	Moderate adverse	Slight adverse
LR3.1	Floral species of conservation interest	Insubstantial	Insubstantial	-	Insubstantial	Insubstantial	Insubstantial
LR4.1	Coastal open water	Insubstantial	Insubstantial	-	Insubstantial	Insubstantial	Insubstantial
LR4.2	Pond	Significant adverse	Significant adverse	OP05	Significant adverse	Slight adverse	Slight adverse
LR4.3	Stream	Significant adverse	Significant adverse	-	Significant adverse	Moderate adverse	Moderate adverse
LR5.1	Natural coastline	Insubstantial	Insubstantial	-	Insubstantial	Insubstantial	Insubstantial

Table 12.16: Impact Assessment for Landscape Character Areas

ID No.	LR Name	Significance Threshold (Unmitigated) (Insubstantial / Slight / Moderate / Significant)		Proposed Mitigation Measures	Significance Threshold (Mitigated) (Insubstantial / Slight / Moderate / Significant)		
		Construction	Operation		Construction	Operation (Day 1)	Operation (Year 10)
LCA1	Theme park	Moderate adverse	Moderate adverse	CP04; CP05; CP06; CP07; CP08; CP10; OP02; OP03; OP04; OP05; OP07	Moderate adverse	Slight adverse	Insubstantial
LCA2	Natural hillside	Insubstantial	Insubstantial	-	Insubstantial	Insubstantial	Insubstantial
LCA3	Open water	Insubstantial	Insubstantial	-	Insubstantial	Insubstantial	Insubstantial
LCA4	Typhoon shelter	Insubstantial	Insubstantial	-	Insubstantial	Insubstantial	Insubstantial
LCA5	Urban non-residential development	Insubstantial	Insubstantial	-	Insubstantial	Insubstantial	Insubstantial

Potential Visual Impacts with Mitigation during Construction

VSR1.1 – Residents at Larvotto

With mitigation, the existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to a construction site which is still large visible in daytime by residents in Block 1, Larvotto, even with screen hoardings and temporary landscape planting. In night-time, the lighting from the Project area will also be visible by this VSR. However, since night-time construction activities are not expected, only minimal lighting, which is similar to the existing lighting in the Project area, is expected to be provided. The potential visual impact is considered **moderate adverse** for daytime and **slight adverse** for night-time during the construction phase.

VSR1.2 – Residents at Lei Tung Estate

Since the existing view of this VSR is dominated by the residential buildings of Larvotto, and the view of the Project area is barely visible, the potential visual impacts, both in the daytime and night-time, are considered **insubstantial** during the construction phase.

VSR2.1 – Workers at Ocean Park

With mitigation, at locations where the Project area is visible within Ocean Park, the existing view, which is largely dominated by dense vegetation, will be replaced by the view of a construction site with screen hoardings and temporary landscape planting. However, since the vegetation within the park often partially screens the view of the Project area, the potential visual impact on this VSR is considered **slight adverse** during the construction phase for both daytime and night-time.

VSR2.2 – Staff and temporary residents at the planned Spa Hotel

Since construction of this hotel is not anticipated to complete before completion of this Project, this VSR will not be present during construction phase. Potential visual impact to this VSR is therefore not applicable during the construction phase.

VSR2.3 – Staff and temporary residents at the planned Fisherman's Wharf Hotel

Since construction of this hotel is not anticipated to complete before completion of this Project, this VSR will not be present during construction phase. Potential visual impact to this VSR is therefore not applicable during the construction phase.

VSR2.4 – Workers at shipyards along the east coast of Yuk Kwai Shan

With mitigation, the existing view of the Project area, which is largely dominated by dense vegetation but often partially obstructed by vessels in Aberdeen South Typhoon Shelter, will change to a construction site which is visible in daytime but partially screened by screen hoardings and temporary landscape planting. In night-time, the lighting from the Project area will also be partially visible by this VSR. However, since night-time construction activities are not expected, only minimal lighting, which is similar to the existing lighting in the Project area, is expected to be provided. Also, the lighting from vessels will be more

prominent than that from the Project area. The potential visual impact is considered **slight adverse** during the construction phase for both daytime and night-time.

VSR3.1 – Recreational users in Ocean Park

With mitigation, at locations where the Project area is visible within Ocean Park, the existing view, which is largely dominated by dense vegetation, will be replaced by the view of a construction site with screen hoardings and temporary landscape planting. However, since the vegetation within the park often partially screens the view of the Project area, the potential visual impact on this VSR is considered **slight adverse** during the construction phase for both daytime and night-time.

VSR3.2 – Hikers on Yuk Kwai Shan

With mitigation, the existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to a construction site which is still largely visible even with screen hoardings and temporary landscape planting in daytime. In night-time, hiking activities are not expected on this hiking trail because this trail is steep, not properly paved and not equipped with any lighting. The potential visual impact is therefore considered **slight adverse** for daytime and **insubstantial** for night-time during construction.

VSR3.3 – Hikers on the beach between Yuk Kwai Shan and Ap Lei Pai

With mitigation, the existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to a construction site which is partially visible even with screen hoardings and temporary landscape planting in daytime. In night-time, hiking activities are not expected on this hiking trail because this trail is steep, not properly paved and not equipped with any lighting. The potential visual impact is therefore considered **slight adverse** for daytime and **insubstantial** for night-time during construction.

VSR3.4 – Hikers on Ap Lei Pai

With mitigation, the existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to a construction site which is still largely visible even with screen hoardings and temporary landscape planting in daytime. In night-time, hiking activities are not expected on this hiking trail because this trail is steep, not properly paved and not equipped with any lighting. The potential visual impact is therefore considered **slight adverse** for daytime and **insubstantial** for night-time during construction.

VSR3.5 – Hikers on Brick Hill

With mitigation, the existing partially obstructed view of the Project area, which is largely dominated by dense vegetation, will change to a construction site which is still largely visible even with screen hoardings and temporary landscape planting in daytime. In night-time, hiking activities are not expected in most parts of the hiking trails, but night-time visitors to the Nam Long Shan Road Rest Garden, particularly in special occasions, such as the Mid-autumn Festival, is expected. However, the overall number of night-time visitors is expected to be low. The potential visual impact is therefore considered **slight adverse** for daytime and **insubstantial** for night-time during construction.

VSR4.1 – Travellers along Shum Wan Road

With mitigation, the existing partially obstructed view of the Project area, which is largely dominated by dense vegetation, will change to a construction site which is partially visible with screen hoardings and temporary landscape planting in daytime. In night-time, the lighting from the Project area will also be partially visible by this VSR. However, since night-time construction activities are not expected, only minimal lighting, which is similar to the existing lighting in the Project area, is expected to be provided. The potential visual impact is considered **slight adverse** during the construction phase for both daytime and night-time.

VSR4.2 – Travellers along Ap Lei Chau Praya Road

With mitigation, the existing view of the Project area, which is largely dominated by dense vegetation, will change to a construction site which is partially visible with screen hoardings and temporary landscape planting in daytime, but only near the end of Ap Lei Chau Praya Road near the roundabout. In night-time, the lighting from the Project area will also be partially visible by this VSR at the same location. However, since night-time construction activities are not expected, only minimal lighting, which is similar to the existing lighting in the Project area, is expected to be provided. Also, the lighting from vessels will be more prominent than that from the Project area. The potential visual impact is considered **slight adverse** for daytime and **insubstantial** for night-time during the construction phase.

VSR4.3 – Boat users in Aberdeen Channel

With mitigation, the existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to a construction site which is partially visible with screen hoardings and temporary landscape planting in daytime. In night-time, the lighting from the Project area will also be partially visible by this VSR. However, since night-time construction activities are not expected, only minimal lighting, which is similar to the existing lighting in the Project area, is expected to be provided. The potential visual impact is considered **slight adverse** during the construction phase for both daytime and night-time.

Potential Visual Impacts with Mitigation during Operation

VSR1.1 – Residents at Larvotto

With mitigation, the existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will be replaced by the view of the Water Park dominated by hard structures such as pools with landscape planting, green roofs and vertical greening, which are still young in Day 1 as shown in **Figure 12.12e**. In night-time, the lighting from the Water Park will be visible by this VSR as shown in **Figure 12.12f**. However, the overall lighting of the Water Park is expected to be similar to the existing lighting in the Project area. In Day 1 of operation, the potential visual impact is considered **moderate adverse** for daytime and **slight adverse** for night-time. In Year 10 of operation, the planting within the Water Park will be mature and have a better screening effect on the hard structures in daytime and lighting in night-time. The potential visual impact will be lessened to **slight adverse** for daytime and **insubstantial** in night-time 10 years after completion of the Project.

VSR1.2 – Residents at Lei Tung Estate

Since the existing view of this VSR is dominated by the residential buildings of Larvotto, and the view of the Project area is barely visible, the potential visual impacts, both in the daytime and night-time, are considered **insubstantial** during the operation phase (Day 1 and Year 10).

VSR2.1 – Workers at Ocean Park

With mitigation, at locations where the Project area is visible within Ocean Park, the existing view, which is largely dominated by dense vegetation, will be replaced by the view of the predominant hard structures of the Water Park with pre-mature landscape planting, green roofs and vertical greening in Day 1 of operation. The potential visual impact on this VSR is considered **slight adverse** in Day 1 of operation for both daytime and night-time. As the landscape planting in the Water Park matures in Year 10 of operation, thereby better screen off the hard structures in the daytime and shield the lighting in night-time, the potential visual impact is expected to be **slight adverse** for daytime and **insubstantial** in night-time in Year 10 of operation.

VSR2.2 – Staff and temporary residents at the planned Spa Hotel

Since construction of this hotel is not anticipated to complete before completion of this Project, this VSR will not be present by Day 1 of operation. Potential visual impact to this VSR is therefore not applicable by Day 1 of operation. However, by Year 10 of operation, with mitigation, the existing view of the Project area, which is dominated by dense vegetation but partially blocked by existing vegetation, will be replaced by the view of the predominant hard structures of the Water Park with landscape planting, green roofs and vertical greening, which can screen the hard structures in the daytime and shield the lighting in night-time, as shown in **Figure 12.12i** and **Figure 12.12j**. The potential visual impact on this VSR is considered **slight adverse** for daytime and **insubstantial** in night-time in Year 10 of operation.

VSR2.3 – Staff and temporary residents at the planned Fisherman's Wharf Hotel

Since construction of this hotel is not anticipated to complete before completion of this Project, this VSR will not be present by Day 1 of operation. Potential visual impact to this VSR is therefore not applicable by Day 1 of operation. However, by Year 10 of operation, with mitigation, the existing view of the Project area, which is dominated by dense vegetation but partially screened by roadside trees, will be replaced by the view of the predominant hard structures of the Water Park with roadside planting, landscape planting, green roofs and vertical greening, which can screen the hard structures in the daytime and shield the lighting in night-time, as shown in **Figure 12.12g** and **Figure 12.12h**. However, hard structures will still be partially visible due to the short viewing distance. The potential visual impact on this VSR is considered **slight adverse** for both daytime and night-time in Year 10 of operation.

VSR2.4 – Workers at shipyards along the east coast of Yuk Kwai Shan

With mitigation, the existing view of the Project area, which is largely dominated by dense vegetation but often partially obstructed by vessels in Aberdeen South Typhoon Shelter, will change to the predominate hard structures of the Water Park with pre-mature landscape planting, green roofs and vertical greening in Day 1 of operation. In night-time, the lighting from the Water Park will also be partially visible by this VSR. However, the lighting from vessels will be more prominent than that from the Water Park. The potential visual impact is considered **slight adverse** for daytime and **insubstantial** in night-time in Day 1 of

operation phase. In Year 10 of operation when the planting in the Water Park matures and better screens the hard structures, the potential visual impact as expected to be **insubstantial** for both daytime and night-time.

VSR3.1 – Recreational users in Ocean Park

With mitigation, at locations where the Project area is visible within Ocean Park, the existing view, which is largely dominated by dense vegetation, will be replaced by the view of the predominant hard structures of the Water Park with pre-mature landscape planting, green roofs and vertical greening in Day 1 of operation. The potential visual impact on this VSR is considered **slight adverse** in Day 1 of operation for both daytime and night-time. As the landscape planting in the Water Park matures in Year 10 of operation, thereby better screen off the hard structures in the daytime and shield the lighting in night-time, the potential visual impact is expected to be **slight adverse** for daytime and **insubstantial** in night-time.

VSR3.2 – Hikers on Yuk Kwai Shan

With mitigation, the existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to the predominant hard structures of the Water Park with pre-mature landscape planting, green roofs and vertical greening in Day 1 of operation as shown in **Figure 12.12a**. The potential visual impact is considered **slight adverse** in daytime in Day 1 of operation. The potential visual impact will remain **slight adverse** in Year 10 of operation because the hard structures of the Water Park will still be partially visible even when the planting in the Water Park matures. In night-time, hiking activities are not expected on this hiking trail because this trail is steep, not properly paved and not equipped with any lighting. The potential visual impact is therefore considered **insubstantial** for night-time during operation (Day 1 and Year 10).

VSR3.3 – Hikers on the beach between Yuk Kwai Shan and Ap Lei Pai

With mitigation, the existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to the predominant hard structures of the Water Park with pre-mature landscape planting, green roofs and vertical greening in Day 1 of operation as shown in **Figure 12.2b**. The potential visual impact is considered **slight adverse** in daytime in Day 1 of operation. The potential visual impact will remain **slight adverse** in Year 10 of operation because the hard structures of the Water Park will still be partially visible even when the planting in the Water Park matures. In night-time, hiking activities are not expected on this hiking trail because this trail is steep, not properly paved and not equipped with any lighting. The potential visual impact is therefore considered **insubstantial** for night-time during operation (Day 1 and Year 10).

VSR3.4 – Hikers on Ap Lei Pai

With mitigation, the existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to the predominant hard structures of the Water Park with pre-mature landscape planting, green roofs and vertical greening in Day 1 of operation as shown in **Figure 12.12c**. The potential visual impact is considered **slight adverse** in daytime in Day 1 of operation. The potential visual impact will remain **slight adverse** in Year 10 of operation because the hard structures of the Water Park will still be partially visible even when the planting in the Water Park matures. In night-time, hiking activities are not expected on this hiking trail because this trail is steep, not properly paved and not equipped with any

lighting. The potential visual impact is therefore considered **insubstantial** for night-time during operation (Day 1 and Year 10).

VSR3.5 – Hikers on Brick Hill

With mitigation, the existing partially obstructed view of the Project area, which is largely dominated by dense vegetation, will change to the predominant hard structures of the Water Park with pre-mature landscape planting, green roofs and vertical greening in Day 1 of operation. The potential visual impact is considered **slight adverse** in daytime in Day 1 of operation. The potential visual impact will remain **slight adverse** in Year 10 of operation because the hard structures of the Water Park will still be partially visible even when the planting in the Water Park matures. In night-time, hiking activities are not expected in most parts of the hiking trails, but night-time visitors to the Nam Long Shan Road Rest Garden, particularly in special occasions, such as the Mid-autumn Festival, is expected. However, the overall number of night-time visitors is expected to be low. The potential visual impact is therefore considered **insubstantial** for night-time during operation (Day 1 and Year 10).

VSR4.1 – Travellers along Shum Wan Road

With mitigation, the existing partially obstructed view of the Project area, which is largely dominated by dense vegetation, will change to the predominant hard structures of the Water Park with pre-mature landscape planting, green roofs and vertical greening in daytime Day 1 of operation. In night-time, the lighting from the Water Park will also be visible by this VSR. However, the overall lighting of the Water Park is expected to be similar to the existing lighting in the Project area. The potential visual impact is considered **slight adverse** in Day 1 of operation for both daytime and night-time. In Year 10 of operation, when planting within the Water Park becomes mature, hard structures and lighting will be further screened by vegetation. However, given the potentially short viewing distance, the potential visual impact will remain **slight adverse** in Year 10 of operation for both daytime and night-time.

VSR4.2 – Travellers along Ap Lei Chau Praya Road

With mitigation, the existing view of the Project area, which is largely dominated by dense vegetation, will change to the predominant hard structures of the Water Park with pre-mature landscape planting, green roofs and vertical greening in Day 1 of operation. This view is visible only at the end of Ap Lei Chau Praya Road near the roundabout. In night-time, the lighting from the Water Park will also be partially visible by this VSR at the same location. However, the overall lighting of the Water Park is expected to be similar to the existing lighting in the Project area. Also, the lighting from vessels will be more prominent than that from the Project area. The potential visual impact is considered **slight adverse** for daytime and **insubstantial** for night-time in Day 1 of operation. As the landscape planting with the Water Park matures and further screens the hard structures, the potential visual impact will become **insubstantial** for both daytime and night-time 10 years after completion of the Project.

VSR4.3 – Boat users in Aberdeen Channel

With mitigation, the existing unobstructed view of the Project area, which is largely dominated by dense vegetation, will change to the predominant hard structures of the Water Park with pre-mature landscape planting, green roofs and vertical greening in Day 1 of operation as shown in **Figure 12.12d**. In night-time, the lighting from the Water Park will also be visible by this VSR. However, the overall lighting of the Water Park is expected to be similar to the existing lighting in the Project area. The potential visual impact is

considered **slight adverse** in Day 1 of operation for both daytime and night-time. In Year 10 of operation, the mature planting will better screen off the hard structures, which will still be partially visible by this VSR. Given the potentially short viewing distance, the potential visual impact is expected to remain **slight adverse** 10 years after completion of the Project for both daytime and night-time.

Table 12.17 summarises the results of the visual impact assessment, which are also illustrated in **Figure 12.11**.

Table 12.17: Visual Impact Assessment

ID No.	VSR Name	Significance Threshold (Unmitigated) (Insubstantial / Slight / Moderate / Significant)		Proposed Mitigation Measures	Significance Threshold (Mitigated) (Insubstantial / Slight / Moderate / Significant)		
		Construction	Operation		Construction	Operation (Day 1)	Operation (Year 10)
VSR1.1	Residents at Larvotto	Moderate adverse (daytime and night-time)	Moderate adverse (daytime and night-time)	CP01; CP02; CP03; CP04; CP05; CP07; CP08; CP09; CP10; CP11; CP12; OP01; OP02; OP03; OP04; OP06; OP07	Moderate adverse in daytime; slight adverse in night-time	Moderate adverse in daytime; slight adverse in night-time	Slight adverse in daytime; insubstantial in night-time
VSR1.2	Residents at Lei Tung Estate	Insubstantial (daytime and night-time)	Insubstantial (daytime and night-time)	-	Insubstantial (daytime and night-time)	Insubstantial (daytime and night-time)	Insubstantial (daytime and night-time)
VSR2.1	Workers at Ocean Park	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)	CP01; CP02; CP03; CP04; CP05; CP07; CP08; CP09; CP10; CP11; CP12; CP13; OP01; OP02; OP03; OP04; OP06; OP07	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)	Slight adverse in daytime; insubstantial in night-time
VSR2.2	Staff and temporary residents at the planned Spa Hotel	N/A	N/A for Day 1; slight adverse (daytime and night-time) for Year 10	OP01; OP02; OP03; OP04; OP06; OP07	N/A	N/A	Slight adverse in daytime; insubstantial in night-time
VSR2.3	Staff and temporary residents at the planned Fisherman's Wharf Hotel	N/A	N/A for Day 1; slight adverse (daytime and night-time) for Year 10	OP01; OP02; OP03; OP04; OP06; OP07	N/A	N/A	Slight adverse (daytime and night-time)
VSR2.4	Workers at shipyards along the east coast of Yuk Kwai Shan	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)	CP01; CP02; CP03; CP04; CP05; CP07; CP08; CP09; CP10; CP11; CP12; OP01; OP02; OP03; OP04; OP06; OP07	Slight adverse (daytime and night-time)	Slight adverse in daytime; insubstantial in night-time	Insubstantial (daytime and night-time)
VSR3.1	Recreational users in Ocean Park	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)	CP01; CP02; CP03; CP04; CP05; CP07; CP08; CP09; CP10; CP11; CP12; CP13; OP01; OP02; OP03; OP04; OP06; OP07	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)	Slight adverse in daytime; insubstantial in night-time
VSR3.2	Hikers on Yuk Kwai Shan	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)	CP01; CP02; CP03; CP04; CP05; CP07; CP08; CP09; CP10; CP11; CP12; OP01; OP02; OP03; OP04; OP06; OP07	Slight adverse in daytime; insubstantial in night-time	Slight adverse in daytime; insubstantial in night-time	Slight adverse in daytime; insubstantial in night-time

ID No.	VSR Name	Significance Threshold (Unmitigated) (Insubstantial / Slight / Moderate / Significant)		Proposed Mitigation Measures	Significance Threshold (Mitigated) (Insubstantial / Slight / Moderate / Significant)		
		Construction	Operation		Construction	Operation (Day 1)	Operation (Year 10)
VSR3.3	Hikers on the beach between Yuk Kwai Shan and Ap Lei Pai	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)	CP01; CP02; CP03; CP04; CP05; CP07; CP08; CP09; CP10; CP11; CP12; OP01; OP02; OP03; OP04; OP06; OP07	Slight adverse in daytime; insubstantial in night-time	Slight adverse in daytime; insubstantial in night-time	Slight adverse in daytime; insubstantial in night-time
VSR3.4	Hikers on Ap Lei Pai	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)	CP01; CP02; CP03; CP04; CP05; CP07; CP08; CP09; CP10; CP11; CP12; OP01; OP02; OP03; OP04; OP06; OP07	Slight adverse in daytime; insubstantial in night-time	Slight adverse in daytime; insubstantial in night-time	Slight adverse in daytime; insubstantial in night-time
VSR3.5	Hikers on Brick Hill	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)	CP01; CP02; CP03; CP04; CP05; CP07; CP08; CP09; CP10; CP11; CP12; OP01; OP02; OP03; OP04; OP06; OP07	Slight adverse in daytime; insubstantial in night-time	Slight adverse in daytime; insubstantial in night-time	Slight adverse in daytime; insubstantial in night-time
VSR4.1	Travellers along Shum Wan Road	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)	CP01; CP02; CP03; CP04; CP05; CP07; CP08; CP09; CP10; CP11; CP12; OP01; OP02; OP03; OP04; OP06; OP07	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)
VSR4.2	Travellers along Ap Lei Chau Praya Road	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)	CP01; CP02; CP03; CP04; CP05; CP07; CP08; CP09; CP10; CP11; CP12; OP01; OP02; OP03; OP04; OP06; OP07	Slight adverse in daytime; insubstantial in night-time	Slight adverse in daytime; insubstantial in night-time	Insubstantial (daytime and night-time)
VSR4.3	Boat users in Aberdeen Channel	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)	CP01; CP02; CP03; CP04; CP05; CP07; CP08; CP09; CP10; CP11; CP12; OP01; OP02; OP03; OP04; OP06; OP07	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)	Slight adverse (daytime and night-time)

12.12 Cumulative Impacts

No interfacing or concurrent project has been identified as stated in **Section 2.12**. No cumulative landscape and visual impact is therefore anticipated.

12.13 Summary

Review of Planning and Development Control Framework

The entire Project area is within the land use type "Other Specified Uses" "OU" for "Ocean Park" only. The planning intention of this zone is primarily for comprehensively planed low-density and generally low- to medium-rise marine-themed park development in Hong Kong with related retail, dining and entertainment facilities serving visitors as well as the general public. Height restrictions apply to buildings in this zone. The Project is in line with the planning intention of this "OU" zone. No re-zoning under Section 12A of the Town Planning Ordinance will be required for the implementation of the Project. However, should the building height restrictions of this "OU" zone be violated by the proposed redevelopment, planning application under Section 16 of the Town Planning Ordinance will be required.

Summary of Potential Impact on Existing Trees

To facilitate implementation of the Project, 70 dead trees are proposed to be removed, 1 tree is recommended to be retained on site with pruning, 65 trees are proposed to be transplanted, and 1,613 trees (including 84 *Leucaena leucocephala*) are proposed to be felled. Compensatory tree planting will be provided as far as practicable to compensate for the loss of existing trees due to this Project. Recommended on-site compensatory tree planting includes approximately 608 heavy standard trees (with DBH 0.1m) and approximately 18,202 whip trees (with DBH 0.01m). Off-site compensation will be further explored as far as practicable within the lot boundary of Ocean Park, such as the area currently occupied by project site office which has a potential of accommodating approximately 120 nos. of heavy standard trees. The availability of off-site compensatory tree planting area is still subject to further investigation and agreement with relevant authorities.

Summary of Sources of Potential Landscape and Visual Impacts

During the construction phase, sources of potential landscape and visual impacts would arise from the following:

- Site clearance for the proposed structures, particularly at the existing woodland and tall shrubland area.

During the operation phase, sources of potential landscape and visual impacts would arise from the following:

- Operation of the Indoor Zone of the Water Park (with a wave pool, lazy river, play structure, water slides, surf-rider, various pools, F&B facilities, E&M utilities, back of house and car-parking;
- Operation of the Outdoor Zone of the Water Park (with a wave pool, lazy river, water slides, ride platforms, various pools, 'sea turtle' exhibit and some small-scale F&B facilities; and
- Operation of the General Approach Area with coach and taxi drop-off point and EVA.

Summary of Recommended Landscape and Visual Mitigation Measures

Proposed construction phase mitigation measures comprise the following (described in detail in **Table 12.13**):

CP01 – Minimisation of Construction Period;

CP02 – Minimisation of Works Areas;

CP03 – Construction Site Controls;

CP04 – Preservation of Existing Vegetation;

CP05 – Transplantation of Existing Trees;

CP06 – No Intrusion Zones;

CP07 – Temporary Tree Nurseries;

CP08 – Advance Planting;

CP09 – Construction Site Hoardings;

CP10 – Dust and Erosion Control for Exposed Soil;

CP11 – Appearance of Construction Plant / Machinery;

CP12 – Construction Lighting Control; and

CP13 – Appearance of Construction Workers.

Proposed operation phase mitigation measures comprise the following (described in detail in **Table 12.14**):

OP01 – Sensitive Design and Disposition;

OP02 – Compensatory Tree Planting;

OP03 – Enhancement Planting;

OP04 – Green Roofs and Vertical Greening;

OP05 – Reprovision of Flamingo Pond;

OP06 – Responsive Lighting Design; and

OP07 – Woodland Compensation.

Summary of Predicted Landscape and Visual Impacts

Construction Phase

The following LRs are expected to receive a **significant adverse** residual impact during construction.

LR2.2 – Roadside planting;

LR4.2 – Pond; and

LR4.3 – Stream.

The following LRs, LCA and VSR are expected to receive a **moderate adverse** residual impact during construction.

LR1.4 – Woodland;

LR2.1 – Plantation on modified slopes;

LR2.3 – Amenity planting;

LCA1 – Theme park; and

VSR1.1 – Residents at Larvotto (daytime).

The following LRs and VSRs are expected to receive a **slight adverse** residual impact during construction.

LR1.1 – Tall shrubland;

LR1.2 – Shrubland;

VSR1.1 – Residents at Larvotto (night-time);

VSR2.1 – Workers at Ocean Park (daytime and night-time);

VSR2.4 – Workers at shipyards along the east coast of Yuk Kwai Shan (daytime and night-time);

VSR3.1 – Recreational users in Ocean Park (daytime and night-time);

VSR3.2 – Hikers on Yuk Kwai Shan (daytime);

VSR3.3 – Hikers on the beach between Yuk Kwai Shan and Ap Lei Pai (daytime);

VSR3.4 – Hikers on Ap Lei Pai (daytime);

VSR3.5 – Hikers on Brick Hill (daytime);

VSR4.1 – Travellers along Shum Wan Road (daytime and night-time);

VSR4.2 – Travellers along Ap Lei Chau Praya Road (daytime); and

VSR4.3 – Boat users in Aberdeen Channel (daytime and night-time).

Potential impact is not applicable to the following VSRs during construction.

VSR2.2 – Staff and temporary residents at the planned Spa Hotel; and

VSR2.3 – Staff and temporary residents at the planned Fisherman's Wharf Hotel.

All other LRs, LCAs and VSRs are expected to experience **insubstantial** residual impact during construction.

Day 1 of Operation Phase

The following LRs and VSR are expected to receive a **moderate adverse** residual impact in Day 1 of operation.

LR1.4 – Woodland;

LR2.1 – Planting on modified slopes;

LR2.2 – Roadside planting;

LR2.3 – Amenity planting;

LR4.3 – Stream; and

VSR1.1 – Residents at Larvotto (daytime).

The following LRs, LCA and VSRs are expected to receive a **slight adverse** residual impact in Day 1 of operation.

LR1.1 – Tall shrubland;

LR1.2 – Shrubland;

LR4.2 – Pond;

LCA1 – Theme park;

VSR1.1 – Residents at Larvotto (night-time);

VSR2.1 – Workers at Ocean Park (daytime and night-time);

VSR2.4 – Workers at shipyards along the east coast of Yuk Kwai Shan (daytime);

VSR3.1 – Recreational users in Ocean Park (daytime and night-time);

VSR3.2 – Hikers on Yuk Kwai Shan (daytime);

VSR3.3 – Hikers on the beach between Yuk Kwai Shan and Ap Lei Pai (daytime);

VSR3.4 – Hikers on Ap Lei Pai (daytime);

VSR3.5 – Hikers on Brick Hill (daytime);

VSR4.1 – Travellers along Shum Wan Road (daytime and night-time);

VSR4.2 – Travellers along Ap Lei Chau Praya Road (daytime); and

VSR4.3 – Boat users in Aberdeen Channel (daytime and night-time).

Potential impact is not applicable to the following VSRs in Day 1 of operation.

VSR2.2 – Staff and temporary residents at the planned Spa Hotel; and

VSR2.3 – Staff and temporary residents at the planned Fisherman's Wharf Hotel.

All other LRs, LCAs and VSRs are expected to experience **insubstantial** residual impact in Day 1 of operation.

Year 10 of Operation Phase

The following LR is expected to receive a **moderate adverse** residual impact in Year 10 of operation.

LR4.3 – Stream.

The following LRs and VSRs are expected to receive a **slight adverse** residual impact in Year 10 of operation.

LR1.4 – Woodland;

LR2.1 – Planting on modified slopes;

LR2.2 – Roadside planting;

LR2.3 – Amenity planting;

LR4.2 – Pond;

VSR1.1 – Residents in Larvotto (daytime);

VSR2.1 – Workers at Ocean Park (daytime);

VSR2.2 – Staff and temporary residents at the planned Spa Hotel (daytime);

VSR2.3 – Staff and temporary residents at the planned Fisherman's Wharf Hotel (daytime and night-time);

VSR3.1 – Recreational users in Ocean Park (daytime);

VSR3.2 – Hikers on Yuk Kwai Shan (daytime);

VSR3.3 – Hikers on the beach between Yuk Kwai Shan and Ap Lei Pai (daytime);

VSR3.4 – Hikers on Ap Lei Pai (daytime);

VSR3.5 – Hikers on Brick Hill (daytime);

VSR4.1 – Travellers along Shum Wan Road (daytime and night-time); and

VSR4.3 – Boat users in Aberdeen Channel (daytime and night-time).

All other LRs, LCAs and VSRs are expected to experience **insubstantial** residual impact in Year 10 of operation.

12.14 Conclusion

Landscape Impact

With the implementation of proposed mitigation measures, the anticipated landscape impacts are generally moderate adverse to insubstantial during the construction phase due to site clearance and removal of existing vegetation. Upon completion of the Project, compensatory planting, enhancement planting, green roofs and vertical greening will be provided to compensate for the loss of vegetation during construction. A new "Flamingo Pond" will also be constructed to replace the removed semi-natural ponds. However, the loss of some of the landscape resources will not be fully compensated. The residual landscape impact in operation phase is therefore generally insubstantial with slight adverse impacts expected for some landscape resources.

Visual Impact

With the implementation of proposed mitigation measures, the anticipated visual impacts are generally slight adverse to insubstantial for daytime and largely insubstantial for night-time during the construction phase due to unobstructed or partially obstructed views of construction activities and screen hoarding. Upon completion of the Project, planting within the proposed Project can act as visual screen to visual sensitive receivers. The residual visual impact in operation phase is generally slight adverse to insubstantial in daytime and largely insubstantial in night-time with slight adverse impacts expected on some VSRs.

Overall Acceptability

Overall, in terms of Annex 10, Clause 1.1 (c) of the EIAO – TM, it is concluded that the landscape and visual impacts are acceptable with mitigation measures.