

10 Landscape and Visual Impact Assessment

10.1 Introduction

- 10.1.1 This section assesses the potential landscape and visual impacts arising from the proposed Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station (the Project²). The Project is to construct an elevated pedestrian corridor above Yuen Long Town Nullah from West Rail Long Ping Station (WRLPS) crossing over Yuen Long On Ning Road (YLONR), Castle Peak Road – Yuen Long Section (CPRYLS) to the south of Kau Yuk Road (KYR) with provision for future extension to Yuen Long South areas.
- 10.1.2 Landscape and visual impacts of any above ground structures and work areas associated with the project during both construction and operation stages within the study area will be assessed. Key elements of the proposed works are described in Chapter 1 and 2.
- 10.1.3 The assessment includes:
- a definition of the scope and contents of the study, including a description of the assessment methodology;
 - a review of the relevant planning and development control framework;
 - a review of comments received during earlier public consultations and how these comments have been addressed in the design;
 - a baseline study providing a comprehensive and accurate description of the baseline landscape resources, landscape character areas and visual sensitive receivers (VSRs);
 - identification of the potential landscape and visual impacts and prediction of their magnitude and potential significance, before and after the mitigation measures;
 - recommendation of appropriate mitigation measures and associated implementation programmes; and
 - an assessment of the acceptability or otherwise of the predicted residual impacts, according to the five criteria set out in Annex 10 of the EIAO-TM.
- 10.1.4 The landscape and visual impact assessment follows the criteria and guidelines as stated in Annexes 10 and 18 of the EIAO TM. Colour photographs showing baseline conditions, and photomontages and illustrative materials supporting conclusions are provided and the locations of all key viewpoints shall be clearly mapped. Photomontages at representative locations provide comparison between existing views, proposals on day 1 after completion without mitigation measures, on day 1

after completion with mitigation measures, and in year 10 after completion with mitigation measures in accordance with EIAO Guidance Note No. 8/2010.

10.2 Environmental Legislation, Standards and Guidelines

10.2.1 The methodology for undertaking the landscape and visual impact assessment is in accordance with Annex 10 and 18 of the Technical Memorandum on Environment Impact Assessment Process, the EIAO Guidance Note No. 8/2010 and the EIA Study Brief No. ESB-278/2014. Legislation, standards and guidelines applicable to this assessment are as follows:

- EIAO Guidance Note 8/2010 (Preparation of Landscape and Visual Impact Assessment under the EIAO);
- Town Planning Ordinance (Cap131) and Town Planning (Amendment) Ordinance;
- Environmental Impact Assessment Ordinance (Cap.499.S.16) and the Technical Memorandum on EIA Process (EIAO TM), particularly Annexes 10 and 18,
- Hong Kong Planning Standards and Guidelines Chapter 4 and Chapter 11, and
- Urban Design Guidelines for Hong Kong issued by the PlanD (2003);
- Study on Landscape Value Mapping of Hong Kong.
- Land Administration Office Instruction (LAOI) Section D-12 - Tree Preservation,
- DEVB TCW No. 07/2015 - Tree Preservation;
- DEVB TC(W) No. 2/2012 - Allocation of Space for Quality Greening on Roads;
- DEVB TC(W) No. 3/2012 - Site Coverage of Greenery for Government Building Projects;
- ETWB TCW No. 06/2015 - Maintenance of Vegetation and Hard Landscape Features;
- GEO 1/2011 - Technical Guidelines on Landscaping Treatment for Slopes. Tree Survey Methodology
- DEVB TC(W) No. 2/2013 – Greening on Footbridges and Flyovers
- ETWB TCW No. 11/2004 - Cyber Manual for Greening;
- ETWB TCW No. 29/2004 - Registration of Old and Valuable Trees, and Guidelines for their Preservation;
- ETWB No. 36/ 2004 - Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS),
- PNAP APP-152 Sustainable Building Guidelines;
- CEDD TC No. 06/2014 - Vetting Committee on Slope Appearance;
- Cyber Manual for Greening (GLTM of DEVB);
- ETWB TCW No. 13/2003A - Guidelines and Procedures for Environmental Impact Assessment of Government Projects and Proposals Planning for Provision of Noise Barriers,
- Guidelines on Tree Transplanting (9/2014), GLTM of DEVB

- Guidelines on Tree Preservation during Development (4/2015), GLTM of DEVB
- Green Infrastructure, GLTM of DEVB - Website:
http://www.greening.gov.hk/en/new_trend/green_infrastructure.html
- Measures on Tree Preservation, GLTM of DEVB - Website:
http://www.greening.gov.hk/en/management/tree_m_and_m.html#tree_maintenance

10.3 Assessment Methodology

10.3.1 Landscape and visual impacts have been assessed separately for the construction and operation phases.

10.3.2 The assessment of landscape impacts has involved the following procedures:

- **Identification of the baseline landscape resources and landscape character areas found within the study area.** This is achieved by site visit and desktop study of topographical maps, information databases and photographs.
- **Assessment of the degree of sensitivity of the landscape resources and landscape character areas and the classification (rating) of sensitivity and each landscape resources and landscape character area.** This is influenced by a number of factors including:
 - quality and maturity of landscape resources/characters;
 - importance and rarity of special landscape elements;
 - whether the landscape resources are considered to be of local, regional, national or global importance;
 - whether there are any statutory or regulatory limitations/requirements relating to the landscape resources/characters; and
 - ability of the landscape resources/characters to accommodate change.

10.3.3 The sensitivity of each landscape resource and character area is classified as follows:

High: Important landscape or landscape resource of particularly distinctive character or high importance, sensitive to relatively small changes.

Medium: Landscape or landscape resource of moderately valued landscape characteristics reasonably tolerant to change.

Low: Landscape or landscape resource of low valued landscape characteristics highly tolerant to change.

- **Identification of potential sources of landscape impacts during construction and operation phases.** These are the various elements of the construction works and operation procedures that would generate landscape impacts.
- **Identification of the magnitude of change and the classification (rating) of the magnitude of change for all landscape resources and landscape character areas.** The magnitude of the impact (or magnitude of change) depends on a number of factors including:

- scale of development;
- compatibility of the project with the surrounding landscape;
- duration of impacts, i.e. whether it is temporary (short, medium or long term), under construction and operation phases; and
- reversibility of change.

10.3.4 The magnitude of landscape impacts is classified as follows:

Large: The landscape or landscape resource would suffer major change. (beneficial or adverse)

Intermediate: The landscape or landscape resource would suffer moderate change. (beneficial or adverse)

Small: The landscape or landscape resource would suffer slight or barely perceptible change. (beneficial or adverse)

Negligible: The landscape or landscape resources would suffer no discernible change.

Nil: The landscape or landscape resources would suffer no change.

- ***Significant threshold of potential landscape impact (before mitigation) during construction and operation.*** By synthesising the magnitude of the various impacts and the sensitivity of the various landscape resources it is possible to categorise impacts in a logical, well-reasoned and consistent fashion. Table 10.1 shows the rationale for dividing the degree of significance into four thresholds, namely insubstantial, slight, moderate, and substantial, depending on the combination of a negligible-small-intermediate-large magnitude of impact and a low-medium-high degree of sensitivity of landscape resource/character.

Table 10.1 Relationship between Receptor Sensitivity and Impact Magnitude in Defining Impact Significance

Magnitude of Impact (Both beneficial and adverse impact are assessed)	Large	Moderate	Moderate / Substantial	Substantial
	Intermediate	Slight / Moderate	Moderate	Moderate / Substantial
	Small	Slight	Slight / Moderate	Moderate
	Negligible	Insubstantial	Insubstantial	Insubstantial
	Nil	Nil	Nil	Nil
		Low	Medium	High
		Receptor Sensitivity (of Landscape Resource, Landscape Character Area or VSR)		

- **Identification of potential landscape mitigation measures.** Mitigation measures may take the form of
 - adopting alternative design or revisions to the basic engineering or architectural design to prevent and/or minimize adverse impacts;
 - remedial measures such as colour and textural treatment of physical, engineering and building features; and
 - compensatory measures such as the implementation of landscape design measures (e.g. tree planting, creation of new open space etc) to compensate for unavoidable adverse impacts and to attempt to generate potentially beneficial long term impacts.

10.3.5 The significance of landscape impacts is categorised as follows:

- Substantial:** Adverse / beneficial impact where the proposal would cause significant deterioration or improvement in existing landscape quality.
- Moderate:** Adverse / beneficial impact where the proposal would cause noticeable deterioration or improvement in existing landscape quality.
- Slight:** Adverse / beneficial impact where the proposal would cause barely perceptible deterioration or improvement in existing landscape quality.
- Insubstantial:** No discernible change in the existing landscape quality.
- Nil:** No impact on the existing landscape quality.

10.3.6 A programme for the mitigation measures is provided and discussed in Section 10.9. The agencies responsible for the funding, implementation, management and maintenance of the mitigation measures are proposed in Table 10.6 and 10.7.

- **Significant threshold of residual impact after the implementation of the mitigation measures during Construction and Operation: Day 1 and Year 10.** The level of residual impact is derived from the magnitude of change which the proposed works will cause to the existing landscape resources or landscape character areas and the ability of the LRs and LCAs to tolerate change, i.e. the quality and sensitivity of the LRs and LCAs, taking into account the beneficial effects of the proposed mitigation measures. The significance threshold is derived from the matrix shown in Table 10.1.
- **Prediction of Acceptability of Impacts.** An overall assessment of the acceptability, or otherwise, of the impacts according to the five criteria set out in Annex 10 of the EIAO TM as below:

Beneficial	The proposed works will complement the landscape and visual character of its setting, follow the relevant planning objectives, and improve overall and visual quality.
Acceptable	There will be no significant effects on the landscape, no significant visual effects, and no interference with the key views due to the proposed works.

10.3.7

Acceptable with Mitigation Measures	There will be some adverse effects due to the proposed works, but the adverse effects can be eliminated, reduced or offset to a large extent by the proposed mitigation measures.
Unacceptable	There will be the adverse effects that are considered too excessive and are unable to mitigate practically.
Undetermined	Significant adverse effects are likely, but the extent to which they may occur or may be mitigated cannot be determined from the study. Further detailed study will be required for the specific effects in question.

The assessment of visual impacts has involved the following:

- **Identification of Zones of Visual Influence (ZVIs) during the construction and operation phase of the project.** This is achieved by site visit and desktop study of topographic maps and photographs, and preparation of cross-section to determine the visibility of the project from various locations.
- **Identification of Visual Sensitive Receivers (VSRs) within the Zone of Visual Influence (ZVIs) at construction and operation phases.** These are the people who would reside within, work within, play within, or travel through, the ZVIs.
- **Assessment of the degree of Sensitivity of the VSRs.** Factors considered include:
 - the type of VSRs, which is classified according to whether the person is at home, at work, at school, at play, or travelling. Those who view the impact from their homes are considered to be highly sensitive as the attractiveness or otherwise of the outlook from their home will have a substantial effect on their perception of the quality and acceptability of their home environment and their general quality of life. Those who view the impact from their workplace and at school are considered to be only moderately sensitive as the attractiveness or otherwise of the outlook will have a less important, although still material, effect on their perception of their quality of life. The degree to which this applies depends on whether the workplace is industrial, retail or commercial. Those who view the impact whilst taking part in an outdoor leisure activity may display varying sensitivity depending on the type of leisure activity. Those who view the impact whilst travelling on a public thoroughfare will also display varying sensitivity depending on the speed of travel.
 - other factors which are considered (as required by EIAO GN 8/2010) include the number of individuals, value and quality of existing views, the availability and amenity of alternative views, the duration or frequency of view, and the degree of visibility.

10.3.8 The sensitivity of VSRs is classified as follows:

- High:** The VSRs are highly sensitive to any change in their viewing experience.
- Medium:** The VSRs are moderately sensitive to any change in their viewing experience.
- Low:** The VSRs are only slightly sensitive to any change in their viewing experience.

- **Identification of relative numbers of VSRs.** This is expressed in term of whether there are few, medium or many VSRs in any one category of VSR.
- **Identification of potential sources of visual impacts.** These are the various elements of the construction works and operation procedures that would generate visual impacts.
- **Assessment of the potential magnitude of visual impacts.** Factors considered include
 - the compatibility with the surrounding landscape;
 - the duration of the impact;
 - the reversibility of the impact;
 - the scale of the impact and distance of the source of impact from the viewer; and
 - potential blockage of view.

10.3.9 The magnitude of visual impacts is classified as follows:

- Large:** The VSRs would suffer major change in their viewing experience.
- Intermediate:** The VSRs would suffer moderate change in their viewing experience.
- Small:** The VSRs would suffer small change in their viewing experience.
- Negligible:** The VSRs would suffer no discernible change in their viewing experience.

- **Identification of potential visual mitigation measures.** These may take the form of adopting alternative designs or revisions to the basic engineering and architectural design to prevent and/or minimise adverse impacts, remedial measures such as colour and textural treatment of building features, landscape and visual enhancement and tree planting to screen the roads and associated bridge structures. A programme for the mitigation measures is provided and discussed in Section 7. The agencies responsible for the funding, implementation, maintenance of the mitigation measures are identified and their approval-in-principle has been sought.
- **Prediction of the significance of visual impacts before and after the implementation of the mitigation measures.** By synthesising the magnitude of the various visual impacts and the sensitivity of the VSRs, and the numbers of VSRs that are affected, it is possible to categorise the degree of significance of the impacts in a logical, *well*-reasoned and consistent fashion. Table 10.1 shows the rationale for dividing the degree of significance into four thresholds, namely, insubstantial, slight, moderate and substantial, depending on the combination of a negligible-small-intermediate-large magnitude of impact and a low-medium-high degree of sensitivity of VSRs.

10.3.10 The significance of visual impacts is categorised as follows:

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

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

Insubstantial: No discernible change in the existing visual quality.

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

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

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

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

Insubstantial: No discernible change in the existing visual quality.

10.3.11 It is assumed that funding, implementation and maintenance agency of the mitigation measures can be satisfactorily resolved according to the principles in DEVB TCW No. 7/2015. All mitigation measures in this report are practical and achievable within the known parameters of funding, implementation and maintenance agency. The suggested agencies for the funding and implementation (and subsequent maintenance, if applicable) are indicated in Table 10.6 -10.7. Approval-in-principle to the implementation and maintenance of the proposed mitigation measures is being sought from the appropriate authorities.

10.4 Scope and Content of the Study

10.4.1.1 The study area for the landscape impact assessment will include all areas within 100m from the works limit as indicated in Drawing no. 10.1101, and the context of the Project is shown on drawing 10.1102.

10.4.1.2 The area for the visual impact assessment shall be defined by the visual envelope of the Project and associated works during the construction and operation phases. The defined visual envelope is illustrated in drawing no. 10.1401.

10.4.1.3 Detail project background and project description are provided in Chapter 1 and Chapter 2 of the report, while construction method, implementation programme, and concurrent projects are provided in section 2.6, 2.7 and 2.8 respectively.

10.4.1.4 The design of footbridge was selected out of several alternative design options by public consultation progress. Consideration of alternatives scheme and the selection of preferred options are described in section 3.1 and 3.2 respectively. The criterion for the selection was based on aesthetic quality, functional requirements,

buildability, operation performance and maintainability, creativity, and environmental impact purpose (refer to chapter 3).

- 10.4.1.5 During the public engagement conducted in March 2013 and April 2013, the public and Yuen Long District Council indicated strong support for the proposed footbridge and urged its early implementation. In addition, some DC members have requested early implementation of the proposed footbridge during the first special meeting of Traffic and Transport Committee under Yuen Long DC (DC Paper No. 65/2013) (refer to chapter 2).
- 10.4.1.6 As described in the EIA Study Brief, the scope of the Project includes:
- construction of a covered footbridge of about 540m in length and 6m clear width with staircases / lifts / escalators along Yuen Long Town Nullah from West Rail Long Ping Station to the south of the Kau Yuk Road;
 - connection of the footbridge with West Rail Long Ping Station;
 - connection of the footbridge with at-grade footways in Yuen Long On Ling Road, Castle Peak Road – Yuen Long Section and Kau Yuk Road;
 - provision at the southern end of the footbridge to allow for future extension;
 - measures for mitigating drainage impact for the sections of Yuen Long Town Nullah underneath the footbridge;
 - landscaping and streetscape works of the footpaths along both sides of Yuen Long Town Nullah between West Rail Long Ping Station and Kau Yuk Road; and
 - associated civil, road, drainage, geotechnical, traffic aids, utility, diversion street lighting, landscaping, E&M works and environmental mitigation measures and temporary traffic arrangement during construction stage.
- 10.4.2 According to the EIA Study Brief No. ESB-278 /2014, the study area for the landscape impact assessment shall include all areas within 100m extended from the boundary of the scope of the EIA study as described in section 10.4.1.1 above. The assessment of landscape character areas will include all areas within the study area. The assessment area for the visual impact assessment shall be defined by the visual envelope of the Project and associated works.
- 10.4.3 In this study, relevant Outline Development Plans (ODPs), Outline Zoning Plans (OZPs), Layout Plans and other relevant published land use plans, planning briefs and studies which may identify areas of high landscape value, open space and amenity area will be reviewed. Any guidelines on landscape strategies, landscape frameworks, urban design concepts, building height profiles, special design areas, landmarks, designated view corridors, open space networks, landscape links that may affect the appreciation of the Project and associated works will also be reviewed.
- 10.4.4 In the landscape assessment, the existing and planned landscape resources and character of the assessment areas will be described, appraised, analysed and

evaluated. Plans of suitable scale showing the baseline landscape resources and landscape character mapping of impact assessment are used to present the findings of impact assessment.

- 10.4.5 A tree survey which identifies the species and approximate numbers to be affected is included in Appendix 10.1. The assessment focus on the sensitivity of the landscape framework and its ability to accommodate change. The degree of compatibility of the Project and associated works with the existing and planned landscape settings will be identified. The landscape impact assessment quantifies the potential landscape impacts as far as possible, so as to illustrate the significance of such impacts arising from the Project and associated works. All landscape impacts are clearly mapped.
- 10.4.6 In the visual impact assessment, clear illustrations including mapping of visual impact will be provided. The assessment includes:
- Identification and plotting of visual envelope of the Project and associated works,
 - Identification of key groups of sensitive receivers within the visual envelope with regard to views from ground level, sea level and elevated vantage points,
 - Description of the visual compatibility of the Project and associated works within the surrounding, both existing and planned uses, its obstruction and interference with the key views of the adjacent areas, and
 - Description of severity of visual impacts in terms of nature, distance and number of sensitive receivers. The visual impact of the Project and associated works with and without mitigations shall be assessed, and the effectiveness of the mitigation measures shall be demonstrated.

10.5 Review of Planning and Development Control Framework

Review of the Outline Zoning Plans (OZPs)

- 10.5.1 A review of the existing and planned development framework for the proposed works and for the surroundings in Yuen Long has been considered. It aims to identify issues for the neighbouring planned land uses, to identify potential resources and sensitive receivers, and to ensure a high compatibility between the proposed project and the surroundings.
- 10.5.2 The Study Area is largely covered by OZPs. These are the Draft Yuen Long Outline Zoning Plan (No. S/YL/22) and Ping Shan Outline Zoning Plan (No. S/YL-PS/16). Based on desktop study, there will not be any impact on Draft Yuen Long Outline Zoning Plan (No. S/YL/22) and Ping Shan Outline Zoning Plan (No. S/YL-PS/16). The review of OZPs has not only included a review of the plans, but also of the

‘Notes’ and ‘Explanatory Statements’ which accompany, and form part of, these plans (refer to Drawing 10.1103).

- 10.5.3 It is considered that the proposed development and associated works are in principle following the planning intentions for the study areas as set out in the OZPs. However, the concept of proposed structures has been considered to a minimum impact. Enhanced connectivity to the public transportation and open space network from On Ning Road to Kau Yuk Road do reinforce the planning intentions of Yuen Long Urban Area.

Tentative Programme

- 10.5.4 The construction of the elevated corridor and associated works is anticipated to commence in 2018 for completion in Year 2022. It is anticipated that the development will be commissioned in phases. The tentative implementation programme is described in section 3.6, and summarized in Table 3.4 (refer to Chapter 3).

10.6 Baseline Study

- 10.6.1 The proposed footbridge are located at the town centre of Yuen Long, above Yuen Long Town Nullah from West Rail Long Ping Station (WRLPS) crossing over Yuen Long On Ning Road (YLONR), Castle Peak Road - Yuen Long Section (CPRYLS) to the south of Kau Yuk Road (KYR) with provision for future extension to Yuen Long South areas.

- 10.6.2 The proposed footbridge aligned along the centre of Yuen Long Main Nullah from the Yuen Long On Ning Road section to the Kau Yuk Road section, while the section between the Long Ping Station to Yuen Long On Ning Road will be aligned to the eastern side of the Nullah (refer to Drawing no. 10.1101-1102 for the footbridge location).

- 10.6.3 The land uses along the proposed footbridge are mainly residential and commercial mix uses, together with certain recreational uses. The dominant landscape element comes from the trees along both side of the nullah from Yuen Long On Ning Road, Castle Peak Road (Yuen Long Section) and Kau Yuk Road and the Po Fai Path, Hi Lee Path, Yuan Fat Path, Cheong Sing Path and Chung Shing Path, as well as the below rest garden and playground:

- Tai Pei Tau Rest Garden
- Chung Sing Path Playground
- Football pitch at the Hi Lee Path

Physical Landscape Resources

10.6.4 The baseline landscape resources that will be affected during the Construction Phase and Operation Phase, together with their sensitivity to change, are described in Table 10.2. In general, the landscape resources found within 100m LIA boundary were in high to medium landscape quality, some relatively mature vegetation and existing open space were classified as important resources and high in sensitivity. In addition, due to the local significant of the nullah, the Yuen Long nullah also classified as medium sensitivity although it's lack of vegetation and low landscape quality. All landscape resources identified are:

- LR1 Trees at both side of existing nullah
- LR2 Tai Pei Tau Rest Garden
- LR3 Kik Yeung Road 5-a-side Football Pitch
- LR4 Chung Sing Path Playground
- LR5 Hi Lee Path
- LR6 Yuen Fat Path
- LR7 Chung Sing Path
- LR8 Cheong Shing Path
- LR9 Po Fai Path
- LR10 Yuen Long Town Nullah
- LR11 Street and Roadside Trees
- LR12 Yuen Long Children's Playground
- LR13 Vegetation growth within rural village
- LR14 On Hing Playground
- LR15 Sai Ching Street Tennis Court and Sai Ching Street Children's Playground
- LR16 Amenity Planting Area along Long Yip Street
- LR17 Vegetation Grown within Construction Site

The locations of baseline landscape resources are mapped in Drawing 10.1201. Photo views illustrating the landscape resources within the study area are illustrated in drawing no. 10.1202-1204 inclusive. For ease of reference and co-ordination between text, tables and Drawings, each landscape resource is given an identity number.

Landscape Character Zones

10.6.5 Landscape character zones have been identified within the Study Area in accordance with the Study on Landscape Value Mapping of Hong Kong. These are described in Table 10.2 and illustrated in drawing no. 10.1301. Photo views illustrating the landscape character areas within the study area are illustrated in drawing no. 10.1302. All landscape character areas are identified as below:

- LCA1 Yuen Long Traditional Urban Landscape Character Area

- LCA2 Yuen Long Drainage Channel Landscape Area
- LCA3 Yuen Long Infrastructure Network West Rail – Long Ping Station
- LCA4 Yuen Long Miscellaneous Urban Fringe Landscape
- LCA5 Tai Kiu Tsuen Village Landscape
- LCA6 Residential Urban Landscape
- LCA7 Major Transportation Corridor Landscape

10.6.6 Three main landscape character zones have been identified within the 100m Study Area. These are described in Table 10.2 and illustrated in Drawing 10.1301.

Landscape Sensitivity to Change

10.6.7 The landscape resources and landscape character zones that will be potentially affected during the construction phase and operation phase, together with their sensitivity to change, are listed in Table 10.2.

Table 10.2 Baseline Landscape Resources (LRs) and Landscape Character Areas (LCAs) and its Sensitivity to Change

Id. No.	Landscape Resource/ Landscape Character Areas
LR1	<p><u>Trees at both side of existing nullah</u></p> <p>More than 80 nos. of existing trees line the two sides of Yuen Long Town Nullah within the 100m LIA study area. Trees are particularly lush along Hi Lee Path, Sau Fu Street, Yuen Fat Path and Chung Sing Path. Dominant species include <i>Lagerstroemia speciosa</i>, <i>Bauhinia x blakeana</i> and <i>Ficus microcarpa</i>. Those trees planted along the path are well maintained and generally in good to fair condition. However, some trees are found in poor health and form which grown on the nullah wall. The sizes are varies from 4m to 16m height. They soften the monotonous look of the nullah and provide valuable greening to the urbanized and busy Yuen Long town centre.</p> <p>All tree species are commonly found in Hong Kong, their form and health are varies in different location, therefore, its landscape quality and maturity are generally considered as medium rating, its overall sensitivity is medium.</p>

Id. No.	Landscape Resource/ Landscape Character Areas
LR2	<p><u>Tai Pei Tau Rest Garden</u></p> <p>The Rest Garden (~0.2ha) is a passive recreational space containing a sitting out area location adjacent to the open car park are in Fung Lok Lane.</p> <p>There are approximately 70 nos. of semi-mature trees planted mainly at the periphery of the rest garden. Trees are well maintained, sizes are varies from 2m to approx. 10m height. Major tree species include <i>Ficus benjamina</i>, <i>Schefflera actinophylla</i>, <i>Aleurites moluccana</i>, and <i>Callistemon viminalis</i>, and include 5 nos. of the rare and precious tree species <i>Ailanthus fordii</i>. The trees are an important element in diffusing the proposed elevated flyover and footbridge from the passive amenity space within the garden, which will not be directly affected by the works.</p> <p>The form of the vegetation are generally good with proper maintenance, besides that some mature trees are found in this LR. Those seating benches, rain-shelters, and pavilions can provide leisure sitting-out function for the local residents. Due considering its important function for the local residents and the landscape quality of this LR, its overall sensitivity is considered as high.</p>
LR3	<p><u>Kik Yeung Road 5-a-side Football Pitch</u></p> <p>The public football ground (~0.2ha) is actively use by locals for physical activities with a small seating area adjacent to Hi Lee Path adjacent to the existing nullah. It is well maintained and provides both active and passive open space adjacent to the transportation node in Yuen Long (West) Bus Terminus in On Tat Square.</p> <p>There are approximately 30 nos. of trees surrounding the football pitch which mainly comprise of <i>Bauhinia x blakeana</i>, <i>Livistona chinensis</i> and <i>Ficus microcarpa</i>. They are well maintained and sizes are generally 6m to 8m in height. One particular <i>Ficus microcarpa</i> at the Kik Yeung Road side is especially large-sized and well-formed.</p> <p>It is an active ball court and its utilization rate is high for local residents, the ball court coating and its associate's facilities are well maintained. Due considering its important function for the local residents, its overall sensitivity is considered as high.</p>
LR4	<p><u>Chung Sing Path Playground</u></p> <p>The basketball court (~0.22ha) adjacent to Chung Shing Path next to CCC Chun Kwong Primary School with 2 basketball court. The west boundary of the court is a sitting out area.</p> <p>There are approximately 34 nos. of trees surrounding this playground, comprising roughly the same quantities of <i>Aleurites moluccana</i>, <i>Crateva unilocularis</i>, <i>Bauhinia x blakeana</i>, <i>Reevesia thyrsoidea</i> and a few <i>Lagerstroemia speciosa</i>. Trees are generally in medium size varies from 8m to 10m in height.</p> <p>This playground included two active basketball court and its utilization rate is high for local residents. Its ball court facilities are well maintained by relevant department and up to standard (e.g. ball court coating, safety matt). The trees and shrubs planting are in common species, it can provide shading and leisure sitting out function for the passive area. Due considering its important function for the local residents, its overall sensitivity is considered as high.</p>

Id. No.	Landscape Resource/ Landscape Character Areas
LR5	<p><u>Hi Lee Path</u></p> <p>The western boundary of the nullah and proposed works area on Hi Lee Path (~160m) is a green corridor through Castle Peak Road to On Ning Road.</p> <p>Trees are planted in tree grilles at-grade tree pits and in raised planters with shrubs and ground cover. A leisure landscape feature in pergola and seating along with well-maintained trees species predominantly of <i>Lagerstroemia speciosa</i> and <i>Bauhinia x blakeana</i> provide providing an important visual relief to the place. There are approximately 22 nos. of trees along the nullah at Hi Lee Path. Small size trees (approx.4m height) are planted along the planter box aligning with the nullah wall, some relatively mature size trees (approx.8m to 10m height) are planted within tree pits. The trees are an important visual asset for Visual Sensitive Receivers (VSRs) in surrounding buildings and for pedestrians.</p> <p>The vegetation found within this LR are in common species, and its landscape quality is considered as medium. The leisure walking path include sitting benches and trellis which can still provide resting function for local visitors. Due considering its landscape quality and maturity are general in medium rating, its overall sensitivity is considered as medium.</p>
LR6	<p><u>Yuen Fat Path</u></p> <p>Yuen Fat Path and the north-south running section of Sau Fu Street (~160m) located on the eastern boundary of the nullah and parallel to Hi Lee Path.</p> <p>There are approximately 20 nos. of trees along this section, with small sized (approx.4m height) <i>Lagerstroemia speciosa</i> on Sau Fu Street and a large group of mature <i>Ficus microcarpa</i> (approx.8m to 10m height) on Yuen Fat Path.</p> <p>These dense tree planting is an effective buffer along the pathway and the busy Castle Peak Road (Yuen Long section).</p> <p>Some mature <i>Ficus microcarpa</i> is found within this LR and acting as an important shading trees for the local residents. Although its quality of landscape is medium in rating, due considering its maturity and important function provided, its overall sensitivity is considered as high.</p>
LR7	<p><u>Chung Sing Path</u></p> <p>This path is a major pedestrian movement (~150m) along the nullah from North of Castle Peak Road to South of Kau Yuk Road; within this context there is CCC Chun Kwong Primary School, basketball court and playground.</p> <p>There are approximately 16 nos. of trees (with approx. 8m to 10m height) planted on hard paved tree pits on the edge of the nullah, comprising mainly of <i>Aleurites moluccana</i>, <i>Spathodea campanulata</i>, <i>Melia azedarach</i> and <i>Callistemon viminalis</i>. The <i>Ficus microcarpa</i> located between CCC Chun Kwong Primary School and Chung Sing Path Playground is especially large-sized and well-formed. These trees provided an important greening element for the space.</p> <p>It is an attractive pathway where trees are generally in good health and landscape quality. The trees are also provide an important shading function for the school students adjacent. Therefore, its overall sensitivity is considered as high.</p>

Id. No.	Landscape Resource/ Landscape Character Areas
LR8	<p><u>Cheong Shing Path</u></p> <p>Cheong Shing Path (~150m) is opposite to Chung Sing Path in western side. The Rest Garden is enclosed on this walkway. Raised planter area and pergola with seating streetscape is well disturbance align with amenity trees and shrubs. This landscape quality is as peaceful amenity retreat for communities and pedestrians.</p> <p>There are approximately 5 nos. of trees located in the space, comprising <i>Acacia confusa</i>, <i>Celtis sinensis</i> and <i>Sapium sebiferum</i>. Trees are relatively young in 4m to 6m height.</p> <p>Due considering its landscape quality are general in medium rating, and the trees are found in relatively young and common species, its overall sensitivity is considered as medium.</p>
LR9	<p><u>Po Fai Path</u></p> <p>This Path (~120m) is a main passage towards public transport node of West Rail Long Ping Station and adjacent Wang Lok Street transit area.</p> <p>This LR is mainly a pedestrian access with relatively low landscape quality.</p> <p>There are approximately 8 nos. of trees located in the space, comprising of 7 nos. of small sized (4m to 5m height) <i>Bauhinia variegata</i> on raised planters along the PTI, and a mix of fruit trees e.g. <i>Clausena lansium</i>, <i>Mangifera indica</i> and <i>Dimocarpus longan</i> in roadside tree pits near Yuen Long On Ning Road.</p> <p>Although the landscape quality of this LR is low, it was still an important leisure pedestrian walkway for the residents and visitors, therefore it overall sensitivity is considered as medium.</p> <p>Po Fai Path have similar function as LR8, trees are found in common species and relatively young. Due considering its maturity are general in medium rating, and its vegetation are in relatively poor form and health, its overall sensitivity is considered as medium.</p>
LR10	<p><u>Yuen Long Town Nullah</u></p> <p>A channelised, hard paved drainage (~32m width) from north to south across Yuen Long town centre, and it is a designated view corridor and pedestrian network alongside with recreational, commercials and institutional facilities through On Ning Road to Kau Yuk Road; withhold a strong local identity in historical and cultural significances.</p> <p>Although it is lack of vegetation found within this LR and its concrete treatment was in poor appearance, due considering its significant character and importance to the Yuen Long district, its overall sensitivity is considered as medium.</p>

Id. No.	Landscape Resource/ Landscape Character Areas
LR11	<p><u>Street and Roadside Trees</u></p> <p>This LR comprises of street trees within the study area that are not covered by other LRs.</p> <p>Due to the congested urban space, trees within Yuen Long town centre are mainly found along the nullah, in/around rest gardens and playgrounds, while other street trees within the study area are mainly located in those paths with only pedestrian access.</p> <p>These trees are found e.g. next to MTR Long Ping Station, in-between Yuen Long Plaza and Kik Yeung Road PTI, along Sau Fu Street, and on Tai Pei Tau Path. Trees are generally in narrow form and mostly over 10m in height.</p> <p>Trees comprise mainly of common amenity species such as <i>Lagerstroemia speciosa</i>, <i>Ficus microcarpa</i>, <i>Bombax ceiba</i>, <i>Celtis sinensis</i> and <i>Melaleuca cajuputi</i> subsp. <i>cumingiana</i>, and generally of good to fair landscape quality.</p> <p>No trees in this LR will be affected by the projects. The vegetation found in this LR are common species in Hong Kong, it mainly provide green screening effect for the road. Its landscape quality and maturity are general in medium rating, its overall sensitivity is considered as medium.</p>
LR12	<p><u>Yuen Long Children's Playground</u></p> <p>This playground (approx. 2913 sq.m.) is located in Yuen Long Hong Lok Road.</p> <p>There are not many trees within this large playground, nevertheless all the dominant trees are of very large size and high landscape quality (over 20m height).</p> <p>There are 9 nos. of such large trees which include <i>Bombax ceiba</i>, <i>Aleurites moluccana</i>, <i>Ficus virens</i> and <i>Ficus microcarpa</i>. Other trees of lesser dominance include <i>Juniperus chinensis</i> 'Kaizuca' and <i>Murraya paniculata</i>.</p> <p>There are total approximately 20 nos. of trees surrounding this open space. This playground included two basketball court and children play facilities, which act as important function for the local residents, and those facilities are well maintained by relevant department. Due considering its important function for the local residents, and the existing trees can also provide shading for the local people, its overall sensitivity is considered as high.</p>
LR13	<p><u>Vegetation growth within rural village</u></p> <p>This LR represent the vegetation within the Tai Kiu Tsuen adjacent to the Tai Kiu Road. They are mainly <i>Ficus microcarpa</i>, <i>Ficus virens</i> and a mix of fruit trees e.g. <i>Clausena lansium</i>, <i>Mangifera indica</i> and <i>Dimocarpus longan</i> in the periphery of the village. Trees are found in mature size (generally over 10m) with high landscape quality and shading function.</p> <p>Although trees species are common in Hong Kong, it grown in mature form and provide important shading function for Tai Kiu Village. Due considering its maturity and quality of trees are high, its overall sensitivity is considered as high.</p>

Id. No.	Landscape Resource/ Landscape Character Areas
LR14	<p><u>On Hing Playground</u></p> <p>This playground (approx. 5630 sq.m.) is located in the On Leung Lane.</p> <p>There are approximately 15 trees within this playground, mainly planted within the sitting-out area along the northern side of the football pitch. Major tree species include <i>Bauhinia x blakeana</i> and <i>Lagerstroemia speciosa</i>.</p> <p>The southwest corner of the playground is dominated by a large sized (over 10m in height) <i>Celtis sinensis</i> in good condition. All trees are well maintained and generally of high to fair landscape quality. There is also a dense row of <i>Cinnamomum camphora</i> in tree pits at the south outside the playground. The sitting-out and play facilities provided an important leisure open space for the public.</p> <p>This is the only large soccer patch in the local area, therefore its utilization rate is high. The adjacent amenity trees are also high in landscape value. Due considering its important function for the local residents, its overall sensitivity is considered as high.</p>
LR15	<p><u>Sai Ching Street Tennis Court and Sai Ching street Children's Playground</u></p> <p>The Sai Ching Street Children's Playground and Sai Ching Street Tennis Court (approx. 4772 sq.m.) is located in the Sai Ching Street, in which part of it is within the landscape assessment area. The sitting-out and play facilities provided an important leisure open space for the public.</p> <p>There are approximately 50 nos. of trees located within the Sai Ching Street Children's Playground, comprising mainly of <i>Livistona chinensis</i>, <i>Araucaria heterophylla</i>, <i>Bauhinia x blakeana</i> and <i>Phoenix roebelenii</i>.</p> <p>In addition, the playground's entrance at Sai Ching Street is adorned by two fine specimens of <i>Phoenix sylvestris</i>. Trees within the playground are generally well maintained and of high to fair landscape quality.</p> <p>For the Sai Ching Street Tennis Court, there are approximately 20 nos. of trees located in the courtyard and the periphery of the tennis fields, and comprise mainly of mature (approx. 8m to 10m in height) <i>Aleurites moluccana</i> and <i>Araucaria heterophylla</i>. These trees are well maintained and of high to fair landscape quality.</p> <p>Although its planting is common and not mature, the amenity and form are considered as good. Hard landscape features like paving, pavilion are well maintained. Due considering its important function for the local residents, its overall sensitivity is considered as high.</p>

Id. No.	Landscape Resource/ Landscape Character Areas
LR16	<p><u>Amenity Planting Area along Long Yip Street</u></p> <p>This is an amenity area with sitting-out facilities. It acting as a sitting out area for the adjacent residents. Flowering trees and shrubs were well maintained by relevant government.</p> <p>There are approximately 10 nos. of trees located within this area. Dominate tree species included <i>Delonix regia</i>, <i>Roystonea regia</i>, and <i>Melaleuca cajuputi</i> subsp. <i>cumingiana</i>. Trees are generally young with size between 4 to 6m height. Shrubs species such as <i>Cordyline fruticosa</i>, <i>Alpinia speciosa</i>, and <i>Loropetalum chinense</i> f. <i>rubrum</i> were found.</p> <p>By considering its landscape quality of vegetation are high and well maintenance, and it is a rare area found with high amenity vegetation value, its overall sensitivity is considered as high.</p>
LR17	<p><u>Vegetation Grown within Construction Site</u></p> <p>Some existing trees are found along the edge of the construction site. They are over 10m in height. However, those trees are currently in poor form and landscape quality. The limited planting area and adjacent construction activities were also affecting the vegetation's health. The sensitivity of this LR is low due to its poor form and health of vegetation growth.</p>
LCA1	<p><u>Yuen Long Traditional Urban Landscape Character Area</u></p> <p>This area covers the core of Yuen Long town typically comprises a small area of narrow streets on orthogonal grid with medium rise older building stock.</p> <p>Vegetation is very limited to occasional street tree planting or amenity planting in sitting-out areas. However, the formation of the building character is consider significance to the Yuen Long district and medium in importance. Therefore, the overall sensitivity shall be medium</p> <p>Landscape resources included in this LCA: LR11, LR15.</p>
LCA2	<p><u>Yuen Long Drainage Channel Landscape Area</u></p> <p>This area is occupied primarily medium rise older building block with mixture use at ground level and residential properties above. Drainage Channel is hard paved alongside with line of trees provided shady resting area on both side of narrow pathway created an intimate scale amenity area.</p> <p>Collective pedestrian movement and commercial activities adjacent with small recreational ground created provided both active and passive vibrant character to the area.</p> <p>Similar as LR10, although it is lack of vegetation found within this area and its concrete treatment was in poor appearance, due considering its significant character and importance to the Yuen Long district, its overall sensitivity is considered as medium.</p> <p>Landscape resources included in this LCA: LR1, LR5, LR6, LR7, LR8, LR9, LR10.</p>

Id. No.	Landscape Resource/ Landscape Character Areas
LCA3	<p><u>Yuen Long Infrastructure Network West Rail – Long Ping Station</u></p> <p>This LCA refers to the Yuen Long infrastructure network of West Rail – Long Ping Station.</p> <p>There is no vegetation growth and its appearance is general poor. There is no landscape value in this LCA. Its overall sensitivity is low.</p>
LCA4	<p><u>Yuen Long Miscellaneous Urban Fringe Landscape</u></p> <p>This area comprised with institution, leisure, and industrial settlement, they were generally distributed all around the Yuen Long district in organic form.</p> <p>This LCA have similar character with LCA1, vegetation growth was limited due the site constraint. However, there are still some landscape resources found within this LCA. The overall sensitivity is considered as medium.</p> <p>Landscape resources included in this LCA: LR2, LR3, LR4, LR11, LR12, LR14, LR16, LR17.</p>
LCA5	<p><u>Tai Kiu Tsuen Village Landscape</u></p> <p>This landscape character area covers approximately 2 ha, which has its own history around several hundred years. The landscape setting was distinguish from the surrounding Yuen Long Urban town. Two to three storey of rural housing were scattered within that area with several mature size trees.</p> <p>Trees are found in mature size within this area, and the landscape character is distinguish in Yuen Long district. By considering on its high significant and maturity of the landscape. The overall sensitivity is considered as high.</p> <p>Landscape resources included in this LCA: LR13</p>
LCA6	<p><u>Residential Urban Landscape</u></p> <p>Several high-rise residential buildings were found. They were relatively newer and under proper maintenance comparing with its surrounding low-rise settlement. However, vegetation is still limited by the overall congesting urban form. No mature vegetation is found. Therefore, its overall sensitivity is considered as low.</p>
LCA7	<p><u>Major Transportation Corridor Landscape</u></p> <p>This landscape character area represent the major traffic road included Castle Peak Road, On Ling Road, and Kau Yuk Road. Those road and the existing nullah were bisecting the site area into several groups of building. The road was under heavy traffic, and lack of vegetation growth. The landscape quality and maturity shall be low. Therefore the overall sensitivity of this LCA is considered as low.</p>

Table 10.2b Landscape Resources / Landscape Character Areas and their sensitivity to change

Id. No.	Landscape Resources / Landscape Character Areas	Quality (High/Medium/Low)	Importance and Rarity (High/Medium /Low)	Ability to accommodate change (High/Medium/ Low)	Importance of landscape resources in local and regional context (Local/Regional/ National/Global)	Maturity (High/Medium/ Low)	Sensitivity to Change (Low, Medium, High)
Landscape Resources (LRs)							
LR1	Trees at both side of existing nullah	Medium	Medium	Medium	Local	Medium	Medium
LR2	Tai Pei Tau Rest Garden	Medium	High	Medium	Local	High	High
LR3	Kik Yeung Road 5-a-side Football Pitch	Medium	High	Medium	Local	Medium	High
LR4	Chung Sing Path Playground	Medium	High	Medium	Local	Medium	High
LR5	Hi Lee Path	Medium	Medium	Medium	Local	Medium	Medium
LR6	Yuen Fat Path	Medium	Medium	Medium	Local	High	High
LR7	Chung Sing Path	High	Medium	Medium	Local	High	High
LR8	Cheong Shing Path	Medium	Medium	Medium	Local	Low	Medium
LR9	Po Fai Path	Low	High	Medium	Local	Medium	Medium
LR10	Yuen Long Town Nullah	Low	High	High	Local	Low	Medium
LR11	Street and Roadside Trees	Medium	Medium	Medium	Local	Medium	Medium
LR12	Yuen Long Children's Playground	High	High	Medium	Local	Medium	High

Id. No.	Landscape Resources / Landscape Character Areas	Quality (High/Medium/Low)	Importance and Rarity (High/Medium /Low)	Ability to accommodate change (High/Medium/ Low)	Importance of landscape resources in local and regional context (Local/Regional/ National/Global)	Maturity (High/Medium/ Low)	Sensitivity to Change (Low, Medium, High)
LR13	Vegetation growth within rural village	High	High	Medium	Local	High	High
LR14	On Hing Playground	High	High	Medium	Local	High	High
LR15	Sai Ching Street Tennis Court and Sai Ching street Children's Playground	High	High	Medium	Local	Medium	High
LR16	Amenity Planting Area along Long Yip Street	High	High	Medium	Local	Medium	High
LR17	Vegetation Grown within Construction Site	Low	Low	High	Local	Medium	Low
Landscape Character Areas (LCAs)							
LCA1	Yuen Long Traditional Urban Landscape Character Area	Low	Medium	Medium	Local	Medium	Medium
LCA2	Yuen Long Drainage Channel Landscape Area	Low	High	High	Local	Low	Medium
LCA3	Yuen Long Infrastructure Network West Rail – Long Ping Station	Low	Medium	Medium	Local	Low	Low
LCA4	Yuen Long Miscellaneous Urban Fringe Landscape	Medium	Medium	Medium	Local	Medium	Medium
LCA5	Tai Kiu Tsuen Village Landscape	High	High	Medium	Local	High	High
LCA6	Residential Urban Landscape	Low	Medium	Medium	Local	Low	Low

Id. No.	Landscape Resources / Landscape Character Areas	Quality (High/Medium/Low)	Importance and Rarity (High/Medium /Low)	Ability to accommodate change (High/Medium/ Low)	Importance of landscape resources in local and regional context (Local/Regional/ National/Global)	Maturity (High/Medium/ Low)	Sensitivity to Change (Low, Medium, High)
LCA7	Major Transportation Corridor Landscape	Low	Medium	Medium	Local	Low	Low

Tree Survey

- 10.6.8 The tree survey was conducted in May 2015 to assess all existing trees within the project works limit. A total of 125 nos. surveyed trees within the works limit belonging to 26 species were recorded in this tree survey, and is summarized in Table 10.3. A tree survey within the project works limit has been undertaken in accordance with DEVB TCW No. 07/2015 - Tree Preservation, and the tree survey and recommendation plan is under **Appendix 10.1**.
- 10.6.10 There is no Registered Old and Valuable Tree (OVT), “Important Tree”, stonewall tree, within the landscape impact study boundary.
- 10.6.11 However, there are 5 no. of *Ailanthus fordii* trees located in the LR2, which are Rare and precious tree species included in “Rare and Precious Plants of Hong Kong” (AFCD, 2003) or “Forest and Countryside Ordinance” (Cap. 96). Those *Ailanthus fordii* are located outside the project works limit, but within the 100m landscape study area.

Table 10.3 Surveyed Trees Species and Quantity within works limit

Scientific Name	Chinese Name	Quantity
<i>Bauhinia variegata</i>	宮粉羊蹄甲	8
<i>Acacia confusa</i>	台灣相思	2
<i>Aleurites moluccana</i>	石栗	2
<i>Bauhinia x blakeana</i>	洋紫荊	18
<i>Bischofia javanica</i>	秋楓	1
<i>Callistemon viminalis</i>	串錢柳	6
<i>Celtis sinensis</i>	朴樹	5
<i>Clausena lansium</i>	黃皮	3
<i>Delonix regia</i>	鳳凰木	1
<i>Dimocarpus longan</i>	龍眼	3
<i>Ficus benjamina</i>	垂榕	1
<i>Ficus microcarpa</i>	細葉榕	9
<i>Ilex rotunda</i> var. <i>microcarpa</i>	小果鐵冬青	1
<i>Lagerstroemia speciosa</i>	大花紫薇	29
<i>Macaranga tanarius</i> var. <i>tomentosa</i>	血桐	11
<i>Mangifera indica</i>	杧果	2
<i>Melaleuca cajuputi</i> subsp. <i>cumingiana</i>	白千層	5
<i>Melia azedarach</i>	楝	4
<i>Michelia x alba</i>	白蘭	1
<i>Spathodea campanulata</i>	火焰木	4
<i>Sterculia lanceolata</i>	假蘋婆	2
<i>Bombax ceiba</i>	木棉	1
<i>Casuarina equisetifolia</i>	木麻黃	1

Scientific Name	Chinese Name	Quantity
<i>Eucalyptus citriodora</i>	檸檬桉	1
<i>Ficus virens</i>	黃葛樹	2
<i>Pterocarpus indicus</i>	紫檀	2
Total Quantity of Surveyed Trees		125

Zone of Visual Influence (ZVI)

10.6.9 The ZVI for the Project during the construction phase are illustrated in Drawing no. 10.1401. Photo views illustrating the Visual Sensitive Receivers (VSRs) within the ZVI are illustrated in Drawing 10.1402-1407. Visual Envelope of the project is bounded by the buildings along both side of the existing nullah; the industrial buildings and the Long Ping Station to the north; and the Ma Tong Road to the south. The ZVI adopts a cut-off at the Ma Tong Road as the only potential VSRs beyond this would be traveller along Kung Um Road, Tai Shu Ha Road East and Shap Pat Heung Road from which visual impacts would be negligible due to their distant location (refer to drawing no. 10.1401).

Visual Sensitive Receivers (VSRs)

10.6.10 Table 10.4 lists the key VSRs found within the ZVIs, and are mapped in Drawing no. 10.1401. Photo views illustrating the VSRs within the study area are shown in Drawing no. 10.1402-1407. For ease of reference, each VSR is given an identity number, which is used in all relevant tables and Drawings in this report.

10.6.11 There are no vantage points identified in the Urban Design Guidelines under Hong Kong Planning Standards and Guidelines.

10.6.12 VSR are divided into 6 types: Comprehensive Development, Commercial and Residential, Residential, Open Space, Government, Institution or Community, Recreational and Transportation related. The type of VSRs is classified according to whether the person is at home, at work, at play, or travelling. Those who view the impact from their homes are considered to be highly sensitive as the attractiveness or otherwise of the outlook from their home will have a substantial effect on their perception of the quality and acceptability of their home environment and their general quality of life. Those who view the impact from their workplace are considered to be only moderately sensitive as the attractiveness or otherwise of the outlook will have a less important, although still material, effect on their perception of their quality of life. The degree to which this applies depends on whether the workplace is industrial, retail or commercial. Those who view the impact whilst taking part in an outdoor leisure activity may display varying sensitivity depending on the type of leisure activity. Those who view the impact whilst travelling on a public thoroughfare will generally have low sensitivity.

- 10.6.13 The sensitivity of the VSRs shall also be determined by numbers of the individuals within the VSR category, the quality of existing views, availability of alternative views, amenity of alternative views, degree of visibility, duration of view and frequency of view.

Visual Resources

- 10.6.14 Yuen Long Nullah locates at the centre of Yuen Long Town, connecting the urbanized town at the north and the natural landscape at the south. Development along the side of the nullah are mainly open space, GIC facilities, low-rise commercial/residential and some medium rise residential developments. Surrounded by this highly urbanized townscape, Yuen Long Nullah becomes a major visual relief to the town.
- 10.6.15 As most of the views at the street level to the east and the west along the nullah are being blocked by the residential buildings, Yuen Long Nullah forms a visual corridor for leisure and recreational users along the nullah. It is an important visual resource of Yuen Long Town.
- 10.6.16 Currently, the hard surface and channelization of the nullah, the incoherent buildings along both side of the nullah and the lacked of maintenance and disorder of the paving pattern have inevitably downgraded the visual quality of the visual corridor.
- 10.6.17 However, there are several amenity planting along both side of the nullah, which forms a green corridor for the visual relief. Also, beautification works of the nullah will be held in the future under another separate project, it is foreseeable that upon beautification, visual quality of Yuen Long Nullah will be further enhanced and public open space along the nullah will become more important leisure space to the local community.

Table 10.4 Visual Sensitive Receivers (VSRs) and Their Sensitivity to Change

Id. No.	Key Visual Sensitive Receivers (VSRs)	Type of VSRs	Number of Individuals (Many/ Medium/ Few/ Very Few)	Quality of Existing View (Good/ Fair/ Poor)	Quality of Existing View – with Planned Nullah beautification (Good/ Fair/ Poor)	Availability of Alternative Views (Yes/ No)	Degree of Visibility (Full/ Partial/ Glimpse)	Frequency of View (Very Frequent/ Frequent/ Occasional/ Rare)	Sensitivity to Change (Low, Medium, High)
Comprehensive Development Area									
CDA1	Future Tai Kiu Property Development	Commercials / Residential	Many	Fair	Good	Yes	Full	Very Frequent	High
CDA2	Future Long Ping South Lot. 512 Development	Commercials / Residential	Many	Fair	Good	Yes	Full	Very Frequent	High
CDA3	Future Kwong Yip Street Development (The Spectra)	Commercials / Residential	Many	Poor	Fair	Yes	Glimpse	Occasional	Medium
Residential Development									
R1	Yen Tsui Gardens, Po Fai Building, Man Yip Building, Shung Tak Building & Fuk Yip Building	Residential/ Commercial	Many	Poor	Fair	No	Full	Very Frequent	High
R2	Yuen Tung Building, Hong Shing Building, Fung Yue Building, Kinston Court, Fuk Chiu House, Wing Tai Building, Chi King House	Commercial	Many	Poor	Fair	No	Full	Very Frequent	High
R3	Kei Yip Building, On Ning Building, King Wah Building and Yuen Cheong House	Residential/ Commercial	Medium	Fair	Good	Yes	Partial	Frequent	High

Id. No.	Key Visual Sensitive Receivers (VSRs)	Type of VSRs	Number of Individuals (Many/ Medium/ Few/ Very Few)	Quality of Existing View (Good/ Fair/ Poor)	Quality of Existing View – with Planned Nullah beautification (Good/ Fair/ Poor)	Availability of Alternative Views (Yes/ No)	Degree of Visibility (Full/ Partial/ Glimpse)	Frequency of View (Very Frequent/ Frequent/ Occasional/ Rare)	Sensitivity to Change (Low, Medium, High)
R4	Yee Fung Garden	Residential/ Commercial	Many	Fair	Good	Yes	Partial	Occasional	Medium
R5	Wah Kin Building, Chuk Bun Building & Ho Wang Building	Residential/ Commercial	Many	Fair	Good	Yes	Partial	Occasional	Medium
R6	Ho Shing Building, Kam On Building, Kam Hei House, Happy House, Nan Tin Mansion & Kam Fai House	Residential/ Commercial	Many	Fair	Good	No	Full	Very Frequent	High
R7	Siu Fung Building, Shun Fat House, Lee Fat Building	Residential/ Commercial	Many	Poor	Fair	No	Full	Very Frequent	High
R8	Ho Shin Fuk Building	Residential/ Commercial	Many	Fair	Good	No	Full	Very Frequent	High
R9	Tai Kiu Village	Residential/ Commercial	Few	Fair	Good	No	Full	Very Frequent	Medium
R10	Future High-rise Residential Building (Yuccie Square)	Residential/ Commercial	Many	Fair	Fair	Yes	Partial	Occasional	Medium
R11	Fook On Building	Residential/ Commercial	Many	Poor	Fair	No	Full	Very Frequent	High
Commercial and Residential Development									
CR1	Campbell Building, Man Cheong Building and Kan Yip Building	Residential/ Commercial	Many	Fair	Fair	Yes	Partial	Occasional	Medium
CR2	Yuen Long Plaza	Residential/ Commercial	Many	Good	Good	Yes	Partial	Occasional	Medium

Id. No.	Key Visual Sensitive Receivers (VSRs)	Type of VSRs	Number of Individuals (Many/ Medium/ Few/ Very Few)	Quality of Existing View (Good/ Fair/ Poor)	Quality of Existing View – with Planned Nullah beautification (Good/ Fair/ Poor)	Availability of Alternative Views (Yes/ No)	Degree of Visibility (Full/ Partial/ Glimpse)	Frequency of View (Very Frequent/ Frequent/ Occasional/ Rare)	Sensitivity to Change (Low, Medium, High)
CR3	Fuk Sing Building, Fu Hing Building, Wah Cheung Mansion and Wah Shing Mansion, Yuen Long Mansion & Tung Fook Building	Residential/ Commercial	Many	Fair	Good	Yes	Full	Frequent	High
CR4	Healey Building, Kin Shing Building and Yuen Fat Building	Residential/ Commercial	Many	Poor	Fair	Yes	Full	Frequent	High
Open Space Development									
O1	Football Pitch at Hi Lee Path	Recreational	Medium	Good	Good	Yes	Full	Frequent	Medium
O2	Tai Pei Tau Rest Garden	Recreational	Medium	Good	Good	Yes	Full	Frequent	High
O3	Basketball Court at Chung Sing Path	Recreational	Medium	Good	Good	Yes	Full	Frequent	Medium
Government, Institution or Community Development Area									
GIC1	Kik Yeung Road Bus Terminus	Occupational/ Transportation	Few	Fair	Fair	Yes	Partial	Occasional	Low
GIC2	Fung Lok Lane Car park and Maxwell House	Commercial, Residential	Few	Fair	Fair	Yes	Partial	Occasional	Medium
GIC3	CCC Chun Kwong Primary School	Institutional	Medium	Fair	Good	Yes	Partial	Occasional	Medium
GIC4	Caritas Yuen Long Chan Chun Ha Prevocational School	Institutional	Medium	Fair	Good	Yes	Partial	Occasional	Low
Recreational									

Id. No.	Key Visual Sensitive Receivers (VSRs)	Type of VSRs	Number of Individuals (Many/ Medium/ Few/ Very Few)	Quality of Existing View (Good/ Fair/ Poor)	Quality of Existing View – with Planned Nullah beautification (Good/ Fair/ Poor)	Availability of Alternative Views (Yes/ No)	Degree of Visibility (Full/ Partial/ Glimpse)	Frequency of View (Very Frequent/ Frequent/ Occasional/ Rare)	Sensitivity to Change (Low, Medium, High)
REC1	Travellers along Yuen Long Town Nullah	Recreational	Many	Fair	Good	Yes	Full	Frequent	High
REC2	Travellers along the crossing of Yuen Long Nullah and major road	Recreational	Many	Good	Good	Yes	Full	Occasional	High
Transportation Development									
T1	West Rail Long Ping Station	Transportation	Many	Fair	Good	Yes	Full	Frequent	High
T2	On Ning Road	Transportation	Many	Fair	Fair	Yes	Partial	Rare	Low
T3	Castle Peak Road – Yuen Long	Transportation	Many	Fair	Fair	Yes	Partial	Rare	Low
T4	Kau Yuk Road	Transportation	Many	Fair	Fair	Yes	Partial	Rare	Low

* C = commercial, CDA = comprehensive development area, C/R = commercial / residential, GIC = government/institution/community, I = industrial, O = open space, R = residential, REC = Recreation related, T = transportation related.

* VSR type & ID CDA1, CDA2, CDA3, R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, CR1, CR2, CR3, CR4, O1, O2,O3, GIC1, GIC2, GIC3, GIC4, REC1, T1, T2, T3, and T4 do not represent for the landuse zone.

* VSRs (CDA1, CDA2, and CDA3) in developments planned to be completed before operation of footbridge.

10.7 Landscape Impact Assessment

Sources of Landscape Impacts

10.7.1 The nature and scope of works are described in chapter 2. Sources of impacts of the proposed works during the construction phase are described below while the impacts of these potential sources on each LR and LCA are provided in Table 10.5.

10.7.2 Sources of impacts in the construction phase would include:

- construction of a covered footbridge of about 540m in length and 6m clear width with staircases / lifts / escalators along Yuen Long Town Nullah from West Rail Long Ping Station to the south of the Kau Yuk Road;
- piers of footbridge
- pedestrian interchange linking to the footbridge located in Yuen Long On Ling Road, Castle Peak Road – Yuen Long Section and Kau Yuk Road;
- Associated civil, structural, marine, geotechnical, landscape, lighting (including road lighting and footbridge lighting), traffic control and surveillance system, signing, traffic aids, electrical & mechanical, and environmental protection and mitigation works, and other related works;
- construction of landscape area,
- construction traffic,
- the laying down of utilities, including water, drainage and power,
- temporary site access areas, site cabins and heavy machinery,
- dust during dry weather.

10.7.3 The sources of impacts of the project at the operational stage would be:

- footbridge (about 540m)
- pedestrian interchange linking to the footbridge located in Yuen Long On Ling Road, Castle Peak Road – Yuen Long Section and Kau Yuk Road;
- piers of footbridge
- extensive landscaped spaces.

Degree of compatibility of the Project and associated Works

10.7.4 The proposed footbridge is built above nullah area of Yuen Long Town Centre in accordance with the planned landscape framework. The enhanced connectivity will bring improvement to existing pedestrian circulation district-wise. Improvement of Yuen Long Nullah will be held in the future, the works will beautify the existing concrete appearance nullah into environmental pleasant river. It is considered that the provision of amenity planting strip will upgrade the existing landscape setting

and is highly compatible to the planned landscape framework (refer to Figure 10.1801-10.1806 for the streetscape improvement).

10.7.5 As a whole, the proposed project and associated works will not create substantial landscape changes to the existing urban environment and is considered as compatible to the existing and proposed landscape settings.

10.7.6 The structure of the elevated walkway and its associated columns will be minimized as far as practicable, to avoid substantial impact on the future Yuen Long beautification project. The design concept of the walkway will be coherent with the future nullah design.

Nature and Magnitude of Impacts of Unmitigated Landscape Impact in Construction Phase

10.7.7 The magnitude of the impacts, before implementation of mitigation measures, on the landscape resources and character areas that would occur in the construction phase are described and tabulated in Table 10.5. All impacts are adverse unless otherwise stated.

Table 10.5 Significant Landscape Impacts of the Proposed Works during Construction Phase

Id No.	Landscape Resources/ Landscape Character Areas	Source of Impact	Description of Impacts	Extent of Impact
Landscape Resources				
LR1	Trees at both side of existing nullah	<ul style="list-style-type: none"> Footbridge and the supporting piers. 	<ul style="list-style-type: none"> Approx. 18 nos. of tree will be potentially affected (included 1 no. will be transplanted) by permanently works. 	Partial
LR2	Tai Pei Tau Rest Garden	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Nil 	Nil
LR3	Kik Yeung Road 5-a-side Football Pitch	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Nil 	Nil
LR4	Chung Sing Path Playground	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Nil 	Nil
LR5	Hi Lee Path	<ul style="list-style-type: none"> Footbridge and the supporting piers. Interchange platform. 	<ul style="list-style-type: none"> Approx. 7 nos. of tree will be affected by permanently works. Approx. three pavilions and two benches are required to be demolished. Small portion of planter box and paving will be affected. 	Small

Id No.	Landscape Resources/ Landscape Character Areas	Source of Impact	Description of Impacts	Extent of Impact
LR6	Yuen Fat Path	<ul style="list-style-type: none"> • Footbridge and the supporting piers. • Interchange platform. 	<ul style="list-style-type: none"> • Approx. 6 nos. of tree will be affected by permanently works. • One pavilion is required to be demolished. • Small portion of planter box and paving will be affected. 	Small
LR7	Chung Sing Path	<ul style="list-style-type: none"> • Footbridge and the supporting piers. • Interchange platform. 	<ul style="list-style-type: none"> • Approx. 5 nos. of tree will be affected by permanently works. • Approx. three pavilions and two benches are required to be demolished. • Small portion of planter box and paving will be affected. 	Small
LR8	Cheong Shing Path	<ul style="list-style-type: none"> • Footbridge and the supporting piers. • Interchange platform. 	<ul style="list-style-type: none"> • Approx. 1 no. of tree will be affected by permanently works. • Small portion of paving block is required to be demolished. • Approx. three benches are required to be demolished. • Small portion of planter box and paving will be affected. 	Small
LR9	Po Fai Path	<ul style="list-style-type: none"> • Footbridge and the supporting piers. • Interchange platform. 	<ul style="list-style-type: none"> • Approx. 1 no. of tree will be affected by permanently works. • Three benches are required to be demolished. • Small portion of planter box and paving will be affected. 	Small
LR10	Yuen Long Town Nullah	<ul style="list-style-type: none"> • Supporting piers. • Interchange platform and its associates box culvert. 	<ul style="list-style-type: none"> • Approx. (32.75%) 6272 sq.m. out of 19,140 sq.m. nullah area will be lost due to the construction of piers for the footbridge. 	Partial

Id No.	Landscape Resources/ Landscape Character Areas	Source of Impact	Description of Impacts	Extent of Impact
LR11	Street and Roadside Trees	<ul style="list-style-type: none"> Footbridge and the supporting piers 	<ul style="list-style-type: none"> Nil 	Nil
LR12	Yuen Long Children's Playground	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Nil 	Nil
LR13	Vegetation growth within rural village	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Nil 	Nil
LR14	On Hing Playground	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Nil 	Nil
LR15	Sai Ching Street Tennis Court and Sai Ching street Children's Playground	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Nil 	Nil
LR16	Amenity Planting Area along Long Yip Street	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Nil 	Nil
LR17	Vegetation Grown within Construction Site	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Nil 	Nil
Landscape Character Areas				
LCA1	Yuen Long Traditional Urban Landscape Character Area	<ul style="list-style-type: none"> Footbridge and the supporting piers. Interchange platform. 	<ul style="list-style-type: none"> Some leisure facilities will be demolished due to the construction works of the interchange platform. 	Small
LCA2	Yuen Long Drainage Channel Landscape Area	<ul style="list-style-type: none"> Footbridge and the supporting piers. Interchange platform. 	<ul style="list-style-type: none"> Approx. 37 nos. of tree will be affected by permanently works (included 1 no. of tree to be transplanted). Elevated walkway and interchange platform will partially cover the nullah at some location. Approx. (32.75%) 6272 sq.m. out of 19,140 sq.m. nullah area will be lost due to the construction of piers for the footbridge. 	Partial
LCA3	Yuen Long Infrastructure	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Nil 	Nil

Id No.	Landscape Resources/ Landscape Character Areas	Source of Impact	Description of Impacts	Extent of Impact
	Network West Rail – Long Ping Station			
LCA4	Yuen Long Miscellaneous Urban Fringe Landscape	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Nil 	Nil
LCA5	Tai Kiu Tsuen Village Landscape	<ul style="list-style-type: none"> Footbridge and the supporting piers. 	<ul style="list-style-type: none"> 1 no. of tree will be affected by the elevated walkway. 	Small
LCA6	Residential Urban Landscape	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Nil 	Nil
LCA7	Major Transportation Corridor Landscape	<ul style="list-style-type: none"> Footbridge and the supporting piers. 	<ul style="list-style-type: none"> The proposed footbridge will cross cover the transportation corridor. 	Small

Nature and Magnitude of Impacts of Unmitigated Landscape Impact in Operation Phase

10.7.8 The magnitude of the impacts, before implementation of mitigation measures, on the landscape resources and character areas that will occur in the operation phase are the same as the permanent and irreversible impacts described in the construction phase.

Table 10.5a Magnitude of Impact of Landscape Resources and Landscape Character Areas

ID No.	Landscape Resources / Landscape Character Areas	Compatibility with the surrounding (Good/Fair/Poor/Nil)		Duration of Impact (Long/Medium/Short/ Nil)		Extent of Impact (Full/Partial/Small/Nil)		Reversibility of change (Yes/No/Nil)		Magnitude of Impact (Large/Intermediate/Small/ Negligible/Nil)	
		Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.
Landscape Resources (LRs)											
LR1	Trees at both side of existing nullah	Poor	Fair	Short	Long	Partial	Partial	No	No	Intermediate	Intermediate
LR2	Tai Pei Tau Rest Garden	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
LR3	Kik Yeung Road 5-a- side Football Pitch	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
LR4	Chung Sing Path Playground	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
LR5	Hi Lee Path	Poor	Fair	Short	Long	Small	Small	No	No	Small	Small
LR6	Yuen Fat Path	Poor	Fair	Short	Long	Small	Small	No	No	Small	Small
LR7	Chung Sing Path	Poor	Fair	Short	Long	Small	Small	No	No	Small	Small
LR8	Cheong Shing Path	Poor	Fair	Short	Long	Small	Small	No	No	Small	Small
LR9	Po Fai Path	Poor	Fair	Short	Long	Small	Small	No	No	Small	Small
LR10	Yuen Long Town Nullah	Poor	Fair	Short	Long	Partial	Partial	No	No	Intermediate	Intermediate
LR11	Street and Roadside Trees	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
LR12	Yuen Long Children's Playground	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
LR13	Vegetation growth within rural village	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

ID No.	Landscape Resources / Landscape Character Areas	Compatibility with the surrounding (Good/Fair/Poor/Nil)		Duration of Impact (Long/Medium/Short/ Nil)		Extent of Impact (Full/Partial/Small/Nil)		Reversibility of change (Yes/No/Nil)		Magnitude of Impact (Large/Intermediate/Small/ Negligible/Nil)	
		Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.
LR14	On Hing Playground	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
LR15	Sai Ching Street Tennis Court and Sai Ching street Children's Playground	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
LR16	Amenity Planting Area along Long Yip Street	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
LR17	Vegetation Grown within Construction Site	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Landscape Character Areas (LCAs)											
LCA1	Yuen Long Traditional Urban Landscape Character Area	Fair	Fair	Short	Long	Small	Small	No	No	Small	Small
LCA2	Yuen Long Drainage Channel Landscape Area	Fair	Fair	Short	Long	Partial	Partial	No	No	Intermediate	Intermediate
LCA3	Yuen Long Infrastructure Network West Rail – Long Ping Station	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
LCA4	Yuen Long Miscellaneous Urban Fringe Landscape	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

ID No.	Landscape Resources / Landscape Character Areas	Compatibility with the surrounding (Good/Fair/Poor/Nil)		Duration of Impact (Long/Medium/Short/ Nil)		Extent of Impact (Full/Partial/Small/Nil)		Reversibility of change (Yes/No/Nil)		Magnitude of Impact (Large/Intermediate/Small/ Negligible/Nil)	
		Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.
LCA5	Tai Kiu Tsuen Village Landscape	Poor	Fair	Short	Long	Small	Small	No	No	Small	Small
LCA6	Residential Urban Landscape	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
LCA7	Major Transportation Corridor Landscape	Fair	Fair	Short	Long	Small	Small	No	No	Small	Small

10.8 Visual Impact Assessment

10.8.1 The proposed Visual Mitigation Measures in the Construction and Operation Phases are summarized in Table 10.6 and 10.7, together with an indication of Funding, Implementation, Management and Maintenance Agencies.

Prediction of Significance of Visual Impacts

10.8.2 An assessment of the potential significance of the visual impacts during the construction and operation phases, before and after mitigation is provided in detail in Table 10.9. This follows the methodology outlined in Section 10.3 and assumes that the appropriate mitigation measures identified in Table 10.6 and 10.7 above would be implemented, and that the full effect of the soft landscape mitigation measures would be realized after ten years.

10.8.3 During the construction phase, the unmitigated visual impacts are adverse in nature and degrading of visual quality of existing views and visual incompatibility of the construction works in the vicinity.

10.8.4 During the operation phase, the nature of unmitigated visual impacts could be adverse. Adverse impacts will be resulted from the blockage of views and loss of vegetation along both side of the nullah.

10.8.5 However the proposed footbridge and the pedestrian interchange is relatively closed to the existing residential and commercial development that will be the main source of impact. With the implementation of proposed mitigation measures in the construction and operation phases, provision of the works in the urban environment will not create substantial visual impact on existing or future VSR.

10.8.6 During the night time, lighting provisions on the proposed footbridge and the pedestrian interchange will inevitably cause adverse impact. Therefore, the lighting design of the main footbridge will be designed to minimize the glare at night.

Table 10.5b Magnitude of Change on Visual Impacts in the Construction and Operation Phases (Note: All impacts adverse unless otherwise noted.)

Id No	Key Visual Sensitive Receiver (VSR)	Approx. Distance (To at grade structure)	Approx. Distance (To elevated structure)	Compatibility (Good/Fair/Poor)	Potential Blockage of View (Full/Partial/Nil)		Duration of Impact (Temporary/Permanent)		Scale of the Project when viewed from the VSR (Small/Medium/Large)		Reversibility of Impact (Yes/No)		Magnitude of Change (Large/Intermediate/Small/Negligible)	
					Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.
Part 1 – Comprehensive Development Area														
CDA1	Future Tai Kiu Property Development	1-5m	1-5m	Fair	Partial	Partial	Temporary	Permanent	Medium	Medium	No	No	Intermediate	Intermediate
CDA2	Future Long Ping South Lot. 512 Development	3-5m	5-10m	Fair	Partial	Partial	Temporary	Permanent	Medium	Medium	No	No	Intermediate	Intermediate
CDA3	Future Kwong Yip Street Development (The Spectra)	80m	80m	Fair	Nil	Nil	Temporary	Permanent	Medium	Medium	No	No	Small	Small
Part 2– Residential Development														
R1	Yen Tsui Gardens, Po Fai Building, Man Yip Building, Shung Tak Building & Fuk Yip Building	5m	8-18m	Fair	Full	Full	Temporary	Permanent	Large	Large	No	No	Large	Large
R2	Yuen Tung Building, Hong Shing Building, Fung Yue Building, Kinston Court,	5m	10-18m	Fair	Full	Full	Temporary	Permanent	Large	Large	No	No	Large	Large

Id No	Key Visual Sensitive Receiver (VSR)	Approx. Distance (To at grade structure)	Approx. Distance (To elevated structure)	Compatibility (Good/Fair/Poor)	Potential Blockage of View (Full/Partial/Nil)		Duration of Impact (Temporary/Permanent)		Scale of the Project when viewed from the VSR (Small/Medium/Large)		Reversibility of Impact (Yes/No)		Magnitude of Change (Large/Intermediate/Small/Negligible)	
					Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.
	Fuk Chiu House, Wing Tai Building, Chi King House													
R3	Kei Yip Building, On Ning Building, King Wah Building and Yuen Cheong House	25m	30m	Fair	Partial	Partial	Temporary	Permanent	Medium	Medium	No	No	Small	Small
R4	Yee Fung Garden	100m	105m	Fair	Partial	Partial	Temporary	Permanent	Medium	Medium	No	No	Small	Small
R5	Wah Kin Building, Chuk Bun Building & Ho Wang Building	40m	45m	Fair	Partial	Partial	Temporary	Permanent	Medium	Medium	No	No	Small	Small
R6	Ho Shing Building, Kam On Building, Kam Hei House, Happy House, Nan Tin Mansion & Kam Fai House	5-6m	12-20m	Fair	Full	Full	Temporary	Permanent	Large	Large	No	No	Large	Large
R7	Siu Fung Building,	5m	12-17m	Fair	Full	Full	Temporary	Permanent	Large	Large	No	No	Large	Large

Id No	Key Visual Sensitive Receiver (VSR)	Approx. Distance (To at grade structure)	Approx. Distance (To elevated structure)	Compatibility (Good/Fair/Poor)	Potential Blockage of View (Full/Partial/Nil)		Duration of Impact (Temporary/Permanent)		Scale of the Project when viewed from the VSR (Small/Medium/Large)		Reversibility of Impact (Yes/No)		Magnitude of Change (Large/Intermediate/Small/Negligible)	
					Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.
	Shun Fat House, Lee Fat Building													
R8	Ho Shin Fuk Building	15m	20-25m	Fair	Partial	Partial	Temporary	Permanent	Medium	Medium	No	No	Intermediate	Intermediate
R9	Tai Kiu Village	1-5m	1-5m	Fair	Partial	Partial	Temporary	Permanent	Large	Large	No	No	Large	Large
R10	Future High-rise Residential Building (Yuccie Square)	150m	150m	Fair	Nil	Nil	Temporary	Permanent	Medium	Medium	No	No	Small	Small
R11	Fook On Building	15m	25m	Fair	Full	Full	Temporary	Permanent	Large	Large	No	No	Large	Large
Part 3 – Commercial and Residential Development														
CR1	Campbell Building, Man Cheong Building and Kan Yip Building	60m	65-70m	Fair	Partial	Partial	Temporary	Permanent	Medium	Medium	No	No	Intermediate	Intermediate
CR2	Yuen Long Plaza	130m	135-140m	Fair	Nil	Nil	Temporary	Permanent	Small	Small	No	No	Small	Small
CR3	Fuk Sing Building, Fu Hing Building,	8m	15-20m	Fair	Full	Full	Temporary	Permanent	Large	Large	No	No	Large	Large

Id No	Key Visual Sensitive Receiver (VSR)	Approx. Distance (To at grade structure)	Approx. Distance (To elevated structure)	Compatibility (Good/Fair/Poor)	Potential Blockage of View (Full/Partial/Nil)		Duration of Impact (Temporary/Permanent)		Scale of the Project when viewed from the VSR (Small/Medium/Large)		Reversibility of Impact (Yes/No)		Magnitude of Change (Large/Intermediate/Small/Negligible)		
					Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.	
	Wah Cheung Mansion and Wah Shing Mansion, Yuen Long Mansion & Tung Fook Building														
CR4	Healey Building, Kin Shing Building and Yuen Fat Building	5m	13m	Fair	Full	Full	Temporary	Permanent	Large	Large	No	No	Large	Large	
Part 4 – Open Space Development															
O1	Football Pitch at Hi Lee Path	15m	20m	Fair	Partial	Partial	Temporary	Permanent	Medium	Medium	No	No	Intermediate	Intermediate	
O2	Tai Pei Tau Rest Garden	15m	20m	Fair	Partial	Partial	Temporary	Permanent	Medium	Medium	No	No	Intermediate	Intermediate	
O3	Basketball Court at Chung Sing Path	5m	17m	Fair	Partial	Partial	Temporary	Permanent	Large	Large	No	No	Intermediate	Intermediate	
Part 5 – Government, Institution or Community Development Area															
GIC1	Kik Yeung Road Bus Terminus	55m	60m	Fair	Partial	Partial	Temporary	Permanent	Medium	Medium	No	No	Small	Small	
GIC2	Fung Lok Lane Car park	70m	80m	Fair	Partial	Partial	Temporary	Permanent	Medium	Medium	No	No	Small	Small	

Id No	Key Visual Sensitive Receiver (VSR)	Approx. Distance (To at grade structure)	Approx. Distance (To elevated structure)	Compatibility (Good/Fair/Poor)	Potential Blockage of View (Full/Partial/Nil)		Duration of Impact (Temporary/Permanent)		Scale of the Project when viewed from the VSR (Small/Medium/Large)		Reversibility of Impact (Yes/No)		Magnitude of Change (Large/Intermediate/Small/Negligible)	
					Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.
	and Maxwell House													
GIC3	CCC Chun Kwong Primary School	5m	20m	Fair	Partial	Partial	Temporary	Permanent	Large	Large	No	No	Intermediate	Intermediate
GIC4	Caritas Yuen Long Chan Chun Ha Prevocational School	150m	150m	Fair	Nil	Nil	Temporary	Permanent	Medium	Medium	No	No	Small	Small
Part 5 – Recreational														
REC1	Travellers along Yuen Long Town Nullah	0-5m	5-10m	Fair	Partial	Partial	Temporary	Permanent	Large	Large	No	No	Large	Large
REC2	Travellers along the crossing of Yuen Long Nullah and major road	0-5m	5m	Poor	Full	Full	Temporary	Permanent	Large	Large	No	No	Large	Large
Part 6 – Transportation Development														
T1	West Rail Long Ping Station	0m	0m	Fair	Partial	Partial	Temporary	Permanent	Medium	Medium	No	No	Small	Small
T2	On Ning Road	5-10m	5-10m	Fair	Partial	Partial	Temporary	Permanent	Large	Large	No	No	Intermediate	Intermediate

Id No	Key Visual Sensitive Receiver (VSR)	Approx. Distance (To at grade structure)	Approx. Distance (To elevated structure)	Compatibility (Good/Fair/Poor)	Potential Blockage of View (Full/Partial/Nil)		Duration of Impact (Temporary/Permanent)		Scale of the Project when viewed from the VSR (Small/Medium/Large)		Reversibility of Impact (Yes/No)		Magnitude of Change (Large/Intermediate/Small/Negligible)	
					Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.
T3	Castle Peak Road – Yuen Long	5-10m	5-10m	Fair	Partial	Partial	Temporary	Permanent	Large	Large	No	No	Intermediate	Intermediate
T4	Kau Yuk Road	5-10m	5-10m	Fair	Partial	Partial	Temporary	Permanent	Large	Large	No	No	Intermediate	Intermediate

10.9 Landscape and Visual Mitigation Measures

- 10.9.1 The previous sections have identified the potential landscape and visual impacts due to the proposed footbridge. A series of mitigation measures have been formulated in order to alleviate some of the effects of these impacts where possible, while some mitigation measures are targeted to provide the potential landscape visual enhancement.
- 10.9.2 The proposed mitigation measures shall be feasible and practical by considering the existing site constraint and construction. Due considering number of site constraint in section 10.9.3 to 10.9.5, planting on the footbridge is considered not desirable. Therefore, mitigation measures will be mainly focus on the planting and the streetscape enhancement at grade, and the aesthetic architectural treatment of the footbridge itself.
- 10.9.3 The Project falls within the Scheduled Area of the Northwest New Territories (i.e. Area No. 2 of the Scheduled Areas in the Building Ordinance (Cap.123)) of complex geology. It is an area within which the presence of marble subcrop containing cavities is considered possible. Results from ground investigation recently completed in March 2016 show that the rock head levels in the Project area varies from 20m to more than 120m below ground level and 20m sound marble were not yet encountered at over 120m below ground level at some drillholes. With such large geological variation and uncertainty, higher construction risk will be encountered due to the increased number and size of supporting structures.
- 10.9.4 Without provision of planter, 2 nos. columns and 6 nos. box culvert will be built inside the Yuen Long Town Nullah to support the proposed footbridge, which the number and size of the supporting structures had been optimised to minimise the hydraulic impact on the Yuen Long Town Nullah. With provision of planter alongside footbridge deck, the increase in number or size of the supporting structure will affect the hydraulic performance of Yuen Long Town Nullah.
- 10.9.5 Planting at the section across Castle Peak Road – Yuen Long is not preferred. Light rail is located at Castle Peak Road – Yuen Long underneath the proposed footbridge. According to the MTRCL’s requirement, 1.8m high barriers should be provided on the proposed footbridge deck at the section across light rail to prevent fallen object onto light rail operating areas. Therefore, planters at this location will raise maintenance problem and are not preferred.
- 10.9.6 The proposed landscape and visual mitigation measures in the construction and operation are listed in Table 10.6 and 10.7 below, together with an indication of Funding, Implementation, Management and Maintenance Agencies.

Table 10.6 Proposed Construction Phase Landscape and Visual Mitigation Measures

ID No.	Landscape and Visual Mitigation Measures	Funding Agency	Implementation Agency
CM1	Not Used	-	-
CM2 ^{1,2}	Existing trees to be retained on site should be carefully protected during construction. The requirement shall follow the “Guidelines on Tree Preservation during Development” released by Greening, Landscape and Tree Management Section, Development Bureau.	HYD	HYD / Contractor
CM3 ¹	Trees unavoidably affected by the works should be transplanted where practical. The requirement shall follow the “Guidelines one Tree Transplanting during Development” released by Greening, Landscape and Tree Management Section, Development Bureau.	HYD	HYD / Contractor
CM4 ¹	Compensatory tree planting should be provided to compensate for felled trees during construction according to TC (W) No.7/2015 – Tree Preservation and satisfaction of relevant Government departments. Sufficient planting area shall be provided for the growth of trees. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Felling Application.	HYD	HYD / Contractor
CM5 ^{1,2}	Control of night-time lighting.	HYD	HYD / Contractor
CM6 ¹	Erection of decorative screen hoarding compatible with the surrounding setting.	HYD	HYD / Contractor

Note: (1) HYD shall be responsible for the implementation of road works and associated amenity landscape areas;
(2) Mitigation measures refer to Good Site Practices.

Table 10.7 Proposed Operation Phase Landscape and Visual Mitigation Measures

ID No.	Landscape and Visual Mitigation Measures	Funding Agency	Implementation Agency	Maintenance/ Management Agency
OM1 ³	Maintenance of compensatory tree planting for all felled trees. Maintenance parties shall be identified according to DEVB TCW No. 6/2015 – maintenance of vegetation and hard landscape features.	HYD	HYD / Contractor	LCSD
OM2 ³	Aesthetic and greening design of the Footbridge according to DEVB TC(W) No.2/2013 Greening on Footbridges and Flyovers.	HYD	HYD / Contractor	HYD
OM3 ³	Use appropriate (visually unobtrusive and non-reflective) building structural materials and avoidance of excessive height and bulk of buildings and structures.	HYD	HYD / Contractor	HYD

ID No.	Landscape and Visual Mitigation Measures	Funding Agency	Implementation Agency	Maintenance/ Management Agency
OM4 ³	Streetscape elements (e.g. paving, street furniture, railing etc.) shall be sensitively designed in a manner that respond to the local context, to enhance the overall landscape and visual appearance of the site, in order to mitigate the loss of landscape greenery and the visual obstruction by the structure. Lighting units should be directional and minimize unnecessary light spill.	HYD	HYD / Contractor	HYD
OM5 ³	Maximize soft landscape of the site, Where space permits, road side tree and shrub planting should be created.	HYD	HYD / Contractor	LCSD
OM6 ³	Aesthetic facade treatment at the bottom of proposed footbridge.	HYD	HYD / Contractor	HYD
OM7 ³	Screening treatment on the interchange structure.	HYD	HYD / Contractor	HYD

Note: (3) According to the DEVB TCW No. 6/2015 – Maintenance of vegetation and hard landscape features, HyD shall be responsible for the maintenance and management for hard streetscape works, while LCSD shall be responsible for the maintenance and management of soft landscape works.

10.9.7 The master landscape plans show the preliminary soft landscape treatment to the proposed footbridge are shown in Drawing no. 10.1801 -1808. The Photomontages of the proposed project without and with mitigation measures at Day 1 and Year 10, illustrating the appearance of the proposed works, and the locations of viewpoints, are shown in Drawing no. 10.1701-1719.

Programme of Implementation of Landscape and Visual Mitigation Measures

10.9.8 The Construction Phase Measures listed above shall be adopted from the commencement of construction and shall be in place throughout the entire construction period. The Operation Phase Measures listed above shall be adopted during the detailed design and be built as part of the construction works so that they are in place at the date of commissioning of the Project.

Prediction of Significance of Landscape Impacts

10.9.9 The potential significance of landscape impacts during the construction and operation phases, before and after mitigation, is provided below in Table 10.8. The assessment follows the proposed methodology and assumes that the appropriate mitigation measures identified in Table 10.6 and 10.7 above would be implemented, with proper funding, management and maintenance by relevant parties which

identified, and the full effect of the soft landscape mitigation measures would be realized after 10 years.

Impact on Existing Trees

- 10.9.10 Based on broad brush survey, approximately 38 nos. of trees will be affected by due to the construction of proposed works (in which 37 nos. are proposed to be felled and 1 no. is proposed to be transplanted). None of these are LCSD Champion Trees or Registered Old and Valuable Trees. There are no rare species or endangered species but common species will be affected. All the trees with high amenity value which are unavoidably affected by the works will be transplanted where possible. Detailed tree preservation, transplanting and felling including compensatory planting proposals shall be submitted to relevant government departments for approval in accordance with DEVB TCW no. 07/2015. Based on the proposed works, trees will be planted along roadside amenity areas and new open space to compensate for the loss of existing trees.

Impact on Landscape Character Areas

- 10.9.11 Impact on Landscape Character Areas during construction will be primarily due to the construction activities including associated temporary works. After implementation of mitigation measures, there will still be moderate negative impacts on the Drainage Channel Landscape Area (LCA2) during construction.
- 10.9.12 There will be moderate residual impacts on Yuen Long Urban Landscape Character Area (LCA1) during construction. During Operation, there is some slightly adverse landscape impact, and the impact will reduce to insubstantial due to the enhanced streetscape along both side of Yuen Long Town Nullah.

Table 10.8 Significance of Landscape Impacts in the Construction and Operation Phases

Id. No.	Landscape Resource / Landscape Character	Sensitivity to Change (Low, Medium, High)		Magnitude of Change (Nil, Negligible, Small, Intermediate, Large)		Impact Significance before Mitigation (Nil, Insubstantial, Slight, Moderate, Substantial)		Recommended Mitigation Measures	Residual Impact Significance Threshold After Mitigation (Insubstantial/Slight/Moderate/Substantial)		
		Construction	Operation	Construction	Operation	Construction	Operation		Construction	Operation	
										Day 1	Year 10
Physical Landscape Resources (Vegetation, Open Space, Amenity Area and Features)											
LR1	Trees at both side of existing nullah	Medium	Medium	Intermediate	Intermediate	Moderate	Moderate	CM2 to CM4, OM1, OM5	Moderate	Slight	Slight
LR2	Tai Pei Tau Rest Garden	High	High	Nil	Nil	Nil	Nil	Not required	Nil	Nil	Nil
LR3	Kik Yeung Road 5-a-side Football Pitch	High	High	Nil	Nil	Nil	Nil	Not required	Nil	Nil	Nil
LR4	Chung Sing Path Playground	High	High	Nil	Nil	Nil	Nil	Not required	Nil	Nil	Nil
LR5	Hi Lee Path	Medium	Medium	Small	Small	Moderate	Moderate	CM2 to CM4, OM1, OM4, OM5	Moderate	Slight	Slight
LR6	Yuen Fat Path	High	High	Small	Small	Moderate	Moderate	CM2 to CM4, OM1, OM4, OM5	Moderate	Slight	Slight
LR7	Chung Sing Path	High	High	Small	Small	Moderate	Moderate	CM2 to CM4, OM1, OM4, OM5	Moderate	Slight	Slight
LR8	Cheong Shing Path	Medium	Medium	Small	Small	Moderate	Moderate	CM2 to CM4, OM1, OM4, OM5	Moderate	Slight	Slight
LR9	Po Fai Path	Medium	Medium	Small	Small	Moderate	Moderate	CM2 to CM4, OM1, OM4, OM5	Moderate	Slight	Slight
LR10	Yuen Long Town Nullah	Medium	Medium	Small	Small	Moderate	Moderate	CM2 to CM4, OM1, OM2, OM4, OM5, OM6	Moderate	Slight	Slight
LR11	Street and Roadside Trees	Medium	Medium	Nil	Nil	Nil	Nil	Not required	Nil	Nil	Nil

Id. No.	Landscape Resource / Landscape Character	Sensitivity to Change (Low, Medium, High)		Magnitude of Change (Nil, Negligible, Small, Intermediate, Large)		Impact Significance before Mitigation (Nil, Insubstantial, Slight, Moderate, Substantial)		Recommended Mitigation Measures	Residual Impact Significance Threshold After Mitigation (Insubstantial/Slight/Moderate/Substantial)		
		Construction	Operation	Construction	Operation	Construction	Operation		Construction	Operation	
										Day 1	Year 10
LR12	Yuen Long Children's Playground	High	High	Nil	Nil	Nil	Nil	Not required	Nil	Nil	Nil
LR13	Vegetation growth within rural village	High	High	Nil	Nil	Nil	Nil	Not required	Nil	Nil	Nil
LR14	On Hing Playground	High	High	Nil	Nil	Nil	Nil	Not required	Nil	Nil	Nil
LR15	Sai Ching Street Tennis Court and Sai Ching street Children's Playground	High	High	Nil	Nil	Nil	Nil	Not required	Nil	Nil	Nil
LR16	Amenity Planting Area along Long Yip Street	High	High	Nil	Nil	Nil	Nil	Not required	Nil	Nil	Nil
LR17	Vegetation Grown within Construction Site	Low	Low	Nil	Nil	Nil	Nil	Not required	Nil	Nil	Nil
Landscape Character Areas											
LCA1	Yuen Long Traditional Urban Landscape Character Area	Medium	Medium	Small	Small	Moderate	Moderate	CM2 to CM4, OM1, OM4, OM5	Moderate	Slight	Insubstantial

Id. No.	Landscape Resource / Landscape Character	Sensitivity to Change (Low, Medium, High)		Magnitude of Change (Nil, Negligible, Small, Intermediate, Large)		Impact Significance before Mitigation (Nil, Insubstantial, Slight, Moderate, Substantial)		Recommended Mitigation Measures	Residual Impact Significance Threshold After Mitigation (Insubstantial/Slight/Moderate/Substantial)		
		Construction	Operation	Construction	Operation	Construction	Operation		Construction	Operation	
										Day 1	Year 10
LCA2	Yuen Long Drainage Channel Landscape Area	Medium	Medium	Intermediate	Intermediate	Moderate	Moderate	CM2 to CM4, OM1, OM4, OM5	Moderate	Slight	Slight
LCA3	Yuen Long Infrastructure Network West Rail – Long Ping Station	Low	Low	Nil	Nil	Nil	Nil	Not required	Nil	Nil	Nil
LCA4	Yuen Long Miscellaneous Urban Fringe Landscape	Medium	Medium	Nil	Nil	Nil	Nil	Not required	Nil	Nil	Nil
LCA5	Tai Kiu Tsuen Village Landscape	High	High	Small	Small	Moderate	Moderate	CM2 to CM4, OM2, OM4, OM5	Slight	Slight	Slight
LCA6	Residential Urban Landscape	Low	Low	Nil	Nil	Nil	Nil	Not required	Nil	Nil	Nil
LCA7	Major Transportation Corridor Landscape	Low	Low	Small	Small	Slight	Slight	OM3 to OM4	Slight	Insubstantial	Insubstantial

Table 10.9 Significance threshold of residual impact before and after mitigation: Operation Day 1 and Year 10 (Note: All impacts adverse unless otherwise noted.)

Id No	Key Visual Sensitive Receiver (VSR)	Receptor Sensitivity (Low, Medium, High)		Magnitude of Impact (Negligible, Small, Intermediate, Large)		Impact Significance without Mitigation Measures (Insubstantial, Slight, Moderate, Substantial)		Recommended Mitigation Measures	Residual Impact Significance with Mitigations (Insubstantial, Slight, Moderate, Substantial)		
		Construction	Operation	Construction	Operation	Construction	Operation		Construction	Operation	
										Day 1	Year 10
Part 1 – Comprehensive Development Area											
CDA1	Future Tai Kiu Property Development	High	High	Intermediate	Intermediate	Substantial	Substantial	CM2-CM6, OM1-OM5	Moderate	Slight	Slight
CDA2	Future Long Ping South Lot. 512 Development	High	High	Intermediate	Intermediate	Substantial	Substantial	CM2-CM6, OM1-OM5	Moderate	Slight	Slight
CDA3	Future Kwong Yip Street Development (The Spectra)	Medium	Medium	Small	Small	Slight	Slight	CM2-CM6, OM1-OM5	Slight	Insubstantial	Insubstantial
Part 2– Residential Development											
R1	Yen Tsui Gardens, Po Fai Building, Man Yip Building, Shung Tak Building & Fuk Yip Building	High	High	Large	Large	Substantial	Substantial	CM2-CM6, OM1-OM5, OM7	Substantial	Substantial	Moderate
R2	Yuen Tung Building, Hong Shing Building,	High	High	Large	Large	Substantial	Substantial	CM2-CM6, OM1-OM5, OM7	Substantial	Substantial	Moderate

Id No	Key Visual Sensitive Receiver (VSR)	Receptor Sensitivity (Low, Medium, High)		Magnitude of Impact (Negligible, Small, Intermediate, Large)		Impact Significance without Mitigation Measures (Insubstantial, Slight, Moderate, Substantial)		Recommended Mitigation Measures	Residual Impact Significance with Mitigations (Insubstantial, Slight, Moderate, Substantial)		
		Construction	Operation	Construction	Operation	Construction	Operation		Construction	Operation	
										Day 1	Year 10
	Fung Yue Building, Kinston Court, Fuk Chiu House, Wing Tai Building, Chi King House										
R3	Kei Yip Building, On Ning Building, King Wah Building and Yuen Cheong House	High	High	Small	Small	Moderate	Moderate	CM2-CM6, OM1-OM5	Moderate	Moderate	Slight
R4	Yee Fung Garden	Medium	Medium	Small	Small	Slight	Slight	CM2-CM6, OM1-OM5	Slight	Slight	Insubstantial
R5	Wah Kin Building, Chuk Bun Building & Ho Wang Building	Medium	Medium	Small	Small	Slight	Slight	CM2-CM6, OM1-OM5	Slight	Slight	Insubstantial
R6	Ho Shing Building, Kam On Building, Kam Hei House, Happy	High	High	Large	Large	Substantial	Substantial	CM2-CM6, OM1-OM5, OM7	Substantial	Substantial	Moderate

Id No	Key Visual Sensitive Receiver (VSR)	Receptor Sensitivity (Low, Medium, High)		Magnitude of Impact (Negligible, Small, Intermediate, Large)		Impact Significance without Mitigation Measures (Insubstantial, Slight, Moderate, Substantial)		Recommended Mitigation Measures	Residual Impact Significance with Mitigations (Insubstantial, Slight, Moderate, Substantial)		
		Construction	Operation	Construction	Operation	Construction	Operation		Construction	Operation	
										Day 1	Year 10
	House, Nan Tin Mansion & Kam Fai House										
R7	Siu Fung Building, Shun Fat House, Lee Fat Building	High	High	Large	Large	Substantial	Substantial	CM2-CM6, OM1-OM5, OM7	Substantial	Substantial	Moderate
R8	Ho Shin Fuk Building	High	High	Intermediate	Intermediate	Substantial	Substantial	CM2-CM6, OM1-OM5	Moderate	Moderate	Slight
R9	Tai Kiu Village	Medium	Medium	Large	Large	Substantial	Substantial	CM2-CM6, OM1-OM5	Substantial	Moderate	Moderate
R10	Future High-rise Residential Building (Yuccie Square)	Medium	Medium	Small	Small	Slight	Slight	CM2-CM6, OM1-OM5	Slight	Slight	Insubstantial
R11	Fook On Building	High	High	Large	Large	Substantial	Substantial	CM2-CM6, OM1-OM5, OM7	Substantial	Substantial	Moderate
Part 3 – Commercial and Residential Development											
CR1	Campbell Building, Man Cheong Building and	Medium	Medium	Intermediate	Intermediate	Moderate	Moderate	CM2-CM6, OM1-OM5	Moderate	Slight	Slight

Id No	Key Visual Sensitive Receiver (VSR)	Receptor Sensitivity (Low, Medium, High)		Magnitude of Impact (Negligible, Small, Intermediate, Large)		Impact Significance without Mitigation Measures (Insubstantial, Slight, Moderate, Substantial)		Recommended Mitigation Measures	Residual Impact Significance with Mitigations (Insubstantial, Slight, Moderate, Substantial)		
		Construction	Operation	Construction	Operation	Construction	Operation		Construction	Operation	
										Day 1	Year 10
	Kan Yip Building										
CR2	Yuen Long Plaza	Medium	Medium	Small	Small	Slight	Slight	CM2-CM6, OM1-OM5	Slight	Slight	Insubstantial
CR3	Fuk Sing Building, Fu Hing Building, Wah Cheung Mansion and Wah Shing Mansion, Yuen Long Mansion & Tung Fook Building	High	High	Large	Large	Substantial	Substantial	CM2-CM6, OM1-OM5	Substantial	Moderate	Moderate
CR4	Healey Building, Kin Shing Building and Yuen Fat Building	High	High	Large	Large	Substantial	Substantial	CM2-CM6, OM1-OM5	Substantial	Moderate	Moderate
Part 4 – Open Space Development											
O1	Football Pitch at Hi Lee Path	Medium	Medium	Intermediate	Intermediate	Moderate	Moderate	CM2-CM6, OM1-OM5	Moderate	Slight	Insubstantial
O2	Tai Pei Tau Rest Garden	High	High	Intermediate	Intermediate	Substantial	Substantial	CM2-CM6, OM1-OM5	Moderate	Slight	Insubstantial
O3	Basketball Court at	Medium	Medium	Intermediate	Intermediate	Moderate	Moderate	CM2-CM6, OM1-OM5	Moderate	Slight	Insubstantial

Id No	Key Visual Sensitive Receiver (VSR)	Receptor Sensitivity (Low, Medium, High)		Magnitude of Impact (Negligible, Small, Intermediate, Large)		Impact Significance without Mitigation Measures (Insubstantial, Slight, Moderate, Substantial)		Recommended Mitigation Measures	Residual Impact Significance with Mitigations (Insubstantial, Slight, Moderate, Substantial)		
		Construction	Operation	Construction	Operation	Construction	Operation		Construction	Operation	
										Day 1	Year 10
	Chung Sing Path										
Part 5 – Government, Institution or Community Development Area											
GIC1	Kik Yeung Road Bus Terminus	Low	Low	Small	Small	Slight	Slight	CM2-CM6, OM1-OM5	Slight	Slight	Insubstantial
GIC2	Fung Lok Lane Car park and Maxwell House	Medium	Medium	Small	Small	Slight	Slight	CM2-CM6, OM1-OM5	Slight	Slight	Insubstantial
GIC3	CCC Chun Kwong Primary School	Medium	Medium	Intermediate	Intermediate	Moderate	Moderate	CM2-CM6, OM1-OM5	Moderate	Slight	Insubstantial
GIC4	Caritas Yuen Long Chan Chun Ha Prevocational School	Low	Low	Small	Small	Slight	Slight	CM2-CM6, OM1-OM5	Slight	Slight	Insubstantial
Part 6 – Recreational											
REC1	Travellers along Yuen Long Town Nullah	High	High	Large	Large	Substantial	Substantial	CM2-CM6, OM1-OM5	Substantial	Moderate	Slight
REC2	Travellers along the crossing of Yuen Long	High	High	Large	Large	Substantial	Substantial	CM2-CM6, OM1-OM6	Substantial	Substantial	Substantial

Id No	Key Visual Sensitive Receiver (VSR)	Receptor Sensitivity (Low, Medium, High)		Magnitude of Impact (Negligible, Small, Intermediate, Large)		Impact Significance without Mitigation Measures (Insubstantial, Slight, Moderate, Substantial)		Recommended Mitigation Measures	Residual Impact Significance with Mitigations (Insubstantial, Slight, Moderate, Substantial)		
		Construction	Operation	Construction	Operation	Construction	Operation		Construction	Operation	
										Day 1	Year 10
	Nullah and major road										
Part 7 – Transportation Development											
T1	West Rail Long Ping Station	High	High	Small	Small	Moderate	Moderate	CM2-CM6, OM1-OM5	Moderate	Slight	Slight
T2	On Ning Road	Low	Low	Intermediate	Intermediate	Slight	Slight	CM2-CM6, OM1-OM5	Slight	Slight	Insubstantial
T3	Castle Peak Road – Yuen Long	Low	Low	Intermediate	Intermediate	Moderate	Moderate	CM2-CM6, OM1-OM5	Slight	Slight	Insubstantial
T4	Kau Yuk Road	Low	Low	Intermediate	Intermediate	Moderate	Moderate	CM2-CM6, OM1-OM5	Slight	Slight	Insubstantial

* C = commercial, CDA = comprehensive development area, C/R = commercial / residential, GIC = government/institution/community, I = industrial, O = open space, R = residential, REC = Recreational, T = transportation related.

* VSR type & ID CDA1, CDA2, CDA3, R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, CR1, CR2, CR3, CR4, O1, O2, O3, GIC1, GIC2, GIC3, GIC4, REC1, T1, T2, T3 and T4 do not represent for the landuse zone.

* VSRs (CDA1, CDA2, and CDA3) in developments planned to be completed before operation of footbridge.

10.10 Residual Impacts

10.10.1 The major existing / planned concurrent projects are described in section 3.7 and illustrated in Figure 3.1 (refer to Chapter 3 for detail description).

Prediction of Significance of Landscape Impacts

10.10.2 The potential significance of the landscape impacts during the construction and operation phases, before and after mitigation, is provided in Table 10.8. This assessment follows the proposed methodology and assumes that the appropriate design measures incorporated in the development layout and the mitigation measures identified in Tables 10.6 and 10.7 would be implemented and that the full effect of the soft landscape mitigation measures would be realized after 10 years. Cumulative impact during construction phase and operation phase of the proposed footbridge and all concurrent projects within the assessment area on landscape resources and landscape character areas are described below.

Residual Landscape Impact in Construction Phase

10.10.3 Based on the tree survey report, approximately 38 nos. of trees will be affected, of which approximately 1 no. are proposed to be transplanted, and approximately 37 no. trees are proposed to be felled. It is because of the construction of the proposed footbridge and pedestrian interchange located in Yuen Long On Ning Road, Castle Peak Road – Yuen Long section, and Kau Yuk Road. Only 1 affected trees are proposed to be transplanted due to its good form and amenity value and medium in “Suitability for Transplanting”. A total of 37 nos. of existing trees are inevitably affected by the proposed works, and proposed to be felled due to low “Suitability for Transplanting” (Refer to Appendix 10.1).

10.10.4 Trees surveyed within the proposed works limit are primarily common species. There are no LCSD Champion Trees, Registered Old and Valuable Trees nor trees that meet the criteria for Important Trees (ITs) as listed in DEVB TCW No. 7/2015 – Tree Preservation. There are no tree species listed under Forests and Countryside Ordinance (Cap. 96); and Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586). Affected tree species are only common tree species, and are listed in Table 10.10.

Table 10.10 Summary of Affected Trees Species

Scientific Name	Chinese Name	Tree number
<i>Bauhinia variegata</i>	宮粉羊蹄甲	1
<i>Clausena lansium</i>	黃皮	2
<i>Dimocarpus longan</i>	龍眼	1
<i>Ficus microcarpa</i>	細葉榕	1
<i>Lagerstroemia speciosa</i>	大花紫薇	10

Scientific Name	Chinese Name	Tree number
<i>Bauhinia x blakeana</i>	洋紫荊	7
<i>Macaranga tanarius var. tomentosa</i>	血桐	2
<i>Aleurites moluccana</i>	石栗	1
<i>Mangifera indica</i>	杧果	2
<i>Sterculia lanceolata</i>	假蘋婆	1
<i>Callistemon viminalis</i>	串錢柳	3
<i>Bischofia javanica</i>	秋楓	1
<i>Celtis sinensis</i>	朴樹	2
<i>Melaleuca cajuputi subsp. cumingiana</i>	白千層	3
<i>Delonix regia</i>	鳳凰木	1
Total		38

10.10.5 In accordance with DEVB TCW No. 7/2015 – Tree Preservation, the proposed compensatory planting proposal should be of a ratio not less than 1:1 in terms of number. For the proposed trees to be felled, heavy standard trees with trunk diameter from 75mm to 150mm (as specified in the Clause 3.15 of General Specification of Civil Engineering Works 2006) will be adopted for compensatory planting. It is expected approx. 37 heavy standard sized trees shall be planted as compensatory tree planting.

10.10.6 Cumulative impact on existing trees is summarized in Table 10.11, and tree survey and recommendation plans are under Appendix 10.1.

Table 10.11 Cumulative Impact on Existing Trees

Id No.	Landscape Resources/ Landscape Character Areas	Source of Impact	Residual Impact on Trees in Construction Phase
LR1	Trees at both side of existing nullah	• Footbridge, pedestrian interchange	• Approx. 18 nos. of tree will be affected by permanently works
LR5	Hi Lee Path	• Footbridge, pedestrian interchange	• Approx. 7 nos. of tree will be affected by permanently works
LR6	Yuen Fat Path	• Footbridge, pedestrian interchange	• Approx. 6 nos. of tree will be affected by permanently works
LR7	Chung Sing Path	• Footbridge, pedestrian interchange	• Approx. 5 nos. of tree will be affected by permanently works
LR8	Cheong Shing Path	• Footbridge, pedestrian interchange	• Approx. 1 nos. of tree will be affected by permanently works

Id No.	Landscape Resources/ Landscape Character Areas	Source of Impact	Residual Impact on Trees in Construction Phase
LR9	Po Fai Path	<ul style="list-style-type: none"> Footbridge, pedestrian interchange 	<ul style="list-style-type: none"> Approx. 1 nos. of tree will be affected by permanently works
LR10	Yuen Long Town Nullah	<ul style="list-style-type: none"> Footbridge, pedestrian interchange and supporting piers 	<ul style="list-style-type: none"> approx. (32.8%) 6,270 sq.m. out of 19,140 sq.m. nullah area will be lost due to the construction of piers for the footbridge
LCA2	Yuen Long Drainage Channel Landscape Area	<ul style="list-style-type: none"> Footbridge, pedestrian interchange and supporting piers 	<ul style="list-style-type: none"> Approx. 37 nos. of tree will be affected by permanently works
LCA5	Tai Kiu Tsuen Village Landscape	<ul style="list-style-type: none"> Footbridge 	<ul style="list-style-type: none"> Approx. 1 no. of tree will be affected by permanently works

10.10.7 There will be permanently loss of 6,270 sq.m. nullah area (LR10), which accounts for 32.8% of the Yuen Long Town Nullah area in the landscape impact study area, due to the construction of the proposed footbridge and pedestrian interchange located in Yuen Long On Ning Road, Castle Peak Road – Yuen Long section, and Kau Yuk Road. It is because staircases, escalators, and barrier free provision such as ramps and disabled lift will be provided at the pedestrian interchange. The landscape impacts on Yuen Long Town Nullah (LR10) will be mitigated by minimizing area and construction period.

10.10.9 The residual impact on other LRs and LCAs will be either no impact or insubstantial in construction phase, except on LR1, LR5, LR6, LR7, LR8, LR9, LR10, LCA1, LCA2 and LCA5 will be moderate due to the nullah will be permanently covered by the proposed interchange platform and the loss of existing greenery. LCA7 will be slight due to some portion of the footbridge will cross over the existing road.

10.10.10 The overall residual impact on all LR and LCA are considered as acceptable with implementation of mitigation measures.

Residual Landscape Impact in Operation Phase

10.10.11 Residual impact on landscape resources and landscape character areas are shown in Table 10.8 and mapped in Drawing no. 10.1601 and 10.1611. The master landscape plans show the preliminary soft landscape treatment to the proposed footbridge and the pedestrian interchanges located in Yuen Long On Ning Road, Castle Peak Road – Yuen Long, and Kau Yuk Road are shown in Drawing no. 10.1801-1805.

10.10.12 To compensation for the loss of vegetation and affected trees, approx. 37 new trees will be planted as Compensatory planting in terms of quantity. Due to the congestion of the existing site condition, and considering certain clear width of the pedestrian footpath need to be provided to cater the crowd pedestrian flow, the tree

compensation ratio of 1:1 in terms of quality (i.e. the tree diameter of breast height DBH) is not feasible. All landscape opportunities within the site has already been maximised, and no further other off site planting opportunity is found adjacent to the project area due to the crowd development. Detailed tree preservation, transplanting and felling including compensatory planting proposals shall be submitted to relevant government departments for approval in accordance with DEVB TCW No. 7/2015 – Tree Preservation.

- 10.10.13 With the implementation of the mitigation measures, residual impacts at day 1 of operation are considered to be reduced to slight for the LR5, LR6, LR7, LR8, LR9, LR10, LCA2 and LCA5. These landscape resources and landscape character areas are mainly mitigated by the streetscape elements, namely, paving enhancement along both side of the Yuen Long Town Nullah.
- 10.10.14 LR1 – there is expected to be moderate impact upon the Trees at both side of existing nullah in Yuen Long in construction phase. The loss of vegetation are due to the construction of footbridge and the pedestrian interchange. Proposed compensatory planting is proposed to compensate for the loss of trees. This planting should be well established after 10 years. It is considered that the residual impact is expected to be slight after the compensatory planting are well established under operation phase.
- 10.10.15 LR2 – there is expected to be no landscape impact upon the Tai Pei Tau Rest Garden (LR2).
- 10.10.16 LR3 – there is expected to be no landscape impact upon the Kik Yeung Road 5-a-side Football Pitch (LR3).
- 10.10.17 LR4 – there is expected to be no landscape impact upon the Chung Sing Path Playground (LR4).
- 10.10.18 LR5 – approximately 8 no. of trees will be affected in Hi Lee Path and the impact will be moderate in construction phase. Proposed compensatory planting is proposed to compensate for the loss. It is considered that the residual impact is expected to be slight under operation phase.
- 10.10.19 LR6 – there is expected to be moderate impact on the Yuen Fat Path in construction phase. It is considered that the residual impact is expected to be slight after the enhancement of the streetscape mitigation measures under operation phase.
- 10.10.20 LR7 – there is expected to be moderate impact upon Chung Sing Path (LR7) in construction phase. It is considered that the residual impact is expected to be slight after the enhancement of the streetscape mitigation measures under operation phase.

- 10.10.21 LR8 – there is expected to be moderate impact upon Cheong Shing Path (LR8) in construction phase. It is considered that the residual impact is expected to be slight after the enhancement of the streetscape mitigation measures under operation phase.
- 10.10.22 LR9 – there is expected to be moderate impact upon Po Fai Path (LR9). It is considered that the residual impact is expected to be slight after the enhancement of the streetscape mitigation measures under operation phase.
- 10.10.23 LR10 – there is expected to be moderate impact upon Yuen Long Town Nullah (LR10) in construction phase. The Yuen Long Town Nullah area will be lost due to the operation of footbridge and pedestrian interchange. It is because staircases, escalators, and barrier free access such as ramps and disabled lift will be provided at the pedestrian interchange. The landscape impacts on Yuen Long Town Nullah (LR10) will be mitigated by providing soft landscape at the pedestrian interchange. It is considered that the residual impact is expected to be slight under operation phase.
- 10.10.24 LR11 – there is expected to be no landscape impact upon Street and Roadside Trees (LR10).
- 10.10.25 LR12 – there is expected to be no landscape impact upon Roadside Planting in Yuen Long Children's Playground (LR12).
- 10.10.26 LR13 – there is expected to be no landscape impact upon Vegetation growth within rural village (LR13).
- 10.10.27 LR14 – there is expected to be no landscape impact upon On Hing Playground (LR14).
- 10.10.28 LR15 – there is expected to be no landscape impact upon Sai Ching Street Tennis Court and Sai Ching Street Children's Playground (LR15).
- 10.10.29 LR16 – there is expected to be no landscape impact upon Amenity Planting Area along Long Yip Street (LR16).
- 10.10.30 LR17 – there is expected to be no landscape impact upon Vegetation Grown within Construction Site (LR17).
- 10.10.31 LCA1 – There will be some impact on Yuen Long Traditional Urban Landscape Character Area (LCA1) due to the operation of footbridge and pedestrian interchange and the loss of visual identity in Yuen Long Town Nullah. It is considered that the residual impact on this LCA1 is insubstantial.

- 10.10.32 LCA2 - There will be moderate impact on Yuen Long Drainage Channel Landscape Area (LCA2) due to the construction of footbridge and the pedestrian interchange. However, with the proposed mitigation measures including the aesthetic design of the footbridge and the soft landscape treatment works on pedestrian interchange as well as the streetscape elements, it is considered that the residual impact on this LCA is slight under operation phase.
- 10.10.33 LCA3 – there will be no landscape impact on Yuen Long Infrastructure Network West Rail – Long Ping Station (LCA3).
- 10.10.34 LCA4 – there will be no landscape impact on Yuen Long Miscellaneous Urban Fringe Landscape (LCA4).
- 10.10.35 LCA5 – Tai Kiu Tsuen Village Landscape (LCA5) will be subject to slight impact after mitigation measures on tree protection zone has been identified. Its landscape impact will remain as slight since there is limited space for tree compensation at that area.
- 10.10.36 LCA6 – there will be no landscape impact on Residential Urban Landscape (LCA6).
- 10.10.37 LCA7 – Major Transportation Corridor Landscape (LCA7) will be subject to insubstantial impact after mitigation measures applied.
- 10.10.38 Therefore, the overall cumulative residual impacts on existing LR and LCA are considered acceptable with mitigation measures.

Residual Visual Impacts

- 10.10.39 The Photomontages of the proposed project without and with mitigation measures at Day 1 and Year 10, illustrating the appearance of the proposed works, and the locations of viewpoints, are shown in Drawing no. 10.1701-1719.

Construction Phase

- 10.10.40 Residual visual impacts in the Construction Phase are listed out in Table 10.9. With the implementation of mitigation measures, there will still be some adverse residual visual impacts during the construction stage. Residential VSRs and Commercial & Residential VSRs that are along both side of the nullah will have direct, short range views to the construction of the footbridge and pedestrian interchange which is immediately adjacent or very close to the VSRs. In addition, the VSRs from the recreational path along the nullah, especially at the proposed pedestrian interchange will have moderate to substantial visual impact due to the obstruction of the existing open view. Therefore, mitigation measures is required to minimise and reduce the visual impact.

Operation Phase

- 10.10.41 Residual visual impacts in the Operation phase are listed out in Table 10.9, and mapped in drawing no. 10.1621.
- 10.10.42 The Photomontages of the proposed project without and with mitigation measures at Day 1 and Year 10, illustrating the appearance of the proposed works, and the locations of viewpoints, are shown in Drawing no. 10.1701-1719.
- 10.10.43 The proposed footbridge shall have “*Slight*” to “*Insignificant*” visual impact to the VSR in existing and planned high-rise residential developments (i.e. CDA1, CDA2, CDA3, R8) and the VSR towards the southern end of the of the footbridge (i.e. R3, R4, R5, GIC4) as these VSR shall have alternative open views and shall have “*Nil*” or “*Partial*” Blockage of their view.
- 10.10.44 For VSR that are located further away from the proposed footbridge (i.e. CR1, CR2, GIC1, GIC2, R10), a large portion of the footbridge are likely to be screened off by the existing developments. These VSR shall therefore experience “*Slight*” to “*Insignificant*” visual impact.
- 10.10.45 For VSR O1, O3, GIC3 and transient VSR T2, T3, T4, although with a closer and direct viewing angle, given their nature of activities, these VSRs shall also experience “*Slight*” to “*Insignificant*” visual impact.
- 10.10.46 For VSR T1, given its elevated location and the portion of the footbridge at the front of the VSR is shifted to the eastern side of the nullah, the VSR shall still enjoy the open view of the existing visual corridor and the future scenic of the nullah after the planned nullah beautification work. For VSR O2 and REC 1, although they shall experience “*Substantial*” visual impact due to the proposed footbridge, the compensatory and existing road side trees shall provide certain level of visual screening. Considering that the shrub and paving shall enhance the overall streetscape, the residual impact to these VSRs in Year 10 shall be able to lower to “*Slight*”.
- 10.10.47 For low-rise Residential VSR near the interchange of the footbridge with windows fronting the proposed structure (i.e. R1, R2, R6, R7, R9, R11, CR3, CR4), these VSRs shall experience “*Substantial*” visual impact due its high sensitivity, permanent lost of the scenic view of future beautified nullah and the large magnitude of change (**Drawing No. 10.1720 - 10.1721 & 10.1716 - 10.1717**). As visual mitigation measures are restricted to road side shrubs, streetscape elements and aesthetic design of the footbridge due to site constraints, the effectiveness of these measures on visual screening may be limited. The residual impact to these VSRs in Year 10 shall be “*Moderate*”.
- 10.10.48 For leisure and recreational users along the footbridges crossing Yuen Long Nullah (i.e. REC2) who enjoy the existing open view of the visual corridor, it will be unavoidable for them to experience “*Substantial*” residual visual impact even after the implementation of mitigation measures due full blockage of the visual corridor and the future scenic view of Yuen Long Nullah (**Drawing No. 10.1712 - 10.1715 & 10.1718 - 10.1719**). Aesthetic treatment at the bridge underneath shall be applied, to reduce the visual impact as far as possible.

- 10.10.49 The master landscape plans show the preliminary soft landscape treatment to the proposed footbridge and the pedestrian interchanges located in Yuen Long On Ning Road, Castle Peak Road – Yuen Long, and Kau Yuk Road are shown in Drawing no. 10.1801-1805.

10.11 Conclusion

- 10.11.1 It is considered that the proposed footbridge and the pedestrian interchange follow in principle the planning intentions from the Draft Yuen Long Outline Zoning Plan (No.S/YL/22) and the approved Ping Shan Outline Zoning Plan (No.S/YL-PS/16). However, the concept of the proposed footbridge and pedestrian interchange has been considered to a minimum impact. Enhanced connectivity to the public transportation and open space network from On Ning Road to Kau Yuk Road do reinforce the planning intentions of Yuen Long Urban Area.
- 10.11.2 There are approximately 38 trees (included 1 no. of tree to be transplanted and 37 nos. to be felled) will be affected by the construction of the proposed footbridge and pedestrian interchange located in Yuen Long On Ning Road, Castle Peak Road – Yuen Long, and Kau Yuk Road. None of these affected trees are LCSD Champion Trees nor Registered Old and Valuable Trees. There are no rare species or endangered species but common species will be affected.
- 10.11.3 Approximately 37 nos. of trees will be proposed to compensate the loss of existing greenery, in which 12 nos. will be planted off-site due to the existing site constraint on the utility facilities and its congesting condition, by considering sufficient space should be provided for planting of trees taking into account the minimum space required to cater for the establishment, healthy growth and mature size of the trees. The off-site planting is proposed at the planting area which adjacent to the Ma Tin Road (Refer to the Tree compensation plan in Appendix 10.1). Although the net loss of the trees within works boundary will be 13 in numbers (including 1 no of transplant tree and 12 nos. of compensation trees are proposed in off-site), the trees compensation ratio is considered acceptable in term of 1:1 by quantity, and the proposed off-site compensation area is adjacent to the works boundary which within Yuen Long district. Detailed tree preservation, transplanting and felling including compensatory planting proposals will be submitted to relevant government departments for approval in accordance with DEVB TCW No. 7/2015 – Tree Preservation.
- 10.11.4 With the implementation of the mitigation measures, residual impacts at day 1 of operation are considered can be reduced to slight for the LR1, LR5, LR6, LR7, LR8, LR9, LR10, LCA1, LCA2 and LCA5. These mitigation measures are mainly due to the streetscape elements, namely, paving enhancement along both side of the Yuen

Long Town Nullah. It can improve the overall aesthetic value especially on the existing disorder hard landscape elements along Yuen Long nullah.

- 10.11.5 The proposed footbridge will have “*Slight*” to “*Insubstantial*” visual impact to VSRs in high-rise residential developments, VSRs towards the southern end of the of the footbridge, VSRs that located further away from the footbridge, transient VSRs and VSRs who are conducting active sports and occupational activities.
- 10.11.6 However, it is unavoidable for the low-rise Residential VSRs near the interchange of the footbridge to experience “*Moderate*” residual impact and also unavoidable for leisure and recreational users along the footbridges crossing Yuen Long Nullah to experience “*Substantial*” residual impact.
- 10.11.7 Considering the fact that visual obstructions to particular VSRs are unavoidable even with alternative alignments to the footbridge and the site constraints that limit the further adoption of visual mitigation measures, it is considered that the proposed development has fully explored alternative methods to avoid, reduce and alleviate the identified visual impact. The proposed footbridge is therefore considered as marginally acceptable in visual point of view.
- 10.11.8 Overall, the landscape impact of the project are considered to be acceptable with mitigation measures and visual impact of the project is considered to be marginally acceptable with mitigation measures.