13.3.5.2 The impact is derived from the degree or magnitude of change which the proposals will cause to the existing landscape context (features and LCUs) and its ability to tolerate that change, i.e. its sensitivity. The analysis of the degree of impact is based on the following matrix:

Magnitude of Change caused by proposals	High	Moderate Impact*	Moderate / Significant Impact	Significant Impact
	Moderate	Slight / Moderate Impact	Moderate Impact	Moderate / Significant Impact
	Low	Slight Impact	Slight / Moderate Impact	Moderate Impact
	Negligible	Negligible	Negligible	Negligible
		Low	Medium	High
		Sensitivity of Landscape Character Unit / Feature		

<sup>\*</sup> Note: The above matrix will apply in the assessment of the majority of situations, however, in certain cases a deviation from this may occur; for example, the impact may be so major that a significant impact results from a high magnitude of change to a landscape of low quality/sensitivity.

### 13.3.5.3 The significance thresholds are considered as follows:

Adverse / Beneficial Impacts			
Significant	adverse/beneficial impact where the proposal would cause significant deterioration or improvement in existing landscape quality		
Moderate	adverse/beneficial impact where the proposal would cause a noticeable deterioration or improvement in existing landscape quality		
Slight	adverse/beneficial impact where the proposal would cause a barely perceptible deterioration or improvement if the existing landscape quality		
Negligible	no discernible change in the existing landscape quality.		
Neutral	change in character may be significant or slight but is regarded as neither adverse or beneficial		

13.3.5.4 Should there be insufficient design information with respect to undertaking a detailed landscape impact assessment, a recommendation will be given to undertake additional investigation at a later stage when sufficient design is available.

# 13.4 Visual Impact Assessment Methodology

### 13.4.1 Introduction

- 13.4.1.1 The assessment of the potential visual impact of the scheme comprises two distinct parts:
  - (a) baseline visibility survey; and
  - (b) visual impact assessment.

### 13.4.2 Baseline Survey

- 13.4.2.1 The baseline survey seeks to identify the areas from which the site is visible and the approximate numbers and groups of people affected. It is not practical for a project of this scale to identify and visit each and every affected building, street, open space etc. Visual receptors will therefore be rationalised by grouping together those buildings or districts which have similar views and the assessment will be carried out based on typical views from these VSR groups and scenic viewpoints of major importance will be addressed.
- 13.4.2.2 A variety of techniques have been employed to identify the zone of visual influence of the development, including topographical analysis, photographic survey and construction of working section drawings as appropriate. Mapping the visual envelope locates the zones of visually sensitive receivers (VSRs), and facilitate visual contouring based on distance from the

development site. It is anticipated that the visual envelope will be widespread (it will extend beyond the project area boundary) and that there will be a large number of VSRs. Consequently, the VSRs will be defined at the level of residential estate, or industrial district, for example, taking account of committed developments. Where the nature of views from the 'facing edge' of an estate or district is significantly different from the remainder, it may be divided into two VSRs for the purpose of the visual assessment.

- 13.4.2.3 In summary, the baseline visual assessment will identify:
  - (a) the visual envelope or visual zone within which the proposed development may be contained either wholly or partially within views (to include indirect effects such as offsite construction activities); and
  - (b) the visually sensitive receivers (VSRs) within the visual envelope whose views will be affected by the scheme.
- 13.4.2.4 The visual envelope and the visually sensitive receivers have been mapped.

### 13.4.3 Visually Sensitive Receivers (VSR)

- 13.4.3.1 Both present and future VSRs, i.e. other permitted developments scheduled for construction before NAKTA, will be considered. The potential receivers are categorised in three groups for the purposes of the assessment, for reasons of differing visual sensitivity:
  - (a) views from residences the most sensitive of receivers due to the potentially high level of intrusion on visual amenity and quality of life;
  - (b) view from workplaces less sensitive than above due to visual amenity being less important within the work environment; and
  - (c) views from public areas including all other areas accessible to the public, such as public parks, recreation grounds, footpaths, roads, etc. The sensitivity of this group is variable, being affected by the degree to which the receiver is transitory, for example, the same degree of visual impact will have a greater effect on an individual sitting in a park as compared to someone travelling along a highway.

#### 13.4.4 Degree of Visibility

- 13.4.4.1 There is, in any visual assessment, a continuum of degrees of visibility, from not visible to fully open in close views. To indicate the degree of visibility of the site from any location, that continuum has been divided into four categories for the purposes of this assessment:
  - (a) No view; (or difficult to perceive);
  - (b) Glimpse: a transient view or distant view of part of the site (or development) in the context of the wider landscape, or scope (i.e. angle of main view relative to the development);
  - (c) Partial view: a clear view of part of the site (or development); a partial view of most of it; or a distant view in which the site (or development) forms a relatively small proportion of a wider view; and
  - (d) Open view: a panoramic view of most of the site (or development), occupying most of the field of vision.

#### 13.4.5 Visual Sensitivity

- 13.4.5.1 The sensitivity of each VSR is therefore influenced by its location, both in relation to its proximity to the proposed development and to the direction and nature of the view relative to the scheme. Typical views from each VSR are identified and described. Sensitivity of each VSR relates to:
  - character of existing view;

- value of the existing view;
- degree of existing visibility;
- context, location and distance from the development of the VSR;
- type of VSR;
- other views available from VSR; and,
- number of individuals affected per VSR.
- 13.4.5.2 The sensitivity of a view to changes resulting from the proposed development is based therefore, on a combination of the type of receiver and the nature of the view, simplified as follows:
  - (a) High: e.g. residential properties / open views;
  - (b) Medium: e.g. sporting facilities / partial views and glimpses; and
  - (c) Low: e.g. industry / glimpses or no view.

#### 13.4.6 Visual Impact

- 13.4.6.1 The survey of the existing situation forms the baseline from which the potential visual impacts resulting from the proposals will be assessed, as follows:
  - (a) identification of the sources and types of visual impacts, and their magnitude and duration, that would be generated during construction and operation of the scheme; and
  - (b) consideration of the degree of change to the baseline conditions resulting from the principal visual impacts.
- 13.4.6.2 At this stage of project planning, information relating to architectural details including materials and colour finishes is limited. Suggestions relating to building treatments in principal may be made as part of the conclusions to the visual assessment where they may contribute to mitigation of visual effects.
- 13.4.6.3 The impact assessment will relate to the impact of the development proposals on typical views from the VSR, as identified in the baseline assessment. The visual impact will result from consideration of the following:
  - (a) The sensitivity as highlighted above; and,
  - (b) Factors relating to the magnitude of change including:;
    - degree of change to existing views;
    - nature of change to existing views;
    - duration of change to existing views; and,
    - the cumulative effects on views of this and other neighbouring developments which are included on approved land use plans.
- 13.4.6.4 The magnitude of change to view relates to a number of factors such as:
  - (a) visual compatibility with surroundings (e.g. massing, height, shape and proportion of buildings);
  - (b) visual obstruction caused by the proposals;
  - (c) duration of visual impacts (e.g. extent of temporary effects during the construction phase or permanent changes); and
  - (d) improvement of visual amenity (e.g. through clearance of blight).
- 13.4.6.5 This magnitude of change to the views is classified as follows:
  - (a) High: the majority of viewers affected / major and/or permanent changes in view;
  - (b) Moderate: many viewers affected / moderate change in view; and
  - (c) Low: few viewers affected / minor or temporary change in view.

#### 13.4.7 Significance Threshold of Visual Impact

13.4.7.1 The significance threshold is rated in a similar fashion to the landscape impact, i.e. significant, moderate, slight and negligible. The impacts may be beneficial or adverse. The assessment will be undertaken for the construction phase, the opening year and the design year. The impact is derived from the degree of magnitude of change which the proposals would cause to the existing visual context and its ability to tolerate the change, i.e. its sensitivity. Analysis of the significance threshold is based on the following matrix:

Magnitude of Change caused by proposals	High	Moderate Impact	Moderate / Significant Impact	Significant Impact
	Moderate	Slight / Moderate Impact	Moderate Impact	Moderate / Significant Impact
	Low	Slight Impact	Slight / Moderate Impact	Moderate Impact
	Negligible	Negligible	Negligible	Negligible
		Low	Medium	High
		Sensitivity of View		

13.4.7.2 The matrix will apply in the assessment of the majority of situations, however in certain cases a deviation from this may occur, e.g. the impact may be so major that a significant impact may occur to a low quality view.

Adverse / Beneficial Impacts				
Significant	Adverse/beneficial impact where the proposal would cause significant deterioration or improvement in existing visual quality			
Moderate	Adverse/beneficial impact where the proposal would cause a noticeable deterioration or improvement in existing visual quality			
Slight	Adverse/beneficial impact where the proposal would cause a barely perceptible deterioration or improvement in the existing visual quality			
Negligible	No discernible change in the existing visual quality.			
Neutral	Change in character may be significant or slight but is regarded as neither adverse or beneficial			

13.4.7.3 Should there be insufficient design information with respect to undertaking a detailed landscape impact assessment, a recommendation will be given to undertake additional investigation at a later stage when sufficient design is available.

#### 13.4.8 Mitigation Measures

- 13.4.8.1 Landscape and visual 'mitigation' in the context of environmental assessment includes those elements that are incorporated into the proposed scheme, which have been designed to minimise adverse impacts. For example, where appropriate, landscape features will be retained and accommodated within the scheme design. The character of the urban context of the site has informed the proposed layout. Similarly, aspects relating to visual amenity have been considered during the development of the layout plan, such as the incorporation of view corridors, restriction of building heights to maintain views of the ridge, etc. These measures that are integral to the scheme design are described as part of the development proposals and in the description of the landscape framework.
- 13.4.8.2 Inevitably with a scheme of this magnitude and complexity, there will be compromise between the competing requirements of the brief. It is therefore unlikely that all landscape and visual impacts can be resolved through scheme design at the macro scale. Remaining impacts

identified through the assessment process, i.e. those effects that have not been resolved in the preliminary development layout plan, may be mitigated using temporary measures, such as temporary hoarding during construction; alternatively, localised design techniques, such as advance planting or material finishes to buildings may be utilised. These mitigation measures will take into account the following:

- (a) preservation of existing vegetation as far as possible;
- (b) woodland, tree and shrub planting of new slopes, amenity strips and areas, central reservations and adjacent to any new structures to aid stabilisation;
- (c) consideration of the contouring of new slopes in order to blend them in with the existing topography;
- (d) use of vegetated earth mounding or structural solutions for screening;
- (e) sensitive treatment of structural forms;
- (f) appropriate design of hard landscape, furniture and other elements;
- (g) careful consideration of significant landscape elements; and
- (h) feasibility of mitigation measures in respect of funding, implementation phasing and maintenance.
- 13.4.8.3 The aim is the design of integrated landscape proposals to alleviate the landscape and visual impacts that arise from the final scheme, both during its construction and operational phases, and to ensure that the residual impacts are acceptable. As the scheme proposals, in particular the phasing of the project, develop, a programme for the implementation, management and maintenance of landscape works will be worked out and included together with a schedule of recommended mitigation measures.

## 13.5 Proposed Development

#### 13.5.1 Introduction

- 13.5.1.1 The proposed South East Kowloon Development (SEKD) is given on the layout plans and comprises the following:
  - (a) residential development for approximately 250,000 population including:
  - (b) public high-rise residential development;
  - (c) private high-rise residential development, generally on commercial podium;
  - (d) stadium:
  - (e) infrastructure;
  - (f) G/IC facilities;
  - (g) railway depot with private residential above; and.
  - (h) regional, district and local open space.

## 13.5.2 Designated Projects Included Within This Report

13.5.2.1 The SEKD, in accordance with the EIAO, comprises a Schedule 3 Designated Project. As indicated earlier is also comprises a series of Schedule 2 Designated Projects. These will be considered in detail in separate studies, however, they have been included within this section in order to minimise the potential impacts at the early design stages. These Projects together with a number of Schedule 2 Designated Projects. These can be summarised in the following **Table 13.1**.