

# **Landscape and Visual Appraisal**

for

Land between

Haverhill Road and Hinton Way

Stapleford

Cambridgeshire

on behalf of

Axis Land Partnerships

## **Appendix 1: Methodology**

**February 2020**

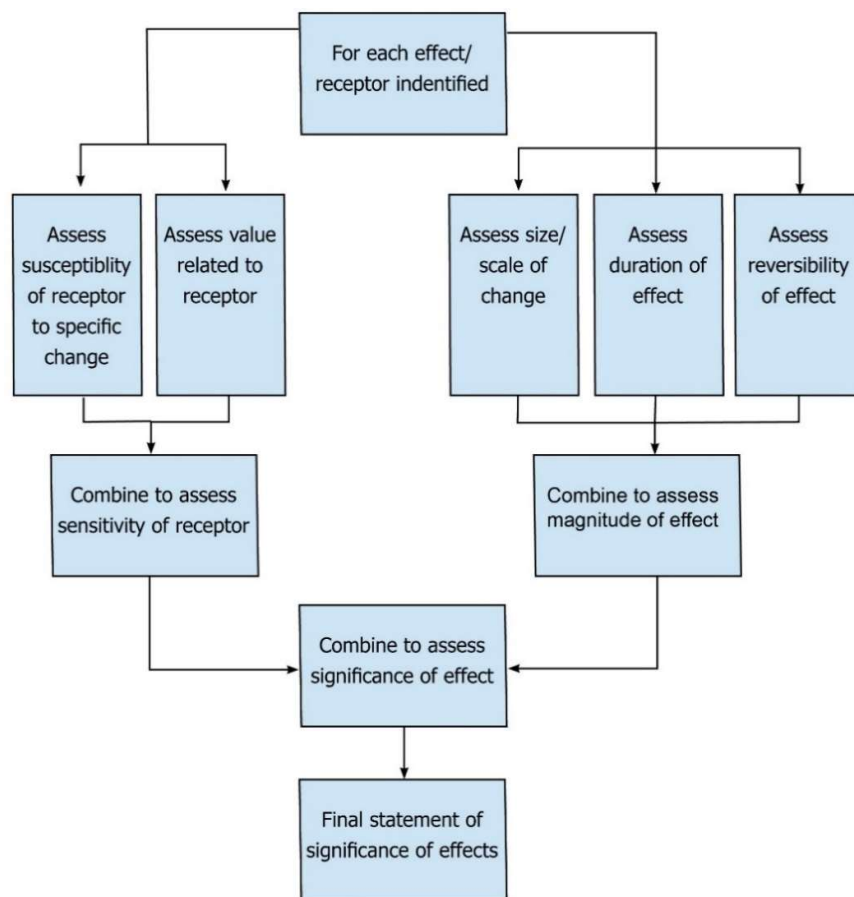
# 1 Scope and process

## 1.1 Introduction

- 1.1.1 Landscape and visual impact assessment (LVIA) involves a combination of quantitative and qualitative considerations within a framework that allows for structured, informed and reasoned professional judgment. The Guidelines for Landscape and Visual Impact Assessment (GLVIA), Third Edition, forms the current nationally recognized professional guidance tool for LVIA. The GLVIA reflects current legislation and professional experience over many years of undertaking landscape and visual assessments. This methodology follows the principles recommended within GLVIA Third Edition as part of the assessment process.
- 1.1.2 In defining 'landscape' within GLVIA, reference is made to the adopted definition agreed by the European Landscape Convention (Florence: Council of Europe 2000), which states that the landscape is *"an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors"*. This definition includes the landscapes of towns and cities i.e. townscape. Throughout this methodology, for the purposes of this assessment, the term 'landscape' should be taken to be synonymous with 'townscape'.
- 1.1.3 Whilst the process of assessment is often referred to as a Landscape and Visual Impact Assessment, it is important to understand the difference between 'impact' and 'effect'. 'Impact' is defined as the action being taken and 'effect' as the change resulting from the action. The changes resulting from the implementation of the development form the main consideration of this assessment and thus the word effect is mainly used. The two main components are:
- landscape effects – assessing effects on the landscape as a resource in its own right; and
  - visual effects – assessing effects on specific views and the general amenity of the view.
- 1.1.4 An assessment of the existing situation and the effects of the proposals is carried out in relation to the following geographical extents:
- national and regional scale landscape character and the wider visual setting;
  - county and district scale landscape character and the local visual setting; and
  - the site and more immediate landscape and visual setting.
- 1.1.5 The spatial scope of the landscape and visual assessment covers a study area of typically up to approximately 2 km radius from the site. This is based on the initial results of a desktop study reviewing location, topography and nature of the development. This desk-based work is then verified as part of the field survey.
- 1.1.6 The likely effects of the proposed scheme are assessed in terms of the degree of change on completion of the works in the first year (year one) in winter and after a period of 15 years (year

15) in summer. Where the field survey and assessment were carried out in summer months, a correlation is made as to what the predicted effects would be in winter, and vice versa. An assessment in year 15 enables the effectiveness of any planting and soft works mitigation measures to be determined over a sufficient period for the proposals to have established and delivered their intended objectives in a meaningful way. Between year one and 15, the proposed planting will be in the process of meeting these objectives and a correlation over this span of time can be made as to the extent to which this has been partially achieved. Beyond 15 years, trees can be expected to continue to grow to reach their mature height, and thus potentially provide increased mitigation in later years.

1.1.7 The assessment uses the following process for both landscape and visual effects, as set out in the GLVIA:



**Figure A1 - Assessing the significance of effect**

1.1.8 Matrices are utilised to enable consistent and transparent judgements to be applied and for them to be easily understood by the reader. By this means, different levels of sensitivity and magnitude of change can be applied and be combined in order to define a significance of effect. The category levels and matrix combination outcomes set out in this methodology reflect the typical situation. However, there are occasions when it is not appropriate to apply these judgements in a rigid and

formulaic manner, and the assessor may judge that it would be appropriate to apply a different category or combination outcome. This would primarily apply in the combining of sensitivity and magnitude used in Tables 7 and 14. Any deviation from the categories used in the matrices are explained in the main body of the report.

## **1.2 Viewpoint analysis and assessment**

1.2.1 The extent of visual influence of the Development is described as the Zone of Visual Influence (ZVI). This area is identified in two stages. First an initial desk-based study of landform, major vegetation and built form is carried out, and secondly an assessment in the field. The field work includes walking the Site and observing locations that are visible beyond the Site and then checking this by visiting the locations beyond the Site where publicly accessible. The extent of the ZVI is therefore progressively determined and fine-tuned.

1.2.2 To assist the reader, viewpoints are provided to demonstrate the range of available views for a variety of receptors and geographical locations. The GLVIA refers to three types of viewpoint, which are set out and utilised as described below.

- **Representative viewpoint** – provides a viewpoint that may be considered as typical or similar to a particular location and where the significant effects are unlikely to differ. It therefore can be considered as being representative of other views, e.g. from a PROW or group of houses. Where the viewpoint is not representative of a neighbouring visual receptor, and there would be different significant effects, this is stated within the text.
- **Specific viewpoint** – illustrates a particular noteworthy or key view. This may be a promoted viewpoint or from a specific visitor attraction, tourist destination, statutory landscape designation, or particular locally valued recreational or cultural landscape associations.
- **Illustrative viewpoint** – provided to demonstrate particular features, effects or issues. These are used to illustrate: particular Site features; the extent of visibility from within the Site from non-publicly accessible locations; or features that prevent views from certain locations.

1.2.3 A range of representative viewpoints are selected to assess the available views at a variety of different geographical locations, distances and receptor experiences. Viewpoint locations include public rights of way, roads and public open space. Viewpoints are provided to help appreciate and then describe the views available, identify features within the view, define the location and extent of the Site within the view, and to provide a visual record. On the photographs, the location and extent of the Site is indicated to help the reader, using a dotted line where the proposed development would not be visible and a solid line where all or parts of the development would be visible as an open view.

1.2.4 The assessment of views includes the detailed consideration of:

- the proximity of the visual receptor to the proposed development;
- the extent of visibility or proportion of the proposed development visible within the wider context of the view;
- the nature and complexity of the existing view and any changes that would affect the skyline;
- elements within the view that may detract from or add to its quality;
- the extent to which the proposed development occupies the view, and whether a framed view, glimpsed or panoramic view; and
- whether the view would be experienced from a specific fixed location or whether it would form part of a sequence of views when the viewer would be moving, and if from a fixed location, such as a window, whether the proposed development would form the central focus of the view or a more oblique outlook.

1.2.5 A variety of visual receptors are assessed with a focus on those who are most likely to be concerned about changes to views.

### **1.3 Photography and site work**

1.3.1 Photographs are taken using a digital camera with an appropriate lens set to provide a focal length equivalent to a 50mm focal length lens on a manual 35mm film SLR camera.

1.3.2 Photographs are taken using two cameras. Summer photographs (2019) were taken on an Olympus E-420 digital single lens reflex camera with a AF-S Zuiko Digital 25mm fixed lens. The camera has a focal length multiplier of 2 making the focal length equivalent to a 50mm focal length lens on a manual 35mm film SLR camera. The horizontal field of view in landscape format from a single frame shot is approximately 40 degrees. Winter photographs (Jan 2020) were taken with a Sony Alpha 7II full frame digital single lens reflex camera with a SEL50F18F 50mm fixed lens.

1.3.3 The camera is rotated in increments to allow a reasonable proportion of overlap of photographs to create a join that is as accurate as possible.

1.3.4 Wherever possible photographs are taken with the sun behind or to one side of the view to prevent over-exposure and a high contrast of photographs or features appearing in shadow.

1.3.5 The panoramic photographs are stitched together using an Adobe Photoshop Plugin (Photomerge). Exposure and levels are adjusted to ensure a smooth transition between the photographs.

## **2 Criteria and categories: landscape**

2.1.1 The assessment includes a description of the existing landscape elements including topography, vegetation, landform, land uses, infrastructure of the landscape and provides an assessment of the effects of the Development. The national landscape character areas provide a useful basis for setting the scene and to understand the broad scale of the landscape at the national context. However, the primary source assessing landscape character is based on district scale character

assessments. The key characteristics that form the landscape are identified, including the individual elements, aesthetic aspects and perceptual aspects, and their condition identified. An assessment of effects on the Site itself is made predominantly in relation to change/loss of the individual landscape features.

2.1.2 In determining the significance of effects on the landscape, sensitivity is determined for each: landscape feature within the Site; landscape character area; or landscape type that would be affected and combined with the magnitude of change arising from the proposed development. The criteria and categories used to determine the effects on landscape, is set out below.

## 2.2 Landscape sensitivity (the nature of the receptor)

2.2.1 This in part is based on the **value** of the landscape receptor. This includes considerations such as: landscape quality / condition; landscape fabric and rarity; scenic quality; wildlife, heritage and cultural interest; recreation value; and perceptual aspects. The presence of a landscape designation can help to identify value and reasons for a designation are usually established in a supporting study. Landscapes or features without any formal designation may also express characteristics that are valued locally. Where there is no supporting evidence base, details regarding sensitivity should typically be derived from landscape character assessments.

**Table 1: Value of Landscape Receptor**

Value of landscape receptor	Criteria
Very High	<p><b>Character:</b> Areas with international or national landscape designations, i.e. National Parks and Areas of Outstanding Natural Beauty or international heritage designations, i.e. World Heritage Sites and their landscape setting, and displaying good condition and/or a strong strength of character. Very high value may occasionally exist in landscapes with no such designation, where the Landscape Character Assessment or Historic Environment Assessment indicates an area as being of particular high sensitivity or international or national rarity.</p> <p><b>Features:</b> form a very important contributory element of the landscape, that have particular historical or cultural reference, or are distinctive or rare and typically of good condition.</p>
High	<p><b>Character:</b> Landscape Character Assessments that identify an Area of being of high sensitivity, e.g. good condition and/or strong strength of character or of particular local value. Areas with local landscape designations may indicate a High value, but weight should also be given to the Landscape Character Assessment to determine the specific value.</p> <p><b>Features:</b> form an important element of the landscape and a major contribution to the character of the landscape. Features play an important role in the local visual and amenity of the area, are typically of good condition and likely to be of historical or cultural relevance to the locality.</p>
Medium	<p><b>Character:</b> Landscape type or area is identified as medium sensitivity (e.g. having a moderate condition and/or strength of character) including judgements within relevant Landscape Character Assessments as of medium sensitivity. The landscape likely to exhibit some damage or deterioration but may have some individual features of local rarity or value.</p>

Value of landscape receptor	Criteria
	<b>Features:</b> forms a notable feature in the landscape, but does not form an important or key characteristic. Alternatively, the feature is an intrinsic element of landscape but is in poor condition. Feature contributes some value to the visual and amenity aspect of the locality and provides some relevance to the historical or cultural context of the landscape.
Low	<b>Character:</b> Landscape type or area is identified as having low sensitivity (e.g. poor condition and/or weak strength of character). Landscapes will typically illustrate clear indication of damage, deterioration, and limited visual cohesion. <b>Features:</b> forms an intrusive element that is unlikely to be valued or provides a limited contribution to the character and local visual and amenity value. The feature may be of such poor condition that it has lost its ability to contribute effectively to the character of the landscape. It is likely that the feature has little historical or cultural relevance.

2.2.2 **'Susceptibility to change'** assesses the relative ability for the landscape to accommodate the changes that would result from different types of development. This is an integral element of the landscape, but one that can only be judged in the context of the generic type of development being proposed. However, it is not necessary to understand the specifics of the development to make this judgement and thus susceptibility to change can be considered as part of the baseline assessment. Susceptibility to change will, in part, relate to the features and characteristics displayed within the landscape type or area: the relative extent of enclosure and openness; the presence of similar development within or adjacent to the landscape type or area; condition/quality; and the ability to meet landscape planning policies and strategies. Where available, reference is made to judgements made in landscape character assessments as well as Site based judgements. It is particularly important to make this judgement in the context of the Site, i.e. determining the relative presence of those aspects that are evident within the proximity of the Site.

**Table 2: Landscape susceptibility to change**

Susceptibility to change	Criteria
Very High	A very limited ability of the landscape to accommodate development of the type proposed. Features particularly susceptible to change from development.
High	A fairly limited ability of the landscape to accommodate development of the type proposed. Features often susceptible to change from development.
Medium	A moderate ability of the landscape to accommodate development of the type proposed. Features likely to have some susceptible to change from development.
Low	A well-defined ability of the landscape to accommodate development of the type proposed. Features has little susceptible to change from development.

2.2.3 These two aspects of susceptibility to change and value are combined to create an overall judgement of sensitivity as follows.

**Table 3: Landscape sensitivity matrix**

Criteria		Susceptibility			
		Very High	High	Medium	Low
Value	Very High	Very High	Very High	High	Medium
	High	Very High	High	High	Medium
	Medium	High	High	Medium	Low
	Low	Medium	Medium	Low	Very Low

**2.3 Magnitude of landscape effect**

2.3.1 The magnitude of effect of the Development on each of the landscape character types or areas was assessed on the basis of three factors: 'size or scale of change', 'geographical influence' and 'duration and reversibility', which are combined to provide an overall judgement of magnitude.

2.3.2 The size or scale is based on the following professional judgement and site based assessment.

**Table 4: Landscape: size or scale of change**

Size/scale of change	Criteria
Very High	The proposals constitute a very major change to the feature or key characteristics and attributes of the landscape type or area, resulting in total loss or permanent alteration to existing landscape features and forming a dominant new feature in the landscape.
High	The proposals constitute a major change to the feature or key characteristics and attributes of the landscape type or area, resulting in major loss or permanent alteration to existing landscape features and forming a prominent new feature in the landscape.
Medium	The proposals constitute a noticeable change to the feature or key characteristics and attributes of the landscape type or area, resulting in a conspicuous loss or alteration to existing landscape features and forming a new feature in the landscape.
Low	The proposals constitute a minor change to the feature or key characteristics and attributes of the landscape type or area, resulting in limited loss or alteration to existing landscape features and forming a minor new feature in the landscape.
Very Low	The proposals constitute little discernible change to the feature or key characteristics and attributes of the landscape type or area, resulting in no loss or permanent alteration to existing landscape features and forming a barely discernible new feature in the landscape.



2.3.3 **Geographical influence** determines the extent of the local landscape type affected by the proposed development.

**Table 5: Landscape: geographical influence**

Geographical influence	Criteria
Very High	Effects experienced over an extensive area of the feature or a district level landscape character area, where this is likely to have an evident effect at the national level of landscape character.
High	Effects experienced where changes would occur over large parts of a feature or landscape character area.
Medium	A moderate extent of a feature or landscape character area is affected.
Low	Effects limited to a localised area and small proportion of the overall feature or landscape character area.
Very Low	Effects limited to a very restricted extent, sufficient that there is little discernible influence on the feature or character of the landscape character area.

2.3.4 Magnitude is also affected by duration and reversibility, as set out below:

**Table 6: Landscape: duration and reversibility**

Duration & reversibility	Criteria
High	Long-term development over 30 years and/or difficult to reverse.
Medium	Medium-term development (5 to 30 years) and/or moderately difficult to reverse.
Very Low	Short-term development 1 to 5 years and/or fully reversible.

2.3.5 The three aspects of magnitude are combined based on professional judgement, with greater weight being given to scale/size of change, into one of the following categories: **Very High, High, High, Medium, Low** or **Very Low** or **No Change** where there is no effect.

## 2.4 Significance of effect and nature of change

2.4.1 On the basis of the above factors and considerations the following categories of significance of effect for landscape change are identified based on a combination of sensitivity and magnitude. Table 7 provides a guide for how different levels of sensitivity and magnitude combine. However, as the assessment is based on professional judgement there may be situations where an intermediate category is considered appropriate or possibly a variation the level of significance. In such circumstances this will be explained in the supporting text.

**Table 7: Significance of Effect on Landscape**

Criteria		Sensitivity				
		Very High	High	Medium	Low	Very Low
Magnitude	Very High	Major	Major	Major-Moderate	Moderate	Minor
	High	Major	Major-Moderate	Major-Moderate	Moderate	Minor
	Medium	Major-Moderate	Major-Moderate	Moderate	Moderate-Minor	Negligible
	Low	Moderate	Minor-Moderate	Minor	Minor	Negligible
	Very Low	Minor	Minor	Negligible	Negligible	Negligible

2.4.2 The nature of change of the effect is also identified providing a judgement on whether the predicted effects would be beneficial, adverse or neutral on the basis of the following:

- **Adverse effects** - those effects that are, on balance, damaging to the quality, integrity or key characteristics of the landscape or visual resource.
- **Beneficial effects** - those effects that would, on balance, result in an improvement in the quality, integrity or key characteristics of the landscape or visual resource.
- **Neutral effects** - those effects that would maintain, on balance, the existing levels of the quality, integrity or key characteristics of the landscape or visual resource. (A neutral effect may therefore arise where beneficial effects offset adverse effects or where the value judgement would consider the change to be different, but neither a deterioration or an enhancement).

2.4.3 For the purposes of this assessment, effects that are considered to be 'significant' i.e. those of greatest consideration in determining a planning application, are those that create an effect of Major or Major-Moderate significance as shaded green in Table 7 above.

### 3 Criteria and categories: views

3.1.1 In determining the significance of effects on views, sensitivity is determined for each visual receptor that would be affected and combined with the magnitude of change arising from the proposed development. The criteria and categories used to determine the effects on views, is set out below.

#### 3.2 The nature of the receptor (sensitivity)

3.2.1 The sensitivity of views is considered in relation to the person experiencing the view. This in part will be based on the **value** that the receptor places on the view. This is considered on a collective basis, so will be influenced by the extent to which it is publicised, relative note-worthiness, i.e.

clearly defined view or vista that is distinguished from other views, and the extent to which the view is utilised or enjoyed.

**Table 8: Value of view**

Value of view	Criteria
High	Views from publicised vantage points and of regional and sub-regional value. Tourist attractions / historic estates / statutory heritage asset with a specific vista or focused views. Particularly noteworthy public views from national trails, National Parks or AONBs or statutory heritage assets, i.e. more than local value and could be expected to be regularly used. Windows from residential properties specifically designed to take advantage of a particular view.
Medium	Locally known or valued viewpoints. Views from promoted public rights of way or clear evidence of regular use and areas of informal open space. Views from regularly used rooms or living space. Panoramic view, vista or other noteworthy view from active recreation areas or transport routes.
Low	View is not publicised and/or that there is relatively limited evidence of being regularly used. Visually degraded locations. View from small windows or likely non-main living spaces. Views of little noteworthiness from areas of active recreation or transport routes.

3.2.2 The '**susceptibility to change**' of the visual receptor will vary depending on the activity or use of the particular location and the extent to which the view is an important aspect of the activity or use. The following criteria are used to determine susceptibility to change:

**Table 9: Susceptibility of visual receptor to change**

Susceptibility of visual receptor to change	Criteria
High	Residential properties. Areas of open space where informal recreation is the main activity e.g. country parks and public open space. Users of public rights of way. Recreational activity where the primary enjoyment comes from the view. General views from heritage assets or attractions.
Medium	Areas of outdoor sport or active recreation where appreciation of views forms part of the experience, e.g. golf courses; pedestrians using footways along roads; vehicular users and cyclists on roads; and rail passengers.
Low	Areas of active sport or play where the view does not form part of the experience e.g. football, rugby, play equipment. Commercial premises and areas of employment, where the view has limited value in relation to the activity being undertaken. There may be specific locations where buildings and the type of employment has been designed to enhance the quality of working life, in which case a higher level sensitivity would be applicable.

3.2.3 These two aspects are combined to create an overall judgement of sensitivity as follows:

**Table 10: Visual sensitivity matrix**

Criteria		Susceptibility		
		High	Medium	Low
Value	High	Very High	High	Medium
	Medium	High	Medium	Low
	Low	Medium	Low	Very Low

**3.3 Magnitude of visual effect**

3.3.1 The magnitude of effect of the Development on each view was assessed on the basis of three factors, 'size or scale of change', 'geographical influence' and 'duration and reversibility', which are combined to provide an overall judgement of magnitude. The size or scale is based on the following professional judgement and Site based assessment.

**Table 11: Visual: size or scale of change**

Size/Scale of Change	Criteria
Very High	The proposed development would become the most dominant feature in the view and that completely contrasts with the other existing features in the view. The contrasting features of the development would be fully visible.
High	The proposal development would constitute a major change to the view, forming a prominent new feature in the view that noticeably contrasts with other existing features in the view. The development would be predominantly visible.
Medium	The proposals development would form a noticeable change to the view, forming a conspicuous new feature in the view that partially contrasts or harmonises with other features in the view. The contrasting features of the development would be partially visible.
Low	The proposal development would constitute a small change to the view, forming a minor new feature in the view that largely integrates with its surroundings with little discernible change. This could also be a result of being a glimpsed or filtered view through vegetation and/or at some distance relative to its scale.
Very Low	The proposed development would be a barely discernible change to the view, which could e.g. be due to a very filtered view through vegetation or considerable distance relative to scale.

3.3.2 **Geographical extent** determines how far the effect would be experienced. The wider the geographical effect, the greater magnitude of change.

**Table 12: Visual: geographical influence**

Geographical Influence	Criteria
Very High	The development affects all or nearly all of the view and forms the primary focus of the view to the extent that it is overwhelming. It is likely that the view is within the Site or very close to the Site.
High	The development affects a large extent of the view and at the centre of the view. It is likely that the view is close to the Site or possibly in the Site.
Medium	The development affects a moderate extent of the view and lies near the centre of the view or at a slightly oblique angle. It is likely that this is a localised view.
Low	The development affects a small extent of the view and and/or at a moderately oblique angle. It is likely that the development is in the mid-distance of the view.
Very Low	The development affects a very small extent of the view and and/or at a very oblique angle. It is likely that the development is in the far distance of the view.

3.3.3 Magnitude is also affected by **duration and reversibility**, as set out below:

**Table 13: Visual: duration and reversibility**

Duration & reversibility	Criteria
High	Long-term development over 30 years and/or difficult to reverse.
Medium	Medium-term development (5 to 30 years) and/or moderately difficult to reverse.
Low	Short-term development 1 to 5 years and/or fully reversible.

3.3.4 The three aspects of magnitude are combined based on professional judgement, with greater weight being given to scale/size of change, into one of the following categories: **Very High, High, Medium, Low** or **Very Low** or **No Change** where there is no effect.

### 3.4 Significance of effect

3.4.1 On the basis of the above factors and considerations the following categories of significance of effect for visual change are identified based on a combination of sensitivity and magnitude. Table 14 provides a guide for how different levels of sensitivity and magnitude combine. However, as the assessment is based on professional judgement there may be situations where an intermediate category is considered appropriate or possibly a variation the level of significance. In such circumstances this will be explained in the supporting text.

**Table 14: Significance of effect on views**

Criteria		Sensitivity				
		Very High	High	Medium	Low	Very Low
Magnitude	Very High	Major	Major	Major-Moderate	Moderate	Minor
	High	Major	Major-Moderate	Major-Moderate	Moderate	Minor
	Medium	Major-Moderate	Major-Moderate	Moderate	Moderate-Minor	Negligible
	Low	Moderate	Minor-Moderate	Minor	Minor	Negligible
	Very Low	Minor	Minor	Negligible	Negligible	Negligible

3.4.2 The nature of change of the effect is also identified providing a judgement on whether the predicted effects would be would be beneficial, adverse or neutral on the basis of the following:

- **Adverse effects** - those effects that are, on balance, damaging to the quality, integrity or key characteristics of the landscape or visual resource.
- **Beneficial effects** - those effects that would, on balance, result in an improvement in the quality, integrity or key characteristics of the landscape or visual resource.
- **Neutral effects** - those effects that would maintain, on balance, the existing levels of the quality, integrity or key characteristics of the landscape or visual resource. (A neutral effect may therefore arise where beneficial effects offset adverse effects or where the value judgement would consider the change to be different, but neither a deterioration or an enhancement).

3.4.3 For the purposes of this assessment, effects that are considered to be 'significant' i.e. those of greatest consideration in determining a planning application, are those that create an effect of Major or Major-Moderate significance with an adverse nature of change. These are shaded in green in Table 14.

## 4 Criteria of other factors assessed

4.1.1 The assessment also considered the following aspects, as set out below.

- **Direct and indirect:** Direct effects relate to the changes on the Site including re-contouring of landform, loss and addition of vegetation, removal or inclusion of built structures and surface treatments, etc. Direct effects are also experienced where there are changes to the character of the landscape, where the proposed development is physically located within a character area or type. Effects on views are also always considered to be direct. Indirect

effects occur where the character is influenced by changes in a neighbouring landscape character area.

- **Seasonal variation and duration:** Due to the role that vegetation can play in preventing or limiting views or influencing the character of the landscape, the difference between winter and summer needs to be considered. This is considered by assessing impacts in winter (in the first year following completion) and in summer (after 15 years).