

Appendix A

Landscape and Visual Assessment Methodology

Introduction

The purpose of the Landscape and Visual Impact Assessment (LVIA) is to identify the potential effects on the landscape character and the changes to views experienced by the inhabitants.

Guidance and Approach

This assessment methodology has been developed from the guidance provided in the following publications:

- 'Guidelines for Landscape and Visual Impact Assessment' (GLVIA), Third Edition Landscape Institute & Institute of Environmental Management and Assessment 2013;
- 'An Approach to Landscape Character Assessment' Christine Tudor and Natural England, October 2014.

It should be noted that the above guidance does not dictate a prescriptive methodology, instead it encourages practitioners to develop transparent and logical methods, using standardised terminology and which are proportionate the type and size of development proposed.

It is important to note that there is a distinction to be made between landscape and visual effects:

- Landscape effects are the result of a change to the fabric, character or quality of the landscape as a result of development. They do not have to be seen; and
- Visual effects result from a change in views or the visual amenity experienced by people.

The following sets out the methodology for the Great Altcar Moss Wellsite LVIA

Assessing Landscape Effects

Evaluating Landscape Sensitivity

The method used to categorise landscape sensitivity, is based on Paragraphs 5.39 – 5.47 of GLVIA3. The sensitivity of a landscape, or its individual components, is defined by a product of its value and its susceptibility to change.

Evaluating Landscape the Value and Susceptibility of a Landscape to Change

Landscape value is defined as the ‘value attached to the landscape by society’ (Paragraph 5.19 of GLVIA3). It is based on a range of factors as set out in Table A1.

Landscape susceptibility is defined as “*The ability of the landscape (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies*” (Paragraph 5.40 of GLVIA3).

Table A1 Landscape Value and Susceptibility to Change

| | Factors Influencing Value | Factors Influencing Susceptibility |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High | <p>Designations: Internationally or nationally designated landscape or feature.</p> <p>Condition/Quality: Landscape /features are intact and/or in good condition.</p> <p>Scenic Quality: High aesthetic appeal.</p> <p>Rarity: Rare landscape features or rare in a regional or national context.</p> <p>Representativeness: The landscape/feature contains many characteristics considered to be important examples.</p> <p>Conservation Interest: Rich and/or diverse nature conservation features.</p> <p>Recreation Value: A landscape /feature that makes a large contribution to the public’s recreational experience.</p> <p>Perceptual Aspects: High level of wildness and/or tranquility.</p> <p>Associations: High level of historic and/or cultural associations.</p> | <p>High Susceptibility</p> <p>The landscape (or individual landscape receptor) cannot accommodate the proposed development without notable consequences for the maintenance of the baseline and/or landscape planning policy.</p> <p>There is no or little similar development present in the landscape.</p> |
| Medium | <p>Designations: Locally designated landscapes or features.</p> <p>Condition/Quality: Some features or sub-areas are intact and/or in good condition</p> <p>Scenic Quality: Of moderate aesthetic appeal.</p> | <p>Medium Susceptibility</p> <p>The landscape (or individual landscape receptor) has some ability to accommodate the proposed development. There would be some consequences for the maintenance of</p> |

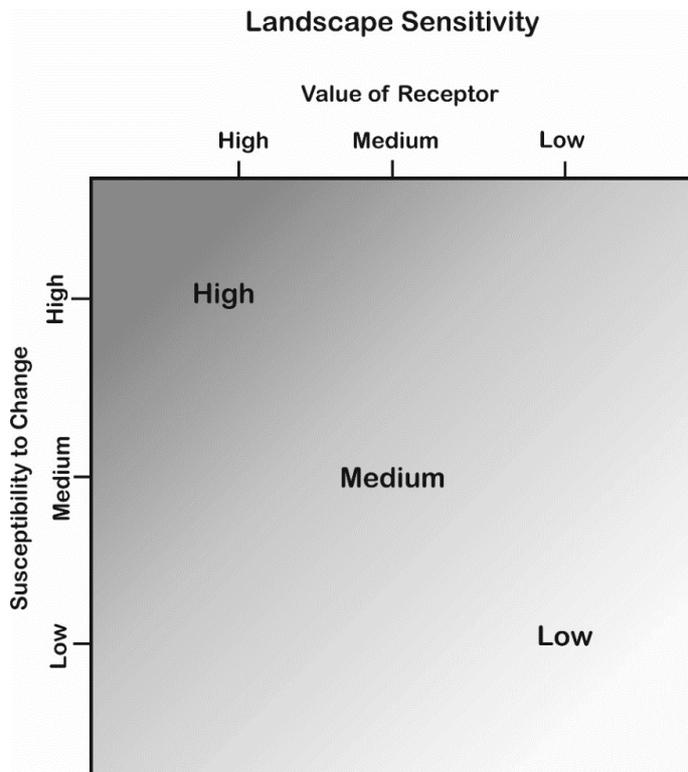
| | | |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>Rarity: Distinctive landscape features that are replicated elsewhere in a regional or national context.</p> <p>Representativeness: The landscape/features contains some characteristics considered to be important examples.</p> <p>Conservation Interest: Some nature conservation features.</p> <p>Recreation Value: Makes a moderate contribution to the public’s recreational experience.</p> <p>Perceptual Aspects: Has some level of wildness and/or tranquillity but also contains some detractive elements.</p> <p>Associations: Limited historic and/or cultural associations.</p> | <p>the baseline and/or landscape planning policy.</p> <p>There is some similar development present in the landscape.</p> |
| Low | <p>Designations: Non-designated landscapes /landscape features.</p> <p>Condition/Quality: A landscape /features are rarely intact and/or are in poor condition.</p> <p>Scenic Quality: Little or no aesthetic appeal.</p> <p>Rarity: Few if any, distinctive landscape features or is extensive in a regional or national context.</p> <p>Representativeness: The landscape/feature does not contain characteristics considered to be important examples.</p> <p>Conservation Interest: Few, if any, nature conservation features.</p> <p>Recreation Value: Makes little or no contribution to the public’s recreational experience.</p> <p>Perceptual Aspects: Little or no level of wildness and/or tranquillity.</p> <p>Associations: Without historic and/or cultural associations.</p> | <p>Low susceptibility</p> <p>The landscape (or individual landscape receptor) has the ability to readily accommodate the proposed development without undue consequences for the maintenance of the baseline and/or landscape planning policy.</p> <p>There is large scale development of a similar nature present in the landscape</p> |

Evaluating Landscape sensitivity

Criterion used to categorise landscape sensitivity, in relation to Paragraphs 5.39 – 5.47 of GLVIA3, are described in Table A2- Landscape Sensitivity.

The sensitivity of the landscape as a whole, (or components of it), is calculated using Table A2 to correlate ‘landscape value’ and ‘susceptibility to change’.

Table A2 Landscape Sensitivity



Evaluating the magnitude of landscape effects

The ‘magnitude’ of landscape effects resulting from the construction and/or the operation of a particular development is categorised as high, medium, low or negligible. In accordance with the approach advocated in Paragraphs 5.48 – 5.52 of GLVIA3 the magnitude of landscape effect considers the size and scale of the change, the geographical extent over which each landscape effects would be felt and their duration and reversibility.

Criterion used to categorise landscape effect are listed in Table A3 -Magnitude of Landscape Effect

Table A3 - Magnitude of Landscape Effect

| Magnitude of landscape effects | Key Determining Criteria |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High | Size and/or scale: the extent and relative proportion of the existing landscape element(s) to be changed would be large and/or the landscape element(s) lost or created make a key contribution to landscape character and/or value. Introduction of new landscape elements that would be likely to be perceived as a dominant landscape characteristic. Large scale alteration to the aesthetic and perceptual characteristics of the landscape. |

| | |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>Geographical extent: effects would be discernible across a large majority or the entirety of the landscape designation or character area.</p> <p>Duration and reversibility of effects: effects of the introduction of new landscape features would be long-term i.e. will last for over 15 years or will be permanent. Loss of landscape features that are irreplaceable or can only be replaced in the long-term, or creation/ restoration of landscape elements which are long-term or permanent.</p> |
| Medium | <p>Size and/or scale: the extent and relative proportion of the existing landscape element(s) to be changed would be moderate and/or any landscape elements lost or created make a moderate contribution to landscape character and/or value. Introduction of new landscape elements that would be likely to be perceived as a prominent landscape characteristic. Moderate scale alteration to the aesthetic and perceptual characteristics of the landscape.</p> <p>Geographical extent: effects would be discernible across a moderate proportion of the landscape designation or character area.</p> <p>Duration and reversibility of effects: effects of the introduction of new landscape features would be medium-term i.e. will last for between 5 and 15 years. Loss or creation of landscape elements that can be fully replaced within the same time period.</p> |
| Low | <p>Size and/or scale: the extent and relative proportion of the existing landscape element(s) to be changed would be minor and/or any landscape element(s) lost or created make only a minor contribution to landscape character and/or value. Introduction of new landscape elements that would be likely to be perceived as a small-scale landscape characteristic. Small scale alteration to the aesthetic and perceptual characteristics of the landscape.</p> <p>Geographical extent: effects would be discernible across a small proportion of the landscape designation or character area and/or restricted to the close vicinity of the development site.</p> <p>Duration and reversibility of effects: effects of the introduction of new landscape features would be short-term i.e. will last for between 1 and 5 years. Loss or creation of landscape elements that can be fully replaced within the same time period.</p> |
| Negligible | <p>Size and/or scale: the extent and relative proportion of the existing landscape element(s) to be changed would be barely perceptible and/or any landscape element(s) lost or created make a minimal or no contribution to landscape character and/or value. Introduction of new landscape elements that will be likely to be imperceptible. Minimal alteration to the aesthetic and perceptual characteristics of the landscape.</p> <p>Geographical extent: effects would only be discernible within the development site or immediately alongside it.</p> <p>Duration and reversibility of effects: effects of the introduction of new landscape elements would last for less than a year. Any loss of landscape elements can be fully replaced immediately.</p> |
| None | The proposals would not change any of the landscape elements, or characteristics. |

Assessing Visual Effects

“An assessment of visual effects deals with the effects on views available to people and their visual amenity. assessing how the surroundings of individuals or groups of people may be specifically affected by changes in the content and character of views as a result of the change or loss of existing elements of the landscape and/or introduction of new elements” (Para 6.1GLVIA3),

Evaluating Visual Sensitivity

The visual sensitivity is calculated by combining the value attributed to a view with the susceptibility of the viewer. The method used to categorise the sensitivity of visual receptors, is based on Paragraphs 6.30– 6.37 of GLVIA3.

Evaluating Value of a View and Susceptibility of the Viewer to Change

The **Value** attributed to a view is defined by the criteria listed in in Table A5.

Susceptibility of the viewer is defined by the occupation or activity of the people experiencing the views at particular locations and by the extent to which their attention or interest may be focused on the views as defined by the criteria listed in in Table A5.

Criterion used to categorise visual sensitivity (combination of value and susceptibility), are listed in Table A5 –Visual Sensitivity.

Table A5 – Visual Sensitivity

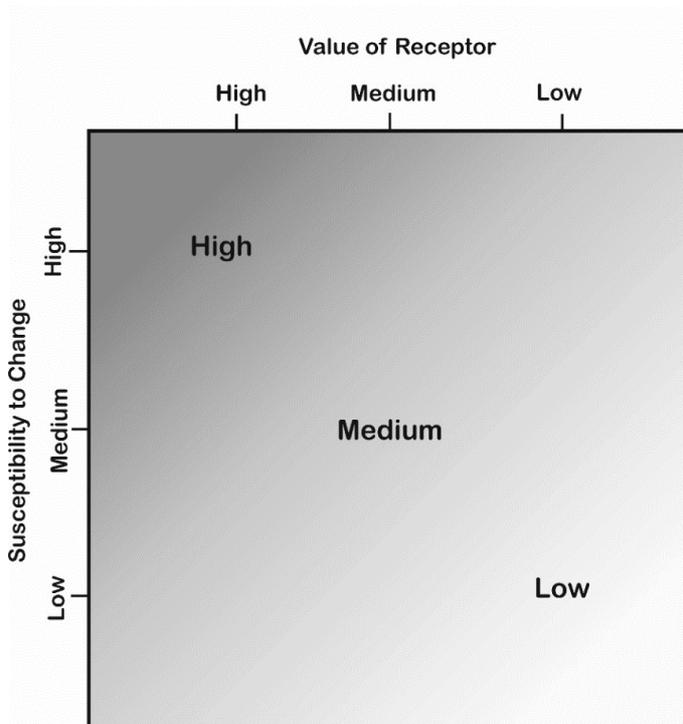
| Visual receptor sensitivity | Factors Influencing Value of a View | Factors Influencing Visual Susceptibility |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High | The view is valued at a national or regional level . The view is of high scenic quality, often protected by planning designations. It is a visitor destination, or heritage asset, where views of the surrounding are an important contributor to the experience. There are references to the view in literature or art, or the view appears in guidebooks or on tourist maps. It is a strategic location or viewpoint which attracts large number of viewers. | Communities or residents at home, where views contribute to the setting or visual amenity of the house or settlement. Travellers on recreational or scenic routes, (including public rights of way) where awareness of views is likely to be high. People who are engaged in outdoor recreation, whose attention or interest is likely to be focussed on the landscape, or on particular views. |
| Medium | The view is valued at a local level . It is mostly frequented by local people. The view is not publicised or waymarked. It is unremarkable but reasonable pleasant. There are some detracting features in the views. | Travellers on road, rail, or local paths for which views are not the primary focus, although they do contribute to the setting of the route. |

| | | |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Low | <p>The view is not valued, or is of limited local value.</p> <p>The view is of low aesthetic quality and may detract from the surroundings.</p> <p>It is not a publically accessible location.</p> | <p>People engaged in activity which does not involve or depend upon appreciation of views of the surrounding landscape.</p> <p>People at their place of work, whose attention may be focussed on their work or activity, not on their surroundings, and where the setting is not important to the quality of life.</p> |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Evaluating Visual Sensitivity

The sensitivity of a visual receptor is calculated using Table A6 to correlate the ‘value of the viewer’ with their ‘susceptibility to change’.

Table A6 Visual Sensitivity



Evaluating the magnitude of visual effect

The magnitude of visual effect is defined by the size/ scale of change, the geographical extent of the view affected and the duration and reversibility of the change caused by the development/ operation proposed. (Paragraph 5.48 GLVIA3)

The magnitude of visual effect is assessed in relation to the following:

- **Size and Scale:** The scale of change in the view is determined by the loss or addition of features in the view, changes in the composition of view and the proportion of view affected.
- **Geographical Extent:** Is assessed in relation to the Zone of Theoretical Visibility, taking into account the angle of view, the distance from the viewpoint, the extent, or number of receptors affected.
- **Duration and Reversibility:** The duration of the visual change, whether temporary or long term; intermittent or continuous; as well as the role of seasonal changes due to management such as hedgerow trimming and seasonal variations in deciduous leaf cover.

Criterion used to categorise the magnitude visual effect, are listed in Table A7 –Magnitude of Visual Effect

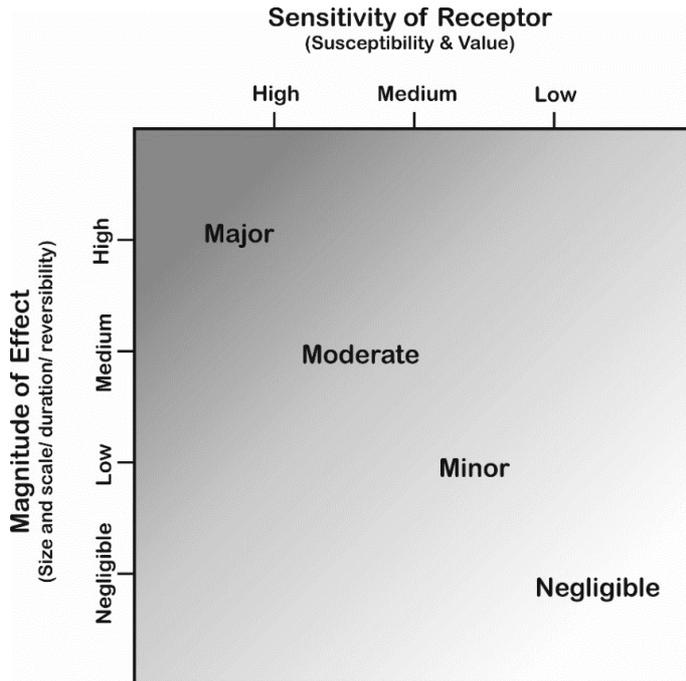
Table A7 - Magnitude of Visual Effect

| Magnitude of visual effect | Key determining criteria |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High | <p>Size and Scale A complete or very substantial change or obstruction of the view.</p> <p>Geographical Extent Extensive receptors affected. Close proximity to the viewer and/or unrestricted direct line-of-sight.</p> <p>Duration and Reversibility Change will be permanent or would last over 25 years.</p> |
| Medium | <p>Size and Scale An obvious, immediately apparent change or obstruction of the view.</p> <p>Geographical Extent Multiple receptors affected. Medium distance view and/or partially restricted line-of-sight.</p> <p>Duration and Reversibility Long term change that will be visible for between 10 and 25 years and would be theoretically reversible.</p> |
| Low | <p>Size and Scale A perceptible change or obstruction of the view.</p> <p>Geographical Extent Small number of receptors affected. Distant view and/or restricted, oblique line-of-sight.</p> <p>Duration and Reversibility A change that will last up to 10 years and would be wholly or partially reversible.</p> |
| Negligible | <p>Size and Scale A barely perceptible or intermittent change or obstruction of the view.</p> <p>Geographical Extent Occasional or Isolated receptor affected. Far distance view and/or largely restricted line-of-sight.</p> <p>Duration and Reversibility Short term change that will last from 0-5 years and would be reversible.</p> |

Judging the significance of landscape and visual effects

The significance of a landscape or visual effect is determined by correlating the sensitivity of the receptor (high, medium to low) with the magnitude of effect (high to negligible). The evaluation is based on professional opinion using Table A8 as a guide.

Table A8 –Significance of landscape and visual effects.



Significant Effects in terms of the EIA Regulations

In terms of the EIA Regulations a ‘Major’ or ‘Major/Moderate’ level of significance (Table A8) is considered to be a ‘Significant Effect’.