

Appendix 8.1 Methodology

8.1 This chapter has been prepared based upon the Guidelines for Landscape and Visual Impact Assessment, third edition (GLVIA3), published by the Landscape Institute and the Institute of Environmental Management and Assessment, in 2013. The assessment of Landscape Value also takes account of guidance in Landscape Institute TGN 02-21 'Assessing landscape value outside national designations'.

8.2 In summary, GLVIA3 states:

'Landscape and Visual impact assessment (LVIA), is a tool used to identify and assess the significance of and the effects of change resulting from development on both landscape as an environmental resource in its own right and on people's views and visual amenity.' (GLVIA3 paragraph 1.1.)

8.3 There are two components of LVIA:

- "Assessment of landscape effects; assessing effects on the landscape as a resource in its own right;
- Assessment of visual effects: assessing effects on specific views and on the general visual amenity experienced by people." (GLVIA3 paragraph 2.21.)

Baseline Studies

8.4 Prior to the assessment of landscape effects, baseline studies are undertaken which provide an understanding of the landscape which may be affected, its constituent elements, character, condition, and value.

8.5 Similarly, before the assessment of visual effects, visual baseline studies are completed to understand the area in which the development may be visible, the people who may experience views, and the nature of views.

8.6 Baseline studies has involved the production of a number of Figures which have been used to inform the assessment. Refer to Figure 8.1 onwards.

Assessment of Landscape Effects

8.7 GLVIA3 states that *'An assessment of landscape effects deals with the effects of change and development on landscape as a resource'* (GLVIA3 paragraph 5.1).

8.8 The baseline landscape is described by reference to existing published Landscape Character Assessments and by a description of the site and its context.

- 8.9 A range of landscape effects can arise through development. These can include:
- Change or loss of elements, features, aesthetic or perceptual aspects that contribute to the character and distinctiveness of the landscape;
 - Addition of new elements that influence character and distinctiveness of the landscape;
 - Combined effects of these changes.
- 8.10 The characteristics of the existing landscape resource are considered in respect of the susceptibility of the landscape resource to the change arising from this development. The value of the existing landscape is also considered.
- 8.11 Each effect on landscape receptors is assessed in terms of size or scale, the geographical extent of the area influenced and its duration and reversibility. In terms of size or scale of change, the judgement takes account of the extent of the existing landscape elements that will be lost or changed, and the degree to which the aesthetic or perceptual aspects or key characteristics of the landscape will be altered by removal or addition of new elements. Geographical extent is considered by reference to the different landscape character areas affected, and within each of these areas the extent of each area changed. Duration is considered for the landscape effects, with short term effects being defined as those lasting less than 5 years, medium term effects lasting between 5 and 10 years and long-term effects being defined as anything over 10 years in duration.
- 8.12 The level of effect is determined by considering the sensitivity of the landscape receptors and the magnitude of effect on the landscape. Final conclusions on the overall landscape effects are drawn from the assessment components described. This assessment describes the nature of the landscape effects, and whether these are adverse or beneficial, at the following stages of development; construction, completion (year 1) and longer term (year 15).
- 8.13 The criteria used in the assessment are set out in Appendix 8.2.

Assessment of Visual Effects

- 8.14 An assessment of visual effects deals with the effects of change and development on the views available to people and their visual amenity. This assessment describes the nature of the visual effects, and whether these are adverse or beneficial, at the following stages of development; construction, completion (year 1 winter) and longer term (year 15 summer).

- 8.15 The first stage in the assessment is to identify approximate visibility/ visibility mapping. This was done by a computerised Zone of Theoretical Visibility (ZTV)¹ - both Digital Terrain Model (DTM) and Digital Surface Model (DSM) - and using manual methods including map study and field evaluation. A series of viewpoints are included within the assessment that are representative of views towards the site from surrounding visual receptors. Other views of the site are included where it supports the description and understanding of the site's landscape and visual characteristics.
- 8.16 The views also typically represent what can be seen from a variety of distances from the development and different viewing experiences.
- 8.17 It is important to remember that visual receptors are all people. For each affected viewpoint, the assessment considers both the susceptibility to change in views and the value attached to views.

'The visual receptors most susceptible to change are generally likely to include:

- *Residents at home;*
- *People, whether residents or visitors who are engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focused on the landscape and on particular views;*
- *Visitors to heritage assets or to other attractions, where views of the surroundings are an important contributor to the experience;*
- *Communities where views contribute to the landscape setting enjoyed by residents in the area;*

Travellers on road, rail or other transport routes tend to fall into an intermediate category of moderate susceptibility to change. Where travel involves recognised scenic routes awareness of views is likely to be particularly high.' (GLVIA3 paragraph 6.33.)

'Visual receptors likely to be less sensitive to change include:

- *People engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape;*
- *People at their place of work whose attention may be focused on their work or activity, not on their surroundings, and where the setting is not important to the quality of*

¹ Zone of Theoretical Visibility (ZTV): A map usually digitally produced, showing areas of land within which, a development is theoretically visible. [GLVIA3]

working life (although there may on occasion be cases where views are an important contributor to the setting and to the quality of working life).' (GLVIA3 paragraph 6.34.)

Each of the visual effects is evaluated in terms of its size or scale, the geographical extent of the area influenced and its duration or reversibility.

8.18 In terms of size or scale, the magnitude of visual effects takes account of:

- The scale of the change in the view with respect to the loss or addition of features in the view and changes in its composition, including proportion of the view occupied by the proposed development;
- The degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of form, scale and mass, line height, colour and texture;
- The nature of the view of the proposed development, in terms of the relative amount of time over which it will be experienced and whether views will be full, partial or glimpses. (GLVIA paragraph 6.39).

8.19 The geographical extent of the visual effect in each viewpoint is likely to reflect:

- The angle of view in relation to the main activity of the receptor;
- The distance of the viewpoint from the proposed development;
- The extent of the area over which the changes would be visible.

8.20 As with landscape effects, the duration of the effect could be short to long term or permanent and the same definitions apply. The criteria used in the assessment are set out in Appendix 8.2.

Overall Landscape and Visual Effects

8.21 The final conclusions on effects, whether adverse or beneficial, are drawn from the separate judgements on the sensitivity of the receptors and the magnitude of the effects. This overall judgement is formed from a reasoned professional overview of the individual judgements against the assessment criteria.

8.22 GLVIA3 notes, at paragraphs 5.56 and 6.44, that *'there are no hard and fast rules with regard to the level of effects'*, therefore the following descriptive thresholds have been used for this appraisal:

- Major;
- Moderate;
- Minor;

- Negligible.

8.23 Where it is determined that the assessment falls between or encompasses two of the defined criteria terms, then the judgement may be described as, for example, Major/ Moderate or Moderate/ Minor. This indicates that the effect is assessed to lie between the respective definitions or to encompass aspects of both.

Judging Overall Significance

8.24 After concluding on the overall effects for each receptor, another judgement is then made as to whether an effect is 'significant' or not. Those degrees of effects that are considered to be 'significant' by the assessor for this chapter are judged to be effects that are either Major or Major/ Moderate.

8.25 Significant effects are described within this chapter as well as in the detailed assessments of landscape and visual effects in Appendices 8.2 and 8.3. Non-significant effects are also described in Appendices 8.2 and 8.3, but are not typically included within this chapter, unless this is with reference to their change to, or from, a significant effect.

8.26 GLVIA3 Statement of Clarification 1/13 (2013) notes that:

'Concerning 'significance', it is for the assessor to define what the assessor considers significant...Depending on the means of judgment and terminology (which should be explicitly set out), effects of varying degrees of change (or levels of change), may be derived. The assessor should then establish (and it is for the assessor to decide and explain) the degree or level of change that is considered to be significant.' (GLVIA3 Statement of Clarification, § 3.)

8.27 All judgements have been formed from a reasoned professional overview of the individual judgements against the assessment criteria. Further detail can be found in Appendix 8.2.

Significance of Landscape Effects

8.28 GLVIA3 states, at paragraph 5.56, that:

'There are no hard and fast rules about what makes a significant effect, and there cannot be a standard approach since circumstances vary with the location and context and with the type of proposal. At opposite ends of the spectrum it is reasonable to say that:

- *Major loss or irreversible negative effects, over an extensive area, on elements and/ or aesthetic and perceptual aspects that are key to the character of nationally valued landscapes are likely to be of the greatest significance;*

- *Reversible negative effects of short duration, over a restricted area, on elements and/or aesthetic and perceptual aspects that contribute to but are not key characteristics of the character of landscapes of community value are likely to be of the least significance and may, depending on the circumstances, be judged as not significant;*
- *Where assessments of significance place landscape effects between these extremes, judgements must be made about whether or not they are significant, with full explanations of why these conclusions have been reached.’ (GLVIA3 paragraph 5.56.)*

Significance of Visual Effects

8.29 GLVIA3 states, at paragraph 6.44, that:

‘There are no hard and fast rules about what makes a significant effect, and there cannot be a standard approach since circumstances vary with the location and context and with the type of proposal. In making a judgement about the significance of visual effects the following points should be noted:

- *Effects on people who are particularly sensitive to changes in views and visual amenity are more likely to be significant;*
- *Effects on people at recognised and important viewpoints or from recognised scenic routes are more likely to be significant;*
- *Large-scale changes which introduce new, non-characteristic or discordant or intrusive elements into the view are more likely to be significant than small changes or changes involving features already present within the view.’ (GLVIA3 paragraph 6.44.)*