

# Landscape & Visual Impact Assessment (LVIA) Methodology (EIA)

## OVERVIEW

The Landscape and Visual Impacts of the proposals have been assessed using accepted methodology set out within;

- Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3);
- Natural England (2014) An Approach to Landscape Character Assessment;
- Landscape Institute Technical Guidance Note 06/19, Visual Representation of Development Proposals; and
- Landscape Institute Technical Guidance Note 02/21: Assessing Landscape Value Outside National Designations.

The results are based on a combination of desk-based research and field-survey work.

## LEVEL OF ASSESSMENT

Principles and good practice for undertaking landscape and visual impact assessment are set out in the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3).

The GLVIA3 acknowledges the landscape and visual impact assessment (LVIA) can be carried out either as a standalone assessment or as part of a broader EIA. GLVIA3 notes that the overall principles and core steps in the process are the same but that there are specific procedures in EIA with which an LVIA that sits within an EIA must comply.

Heritage assets such as Scheduled Monuments, Listed Buildings and Conservation Areas all contribute to the overall present-day landscape character, context and setting of an area. These aspects have been given consideration in the LVIA in terms of physical landscape resources (for example, trees and hedgerows) and landscape character. However this LVIA does not address the historic significance, importance or potential impacts on heritage assets and designations; these assets are assessed in the context of landscape and visual matters only.

## APPROACH

The approach may be summarised as follows:

- Identify the study area and its planning context;
- Assess the landscape character types, landscape features, scenery, land-use, topography and public access;
- Identify the Constraints and Opportunities likely to influence the design process;
- Identify, describe and assess the physical and visual impacts that the proposed development would have on the existing landscape and on visual amenity;
- Propose measures to enhance the developments setting and the wider landscape; and
- Identify and assess residual impacts.

Both landscape and visual impacts have been assessed:

- **Landscape impacts** result from changes to components and/or character or quality of the landscape. The criteria used to define the magnitude of change include; character and quality of existing scenery, key landscape features, the degree of likely change, and the ability of the landscape to accommodate change.
- **Visual impacts** result from changes to the appearance of the landscape as a result of the development proposals either intruding into or obstructing existing views or by the overall impact on visual amenity.

The degree of impact depends on both the degree of change and the sensitivity of the affected receptors.

The landscape and visual effects are assessed from combining the sensitivity of the receptors to landscape and visual changes, and magnitude of the change that they experience.

## ASSESSMENT OF LANDSCAPE EFFECTS

### Landscape Receptors

These are elements of the landscape which will be affected either positively or negatively by development. Elements could include natural or man-made features.

The effect of the development on the particular character and characteristics of the landscape such as landform, scenic qualities or patterns of development is also considered.

### Landscape Value

Landscape value is the relative value attached to a potentially affected landscape. Landscape value will vary in relation to the different users experiencing or using a landscape.

The value of the landscape is judged on a number of factors including its quality/condition, rarity, local / national/ international designations, scenic quality, sense of seclusion or isolation, distinctiveness, recreational use, and conservation or cultural value. Consideration has to be made of the value of both the landscape as a whole and the individual elements such trees, buildings and hedgerows.

Table 1 – Criteria for Landscape Value

|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HIGH   | <ul style="list-style-type: none"><li>• Designated landscapes at National or International level, and also considered an important part of the country’s character, experienced by a high number of users.</li><li>• Well maintained landscape in good condition.</li><li>• Rare or distinctive landscape elements are key components of the landscape character.</li><li>• High level of recreational opportunities where the experience of the landscape is important and/ or promoted</li><li>• Good perceptual scenic / visual qualities</li><li>• Strong sense of wildness / tranquillity and / or dark skies</li></ul>                            |
| MEDIUM | <ul style="list-style-type: none"><li>• Designated landscapes at Regional or County level, and also considered an important part of the regional / county character, experienced by a large number of users.</li><li>• Generally well maintained landscape in fair condition.</li><li>• Rare or distinctive landscape elements which are notable components of the landscape character.</li><li>• Recreational opportunities where the experience of the landscape is important and/or promoted.</li><li>• Perceptual scenic / visual qualities are considered ordinary.</li><li>• Some sense of wildness / tranquillity and / or dark skies.</li></ul> |
| LOW    | <ul style="list-style-type: none"><li>• No formal landscape designations, but a landscape of local relevance, including recreational open spaces, valued by local users.</li><li>• Landscape in poor condition with a visible lack of maintenance.</li><li>• Lack of distinctive landscape elements reflecting a generic sense of identity.</li><li>• Recreational opportunities where the experience of the landscape is important and/or promoted are limited.</li><li>• Perceptual scenic / visual qualities are considered poor.</li><li>• Sense of wildness / tranquillity and / or dark skies are degraded.</li></ul>                             |

**Landscape Susceptibility**

Susceptibility to change can relate to both the overall landscape and a particular landscape elements. Its ability to accommodate the proposed development will depend on existing land-use, existing patterns of landscape development, landscape character, degrees of openness or enclosure or how easily mitigation measures can be put in place.

Table 2 – Criteria for Landscape Susceptibility

|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HIGH   | <ul style="list-style-type: none"><li>• Landscapes which due to the scale of enclosure have a low capacity to accommodate the type of development proposed due to the nature of, and interactions between, landscape components (e.g. topography, vegetation cover and built form).</li><li>• Landscapes which land uses have no or very little existing reference or context to the type of proposed development.</li><li>• Landscapes with existing elements that are not easily retained, replaced or substituted or that reflect strategies for landscape conservation.</li><li>• Landscapes where detracting features or major infrastructure is not present or where these are present but their influence on the landscape is limited.</li></ul>                                         |
| MEDIUM | <ul style="list-style-type: none"><li>• Landscapes which due to the scale of enclosure have a medium capacity to accommodate the type of development proposed due to the nature of, and interactions between, landscape components (e.g. topography, vegetation cover and built form).</li><li>• Landscapes where the existing land uses have some existing reference or context to the type of proposed development.</li><li>• Landscapes with existing elements that are easily retained, replaced or substituted or that reflect strategies for landscape maintenance or enhancement.</li><li>• Landscapes where detracting features or major infrastructure is present and the influence of these on the landscape is noticeable.</li></ul>                                                 |
| LOW    | <ul style="list-style-type: none"><li>• Landscapes which due to the scale of enclosure have a high capacity to accommodate the type of development proposed due to the nature of, and interactions between, landscape components (e.g. topography, vegetation cover and built form).</li><li>• Landscapes which land uses have extensive existing reference or context to the type of proposed development.</li><li>• Landscapes with existing elements that are easily retained, replaced or substituted, or where there are few/no existing elements present or that reflect landscape strategies for landscape creation or restoration.</li><li>• Landscapes where detracting features or major infrastructure is present and the influence of these on the landscape is dominant.</li></ul> |

**Sensitivity of Landscape**

Landscape sensitivity is formed by a combination of the value of the landscape and the degree to which the landscape can accommodate change (otherwise referred to as susceptibility to change).

Table 3 – Criteria for Landscape Character Sensitivity

|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HIGH   | Areas that exhibit a strong positive character with valued features that combine to give unity, richness and harmony. These are landscapes that may be considered to be of particular importance to conserve and which may be particularly sensitive to change in general and which may be detrimental if change is inappropriately dealt with. Exceptional may be used to describe smaller areas of especially high quality or nationally or regionally recognised landscapes such as AONBs and National Parks. |
| MEDIUM | Areas that exhibit positive character but which may have evidence of alteration to/degradation/ erosion of features resulting in areas of more mixed character. Potentially sensitive to change in general; change may be detrimental if inappropriately dealt with but it may require special or particular attention to detail.                                                                                                                                                                                |
| LOW    | Areas generally negative in character with few, if any valued features. Scope for positive enhancement. Locally recognised landscapes.                                                                                                                                                                                                                                                                                                                                                                           |

**ASSESSMENT OF VISUAL EFFECTS**

**Visual Receptors**

Visual receptors are people impacted on by the development proposals. Receptors include residents of nearby properties, communities of people who experience a change in their landscape setting, leisure users of rights of way, people engaged in outdoor sport or people at or travelling to work.

**Value of View**

The value attached to a view includes recognition of value through formal designations (for example planning designations or heritage assets) and indicators of value attached to views by visitors (for example inclusion on maps/ guidebooks, provision of facilities, presence of interpretation).

For example, views of higher value are likely to be from designated landscapes where the condition or scenic quality of the view is higher and where distinctive elements or features form a prominent part of a view; views of lower value are likely to be from area of landscapes where the condition and scenic quality of the view is poorer, where there is no reference to distinctive elements or features and where detracting features are prominent in the view.

Table 4 – Criteria for Value of View

|        |                                                                                                                           |
|--------|---------------------------------------------------------------------------------------------------------------------------|
| HIGH   | Views with high scenic value within designated landscapes                                                                 |
| MEDIUM | Views with moderate scenic value within undesignated landscapes including urban fringe and rural countryside.             |
| LOW    | Views with unremarkable scenic value within undesignated landscapes with partly degraded visual qualities and detractors. |

Susceptibility of Visual Receptors

The susceptibility of different visual receptors to changes in views and visual amenity is judged based on the activity of people experiencing the view at any given time or location and the extent to which their attention would be focused on the view and visual amenity rather than on the activity being undertaken.

For example, views more susceptible to change are likely to be permanent views, in unenclosed or elevated positions in the landscape and where the landscape forms a primary focus for the activity of the receptor; views less susceptible to change are likely to be transient or temporary views, located in enclosed areas of the landscape where the landscape is a secondary focus or consideration to the activity of the receptor.

Table 5 – Criteria for Visual Receptor Susceptibility

|        |                                                                                                                                                  |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| HIGH   | Includes occupiers of residential properties and people engaged in recreational activities in the countryside using public rights of way (PROW). |
| MEDIUM | Includes people engaged in outdoor sporting activities and people travelling through the landscape on minor roads and trains.                    |
| LOW    | Includes people at places of work and people travelling through the landscape on major roads and motorways.                                      |

Sensitivity of Visual Receptors

Visual receptors will be more or less sensitive to landscape changes depending on their relationship with the landscape in question. In particular account needs to be taken of the receptors susceptibility to change. For example a residential or leisure user is likely to be more sensitive to landscape impacts than a receptor at a workplace or a commuter.

In addition a judgement has to be made on the value of the view to the receptor, this might be based on its scenic or heritage value.

Table 6- Criteria for Sensitivity of Visual Receptors

|        |                                                                                                                                                                                                                                                                                                                                                               |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HIGH   | Residents at home. People engaged in outdoor recreation, including use of designated trails and long distance paths or public rights of way, whose attention is likely to be focussed on the landscape and particular views. Visitors to heritage assets or other attractions where views of the surroundings are an important contributor to the experience. |
| MEDIUM | People travelling generally through the landscape on roads and other transport routes. Local public rights of way. Sporting and recreational facilities not specifically focused on the landscape. Areas generally negative in character with few, if any valued features. Scope for positive enhancement. Locally recognised landscapes.                     |
| LOW    | People travelling on main roads, rail or other transport routes where enjoyment of the view is not an intrinsic part of the journey. People at their place of work, shoppers, people at industrial and commercial premises, passengers on commercial railway lines.                                                                                           |

MAGNITUDE OF EFFECT

A combination of the scale of change, degree of contrast with the existing landscape, duration, distance and angle or view from main receptors from the proposed development, the extent over which changes would be visible and the reversibility of the changes.

Table 7 – Landscape Resource Magnitude of Effect

|                       |                                                                    |
|-----------------------|--------------------------------------------------------------------|
| HIGH                  | Major loss or major alteration to an existing landscape feature.   |
| MEDIUM                | Some loss or alteration to part of an existing landscape feature.  |
| LOW                   | Minor loss or alteration to part of an existing landscape feature. |
| NEGLIGIBLE            | Very minor loss or alteration to existing landscape features.      |
| NO CHANGE/<br>NEUTRAL | No loss or alteration to existing landscape features.              |

Table 8 – Landscape Character Magnitude of Effect

|                       |                                                                                                                                                                                                                                                                                             |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HIGH                  | Total loss or major alteration to key elements/features/characteristics of the baseline landscape, or introduction of elements considered to be totally uncharacteristic when set within the attributes of the receiving landscape.                                                         |
| MEDIUM                | Partial loss of or alteration to one or more key elements/features/characteristics of the baseline, or introduction of elements that may be prominent but may not necessarily be considered to be substantially uncharacteristic when set within the attributes of the receiving landscape. |
| LOW                   | Minor loss or alteration to one or more key elements/features/characteristics of the baseline, or introduction of elements that may not be uncharacteristic when set within the attributes of the receiving landscape.                                                                      |
| NEGLIGIBLE            | Very minor loss or alteration to one or more key elements/features/characteristics of the baseline, or introduction or elements that are not uncharacteristic with the surrounding landscape.                                                                                               |
| NO CHANGE/<br>NEUTRAL | No perceivable loss or alteration to one or more key elements/features/characteristics of the baseline, approximating the no change situation.                                                                                                                                              |

Table 9 – Visual Amenity Magnitude of Effect

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HIGH                  | Major loss or addition of features in the view. Major change in the composition of the view. A major proportion of the view may be occupied by the proposed development. The proposed development is prominent when set within existing views of the landscape in terms of form, scale, mass or colour.                                                                                                                                                                                                                                                                                                                                |
| MEDIUM                | Views may be short-distance and direct. Changes in the view may be visible over a large proportion of the view. The proposed development is permanent and irreversible.                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| LOW                   | Moderate loss or addition of features in the view. Moderate change in the composition of the view. A moderate proportion of the view may be occupied by the proposed development. The proposed development is noticeable when set within existing views of the landscape in terms of form, scale, mass or colour. Views may be mid-distance, direct or oblique. Changes in the view would be visible over some of the view.                                                                                                                                                                                                            |
| NEGLIGIBLE            | Minor loss or addition of features in the view. Minor change in the composition of the view. A minor proportion of the view may be occupied by the proposed development. The proposed development is perceptible when set within existing views of the landscape in terms of form, scale, mass or colour. Views may be long-distance and oblique. Changes in the view would be visible over a small proportion of the view.                                                                                                                                                                                                            |
| NO CHANGE/<br>NEUTRAL | Barely perceptible loss or addition of features in the view. Barely perceptible change in the composition of the view. A very minor proportion of the view may be occupied by the proposed development. The proposed development is barely perceptible when set within existing views of the landscape in terms of form, scale, mass or colour. Views may be long- distance, oblique and/ or partly screened. Changes in the view would be visible over a very small proportion of the view. No part of the proposed development, or work or activity associated with it, is visible. There will be no perceivable change in the view. |

LEVEL OF EFFECT

The level of the landscape and visual effects is determined by considering together the magnitude of the change, the sensitivity of landscape and visual receptors and effects of mitigation.

Table 10 demonstrates the general relationship between sensitivity and magnitude based on the criteria given above but is given for illustrative purposes only. To some extent it is an over simplification of the process and so it is not used rigidly to determine the level of an effect upon any given receptor.

Effects are considered as being beneficial (positive), neutral, or adverse (negative) in nature.

The duration and the reversibility of the effects are considered, either being permanent or temporary / reversible.

Effects are considered at year 1 / completion of the development, and at year 15, when any proposed planting is likely to have matured.

Level of significance is also identified as per the EIA Regulations, with the major effects (as highlighted bold) considered to generally be significant, with moderate to negligible considered not significant.

Table 10 – Level of Landscape & Visual Effects

|                     |                       | Sensitivity of Receptor |                      |                      |
|---------------------|-----------------------|-------------------------|----------------------|----------------------|
|                     |                       | HIGH                    | MEDIUM               | LOW                  |
| Magnitude of Change | HIGH                  | <b>Major</b>            | <b>Major</b>         | Moderate             |
|                     | MEDIUM                | <b>Major</b>            | Moderate             | Slight               |
|                     | LOW                   | Moderate                | Slight               | Negligible / Neutral |
|                     | NEGLIGIBLE            | Slight                  | Negligible / Neutral | Negligible / Neutral |
|                     | NO CHANGE/<br>NEUTRAL | Neutral                 | Neutral              | Neutral              |