

5 APPENDIX

GLA - LANDSCAPE AND VISUAL METHODOLOGY

Landscape and Visual Methodology

This assessment has been prepared with reference to current recommended guidelines notably the Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA) published by the Landscape Institute and the Institute of Environmental Assessment in 2013. The GLVIA relies on an appreciation of the existing landscape, a thorough understanding of the development proposals, evaluation of the magnitude of impact predicted to result from the proposed development, the sensitivity of the existing landscape to change and the potential to mitigate effects.

Landscape Character Methodology

The aim of the landscape character assessment is to identify, predict and evaluate potential key effects arising from the development. The assessment of predicted effects involves:

- An appreciation of the nature, form and features of the development in the context of the baseline landscape character. Landscape character is a composite of physical, biological and cultural elements. Landform, hydrology, vegetation, land use pattern and associations combine to create a common 'sense of place' and identity which can be used to categorise the landscape into definable units (character areas). The level of detail and size of unit can be varied to reflect the scale of definition required. It can be applied at national, regional and local levels;
- A review of the sensitivity to change of designated sites and landscape character in relation to changes proposed. This is arrived at by a review of landscape value and scenic quality;
- An evaluation of the predicted magnitude of impact experienced by designated sites and landscape character, assuming implementation of the development. This is in the form of quantification and description of the loss of, or indirect impact on, specific landscape components that make up the character of the various local landscape areas within the study area. Further, it includes explanation of the predicted change in the composite quality of the various areas related to such loss and influence in combination with the compatibility of the proposed forms within or neighbouring the various areas; and
- Assessment of the degree of significance of the effects of the development on the designated site or landscape character under consideration by relating the magnitude of impact to the sensitivity to change.

Landscape Sensitivity to Change

The sensitivity of the landscape receptors is a combined judgement of the value of the landscape receptor and the susceptibility of the landscape receptor. See the following table for the Landscape Sensitivity matrix.

Landscape Value is with reference to landscape designations. The criteria for assessing landscape value is shown in the following table:

Landscape Value

HIGH	Designated areas at an International, National or Local scale (including but not limited to World Heritage Sites, National Parks, AONBs, SLAs, etc.) considered to be an important component of the country's character experienced by a high number of people. Landscape condition is good and components are generally maintained to a high standard. In terms of seclusion, enclosure by land use, traffic and movement, light pollution and presence/absence of major infrastructure, the landscape has an elevated level of tranquillity. Rare or distinctive landscape elements and features are key components that contribute to the landscape character of the area.
MEDIUM	No formal designation but (typically) rural landscapes, important to the setting of towns and villages and considered to be a distinctive component of the national or local landscape character experienced by a large proportion of its population. Landscape condition is fair and components are generally well maintained. In terms of seclusion, enclosure by land use, traffic and movement, light pollution and presence/absence of major infrastructure, the landscape has a moderate level of tranquillity. Rare or distinctive landscape elements and features are notable components that contribute to the character of the area.
LOW	No formal designations but a landscape of local relevance (including but not limited to public or semi-public open spaces, village greens or allotments) and green infrastructure and open spaces within residential areas likely to be visited and valued by the local community. Landscape condition may be poor and components poorly maintained or damaged. In terms of seclusion, enclosure by land use, traffic and movement, light pollution and presence/absence of major infrastructure, the landscape has limited levels of tranquillity. Rare or distinctive elements and features are not notable components that contribute to the landscape character of the area.

Susceptibility is the ability of the landscape receptor to accommodate the change. The criteria for assessing landscape susceptibility is shown in the following table:

Landscape Susceptibility

HIGH	Scale of enclosure – landscapes with a low capacity to accommodate the type of development being proposed owing to the interactions of topography, vegetation cover, built form, etc. Nature of land use – landscapes with no or little existing reference or context to the type of development being proposed. Nature of existing elements – landscapes with components that are not easily replaced or substituted (e.g. ancient woodland, mature trees, historic parkland, etc.). Nature of existing features – landscapes where detracting features, major infrastructure or industry is not present or where present has a limited influence on landscape character.
MEDIUM	Scale of enclosure – landscapes with a medium capacity to accommodate the type of development being proposed owing to the interactions of topography, vegetation cover, built form, etc. Nature of land use – landscapes with some existing reference or context to the type of development being proposed. Nature of existing elements – landscapes with components that are easily replaced or substituted. Nature of existing features – landscapes where detracting features, major infrastructure or industry is present and has a noticeable influence on landscape character.
LOW	Scale of enclosure – landscapes with a high capacity to accommodate the type of development being proposed owing to the interactions of topography, vegetation cover, built form, etc. Nature of land use – landscapes with extensive existing reference or context to the type of development being proposed. Nature of existing features – landscapes where detracting features or major infrastructure is present and has a dominating influence on the landscape.

Landscape Sensitivity

<i>Value</i>	<i>Landscape Sensitivity</i>		
<i>High</i>	Medium	High	High
<i>Medium</i>	Medium	Medium	High
<i>Low</i>	Low	Medium	Medium
	<i>Low</i>	<i>Medium</i>	<i>High</i>
	<i>Susceptibility to Change</i>		

Magnitude of Impact

Magnitude of impact has been assessed on a four-point scale of high, medium, low or negligible. These criteria are described as follows:

- **High:** very noticeable indirect change in landscape characteristics over an extensive area, or direct change to landscape components/character over a less extensive area;
- **Medium:** noticeable indirect change in landscape characteristics over less extensive area, or direct change to landscape components/character over a localised area;
- **Low:** perceptible indirect change in landscape characteristics over a localised area, or direct change to landscape components/character over a very localised area; and
- **Negligible:** virtually imperceptible or no indirect change in landscape characteristics over a very localised area, or virtually imperceptible, or no, direct change to landscape components/character.

Wireline (or wireframe) diagrams and photomontages from viewpoint receptors have also been used as a tool to aid assessment.

The visibility of the development in the landscape would vary according to the weather conditions. The assessment has been carried out, as is best practice, by assuming the 'worst case' scenario, i.e. on a clear, bright day.

Degree of Significance Assessment

Using professional judgement and assisted by tools such as ZTVs, photomontages and wireline diagrams, the assessment of effects compares the magnitude of impact experienced by a designated site or landscape character area to its sensitivity to change of the type proposed. It also takes into account direct impacts upon existing landscape elements, features and key characteristics and assesses whether these would be lost or their relationships modified, in the context of their importance in determining the existing sensitivity of the character area in question.

Anticipated magnitude of impact is reported in terms of a descriptive scale ranging from Major – Moderate – Minor adverse through Negligible to an ascending scale of Minor – Moderate – Major beneficial.

The criteria adopted for the assessment of landscape effects are as follows:

- **Major** adverse (or beneficial) degree of significance: very noticeable deterioration/improvement in the existing landscape.
- **Moderate** adverse (or beneficial) degree of significance: noticeable deterioration/improvement in the existing landscape.
- **Minor** adverse (or beneficial) degree of significance: perceptible deterioration/improvement in the existing landscape.
- **Negligible** degree of significance: virtually imperceptible deterioration/improvement in the existing landscape.

For the purposes of this appraisal, degree of significance of Moderate and above are considered to be significant.

Degree of Significance as a visual guide to understanding how the magnitude of impact relates to the degree of significance over different sensitivities of landscape character.

The predicted effects have been considered in the light of primary mitigation measures associated with site planning, culminating in a statement of the predicted effects and their overall degree of significance to the landscape resource of the study area.

Degree of Significance for Landscape Assessment

<i>Magnitude of Impact</i>	<i>Degree of Significance</i>		
High	Minor or moderate	Moderate or major	Major
Medium	Minor	Moderate	Moderate or major
Low	Negligible or minor	Minor	Minor or moderate
Negligible	Negligible or minor	Negligible or minor	Minor
	Low	Medium	High
	<i>Landscape Receptor Sensitivity</i>		

Visual Assessment Methodology

The assessment of visual impact has been based on the Guidelines for Landscape and Visual Impact Assessment (GLVIA) Third Edition 2013. The guidelines suggest that visual effects are assessed from a clear understanding of the development proposed and any related landscape mitigation measures. It calls for an understanding of the visual form of the existing landscape, its quality and sensitivity to change taking into account the nature of the development.

The assessment has involved three key stages:

- Determination of the main areas where effects would occur as a result of the location and orientation of the development, and establishment of the baseline conditions relating to the visual context of the study area and the location and sensitivity of potential visual receptors.
- Evaluation of the potential effects anticipated to result from the introduction of the development into the baseline context. The susceptibility of visual receptors to change in views and how they contribute to the sensitivity. Next the scale, extent and duration and how they contribute to the magnitude of impacts are assessed.

- Finally, the effects of the anticipated development are assessed by an evaluation of the magnitude of impact on the sensitivity to change. The resulting judgments about sensitivity and magnitude inform the judgement of the overall degree of degree of significance.

Baseline Assessment

The following specific desk-based tasks have been undertaken:

- Within the detailed study area consider methodology, key views and viewpoint locations.
- Identification of the Zone of Theoretical Visibility (visual envelope) for the proposed development.
- Identification and field assessment of potential receptors within the visual envelope.
- Appreciation of the nature and importance of existing views experienced by the identified receptors.
- A site appraisal of potential impacts upon visual amenity was carried out. Site recording involved the completion of standardised recording forms and annotation of survey plans, supported by a photographic record of views from key receptor locations and using wireline projections.

Identification of Visual Receptors

For there to be a visual effect there is the need of a viewer (or visual receptor). Visual receptors include users of residential properties, recreational facilities and other outdoor sites used by the public such as roads, railways and footpaths, which would be likely to experience a change in existing views as a result of the construction and operation of the proposed development.

Views from nearby key viewpoints are illustrated by photomontage and wireline diagrams and views from those potential viewpoints with limited visibility of the proposed development proposals are assessed but not illustrated with either wirelines or photomontages.

Appreciation of Existing Views

The visual assessment involved an initial desk-based review of OS mapping to establish the wider context, followed by site surveys to establish the form and nature of specific views and the role of the proposed development area in such views.

Site survey notes were recorded using a standardised spreadsheet that included receptor type and number, the nature of the existing view, the distance, angle and extent of the view of the proposed development, etc.

The evaluation involved the following tasks:

- Analysis of the sensitivity of the viewpoint receptors to the anticipated change in their view; and
- Identification of the anticipated magnitude of impact in existing views at these locations.

Visual Receptor Sensitivity

The sensitivity of a receptor to the proposed development has been considered in relation to the susceptibility of the receptor, for example, the inhabitants of a residential dwelling are generally considered more sensitive to change than occupiers of a factory unit.

The susceptibility of visual receptors to change in views and visual amenity depends on the activity or occupation of people. The people are the visual receptors who may be residents, recreational users, visitors and commuters. The judgement of susceptibility to change and value are assessed and how they contribute to the sensitivity of the visual receptor. The importance of the changed view to the receptor also contributes to an understanding of sensitivity to change. Therefore, orientation, nature of use, scenic quality and receptors' expectations of the changed view in respect of existing context are all considered as a part of this evaluation. For example, a front-on changed view from the main habitable rooms of a dwelling would result in higher sensitivity to change than a side-on or rear changed view from the same receptor.

The sensitivity of visual receptors is therefore a combined judgement of the value of the view and the susceptibility of the visual receptor. See Table 5.7 for the Visual Sensitivity matrix.

The criteria for assessing the Value of Views is shown in the following table:

Value of Views

HIGH	Views with high scenic value within designated landscapes (including but not limited to World Heritage Sites, National Parks, AONBs, SLAs, etc.) Likely to include key viewpoints on OS maps or reference within guidebooks, provision of facilities, presence of interpretation boards, etc.
MEDIUM	Views with moderate scenic value within mostly undesignated landscape including urban fringe and rural countryside.
LOW	Views with unremarkable scenic value within undesignated landscape with partly degraded visual quality and detractors.

The criteria for assessing the Susceptibility of Visual Receptors is shown in following table:

Susceptibility of Visual Receptors

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 e.g. industrial and commercial premises and people travelling through the landscape on major roads and motorways.

The criteria for judging the combined value of views and the susceptibility of Visual Receptors to ascertain the sensitivity is shown in the following table:

Table : Visual Receptor Sensitivity

<i>Value</i>	<i>Visual Receptor Sensitivity</i>		
<i>High</i>	Medium	High	High
<i>Medium</i>	Medium	Medium	High
<i>Low</i>	Low	Medium	Medium
	<i>Low</i>	<i>Medium</i>	<i>High</i>
	<i>Susceptibility to Change</i>		

Magnitude of Impact

The magnitude of impact considers the extent of the proposed development visible, the extent of the existing view that would be occupied by the proposed development, the influence of the proposed development within the view and the viewing distance from the receptor to the proposed development. This has involved a combination of site, and desk-based analysis. On site, the elements of the proposed development potentially visible were recorded on the survey sheets. The analysis also involved the use of wireline projections and draft photomontages to assist the assessors with the evaluation.

In the assessment of visual effects, the magnitude of impact is considered in terms of the type of effect taking place in a view from a receptor and the degree of change which would take place in that view.

Magnitude of impact is measured on the following scale, which has been adapted from GLVIA methodology:

- **High** magnitude: where the proposed development would cause a very noticeable change in the existing view.
- **Medium** magnitude: where the proposed development would cause a noticeable change in the existing view.
- **Low** magnitude: where the proposed development would cause a perceptible change in the existing view.
- **Negligible**: where the proposed development would cause a largely imperceptible change in the existing view.

Assessment of Effects

The main criteria used to evaluate the visual impact are centred on the extent to which the proposed development would modify established views. The

assessment of effects is based on consideration of both sensitivity to change and magnitude of impact.

The determination of the effects is derived from the assessment of sensitivity to change and the magnitude of impact combined with professional judgement.

- The final assessment adopts the following categories to illustrate the level of visual effects:
- **Major** adverse (or beneficial) degree of significance: very noticeable deterioration/ improvement in the existing view.
- **Moderate** adverse (or beneficial) degree of significance: noticeable deterioration/improvement in the existing view.
- **Minor** adverse (or beneficial) degree of significance: perceptible deterioration/ improvement in the existing view.
- **Negligible** degree of significance: largely imperceptible deterioration or improvement in the existing view.

For the purposes of this appraisal, degree of significance of Moderate and above are considered to be significant and are applicable for landscape and visual assessments that require an EIA.

See Table 5.8 – Degree of Significance as a visual guide to understanding how the magnitude of impact relates to the degree of significance over different sensitivities of visual receptors.

An assessment has been made of the visual effects upon receptors which would occur as a result of the proposed development at the viewpoint locations. However, the visual prominence of the development would vary according to weather conditions. The assessment has therefore been carried out in accordance with best practice, by assuming the “worst case” scenario; that is, on a clear, bright day in winter. The assessment also takes into account changes in vehicle movement patterns and other proposal-related operations.

Degree of Significance for Visual Assessment

<i>Magnitude of Impact</i>	<i>Degree of Significance</i>		
<i>High</i>	Minor or moderate	Moderate or major	Major
<i>Medium</i>	Minor	Moderate	Moderate or major
<i>Low</i>	Negligible or minor	Minor	Minor or moderate
<i>Negligible</i>	Negligible or minor	Negligible or minor	Minor
	<i>Low</i>	<i>Medium</i>	<i>High</i>
	<i>Visual Receptor Sensitivity</i>		