Appendix 3

LVIA Methodology for Land at Yew Tree Farm in Ascott-under-Wychwood

This methodology is derived from the GLVIA3 flow charts illustrated as Figure 5.1 (Landscape Effects, page 71) and Figure 6.1 (Visual Effects, page 99) of the most recent 3rd edition of the Landscape Institute's LVIA guidance. [1]

This methodology sets out the key criteria used in the Landscape and Visual Impact Assessment to assess the sensitivity of landscape and visual receptors and the magnitude of predicted effects. The resulting significance of these effects is assessed with the aid of a Sensitivity-Magnitude matrix as follows:

		Sensitivity [Value of Resource]				
		Very High	**High**	**Medium**	**Low**	**Very Low**
Magnitude [Degree of Change]	**Severe**	Severe / Major	Major	Major / Moderate	Moderate	Moderate / Minor
	Major	Major	Major / Moderate	Moderate	Moderate / Minor	Minor
	Moderate	Major / Moderate	Moderate	Moderate / Minor	Minor	Minor / Negligible
	Minor	Moderate	Moderate / Minor	Minor	Minor / Negligible	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible
	None	None	None	None	None	None

Figure 1 : Sensitivity & Magnitude criteria are combined using the above matrix in order to determine the likely significance of predicted visual and landscape effects.

*Visual and landscape effects are judged to be **significant** where their sensitivity and magnitude combine to give a score of Moderate, Moderate/Major, Major or Severe / Major.*

Where an effect is judged to be significant, mitigation measures are considered and proposed and the effect is re-evaluated taking into account the expected effectiveness of the various mitigation measures proposed. Mitigation may be wholly or partially successful in ameliorating landscape and/or visual effects.

*Any landscape or visual effects that remain after the proposed mitigation has been taken into account are termed **residual effects**.*

The methodology for the assessment of the sensitivity and magnitude in relation to visual effects is different from that employed to assess the sensitivity and magnitude for landscape effects. The different approaches are described as follows:

[1] Guidelines for Landscape and Visual Impact Assessment (2013)
Landscape Institute and Institute of Environmental Management and Assessment.

Landscape Baseline

The Landscape Baseline Study is directed towards the identification of representative Landscape Receptors (LRs), against which the predicted landscape effects can be assessed.

Landscape receptors comprise landscape character and the features or elements that combine to create character, sometimes termed the physical landscape resource.

Sensitivity of Landscape Receptors

The sensitivity of Landscape Receptors (LRs)is comprised of their Landscape Value and their Susceptibility to Change.

Landscape Value is the degree to which a landscape is valued by the people who live within it, or visit it as tourists.

Susceptibility is a measure of a landscape's ability to accept or absorb changes and the resilience or vulnerability that they exhibit in relation to the proposed changes.

Landscape Value

Landscapes may be valued by different types of users and at a range of different levels from community, local or regional level up to national or international recognition.

Existing landscape designations are taken as the starting point for the assessment of value. However, the value of such designations may vary across their geographic extent depending on their intactness, or proximity to detracting forms of development or other adverse influences.

As a starting point for the assessment of landscape value, the table below sets out the relative importance and value of statutory landscape designations and descriptions.

Table 1: Landscape Value attached to Protected Landscape Designations

Very High - Internationally recognised sites World Heritage Sites Unique sites, features or areas of international importance with settings of very high quality. **High** - Nationally Important Landscapes National Parks, AONBs, Conservation Areas, National Trails Sites, features or areas of national importance with settings of high quality. **Medium** - Areas of Local Landscape Importance Sites, features or areas of district importance. **Low** - Local Parks/ Public Open Spaces. Sites or features of local importance. **Very Low** - Derelict land / Wasteland

Some designations cover a very large area and there will be variations within the landscape quality across the entire region of the designation. Some key features or attributes for which an area has been designated may be wholly absent from a given locale within it, whilst other characteristics are locally more important but absent from the citation. This is partly because landscape designations are, most often, a top-tier landscape classification and they tend to identify general, unifying characteristics across a geographical area. Therefore, it is important to consider that within a protected landscape there may be local landscape features that contribute to local landscape value more highly than the citation suggests, but also that non-designated landscapes may be highly valued locally.

Therefore, local, regional and national / international designations only contribute a part of the assessment of landscape value and the remainder requires a considered evaluation of the innate qualities attributed to or exhibited by the landscape within the specific locale.

A range of other criteria are used to assess landscape value of the site and the individual elements that it is comprised of:

Table 2: Criteria for Assessing the Value of Non-designated Landscape Attributes

Landscape Quality : Intactness of the landscape and / or condition of individual elements.
Scenic Quality : General appeal of the landscape to the senses.
Rarity : Rarity of landscape character areas, types or features.
Representativeness : Particular characteristics, features or elements considered to be a particularly important example.
Cultural Interest : The presence of wildlife or cultural heritage interest which contributes positively to the landscape and for which it is valued nationally, regionally or locally.
Recreation Value : Evidence that the landscape experience forms an important part of recreational activity, eg. as established in guidebooks.
Wildness / Tranquillity : Evidence that a landscape is valued for its wildness/tranquillity.
Associations : Relevant associations with notable figures, such as writers or artists, or events in history that contribute to landscape value.

An assessment of overall landscape value is made for each Landscape Receptor (LR), and is categorised in value terms of : very high; high; medium; low and very low.

For example, an intact landscape in good condition, where scenic quality, tranquillity, and or cultural heritage features make a particular contribution to the landscape, or where there are important cultural or historical associations, is likely to be of high value.

Conversely, a degraded landscape in poor condition, containing a number of detracting features, with no particular scenic qualities or cultural interest is likely to be of low value.

Susceptibility of Landscape Receptors to Change

The ability of a given landscape to accommodate the specific nature of a Proposed Development and/or change in land use is referred to as its 'susceptibility to change'.

Judgements on landscape susceptibility take into account the extent to which the attributes of the receiving landscape will be able to accommodate a proposed development or degree of landscape change without demonstrable harm, adverse change, or loss of key features. The following criteria are taken into consideration in the assessment of landscape susceptibility, although not all criteria are equally applicable or important within a given landscape:

- landform;
- sense of openness or enclosure;
- field pattern and scale;
- landcover;
- relationship of a given landscape area to any existing settlements or developments; and
- scenic or special aesthetic qualities.

Landscape receptor susceptibility has been categorised into three main categories, as shown in Table 3 below:

Table 3: Landscape Receptor Susceptibility to Change

Susceptibility	**Criteria**
High	Low ability to accommodate the proposed change without undue harm.
Medium	Some ability to accommodate the proposed change without undue harm.
Low	Substantial ability to accommodate the proposed change without undue harm.

Landscape Sensitivity

The assessment of overall Landscape Sensitivity is a value judgement based upon the combination of the outcomes of landscape value and the landscape's susceptibility to change. A degree of professional judgement is required in the combination of the two outcomes to provide an overall outcome in the range from very high to very low. A separate evaluation is obtained for each landscape receptor.

Magnitude of Landscape Effects

Size and Scale of Effects

The size and/or scale of change in the landscape take into consideration the following factors:

■ the extent/proportion of landscape elements lost or added;

■ the contribution of that element to landscape character and the degree to which aesthetic/perceptualaspects are altered; and

■ whether the effect is likely to change the key characteristics of the landscape, which are critical to its distinctive character.

The criteria used to assess the size and scale of landscape effects are based upon the amount of change that will occur as a result of the proposals, as described in Table 4 below:

Table 4: Landscape Effects: Magnitude of Change

Major adverse landscape effect
The proposals will result in a total change in the key characteristics of landscape character; will introduce elements totally uncharacteristic to the attributes of the receiving landscape; and/or will result in a substantial or total loss, alteration or addition of key elements/features/characteristics.

Moderate adverse landscape effect
The proposals will result in a partial change in the key characteristics of landscape character; will introduce elements partially uncharacteristic to the attributes of the receiving landscape; and/or will result in partial loss, alteration or addition of key elements/features/characteristics.

Minor adverse landscape effect
The proposals will result in a small change in the key characteristics of landscape character; will introduce elements that are not uncharacteristic to the attributes of the receiving landscape; and/or will result in a minor loss, alteration or addition of elements/features/characteristics.

Negligible adverse landscape effect
The proposals will result in a just discernible change to landscape character / elements / features / characteristics.

No change
The proposals will not cause any change to the landscape character / elements / features / characteristics.

Negligible beneficial landscape effect
The proposals will result in a just discernible improvement to the landscape character / elements / features / characteristics.

Minor beneficial landscape effect
The proposals will achieve a degree of fit with the landscape character / elements / features /
characteristics and go some way towards improving the condition or character of the landscape.

Moderate beneficial landscape effect
The proposals will achieve a good fit with the landscape character/elements/features/ characteristics, or would noticeably improve the condition or character of the landscape.

Major beneficial landscape effect
The proposals are fully in accord with the landscape character / elements / features / characteristics, or would restore, recreate or permanently benefit the condition or character of the landscape.

Overall Magnitude

The assessment of the size and scale of effects is considered in relation to the geographical extent of those effects and their potential reversibility or permanence to arrive at an overall assessment of magnitude of landscape effects for each receptor, based on the above criteria.

VISUAL IMPACT ASSESSMENT

Zone of Theoretical Visibility & Zone of Visual Influence

The Zone of Visual Influence (ZVI) describes the entire visual envelope of what can 'actually' be seen of a development site from all directions in the surrounding landscape, in present day conditions, taking into account all of the surface features such as woodlands, buildings and hedgerows, etc.

The Zone of Theoretical Visibility (ZTV) is the area of land or sea from which a development would 'theoretically' be visible if the entire landscape were devoid of all human development, settlement and built form and if all vegetation, both manmade and natural, were stripped from the land to leave it completely denuded.

ZTV is easier to assess than ZVI, as it disregards all of the above ground features of the landscape and can therefore be carried out by computer modelling from a simple set of contour data.

ZVI is much more costly in terms of the time taken to carry out the physical surveying on the ground and also the analysis and mapping of the data obtained. Furthermore, ZVI assessment requires a great deal of practical expertise.

In recent years, and particularly in relation to large scale wind farm projects, ZTV has become the preferred measure of landscape visibility. ZTV appears to offer certainty about visibility in the worst case scenario, for example, in the event that all above ground landscape features were suddenly removed by large scale clear-felling of trees.

In theory, ZTV and ZVI are two different methodologies for assessing the same visual envelope and should therefore be well correlated in terms of results. However, in well-wooded landscapes, ZTV has a very poor correlation with ZVI, because what can actually be seen within the landscape is drastically reduced by the presence of trees and woodland blocks that ZTV does not easily take into account.

However, the landscape of Langley Vale has been largely unchanged for well over a hundred years and there are no 'soft' features that could reasonably be expected to disappear from the surrounding landscape and suddenly alter the scale or scope of the assessment. As such, ZVI provides a much more critical and accurate explanation of what can be seen from where. It is therefore more relevant to the planning of the new woodlands in Langley Vale.

In this assessment, a ZTV map has been used as a coarse measure in order to inform the manual survey of ZVI.
The ZVI assessment is based upon the development in its entirety at completion and considers views to its full latitudinal and longitudinal extents as well as its visibility in terms of vertical height.

In this case the ZVI substantially revises down the extent of the initial ZTV to take account of woodland, hedges and shaws that screen the proposed development site from view.

Public access to some parts of landscape is limited, and it is not possible to assess the comparison between the ZTV and ZVI at every point within the envelope. It would not be practical or cost effective to do so either. Therefore, the ZVI does not represent the area from which the development site can seen, but simply an improved estimate of the extent of the area from which views may be possible.

Visual Response Locations (VRs)

Once compiled, the ZVI Map can then be used to select Visual Response (VR) locations that represent the views in towards the proposed development.

Sensitivity of Visual Receptors

Visual receptors are people and the views they experience at particular places, for example users of public rights of way or other outdoor recreational facilities, and vehicle travellers, including people who may be visiting, living or working within the study area.

Selection of Viewpoints

A selection of viewpoints as a basis on which to undertake the visual impact assessment has been made on the basis of the following types of publicly accessible viewpoints:

- representative viewpoints (for example, representing views of users of a particular footpath);
- specific viewpoints (for example, a key view from a specific visitor attraction);
- illustrative viewpoints (chosen to demonstrate a particular effect/specific issue); and
- any important sequential views (for example, along key transport routes).

The following terminology is used to describe the approximate distance between the viewer and the proposals:

- local: under 0.5km
- medium distant: 0.5-1km
- distant: over 1km

The type of view and the number of viewers are described in the following terms:

■ Glimpsed (ie. in passing) / Filtered / Oblique / Framed / Open Views; and

■ Few / Moderate / Many Viewers.

Value of Views

The value attached to views has regard to a number of factors, including:

■ recognition through planning designations, supplementary planning documents, management plans for protected landscapes, or association with heritage assets;

■ recorded in published documents such as guidebooks, or on Ordnance Survey maps as a viewing area, or acknowledged in literature or art, for example; and

■ the popularity of the viewpoint.

The criteria used to assess the value of views within this study are summarised in Table 5 below:

Table 5: Value Attached to Views

High Views from landscapes/viewpoints of national importance, or highly popular visitor attractions where the view forms an important part of the experience, or with important cultural associations. **Medium - High** **Medium** Views from landscapes/viewpoints of regional/district importance or moderately popular visitor attractions where the view forms part of the experience, or with local cultural associations. **Low - Medium** **Low** Views from landscapes/viewpoints with no designations, not particularly popular as a viewpoint and with minimal or no cultural associations.

Susceptibility of Visual Receptors to Change

The susceptibility of different types of people to changes in views is mainly a function of:

■ the occupation or activity of the viewer at a given location; and

■ the extent to which a person's attention or interest may therefore be focussed on a view and the visual amenity experienced at a given view.

The criteria used to assess the susceptibility of a visual receptor are summarised in Table 6 below:

Table 6 : Visual Receptors & Susceptibility to Change

High People with a proprietary or particular interest in a view, or with a prolonged viewing opportunity: • Residents;

- People engaged in outdoor recreation, including users of public rights of way, whose attention is likely to be focused on the landscape, and on particular views, and their environment;
- Visitors to heritage assets or other attractions where views of the surroundings are an important part of the experience;
- Communities where views contribute to the landscape setting enjoyed by residents; and
- Travellers along scenic routes / forest drives.
- Larger numbers of people obtain a view.

Medium - High Where the susceptibility of the viewer exceeds the requirements / characteristics for medium susceptibility, but where the susceptibility of the viewer does not attain the requirements / characteristics for high susceptibility.

Medium People with a moderate interest in the view and their surroundings:

- Travellers by road, rail or other mode of transport routes along scenic routes, where the appreciation of the view contributes to the enjoyment and quality of the journey; and
- People engaged in outdoor recreation, where their appreciation of their surroundings and particular views is incidental to their enjoyment.
- Intermediate numbers of people obtain a view.

Low - Medium Where the susceptibility of the viewer exceeds the requirements / characteristics for low susceptibility, but where the susceptibility of the viewer does not attain the requirements / characteristics for medium susceptibility.

Low People with a momentary, or little, interest in the view and their surroundings as their focus is on other activities:

- People engaged in, and focused on, in outdoor sport or recreational activities;
- People at their place of work, where the setting is not important to the quality of working life; and
- Travellers, where the view is fleeting and incidental to the journey.
- Lower numbers of people obtain a view.

Sensitivity of Visual Receptors

The assessment of overall visual sensitivity combines judgements on the susceptibility of the receptor to the Proposed Development and the value attributed to that receptor, using professional judgement.

Magnitude of Effects

The magnitude of a landscape or visual effect is assessed in terms of its size or scale, the geographical extent of the area influenced by that effect, and its duration and degree of reversibility.

Size and Scale of Effects

The size and/or scale of effects relates to the scale of changes in the landscape, such as the loss or addition of features and the scale of the change in views.

Geographical Extent of Effects

The geographical extent of effects relates to:

■ the area over which landscape effects are likely to be experienced, ie. this could be at the site level, the immediate setting of the Site, or landscape character type or area; and

■ the area over which visual effects are likely to be visible.

Duration

The following terminology is used to describe the duration of the proposals:

■ short-term: under 3 years
■ medium-term: 3-20 years
■ long-term: over 20 years

Effects may be temporary, permanent or reversible over time. For example, visual effects arising from construction activities may be limited solely to the construction period and therefore only temporary, or they may be permanent, for example, where construction necessitates some clearance of existing vegetation.

Reversibility

Effects may be reversible, for example, restoration of a quarry following mineral extraction. The assessment therefore considers the practicality of effects being reversed with an approximate timeframe for reversibility.

Nature of Effects

The nature of effects may be positive or negative (beneficial or adverse) direct or indirect. Direct effects are those which result directly from a development itself, whereas indirect or secondary effects may arise as a consequential change resulting from development, for example, changes to downstream vegetation as a result of alterations to a drainage regime.

Visual Effects Magnitude

The magnitude of a visual effect is assessed in terms of its size or scale, the geographical extent of the area influenced and its duration and degree of reversibility.

Size and Scale of Effects

The size or scale of change in the view relates to the degree of contrast or integration likely to result from the Proposed Development and is influenced by the relative time over which a view is experienced and whether it is a full, partial or glimpsed view.

The following criteria are used to assess the size and scale of visual effects, based on the degree of change to the view or composition:

Table 7: Visual Effects: Magnitude of Change

Major adverse or beneficial visual effect The proposals will cause a dominant or complete change or contrast to the view, resulting from the loss or addition of substantial features in the view and will substantially alter the appreciation of the view.

Moderate adverse or beneficial visual effect
The proposals will cause a clearly noticeable change or contrast to the view, which would have some affect on the composition, resulting from the loss or addition of features in the view and will noticeably alter the appreciation of the view.

Minor adverse or beneficial visual effect
The proposals will cause a perceptible change or contrast to the view, but which would not materially affect the composition or the appreciation of the view.

Negligible adverse or beneficial visual effect
The proposals will cause a barely perceptible change or contrast to the view, which would not affect the composition or the appreciation of the view.

Neutral There will be a change to the composition of the view, but the change will be in keeping with the existing elements of the view.

No change The proposals will cause no change to the view.

Overall Magnitude

The assessment of the size and scale of effects is considered in relation to the geographical extent of those effects and their potential reversibility or permanence to arrive at an overall assessment of magnitude of visual effects for each receptor, based on the above criteria.