APPENDIX 5.1
LVIA METHODOLOGY

METHODOLOGY

There are two levels of Landscape and Visual Assessment.

LVIA as part of a standalone Landscape 'appraisal' and LVIA as part of an Environmental Impact Assessment (EIA). This methodology has been set out to define the processes involved in the first procedure - an LVIA as part of a stand alone landscape 'appraisal'.

Whilst the processes and principles are fundamentally the same LVIA as part of an 'appraisal' is not required to establish the significance of the effects. GLVIA3 Statement of Clarification 1/13 10-06-13 states *'The reason is that should a landscape professional apply LVIA principles and processes in carrying out an appraisal and then go on to determine that certain effects would be likely be significant, given the term 'significant' is enshrined in EIA Regulations, such a judgement could trigger the requirement for a formal EIA.'*

The level of information and assessment should be proportional to the scale of the project that is being assessed and the nature of its likely effects.

The GLVIA3 (table 3.1 - page 27) sets out the components required at this level of assessment and which have been used in the preparation of this document. These are:

Project Description;

A description of the propose development, main features of the proposals and any established parameters. can included a description of any alternative considered.

Baseline Studies;

Establishing the baseline condition and nature of the landscape and visual components of the study area, including any forces for change or changes likely independently of the development. Includes information of the **condition, value** and **sensitivity** of the baseline. These are described in further detail on the following pages).

The preliminary stages are aimed at building up a thorough understanding of the existing baseline conditions of the landscape and its resources. The latter stages analyse and evaluate the significance of predicted effects of the proposals taking account of the mitigation measures that have incorporated.

A desk study was undertaken using Ordnance Survey maps, Landscape Character Assessments, topographic surveys, aerial photographs and sometimes cross sections of the landscape. These sources were examined for existing patterns and scale of landform, land cover and built development, giving guidance on the general landscape character of the application site and its surroundings.

For visual analysis, an approximate extent of visibility (visual envelope) and likely persons (receptors) potentially affected by the proposals are recorded for further analysis in the field.

The GLVIA3 sets out a series of different visual receptor groups that may be considered;

- Public viewpoints, including buildings, open access land and PRoW;
- Transport Routes; and
- Places of work.

The guidance sets out that in some cases it may be appropriate to consider private views points such a residential properties. The extent and range of receptors should be agreed with the LPA where possible.

For the purposes of this assessment the effects on residential properties is used as a tool to inform the overall landscape and visual impact assessment/appraisal **not** as part of an residential amenity assessment/appraisal. (Refer to GLVIA3 Statement of Clarification 2/14 28-01-14).

Field and Photographic surveys

A Pre-planning BS5837 Tree Survey is carried out at the beginning of the process to provide an understanding of potential landscape constraints. This is used, along with ecological studies and site visits to provide a landscape constraint plan and potential opportunities to be developed as part of the strategy.

The extent of the visual envelope identified in the desk study is checked by initially looking out into the landscape from various locations within the application site and walking all footpaths and roads in the vicinity.

It is often the case that views from houses and places of work can only be predicted by looking towards the receptor from the application site and cross checking the view through section analysis. This process can limited clearly as views are seen from ground level and may be available from elevated viewpoints such as upper floor windows. In these instances where sensitive views are being considered, professional experience and judgement are crucial and where doubts exist, are checked by cross sectional analysis.

Representative viewpoints are selected to represent the range of receptors and distances from which there will be a potential impact by the proposals. The photographs are taken from publicly accessible locations in suitable weather conditions using an SLR camera with the focal lens length set at 50mm (equivalent to 35mm film camera).

Photographs are taken following the Guidelines for Landscape

and Visual Impact Assessment and The landscape Institute Advice Note 01/11 – Photography and Photomontage in Landscape and Visual Impact Assessment. Locations of the photograph are recorded using a GPS.

Preliminary layout proposals are tested to obtain an initial understanding of what aspects of the proposed development might be seen from sensitive receptors and what influence the landscape elements such as trees hedges and woodland might have in screening or filtering views. This information is then relayed to the architects as key constraints and opportunities plan and used to develop the masterplan.

Identification and Description of Effects;

The assessment clearly and systematically set out the evaluates the possible effects on the existing landscape and visual resources of the area, including whether they are adverse or beneficial.

Following the identification of these potential receptors the likely effects of the development and the proposed mitigation are then assessed.

A further narrative as to the types of impacts is given on the following page.

Mitigation

Table 3.1 of the GLVIA3 sets out that mitigation is only a requirement of the EIA process, however it may appropriate to consider mitigation of adverse effects to inform and contribute to a holistic deign approach.

For the purposes of this assessment this has included investigating measure to avoid, remove or reduce adverse effects. It is considered that avoidance mitigation for any significant effects should be the pre-requisite to any scheme design.

Most development will inevitably result in some landscape or visual impacts which cannot be avoided. It is how these effects are dealt with in the design response that normally determines the acceptability or not of the development. These will be identified through the assessment of predicted effects and additional measures recommended.

Offset or compensatory mitigation are the measures to be undertaken in order to compensate for effects that cannot be satisfactorily mitigated by design alone.

Enhancement

Enhancement, whilst often a positive benefit of mitigation measures, is not in itself being proposed to offset a landscape or visual effect. These are measures that are considered to provide a positive benefit to the baseline condition of the receptors.

Enhancement is not a requirement of the EIA regulations but is often included as best practice and to provide a holistic approach to the development framework and landscape setting.

Technical Assumptions

- For the purposes of the assessment the following assumption have been made:
- For human receptors, views are assessed at 1.8m, assuming adult standing height.
- For assessment of planting mitigation measures the following heights have been used. These are based on an average growth rate planted in suitable soils, during the optimum planting season and using good horticultural practices.

These estimates are based on experience. Naturally so many variables are involved eg species of tree, bare-root or root-balled or container grown, health of planting stock, quality of soil, suitability of plant to soil type, drainage, competing vegetation, ability of operative doing the planting, quality of planting aftercare etc.

Table 1 - Average Planting Heights

Planting Type	Year 1	Year 5	Year 10	Year 15
Feathered Standard Trees	2.5-3m	4.5m	6.5m	8.5m
Selected Heavy Standard Trees	3.5m	4.5m	6.5m	8.5m
Semi-mature Tree	4.5	5.5m	7.5m	9.5m

IMPACTS

Construction Impacts

This period is defined as the building works up to the completion of a component of the development. The impacts are normally direct and temporary in terms of the project life cycle and generally result in the majority of adverse landscape and visual effects.

Construction details are usually not fully known at this stage but they are likely to follow a standard building approach for a development of this scale and complexity. It is assumed that the following key construction items will form part of the construction changes for all phases of work:

- Site compound, incorporating portacabins, temporary parking and site storage;
- Delivery vehicles including low loaders, HGVs, tipper wagons, vans and cars;
- Construction plant – large earth moving machinery, cranes, tracked and wheeled excavators and dumper trucks;
- Scaffolding; and
- Temporary lighting during winter months.

Operation and Management Impacts

These are impacts caused during the functioning of an individual component of the development, such as people, car, lorry and machinery movements, as well as the residual effects of landscape maturing. Most residual landscape effects are therefore generally beneficial and adverse views will normally decrease as planting matures. For the purposes of this assessment the impact has been assessed at seven years after the initial mitigation planting to show the effects approximately some way to maturity.

Residual effects are either positive or negative effects that cannot be mitigated by the proposed landscape strategy. (identified as permanent within the significance column of the assessment tables)

Cumulative effects are a result of additional changes to the landscape or visual character of the application site caused by the development working in conjunction with other existing, or in some cases proposed development in the area.

Landscape Impacts

These are concerned with the physical effects of the proposals on the landscape and the changes that might occur to its character and how it is perceived. Landscape effects can be direct or indirect, beneficial or adverse and can be cumulative, permanent or temporary (short, medium or long term).

Direct effects include the quantifiable removal of features to the landscape, such as the loss of trees, hedgerows or water bodies or conversely, the addition of new landscape elements such as woodland.

Indirect effects include:

- Changes to the perception of the landscape;
- Changes in the character of an area;
- Changes to the experience of being in a particular space or designed landscape; and
- Changes to the experience of driving or cycling along a road or walking along a footpath

Visual Impacts

Visual effects relate to the changes that might arise to available views as a result of physical changes to the landscape and how people might respond to those changes. The views are assessed

As with landscape impacts, effects may be positive (beneficial), negative (adverse) and arise at different scales (local, regional or national) with different levels of significance. They may also be direct or indirect, cumulative, permanent or temporary (short, medium or long term).

ASSESSMENT CRITERIA

Introduction

Potential receptors are identified through the baseline and site visits. Threshold tables are used to assess the sensitivity or importance of receptors, the magnitude of change and the resulting significance. By correlating the magnitude and sensitivity it is possible to identify the level of significance of each impact.

These tables provide guidance only. An impact can sometimes deviate from the set criteria through site specific circumstances and professional judgement however this will be justified through sound rational.

Landscape character is inherently affected by the quality or condition of key elements within the site or its surroundings. Assessment of the quality is based on the physical state, visual and habitat intactness of the landscape, individual features or elements which contribute to the overall character including:

- The influence of existing built features and other detracting features;
- Appropriate land use and management;
- Consistency, strength, quality and intactness of both the landscape and visual components.

Landscape Sensitivity

Landscape sensitivity relates to the extent that a landscape feature or area can 'accept change of a particular type and scale without unacceptable adverse effects on its character.'

The GLVIA identifies sensitivity as a combination of the '**susceptibility** of the receptor to a specific type of change or development' and the '**value** *related to that receptor*'.

Table 2 Landscape Sensitivity

Landscape Value see tables 4-8	**Susceptibility to Change - see Table 3**		
	High	**Moderate**	**Low**
Very High	High to Very High	High	High - Moderate
Major	High	High - Moderate	Moderate
Moderate	High - Moderate	Moderate	Moderate - Low
Low	Moderate	Moderate - Low	Low
Very Low	Moderate-Low	Low	Low - Very Low

Landscape Susceptibility

The susceptibility to change relates to the ability of the Application Site to *'accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategy'* .

Potential landscape receptors have been identified as the various LCA's as well as criteria identified through the site visits and technical assessments.

Table 3 Landscape Susceptibility Criteria

Landscape	
High	A well-recognised landscape or feature afforded protection through national, local or regional policy and designation. A landscape particularly sensitive to adverse change that would only accept minor and not easily recognisable adverse effects on the physical and perceived qualities of a landscape or townscape character, feature or elements that contribute to its distinctiveness.
Moderate	A locally recognised landscape or feature, although not protected, valued as a landscape resource or influential on the local character. A landscape capable of accepting limited change resulting in an easily recognisable new element within the landscape or townscape character, or impact on a feature that would not be perceived as out of context with the overall quality and experience.
Low	A landscape capable of accommodating considerable proposed change without significant effects on landscape or townscape character, features or elements. A degraded or low quality landscape with poor structure, condition and value.

Landscape Value

The value of a landscape cannot be assessed by a standard approach and can apply to a combination of elements that contribute to the character of the landscape at national, regional and local level.

The GLVIA3 looks at this technical issue and provides a list of potential criteria that could form part of the consideration of the value of undesignated landscapes (see Box 5.1 of the GLVIA3 - page 84). The criteria in the following tables have been drawn from this table, desk top research and site visits. Professional judgement is then used to formulate an overall value that is used in table

- Quality, condition and intactness of both individual features and overall Landscape Condition
- Designation of a landscape or feature(s);
- Scenic quality and appeal to the receptors senses, including perceptual aspects such as tranquillity;
- Uniqueness, rarity and contribution to key local features;
- Cultural or historical associations and designations;
- Recreational use of the landscape

The value methodology tables form a framework for appraisal but professional judgement must be applied to consider the significance and influence of each of the factors within the landscape. A landscape does not always need to fulfil all of the criteria however a thorough reasoning and assessment should be given to justify the value.

"Landscape value – The relative value or importance attached to a landscape (often as a basis for designation or recognition), which expresses national or local consensus, because of its quality, special qualities including perceptual aspects such as scenic beauty, tranquillity or wilderness, cultural associations or other conservation issues" – (source Annex 1 – Glossary of Terms An Approach to Landscape Character Assessment - Natural England October 2014).

The GLVIA further describes landscape value as *" The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons."*

Table 4 - Landscape Quality and Condition & Uniqueness, rarity and contribution to key local features

Value	Importance	Typical Examples/Features
Very High	International/ National	Exceptional, well managed and unique high quality landscape and features that are fundamental to the character. Considered an outstanding exemplar.
High	National, Regional District/Local	High quality landscape containing high quality and sometimes rare examples of key landscape characteristic features. Well managed, although some elements could be improved. Areas that contain High/Moderate quality examples of important features, experiences and views that identify with the expected perception and key characteristic of the surrounding character. Landscape appropriately managed with minimal detractors or threats to the overall condition or integrity. Trees groups or woodlands of particular visual importance as arboricultural and/or landscape features or of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood pasture (Category A2/3 trees). Considered between 'outstanding' and 'everyday' landscape.
Moderate	Regional District/Local	Moderate quality landscape or features. Some management of the whole or significant features evident. Areas that contain Moderate/Low quality examples of important features, experiences and views that can detract from the expected perception and key characteristics of the surrounding character. Some landscape management however also some evidence of decline or potential damage to the overall condition or integrity. Trees present in numbers, usually growing as groups or woodlands, such as they a attract a higher collative rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wide locality. Trees with material conservation or other cultural value (Category B2/3 trees). Considered an 'everyday' landscape
Low	District/Local	An ordinary low quality landscape with features in a degraded or damaged condition. Certain elements maybe worthy of conservation and enhancement, currently minimal management. Areas that are devoid or contain minimal examples of important features, experiences and views. Low expected perception with major alteration and detractors to the key elements of the surrounding character. Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits. Trees with no material conservation or other cultural value (Category C2/3 trees). Considered between 'everyday' and 'degraded' landscape.
Very Low	N/A	An ordinary low quality landscape, devoid of any key landscape features, often with minimal management. A 'degraded' landscape.

Table 5 - Designated Landscape Assets/features

Value	Importance	Typical Examples/Features
Very High	International/ National	World Heritage Sites, National Parks, AONBs Notable contribution to internationally and / or nationally-designated areas relating to the elements of landscape character - landscape features , biodiversity, archaeology, historic/cultural and or geological. This can include Registered Historic Parks and Gardens Scheduled Monuments, Grade I and / or II* listed buildings context / setting of heritage asset, contribution to character of settlement or feature of international or national importance, SACs, SSSIs, Contribution to international and nationally important assets identified through heritage and ecological assessment. Plays a significant role in the wider landscape / visual function of Green Belt.
High	National, Regional District/Local	Areas of AONB and National Parks that may have been degraded through historic use, in appropriate management or subject to degradation. Notable contribution to designation which have nationally-regional importance relating to the elements of landscape character - landscape features , biodiversity, archaeology, historic/cultural and or geological. This can include Areas of Great Landscape Value (AGLV) , Unregistered Historic Parks and Gardens , Country Parks, TPOs, Ancient Woodlands, Local Wildlife Sites / Local Nature Reserves, Grade II Listed Buildings, Conservation Areas, setting of heritage asset, contribution to character of settlement or feature of national or regional importance Contribution to nationally and regionally important assets identified through heritage and ecological assessment. Plays a role in the wider landscape / visual function of Green Belt, Green Gap and other landscape buffers at a strategic scale.
Moderate	Regional District/Local	Un-designated landscapes which have specific policy, strategies and guidance for their protection and enhancement. Notable contribution to locally designated areas relating to the elements of landscape character, setting, landscape features , biodiversity, archaeology, historic/ cultural and or geological. Plays a role in the local landscape protection and visual function of Green Gap and other landscape buffers of settlements.
Low	District/Local	Un- designated landscapes without specific policy, strategies or guidance for their protection and enhancement. Limited contribution to locally designated or undesignated areas relating to the elements of landscape character, setting, landscape features , biodiversity, archaeology, historic/cultural and or geological. Limited or no contribution to the local landscape protection and visual function of Green Gap and other landscape buffers of settlements.
Very Low	N/A	Negligible contribution to any landscape feature or function.

Table 6 - Scenic Quality & Perceptual

Value	Importance	Typical Examples/Features
Very High	International/ National	Representative of the expected views and distinctive scenic quality of an internationally or nationally recognisable landscape or specific view. Tranquil and remote landscape with minimal influence from human activity.
High	National, Regional District/Local	Forms part of the attractive views/scenic quality representative of the designated or highly valued landscape. Contains important or distinctive landscape features, or is important in recognised views. A tranquil or rural landscape with minimal or occasional influence from human activity.
Moderate	Regional District/Local	Forms part of/or a feature notable within local views. Strong visual links to locally distinctive landscape features such as local monuments and church spires. Background influenced by transport networks or noise pollution, some human activity which can impact upon the potential tranquillity.
Low	District/Local	The landscape has a limited influence in local views with minimal scenic value. Some visual links to locally identifiable features. Heavily influenced by major transport networks, noise pollution and moderate or intermittent human activity.
Very Low	N/A	The landscape does not form a significant feature in local views or have any scenic value. No visual links to locally valued distinctive features and not representative of the local landscape. Heavily influenced by major transport networks or noise pollution, constant human activity.

Table 7 - Cultural or Historical Associations or Designations

Value	Importance	Typical Examples/Features
Very High	International/ National	Forms part of the setting for internationally important historical buildings or cultural features. Landscape has strong historical and cultural associations.
High	National, Regional District/Local	Provides a setting for Listed Buildings, Registered Parks and Gardens or nationally important historical/cultural features. The landscape contains elements that have historical and cultural associations.
Moderate	Regional District/Local	Contains some local historic and cultural associations but not necessarily related to the landscape.
Low	District/Local	Historical and cultural associations do not relate to the landscape.
Very Low	N/A	No historical or cultural associations.

Table 8 - Recreation

Value	Importance	Typical Examples/Features
Very High	International/ National	Provides a nationally important recreational resource or attraction.
High	National, Regional District/Local	Provides well used recreational facilities and attractions for locals and visitors.
Moderate	Regional District/Local	Provides a well-used recreational resource or attraction for local residents.
Low	District/Local	Provides some informal recreational use of limited access.
Very Low	N/A	No recreational or public access.

Table 9 Visual Sensitivity Criteria

Receptor		View type	Sensitivity
Private dwellings	Gardens/ outdoor space	Often used for sitting and leisure, where people congregate with opportunity for high quality views over the surrounding landscape.	High
		Gardens that are Moderately well screened with opportunities for occasional Moderate quality views towards the surrounding landscape.	Moderate
		Gardens that are very well screened with no or extremely limited opportunities of low quality views towards the surrounding landscape.	Low
	Ground Floor	Windows orientated and designed to take advantage of specific views where people may congregate for a prolonged period of time.	High
		Windows that are orientated towards moderate or unexceptional quality views and contain urban elements or detracting views.	Moderate
		Windows that overlook low quality or degraded landscape, or are dominated by large urban structures.	Low
	Upper Floor	Balconies orientated and designed to take advantage of high quality views during the day	High
		Bedroom windows used for relatively short periods with curtains drawn at night.	Moderate
		Windows illuminating stairs, bathrooms or toilets	Low
Places of Work	External areas	Outdoor seating areas	Low
	Ground & Upper Floors	Windows overlooking development	Low
Recreational Routes	PROW, CRoWs& Cycle Routes & Waterways	Nationally designated paths/cycle ways with a high expectation of very high quality views and experiences including elevated panoramas.	Very High
		Recreational paths/cycle ways with a high expectation of quality views and experiences of the surrounding landscape.	High
		Recreational paths/cycle ways with a Moderate expectation of views and experiences and contain elements that are uncharacteristic or discordant with the overall view.	Moderate
		General access routes that are dominated by discordant and low quality aspects of the neighbouring landscape. Includes routes that appear to not be in use.	Low
Others	Public open space	Managed public open space normally found within or adjoining settlements used for formal and informal play/ sporting activities and intermittent use	Moderate
	Designated Cultural/ Historical Aspects	Views from and towards the feature form an integral part of the perceived setting of a designated heritage asset.	High
Roads	Rural	Well used recreation routes that allow prolonged high quality views of a designated landscape.	High
		Lanes or roads that provide local access to isolated settlements or may have occasional opportunities for both high and medium quality views.	Moderate
		Busy lanes where there is no expectation of high quality or prolonged views of the landscape or are low quality when available.	Low
	Main	Traffic speed likely to limit experience and influence on receptors	Low
All		Where no views are available	Negligible

Magnitude

Magnitude is defined as 'a combination of the scale, extent and duration of an effect,' The criteria for levels of magnitude are outlined in the following two tables:

Table 10 Landscape Magnitude Criteria

Type	Magnitude	Criteria
Adverse	Major	Total loss of or major alteration to key elements/feature/characteristics of the baseline i.e. pre-development landscape and/or introduction of elements considered to be totally uncharacteristic when set up within the attributes of the receiving landscape
	Moderate	Partial loss of or alteration to key elements/features/characteristics of the baseline i.e. pre-development landscape or view and/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
	Minor	Minimum loss of or alteration to key elements/features/characteristics of the baseline i.e. pre-development landscape and/or introduction of elements that may be prominent but may not be uncharacteristic when set within the attributes of the receiving landscape.
Negligible	Negligible	Very Minimum loss of or alteration to key elements/features/ characteristics of the baseline i.e. pre-development landscape and/ or introduction of elements that are not uncharacteristic with the surrounding landscape - no change.
Beneficial	Minor	Minor improvement or removal of key elements/features/characteristics that slightly detracts from the baseline character of the landscape and/ or introduction of new elements, which relate to and provide minor enhancement to the baseline character of the landscape.
	Moderate	Moderate improvement or removal of key elements/features/ characteristics that currently detract from the baseline character of the landscape and/or introduction of new elements, which fit into the baseline landscape/townscape and Moderately enhance the baseline character of the landscape/townscape.
	Major	Major improvement or removal of several notable key elements/ features/characteristics that significantly detract from the baseline character of the landscape and/or introduction of new elements, which fit into the baseline landscape and substantially enhance the baseline character of the landscape.

Table 11 Visual Magnitude Criteria

Type	Magnitude	Criteria
Adverse	Major	Major changes in views where the development would form a major and immediately apparent part of the scene that affects and changes its overall character and would be experienced on a regular or permanent basis.
	Moderate	Moderate changes in views where the development may form a visible and recognisable new element within the scene and may be readily noticed by the observer and would be experienced on an occasional basis.
	Minor	Minor changes in view, few receptors affected, where development would be a minor component of the wider view and may be missed by the casual observer-awareness of the proposals would not have a marked effect on the scene.
Negligible	Negligible	No perceived change in view where the development would be scarcely appreciated and, on balance, would have little effect on the scene.
Beneficial	Minor	Where enhancement or mitigation would be a minor component of the wider view, few receptors affected and may be missed by the casual observer-awareness of the proposals would not have a marked effect on the scene.
	Moderate	Moderate enhancement of views and or many receptors affected where the development may form a visible and recognisable new element within the scene and may be readily noticed and appreciated by the observer
	Major	Major enhancement of views and or large numbers of receptors affected. Where the development may form a visible and recognisable new element within the scene and may be readily noticed and appreciated by the observer

Significance

Significance has been determined by assessing the magnitude of the impact in the context of its sensitivity taking account of its duration and the degree to which the impact is reversible. The matrix in Table 11 provides a valuable basis for determining the significance levels on each receptor; however professional judgement is sometimes required to adjust the significance value based on sound reasoning. These can be either adverse or beneficial.

Table 12 Significance Matrix

Magnitude	Sensitivity		
	High	**Moderate**	**Low**
Major	Major Adverse/beneficial	Major- Moderate Adverse/beneficial	Moderate-Minor Adverse/beneficial
Moderate	Major- Moderate Adverse/beneficial	Moderate-Minor Adverse/beneficial	Minor Adverse/beneficial
Minor	Moderate-Minor Adverse/beneficial	Minor Adverse/beneficial	Major Adverse/beneficial/ Negligible
Negligible	Negligible	Negligible	Negligible

Table 13 Landscape Impact Significance Definitions

Impact	Definition
Major	The proposals become the dominant feature in, or fundamentally change the character of, a very important landscape, such that other elements become subordinate .The proposals form an immediately apparent feature in a Moderately or very important landscape such that they affect and change its overall character
Moderate	The proposals form a recognisable new element within a Moderately or very important landscape, but are of such a design or small scale that a casual observer may not readily notice the change in character. Alternatively, the proposals cause an immediately apparent or fundamental change in character in a landscape of low importance
Minor	The proposals form a recognisable new element of different character within a landscape of low importance, but to such a small degree that they may not be readily noticed by an observer
Negligible	No part of the proposals have any effect on the landscape, such that they are scarcely or not appreciated and the character remains substantially unchanged

Table 14 Visual Impact Significance Definitions

Impact	Definition
Major	Major changes to views from important and very important receptors, or dominating changes to views from Moderately important receptors.
Moderate	Moderate- Major or dominating changes to views from receptors of low importance, or small changes to views from important and very important receptors
Minor	Small changes to views from receptors of low importance
Negligible	No discernible change to views, or changes at such a distance or of such a small scale that a negligible component of wider views is influenced. Alternatively no views of the proposal available from important receptors

GLOSSARY

Taken from the GLVIA3 the following provide definitions to terminology used within the LVIA process.

Access land - Land where the public have access either by legal right or by informal agreement.

Baseline studies - Work done to determine and describe the environmental conditions against which any future changes can be measured or predicted and assessed.

Characterisation - The process of identifying areas of similar landscape character, classifying and mapping them and describing their character.

Characteristics - Elements, or combinations of elements, which make a contribution to distinctive landscape character.

Compensation Measures - devised to offset or compensate for residual adverse effects which cannot be prevented/avoided or further reduced.

Designated landscape - Areas of landscape identified as being of importance at international, national or local levels, either defined by statute or identified in development plans or other documents.

Development - Any proposal that results in a change to the landscape and/or visual environment.

Direct effect - An effect that is directly attributable to the proposed development.

Elements - Individual parts which make up the landscape, such as, for example, trees, hedges and buildings.

Enhancement - Proposals that seek to improve the landscape resource and the visual amenity of the proposed development site and its wider setting, over and above its baseline condition.

Environmental Impact Assessment (EIA) - The process of gathering environmental information; describing a development; identifying and describing the likely significant environmental effects of the project; defining ways of preventing/avoiding, reducing, or offsetting or compensating for any adverse effects; consulting the general public and specific bodies with responsibilities for the environment; and presenting the results to the competent authority to inform the decision on whether the project should proceed.

Environmental Statement - A statement that includes the information that is reasonably required to assess the environmental effects of the development and which the applicant can, having regard in particular to current knowledge and methods of assessment, reasonably be required to compile, but that includes at least the information referred to in the EIA,Regulations.

Feature - Particularly prominent or eye-catching elements in the landscape, such as tree clumps, church towers or wooded skylines OR a particular aspect of the project proposal.

Geographical Information System (GIS) - A system that captures, stores, analyses, manages and presents data linked to location. It links spatial information to a digital database.

Green Infrastructure (GI) - Networks of green spaces and watercourses and water bodies that connect rural areas, villages, towns and cities.

Heritage - The historic environment and especially valued assets and qualities such as historic buildings and cultural traditions.

Historic Landscape Characterisation (HLC) and Historic Land-use Assessment (HLA) - Historic characterisation is the identification and interpretation of the historic dimension of the present-day landscape or townscape within a given area. HLC is the term used in England and Wales, HLA is the term used in Scotland.

Indirect effects - Effects that result indirectly from the proposed project as a consequence of the direct effects, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects.

Iterative design process - The process by which project design is amended and improved by successive stages of refinement which respond to growing understanding of environmental issues.

Key characteristics - Those combinations of elements which are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place.

Land cover - The surface cover of the land, usually expressed in terms of vegetation cover or lack of it. Related to but not the same as land use .

Land use - What land is used for, based on broad categories of functional land cover, such as urban and industrial use and the different types of agriculture and forestry.

Landform - The shape and form of the land surface which has resulted from combinations of geology, geomorphology, slope, elevation and physical processes ..

Landscape - An area, as perceived by people, the character of which is the result of . the action and interaction of natural and/or human factors .

Landscape and Visual Impact Assessment (LVIA) - A tool used to identify and assess the likely significance of the effects of change resulting from development both on the landscape as an environmental resource in its own right and on people's views and visual amenity.

Landscape Character - A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.

Landscape Character Areas (LCAs) These are single unique areas which are the discrete geographical areas of a particular landscape type.

Landscape Character Assessment (LCA) - The process of identifying and describing variation in the character of the landscape, and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make landscapes distinctive. The process results in the production of a Landscape Character Assessment.

Landscape Character Types (LCTs) - These are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement pattern, and perceptual and aesthetic attributes.

Landscape classification - A process of sorting the landscape into different types using selected criteria but without attaching relative values to different sorts of landscape.

Landscape effects - Effects on the landscape as a resource in its own right.

Landscape quality (condition) - A measure of the physical state of the landscape. It may include the extent to which typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements.

Landscape receptors - Defined aspects of the landscape resource that have the potential to be affected by a proposal.

Landscape strategy - The overall vision and objectives for what the landscape should be like in the future, and what is thought to be desirable for a particular landscape type or area as a whole, usually expressed in formally adopted plans and programmes or related documents.

Landscape value - The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons.

Magnitude (of effect) - A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration.

Parameters - A limit or boundary which defines the scope of a particular process or activity.

Perception - Combines the sensory (that we receive through our senses) with the cognitive (our knowledge and understanding gained from many sources and experiences).

Photomontage - A visualisation which superimposes an image of a proposed development upon a photograph or series of photographs.

Receptors- See Landscape receptors and Visual receptors.

Sensitivity - A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor.

Significance - A measure , the importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic.

Stakeholders - The whole constituency of individuals and groups who have an interest in a subject or place.

Susceptibility - The ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences.

Townscape - The character and composition of the built environment including the buildings and the relationships between them, the different types of urban open space, including green spaces, and the relationship between buildings and open spaces.

Tranquillity - A state of calm and quietude associated with peace, considered to be a significant asset of landscape.

Visual amenity - The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area.

Visual effects - Effects on specific views and on the general visual amenity experienced by people.

Visual receptors - Individuals and/or defined groups of people who have the potential to be affected by a proposal.

Visualisation - A computer simulation, photomontage or other technique illustrating the predicted appearance of a development.

Zone of Theoretical Visibility (ZTV; sometimes Zone of Visual Influence) - A map usually digitally produced, showing areas of land within which a development is theoretically visible.

Tree Heights used within the preparation of Fig 5.1 – Initial ZTV/Study Area

An initial survey of heights was undertaken as part of the original wider FWA application ES assessment in 2013 to refine the potential ZTV. These heights have been reused to inform the current ZTV and have been checked against google earth to confirm they still exist. The heights from the 2013 survey have been used therefore does not allow for an additional 7 years growth which would potential further increase the screening.

Ref No.	Woodland Type				Height	Age			Screening Qualities			NOTES
	Deciduous	Conifer	Mixed	Plantation		Young	Semi mature	Mature	Low	Moderate	High	
1		/		/	19			/	/			Scots Pine plantation
2	/				22			/			/	
3	/				16			/		/		
4	/				18			/			/	
5	/				18			/			/	
6	/				17		/			/		
7	/				15		/				/	
8	/				12			/		/		
9	/				16		/				/	
10	/				18		/				/	
11	/				18			/			/	Some Rhododendron
12	/				20			/			/	
13	/				20			/			/	
14	/				18			/		/		
15			/		20			/			/	
16	/				18			/			/	
17	/				20			/			/	
18	/				20			/			/	
19	/				18		/			/		
20	/				20			/			/	
21	/				20			/			/	
22	/				20			/			/	
23	/				19			/			/	
24			/		18			/			/	
25	/				20			/			/	
26			/	/	18			/		/		
27	/				20			/			/	Very old woodland
28	/				18			/			/	
29	/				20			/			/	
30	/				17		/			/		
31	/				18			/			/	
32	/				17			/			/	

Ref No.	Woodland Type				Height	Age			Screening Qualities			NOTES
	Deciduous	Conifer	Mixed	Plantation		Young	Semi mature	Mature	Low	Moderate	High	
33	/				18			/			/	
34	/				17			/		/		More open woodland – part of Cobham Park
35			/		20			/			/	Solid block of conifers along one side
36	/				17			/			/	
37	/				20			/			/	
38	/				18			/		/		
39	/			/	20			/			/	
40	/				15			/		/		Poplars
41	/				19			/			/	
42	/				15			/			/	High quality woodland
43			/		17			/			/	
44	/				15		/				/	
45	/				15		/				/	
46	/				16		/			/		
47			/	Part	20			/			/	Plenty of Rhododendron, patches of conifer plantation
48		/		/	18			/	/			
49			/	/	18			/		/		
50			/	/	18			/		/		Scots Pine and mixed deciduous