

H2Teesside Project

Environmental Statement

Volume III – Appendices

Appendix 16A: Landscape and Visual Methodology

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The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended)

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5(2)(a)



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16A.0 LANDSCAPE AND VISUAL METHODOLOGY

16A.1 Assessment Methodology

16A.1.1 The Landscape and Visual Impact Assessment (LVIA) has been based on the following guidance:

- Guidelines for Landscape and Visual Impact Assessment, Third Edition. (2013), Landscape Institute and Institute of Environmental Management and Assessment, referred to as GLVIA3 in this methodology;
- An Approach to Landscape Character Assessment (2014), Natural England;
- Technical Guidance Note (TGN) 02/21: Assessing Landscape Value Outside National Designations;
- TGN: 04/2020: Infrastructure; and
- TGN 06/2019: Visual Representation of Development Proposals.

16A.1.2 Photography incorporated into the figures accompanying the LVIA has been undertaken in accordance with Technical Guidance Note (TGN) 06/2019: Visual Representation of Development Proposals (Landscape Institute, 2019) unless stated otherwise.

16A.2 Zone of Theoretical Visibility (ZTV) Analysis

16A.2.1 The ZTVs have been generated by analysis of a 3D digital terrain model (DTM) of the surrounding terrain and the Proposed Development using the following parameters:

- contours/terrain model based on OS Terrain 5 DTM dataset;
- eye height of viewer set at 1.8 m; and
- visibility assessed on a 50 m grid throughout the Study Area.

16A.2.2 The output provides a graphical representation of the computer calculated inter-visibility between a viewer (at 1.6 m height) and the top of the landform based on points distributed across the Study Area.

16A.3 Assessment Process

16A.3.1 Following assessment of the baseline landscape and visual context of the development the LVIA assesses the:

- sensitivity of receptors, whether the landscape or viewers;
- magnitude of impact, whether adverse or beneficial; and
- significance of the effects based on a comparison of sensitivity of receptor to magnitude of impact.

16A.3.2 The term magnitude of impact has been adopted to align with the methodology as detailed in Chapter 2: Assessment Methodology (ES Volume I, EN070009/APP/6.2).

16A.3.3 Effects may be temporary, permanent, short-term, medium-term or long-term. Landscape and visual effects may be further categorised as being either direct i.e. originating from the site, or indirect e.g. off-site visual effect of construction traffic.

16A.4 Landscape Assessment Methodology

16A.4.1 In predicting the effects of the Proposed Development on the landscape within the Study Area GLVIA3 states the following steps should be undertaken to identify and describe the landscape effects:

- identify the components of the landscape that are likely to be affected by the Proposed Development (landscape receptors); and
- identify the interactions between the landscape receptors and different components of the Proposed Development at its different stages.

Sensitivity of Landscape Receptors

16A.4.2 Landscape receptors are described within GLVIA3 (para 5.34) as “*components of the landscape that are likely to be affected by the scheme*”. These can include overall character and key characteristics, individual elements or features and specific aesthetic or perceptual aspects (such as wildness or tranquillity).

16A.4.3 It is the interaction between the different components of the Proposed Development and these landscape receptors which has potential to result in landscape effects (both adverse and beneficial).

16A.4.4 The sensitivity of the landscape receptor is a combination of their susceptibility to change of the specific type of development being assessed combined with the value of the landscape.

Susceptibility to Change

16A.4.5 The susceptibility to change is a measure of the ability of a landscape to “*accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies*” (paragraph 5.40, GLVIA3). The assessment of susceptibility must be tailored to the Proposed Development and considered as part of the assessment of the effects. Table 16A-1: Landscape Susceptibility to Change provides criteria level in relation to susceptibility.

Table 16A-1: Landscape Susceptibility to Change

CRITERIA LEVEL	SUSCEPTIBILITY TO CHANGE
High	The receptor has a low capacity to accommodate the Proposed Development without effects upon its overall integrity. The landscape is likely to have a strong pattern/ texture or is a simple but distinctive landscape and/or with high value features and essentially intact.
Medium	The receptor has some capacity to accommodate the Proposed Development without effects upon its overall integrity.

CRITERIA LEVEL	SUSCEPTIBILITY TO CHANGE
	The pattern of the landscape is mostly intact and/or with a degree of complexity and with features mostly in reasonable condition.
Low	The receptor is robust; it can accommodate the Proposed Development without effects upon its overall integrity. The landscape is likely to be simple, monotonous and/or degraded with common/ indistinct features and minimal variation in landscape pattern.

Landscape Value

16A.4.6 Establishing the landscape value of the Proposed Development Site and Study Area is necessary to determine the landscape sensitivity at both a Site and Study Area scale.

16A.4.7 The value of a landscape receptor reflects its importance in terms of any designations that may apply, or its importance in itself as a landscape or landscape resource, which may be due to its ecological, cultural or recreational value. The following factors are provided within the TGN 02/21: Assessing Landscape Value Outside National Designations and are complementary to the indicators and factors generally agreed to influence value described within GLVIA3 (GLVIA3 p.84, para 5.28):

- natural heritage (ecological, geological, geomorphological or physiographic interest);
- cultural heritage (archaeological, historical or cultural interest);
- landscape condition (physical state with regard to individual elements and landscape structure);
- associations (a landscape connected with notable people, events and the arts);
- distinctiveness (sense of identity);
- recreational value (recreational opportunities where experience of landscape is important);
- perceptual (valued for perceptual qualities such as wildness or tranquillity);
- functional (performs an identifiable and valuable function);
- conservation interests (presence of features of wildlife, earth science, archaeological, historical or cultural interest); and
- recreation value (valued for recreational activity).

16A.4.8 Judgements on landscape value for each receptor have been informed by the following criteria:

- high: nationally designated or iconic, unspoiled landscape with few, if any degrading elements;

- medium: regionally or locally designated landscape or an undesignated landscape with locally important features which may include some degrading elements; and
- low: undesignated landscape with few, if any, distinct features or several degrading elements.

16A.4.9 In combining susceptibility to change and value GLVIA3 indicates that combining susceptibility and value can be achieved in a number of ways and needs to include professional judgement. However, it is generally accepted that a combination of high susceptibility and high value is likely to result in the highest sensitivity, whereas a low susceptibility and low value is likely to result in the lowest level of sensitivity. A summary of the likely characteristics of the different levels of sensitivity is described in Table 16A-2: Landscape Sensitivity Criteria. It should be noted that these are indicative and in practice there is not a clear distinction between criteria levels.

Table 16A-2: Landscape Sensitivity Criteria

CRITERIA LEVEL	CHARACTERISTICS
High	<ul style="list-style-type: none"> • Areas of landscape character that are highly valued for their scenic quality (including most statutorily designated landscapes); and/or • elements/features that could be described as unique; or are nationally scarce; or • mature vegetation with provenance such as ancient woodland or mature parkland trees. • Mature landscape features which are characteristic of and contribute to a sense of place and illustrate time-depth in a landscape and if replaceable, could not be replaced other than in the long term.
Medium	<ul style="list-style-type: none"> • Areas that have a positive landscape character but include some areas of alteration/degradation/or erosion of features; and/or • perceptual/aesthetic aspects has some vulnerability to unsympathetic development; and/or features/elements that are locally commonplace; unusual locally but in moderate/poor condition; or • mature vegetation that is in moderate/poor condition or readily replicated.
Low	<ul style="list-style-type: none"> • Areas that are relatively bland or neutral in character with few/no notable features; and/or • a landscape that includes areas of alteration/degradation or erosion of features; and/or • landscape elements/features that are common-place or make little contribution to local distinctiveness.
Very Low	<ul style="list-style-type: none"> • Damaged or substantially modified landscapes with few characteristic features of value, capable of absorbing major change; and/or

CRITERIA LEVEL	CHARACTERISTICS
	<ul style="list-style-type: none"> landscape elements/features that might be considered to detract from landscape character such as obtrusive man-made artefacts (e.g. power lines, large scale developments, etc.).

Nature of Landscape Effects (Magnitude)

16A.4.10 The nature of the effect that is likely to occur, *i.e.* its magnitude, is determined by considering four separate factors, namely:

- size/scale;
- geographical extent;
- duration; and
- reversibility.

Size or Scale

16A.4.11 Judgements regarding the size or scale of the changes to the landscape are made for each potential effect. GLVIA3 (para 5.59) specifies that these judgements should take into account the following:

- the extent of existing landscape elements that will be lost, the proportion of the total extent that this represents and the contribution of that element to the character of the landscape – in some cases this may be quantified;
- the degree to which aesthetic or perceptual aspects of the landscape are altered either by removal of existing components of the landscape or by addition of new ones; and
- whether the effect changes the key characteristics of the landscape, which are critical to its distinctive character.

16A.4.12 The criteria should be presented in a verbal scale, which '*distinguishes the amount of change without being overly complex*' (GLVIA3 para 5.49).

16A.4.13 The size and scale of an effect is determined by considering the amount of change experienced by a receptor, based on the indicative criteria set out in Table 16A-3: Landscape Size/Scale Criteria.

Table 16A-3: Landscape Size/Scale Criteria

CRITERIA LEVEL	FEATURE/ELEMENT	AESTHETIC/ PERCEPTUAL ASPECT	KEY CHARACTERISTICS/ OVERALL CHARACTER
Large	Total or substantial loss or large-scale damage to landscape features resulting in	Change wholly or largely alters an aesthetic/perceptual aspect, such that it	Loss of or changes to the critical key characteristics of the landscape, resulting in a

CRITERIA LEVEL	FEATURE/ELEMENT	AESTHETIC/ PERCEPTUAL ASPECT	KEY CHARACTERISTICS/ OVERALL CHARACTER
	the integrity of the landscape being compromised.	becomes difficult/ impossible to appreciate, when considered against the baseline.	change to the overall landscape character.
Medium	Partial loss or medium scale damage to landscape features resulting in a partial change to the element/feature which may in some cases diminish its overall integrity.	Change is such that the development has an influence upon an aesthetic/perceptual aspect, but said aspect remains appreciable.	Partial loss or small changes to the key characteristics of the landscape but not resulting in an obvious change to the overall character of the area.
Small	Slight loss or small-scale damage to landscape features with its integrity remaining unchanged.	Change has little tangible effect upon an aesthetic/ perceptual aspect.	Minor changes to key characteristics which result in no or little change to the overall landscape character.

Geographical Extent

16A.4.14 The geographical extent is determined by considering the extent of influence, based on the indicative criteria set out in Table 16A-4: Geographical Extent Criteria.

Table 16A-4: Geographical Extent Criteria

CRITERIA LEVEL	DESCRIPTION
Large	The effects may influence several landscape types/character areas.
Medium	The effects may influence the landscape type/character area within which the development is located.
Small	The effects may influence the immediate setting of the site.
Negligible	The effects may influence the development site only.

Duration and Reversibility

16A.4.15 The duration of an effect and its reversibility are linked but separate considerations. The criteria for defining these two aspects are provided in Table 16A-5: Duration Criteria and Table 16A-6: Reversibility Criteria.

Table 16A-5: Duration Criteria

CRITERIA LEVEL	DESCRIPTION
Temporary	Less than 12 months
Short-term	0-5 years
Medium-term	5-10 years
Long-term	10+ years

16A.4.16 The reversibility of an effect relates to the prospects and practicality of an effect being able to be reversed and is determined based on the indicative criteria set out in Table 16A-6: Reversibility Criteria.

Table 16A-6: Reversibility Criteria

CRITERIA LEVEL	DESCRIPTION
Reversible	Change can be wholly or largely reversed. For example, the removal of a wind farm development following decommissioning.
Partially reversible	Change is partially reversible. For example, the restoration of a quarry to something similar to the baseline.
Irreversible	Change cannot realistically be reversed i.e. it is permanent.

16A.4.17 The factors above are considered in combination to provide an overall magnitude of impact for each receptor. The magnitude of impact for landscape receptors may be interpreted as per the indicative scales in Table 16A-7: Landscape Magnitude Criteria.

Table 16A-7: Landscape Magnitude Criteria

CRITERIA LEVEL	DESCRIPTION
High	Introduction of incongruous development which would result in noticeable change over an extensive area, affecting many key characteristics and the experience of the landscape.
Medium	Introduction of uncharacteristic development which would result in noticeable change over a large area, or more intensive change over a limited area, affecting some key characteristics and the experience of the landscape.
Low	Introduction of development that is not uncharacteristic which would result in a small change over a limited area affecting few characteristics.
Very Low	Little perceptible change to the landscape characteristics.

Assessing the Significance of Landscape Effects

16A.4.18 The overall significance of landscape effects is a combination of the sensitivity of the landscape receptor and the magnitude of the impacts. GLVIA3 (para 5.56) states

that *“there is no definitive rule regarding what defines a significant effect, but in making the judgement it is reasonable to say that:*

- Major loss or irreversible negative effects, over an extensive area, or element and/or aesthetic and perceptual aspect that are key to the character of nationally valued landscape are likely to be of the greatest significance; [and]
- Reversible negative effects of short duration, over a restricted area, on elements and/or aesthetic and perceptual aspects that contribute to but are not key characteristics of landscape value are likely to be the least significant and may depending upon the circumstance, be judged as not significant.”

16A.4.19 Plate 16A-1 presents a diagram that describes the relationship between sensitivity and magnitude of impacts on the landscape to determine the effect. GLVIA3 dictates that this is not a prescriptive process and is provided as a guide to how combinations of sensitivity and magnitude are typically combined.

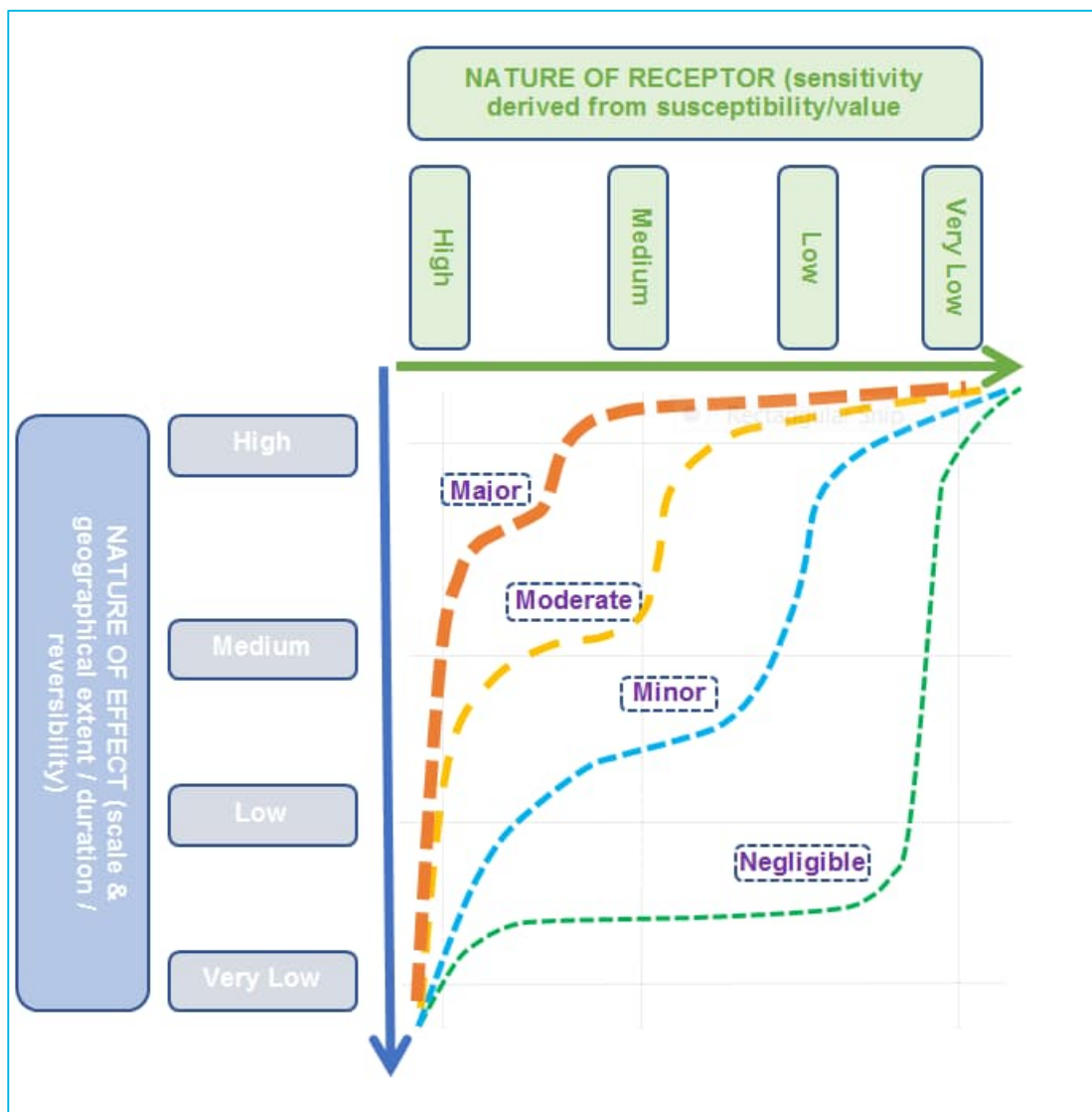


Plate 16A-1: Classification of Landscape Effects

16A.5 Visual Assessment Methodology

16A.5.1 *“An assessment of visual effects deals with the effects of change and development on the views available to people and their visual amenity” (GLVIA3, para 6.1).*

16A.5.2 In predicting the effects of the Proposed Development on the viewpoints being assessed, GLVIA3 states it is helpful to consider (but not restricted to) the following issues:

- nature of the view (full, partial or glimpsed);
- proportion of the proposed development visible;
- distance of the viewpoint from the proposed development and whether it would be the focus of the view or only a small element;
- whether the view is stationary, transient or sequential; and
- the nature of the changes to the view.

16A.5.3 Additionally, the seasonal effects of vegetation are to be considered, in particular the varying degree of screening and filtering of views.

Assessing the Significance of Effects

16A.5.4 The overall significance of visual effects is a combination of the sensitivity of the visual receptor and the magnitude of the visual impacts. GLVIA3 clearly states that there is no definitive rule regarding what defines a significant effect, but in making the judgement the following points should be considered (para 6.44):

- effects on people who are particularly sensitive to changes of views and visual amenity are more likely to be significant;
- effects on people at recognised and important viewpoints or from recognised scenic routes are more likely to be significant; and
- large-scale changes which introduce new, non-characteristic or discordant or intrusive elements into the view are more likely to be significant than small changes or changes involving features already present within the view.

Sensitivity of Viewpoints

16A.5.5 The sensitivity of the visual receptor is a combination of the susceptibility to change, and the viewing expectation or value placed on the view.

Susceptibility to Change

16A.5.6 The susceptibility of visual receptors to changes in the view and visual amenity is related to the activity they are engaged in and the extent to which their attention is focussed on the views and visual amenity at that location. As such, those receptors most susceptible to change are likely to include people engaged in outdoor activities where an appreciation of the landscape is the focus, or residents in areas where the landscape setting contributes to the setting of the properties.

16A.5.7 Conversely, those considered least susceptible to change include (but are not restricted to) people engaged in outdoor sports or recreation where there is no focus on the surrounding landscape/views, and people at their place of work where the focus is on the work activity.

16A.5.8 See Table 16A-8: Visual Susceptibility to Change Criteria for a full description of the criteria used to assess the susceptibility of viewpoints.

Table 16A-8: Visual Susceptibility to Change Criteria

CRITERIA LEVEL	SUSCEPTIBILITY TO CHANGE
High	<ul style="list-style-type: none"> ● Residents at home; ● People engaged in outdoor recreation, whose attention/interest is likely to be focused on the landscape or particular views, including strategic/ popular public rights of way;

CRITERIA LEVEL	SUSCEPTIBILITY TO CHANGE
	<ul style="list-style-type: none"> • Visitors to heritage assets or other attractions, where views of the surroundings are an important contributor to the experience; • Communities where views contribute to the landscape setting enjoyed by residents; and • Travellers on scenic routes.
Medium	<ul style="list-style-type: none"> • Travellers on road, rail, or other transport routes; • Users of local, and less used Public Rights of Way or where the attention is not focused on the landscape; and • Schools and other institutional buildings and their outdoor areas, play areas.
Low	<ul style="list-style-type: none"> • Introduction of development that is not uncharacteristic which would result in a small change over a limited area affecting few characteristics. Travellers on road, rail or other transport routes not focused on the landscape/particular views e.g. on motorways and "A" road or commuter routes; • People engaged in outdoor sport/recreation which does not involve/depend upon appreciation of views of the landscape; and • People at their place of work whose attention may be focused on their work/activity and not their surroundings.

Value of Views

16A.5.9 In making judgements about the value of each view, the assessment takes the following into account:

- recognition of the value to a particular view, e.g. in relation to heritage assets or planning designations; and
- indicators of the value attached to views by others, e.g., in guide books, tourist maps, literary references, painting etc.

16A.5.10 Table 16A-9: Value of View Criteria shows a full description of the criteria used to assess the value of the view.

Table 16A-9: Value of View Criteria

CRITERIA LEVEL	DESCRIPTION
High	<ul style="list-style-type: none"> • A recognised high-quality view, well- frequented and/or promoted as a beauty spot/visitor destination; • A view with cultural associations (recognised in art, literature or other media); and

CRITERIA LEVEL	DESCRIPTION
	<ul style="list-style-type: none"> • A view which relates to the experience of other features, for example heritage assets.
Medium	<ul style="list-style-type: none"> • The view, whilst it may be valued locally, is not widely recognised for its quality or has low visitor numbers. The view has no strong cultural associations.
Low	<ul style="list-style-type: none"> • A view with no recognised quality and/or is unlikely to be visited specifically to experience the views available.

16A.5.11 In combining susceptibility to change and value it is generally accepted that a combination of high susceptible and high value is likely to result in the highest sensitivity, whereas a low susceptibility and low value is likely to resulting in the lowest level of sensitivity. A summary of the likely characteristics of the different levels of sensitivity is described in Table 16A-10: Visual Sensitivity Criteria. It should be noted that these are indicative and in practice there is not a clear distinction between criteria levels.

Table 16A-10: Visual Sensitivity Criteria

CRITERIA LEVEL	DESCRIPTION
High	<ul style="list-style-type: none"> • A view that is well balanced, containing attractive features and notable for its scenic quality; and/or • A view which is an important part of the receptor’s reason for being there; and/or • A view which is experienced by large numbers of people and/or is recognised for its qualities.
Medium	<ul style="list-style-type: none"> • An otherwise attractive view that includes some unattractive or discordant features, or visual detractors; and/or • A view which plays a small part in the receptors being there; and/or • A view that is recognised locally.
Low	<ul style="list-style-type: none"> • A view that is unattractive, discordant and/or contains many visual detractors; and/or • A view which is unlikely to be part of the receptor experience.

Nature of Visual Effects (Magnitude)

16A.5.12 The guidance provided in GLVIA3 (para 6.38) requires that each of the following variables need to be evaluated for each of the visual effects identified:

- size or scale of the change of view, including loss of or additional views, degree of contrast in terms of form, mass, scale, colour and texture etc;
- geographic extent in terms of angle of view, distance etc; and

- duration and reversibility in term of longevity of effects and whether reversible.

Size and Scale

16A.5.13 The size and scale of an effect is determined by considering the amount of change experienced by a receptor, based upon the indicative criteria set out in Table 16A-11: Visual Size/Scale Criteria.

Table 16A-11: Visual Size/Scale Criteria

CRITERIA LEVEL	DESCRIPTION
Large	<ul style="list-style-type: none"> • The proposed development may result in extensive changes to the existing view (including the loss of existing characteristic features and/ or introduction of new discordant landscape features); and/ or • A change to an extensive proportion of the view; and/ or • Views where the Proposed Development would become the dominant landscape feature or contract heavily with the current scene.
Medium	<ul style="list-style-type: none"> • Changes will result in changes to the view but not fundamentally change its characteristics; and/ or • Changes that would be immediately visible but not be the key features of the view.
Small	<ul style="list-style-type: none"> • Changes which would not result in a change to the composition of the view; and/ or • Changes that would only affect a small portion of the view or introduce new features that could be screened.

Geographical Extent

16A.5.14 The geographical extent of an effect is determined by the indicative criteria set out in Table 16A-12: Geographical Extent Criteria. It should be noted that whether a view is at short, medium, or long- range will vary depending upon the type of development proposed.

Table 16A-12: Geographical Extent Criteria

CRITERIA LEVEL	DESCRIPTION
Large	Changes where the proposed development is located: <ul style="list-style-type: none"> • in the main focus of the view; and/ or • at close range; and/or • over a large area.
Medium	Changes where the proposed development is located: <ul style="list-style-type: none"> • obliquely to the main focus of the view; and/ or

CRITERIA LEVEL	DESCRIPTION
	<ul style="list-style-type: none"> at medium range; and/ or over a narrow area.
Small	Changes where the proposed development is located: <ul style="list-style-type: none"> on the periphery of the main focus of the view; and/ or at long range; and/ or over a small area.

Duration and Reversibility

16A.5.15 The duration of an effect and its reversibility are linked but separate consideration of the criteria for defining these are as in Table 16A-13: Duration Criteria and Table 16A-14: Reversibility Criteria.

Table 16A-13: Duration Criteria

CRITERIA LEVEL	DESCRIPTION
Temporary	Less than 12 months
Short-term	1-5 years
Medium-term	5-10 years
Long-term	10+ years

16A.5.16 The reversibility of an effect relates to the prospects and practicality of an effect being able to be reversed and is determined based on the indicative criteria set out in Table 16A-14: Reversibility Criteria.

Table 16A-14: Reversibility Criteria

CRITERIA LEVEL	DESCRIPTION
Reversible	Change can be wholly or largely reversed. For example, the removal of a wind farm development following decommissioning.
Partially reversible	Change is partially reversible. For example, the restoration of a quarry to something similar to the baseline.
Irreversible	Change cannot realistically be reversed, <i>i.e.</i> it is permanent.

16A.5.17 These four factors are then considered together to derive an overall magnitude of impact for each receptor, which is determined by use of professional judgement, based on the indicative criteria set out in Table 16A-15: Visual Magnitude Criteria (Indicative).

Table 16A-15: Visual Magnitude Criteria (Indicative)

CRITERIA LEVEL	DESCRIPTION
High	<ul style="list-style-type: none"> The development, or a part of it, would become the dominant and contrasting feature or focal point in the view; Little or no scope for adequate mitigation.
Medium	<ul style="list-style-type: none"> The development, or a part of it, would form a prominent feature or element of the view which is readily apparent to the receptor in the view; and Partial mitigation is possible.
Low	<ul style="list-style-type: none"> The development, or a part of it, would be noticeable but not alter the overall balance of features and elements that comprise the existing view; and Partial or full mitigation is possible.
Very Low	<ul style="list-style-type: none"> Only a very small part of the development would be discernible, or it is at such a distance that it would form a barely noticeable feature or element of the view and/or occupy a negligible proportion of the view; and Full mitigation is possible.

Beneficial or Adverse Change

16A.5.18 The magnitude of impact is also assessed as to whether it is a beneficial or adverse change. These are defined as follows:

- For beneficial change the Proposed Development, or part of it, would appear in keeping with existing landscape character and would make a positive visual and/or physical contribution to key characteristics. Removal of uncharacteristic features would also be a beneficial change; and
- For adverse change the Proposed Development, or part of it, would be perceived as an alien or intrusive component in the context of existing landscape character and would have a negative visual and/ or physical effect.

Assessing the Significance of Visual Effects

16A.5.19 The overall significance of visual effects is a combination of the sensitivity of the visual receptor and the magnitude of the impacts. GLVIA3 (para 6.42) states that *“the significance of visual effects is not absolute and can only be defined in relation to each development and its specific location.”*

16A.5.20 In paragraph 6.44 it also states that in making judgements about the significance of visual effects the following points should be noted:

- effects on people who are particularly sensitive to changes in the views and visual amenity are more likely to be significant;

- effects on people at recognised and important viewpoints or from recognised scenic routes are more likely to be significant; and
- large-scale changes which introduce new, non-characteristic or discordant features or intrusive elements into the view are more likely to be significant than small changes or changes involving features already present within the view.

16A.5.21 The relationship between the sensitivity of receptors and the magnitude of impacts allows the effects to be classified. Plate 16A-2: Classification of Visual Effects provides a diagram used to describe this relationship, and so allow a relative level of significance of any predicted effects on visual receptors to be categorised.

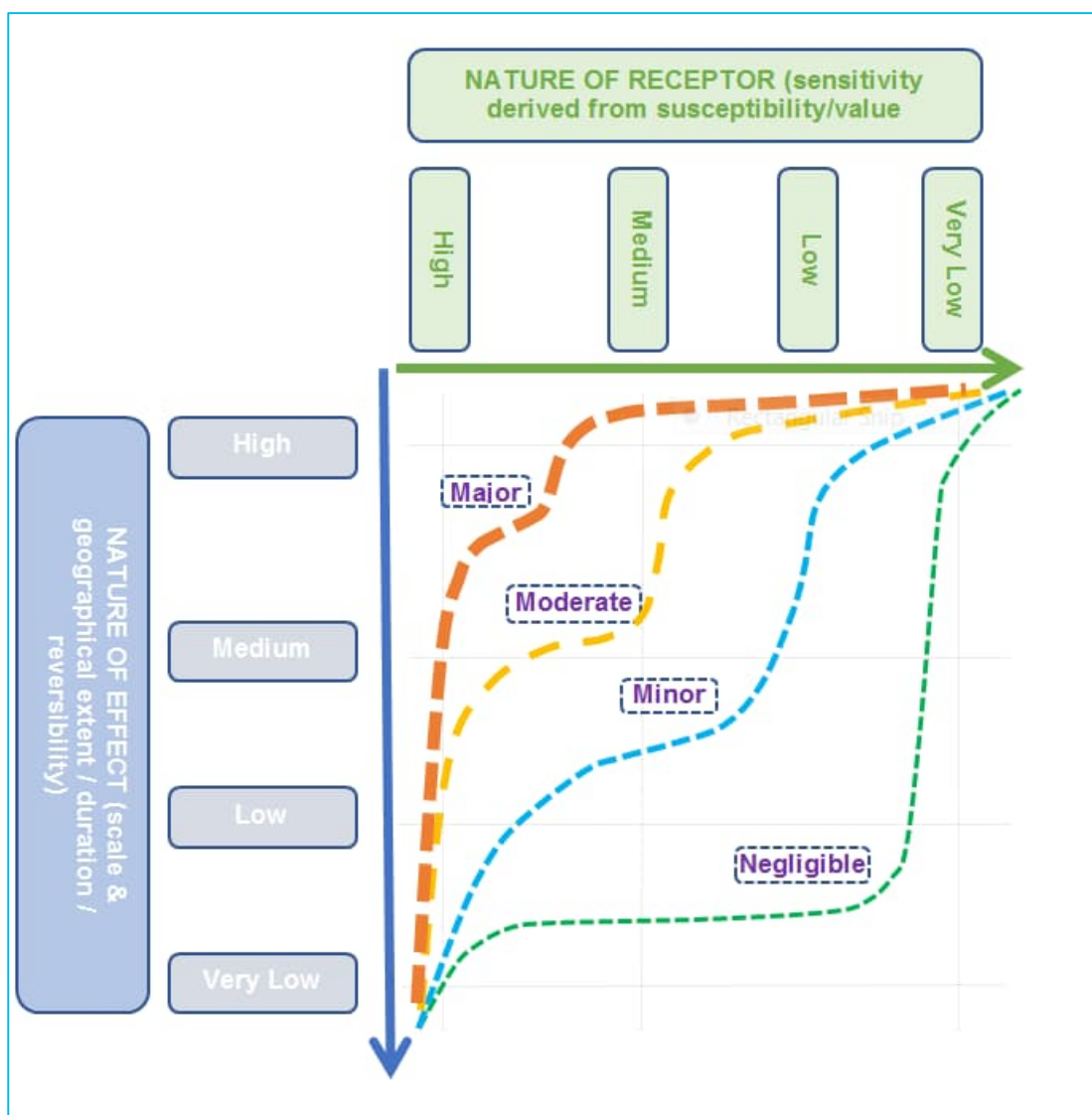


Plate 16A-2: Classification of Visual Effects

16A.5.22 The matrix is indicative of a continuum of effects which are assessed by professional judgement and justification, further clarification of the type of effects which are likely within each category can be found in Table 16A-16: Categories of Landscape and Visual Significance of Effect.

Significance of Effect

- 16A.5.23 The objective of the assessment process is to identify and evaluate potential significant effects arising from the Proposed Development. The assessment identifies the residual effects likely to arise from the design taking into account mitigation measures and change over time. The significance of effect is assessed by considering the sensitivity of the receptor and the predicted magnitude of impact in relation to the baseline conditions.
- 16A.5.24 To provide a level of consistency and transparency to the assessment and allow comparisons to be made between the various landscape and visual receptors subject to assessment, the assessment of beneficial and adverse effects is based on pre-defined criteria as outlined in Table 16A-16: Categories of Landscape and Visual Significance of Effect. When assessing the degree of individual effects, these may fall across several different categories and professional judgement is therefore used to determine which level best fits the overall effect on a landscape or visual receptor.

Table 16A-16: Categories of Landscape and Visual Significance of Effect

SIGNIFICANCE OF EFFECT	DESCRIPTION OF LANDSCAPE EFFECT	DESCRIPTION OF VISUAL EFFECT
Major	Considerable change over an extensive area of a highly sensitive landscape, fundamentally affecting the key characteristics and the overall impression of its character.	The development would become a prominent feature and would result in a very noticeable change to an existing highly sensitive and well composed view.
Moderate	Small or noticeable change to a highly sensitive landscape or more intensive change to a landscape of medium or low sensitivity, affecting some key characteristics and the overall impression of its character.	The development would introduce some enhancing or detracting features to an existing highly sensitive and well composed view or would be prominent within a less well composed and less sensitive view, resulting in a noticeable improvement or deterioration of the existing view.
Minor	Small change to a limited area of landscape of high or medium sensitivity or a more widespread area of a less sensitive landscape, affecting few characteristics without altering the overall impression of its character.	Where the proposed development would form a perceptible but not enhancing or detracting feature within a view of high or medium sensitivity or would be a more prominent feature within a poorly composed view of low sensitivity, resulting in a small improvement or deterioration of the existing view.

SIGNIFICANCE OF EFFECT	DESCRIPTION OF LANDSCAPE EFFECT	DESCRIPTION OF VISUAL EFFECT
Negligible	No discernible improvement or deterioration to the existing landscape character.	No discernible improvement or deterioration in the existing view.
No Effect	The development would not affect the landscape receptor.	The development would not affect the view.

16A.5.25 For the purposes of this assessment, moderate and major effects are deemed 'Significant;' while minor and negligible effects are considered to be 'Not Significant'.

Cumulative Landscape and Visual Effects

16A.5.26 The assessment of cumulative effects follows a similar process to that described above, first identifying and describing the cumulative baseline followed by an assessment of the impact of the addition of the Proposed Development. The cumulative assessment is undertaken based on the same study areas and receptors as those identified within the main landscape and visual assessment.

Assessment of Cumulative Effects

16A.5.27 Assessment of cumulative landscape and visual effects follows the same key steps as that of the non-cumulative assessment, as described in detail above. This first involves identifying the sensitivity of the receptor, followed by the and magnitude of cumulative impact before these judgements are combined and analysed to reach a conclusion as to the significance of cumulative effect.

16A.5.28 Taking a worst case approach, the sensitivity of landscape and visual receptors is identified in the main assessment is adopted without change for the purposes of the cumulative assessment.

16A.5.29 The cumulative magnitude of landscape and visual impact considers the addition of the Proposed Development into the identified cumulative baseline and is determined with reference to the criteria set out in Tables 16A-7 and 16A-15, above, in conjunction with the following considerations:

- The number of cumulative developments potentially visible;
- The distance to, direction and distribution of cumulative developments; and
- The landscape setting, context and / or degree of visual coalescence of the cumulative developments.

Significance of Cumulative Effects

16A.5.30 Determination of the significance of cumulative landscape and visual effects has been undertaken by employing professional judgement to combine and analyse the cumulative magnitude of impact against the identified sensitivity to change. Plates 16A-1 and 16A-2, above provide a diagram to give an indication of how sensitivity and magnitude are analysed and combined alongside application of professional

judgement to reach a conclusion on the significance of cumulative effects. It should be noted that the cumulative assessment is the result of the addition of the Proposed Development to the identified cumulative baseline scenario.

16A.5.31 The significance of cumulative landscape and visual effects are described with reference to the criteria set out in Table 16A-17. For the purposes of this assessment, moderate and major cumulative effects are deemed 'Significant,' while minor and negligible cumulative effects are considered to be 'Not Significant'.

Table 16A-17: Categories of Cumulative Landscape and Visual Effect

SIGNIFICANCE OF EFFECT	DESCRIPTION OF LANDSCAPE EFFECT	DESCRIPTION OF VISUAL EFFECT
Major	The addition of the Proposed Development into the cumulative baseline scenario would result in such development becoming a dominant and character defining feature.	The addition of the Proposed Development to the cumulative baseline scenario would result in a very noticeable increase in development to the extent whereby it would become a dominating or obstructive feature within the view.
Moderate	The addition of the Proposed Development into the cumulative baseline scenario would result in development becoming locally dominant or characteristic but would not result in them becoming a character defining feature.	The addition of the Proposed Development to the cumulative baseline scenario would result in a noticeable increase in development to the extent whereby they would become prominent but would not dominate or obstruct the view.
Minor	The addition of the Proposed Development into the cumulative baseline scenario would not result in a noticeable change to key landscape characteristics.	The addition of the Proposed Development to the cumulative baseline scenario would result in a perceptible increase in development but not to the extent that it would become a prominent feature in the view.
Negligible	The addition of the Proposed Development into the cumulative baseline scenario would not result in any discernible change to key landscape characteristics.	The addition of the Proposed Development to the cumulative baseline scenario would not result in any discernible increase in the appearance of development in the view.
No Effect	The Proposed Development would not affect the landscape receptor.	The Proposed Development would not affect the view.

16A.5.32 It is important to note that cumulative effects may vary from the effects of the Proposed Development considered in isolation. For example, it is possible for a scheme to have greater effects when considered in isolation against the existing baseline than when considered in addition to a theoretical cumulative baseline that includes a range of other potential developments. Conversely a scheme may result in greater effects when considered in addition to other potential developments than when considered in isolation.

16A.6 References

- Landscape Institute (2019) *Technical Guidance Note (TGN): Visual Representation of Development Proposals*.
- Landscape Institute (2021) *TGN 20/21: Assessing Landscape Outside National Designations*.
- Landscape Institute and Institute of Environmental Management and Assessment (2013). *Guidelines for Landscape and Visual Impact Assessment* 3rd Edition, Routledge, Abingdon.
- Natural England (2014). *An Approach to Landscape Character Assessment*.