Landscape and Visual Impact Assessment

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Review changes: updated references to PPW 12, referenced new notes and clarification document for GVLIA3 and added NRW guidance re landscape and visual effects of telecommunication apparatus (paragraph 36)	

Key legislation and policy

Primary Legislation	• National Parks and Access to the Countryside Act 1949 • Environment Act 1995 • Countryside and Rights of Way Act 2000 • Well Being of Future Generations (Wales) Act 2015 • The Planning (Wales) Act 2015 (relevant to DNS) • Environment Act (Wales) 2016
Secondary Legislation	• Environmental Impact Assessment (Wales) Regulations 2017
International policy	• European Landscape Convention (the Florence Convention)
National policy and guidance	• Chapter 6 Planning Policy Wales Edition 12
Judgements	• *R v Rochdale MBC ex parte Tew and Others [1999] 3 PLR 74* • *R v Rochdale MBC ex parte Milne [2000] EWHC 650 (Admin)* (Both concerned with the Rochdale Envelope) • *R (on the application of Samuel Smith Old Brewery) (Tadcaster) & others (Respondents) v North Yorkshire County Council (Appellant) [2020] UKSC 3*
Other guidance	• Guidelines for Landscape and Visual Impact Assessment, Third Edition, Landscape Institute and Institute of Environmental Management & Assessment • Technical Guidance Note: Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3) (August 2024)

	• Technical Guidance Note 06/19 Visual Representation of development proposals, The Landscape Institute • Technical Guidance Note 02/19 Residential Visual Amenity Assessment (RVAA), The Landscape Institute • Scottish Natural Heritage (2017). Siting and Designing Windfarms in the landscape • Scottish Natural Heritage (2017). Visual Representation of Wind Farms • Scottish Natural Heritage (2012). Assessing the Cumulative Impact of Onshore Wind Energy Development • Natural Resources Wales Standing Advice: Telecommunications apparatus and their landscape and visual effects

Other Relevant Manual Chapters and Websites

- Manual Chapters: Environmental Statements
- https://naturalresources.wales/guidance-and-advice/business-sectors/planning-and-development/advice-for-developers/landscape/?lang=en
- https://naturalresources.wales/guidance-and-advice/business-sectors/planning-and-development/evidence-to-inform-development-planning/landmap-the-welsh-landscape-baseline/?lang=en
- https://www.landscapeinstitute.org/technical-resource/landscape-visual-impact-assessment/

Introduction

1. This chapter is concerned with the background to and application of Landscape and Visual Impact Assessments (LVIA). It considers relevant legislation and policy, methodologies and the key aspects to take account of when reviewing an LVIA.

Legislation, Policy and Guidance

2. The Environment Act (Wales) 2016 is concerned with the sustainable management of natural resources in a more proactive, sustainable and joined up way. The Act identifies natural resources as including geological features and processes and physiographical features. It is these features that largely define our natural landscapes.

3. The Environment Act recognises the contribution that the sustainable management of natural resources can make to the achievement of the seven well-being goals set out in the Well-being of Future Generations (Wales) Act 2015 (the WBFG Act).

4. The Environmental Impact Assessment (Wales) Regulations 2017 (the EIA Regulations) sets out those developments for which an Environmental Impact Assessment (EIA) is required. Schedule 4 requires EIAs to include an assessment of the current state of the environment and an outline of the likely evolution of natural changes without the development and the effects on matters such as the population (which would encompass issues of visual amenity) and landscape. More information on EIA can be found in the Environmental Statement chapter of the Manual.

5. The Planning (Wales) Act 2015 set up a category of planning applications for Developments of National Significance (DNS), many of which are subject to EIA. Even where a DNS is not EIA development environmental information including landscape and visual assessments may be required.

6. The UK signed up to the European Landscape Convention (the Florence Convention) which promotes the protection, management and planning of landscapes and organises international co-operation on landscape issues. The Convention's definition of landscape is inclusive and covers natural, rural, urban and semi-rural areas. Wales's landscape policy is currently guided by the Convention but the UK's exit from the European Union may have implications for future policy.

7. Planning Policy Wales (PPW) recognises that the character and special qualities of all our places and landscapes can provide a strong sense of place, inspiration and belonging and contribute to the distinctive cultural identity of Wales. It reiterates the contribution that Wales's landscape makes to the seven goals of the WBFG Act. Wales's landscape qualities are important for tourism, business, local employment, sourcing local building materials, in attracting inward investment and by being used and enjoyed by local communities.

8. PPW requires plans setting out spatial strategies and individual development proposals to be considered and assessed with regard to their impacts on landscape character. Whilst many applications are not subject to a statutory requirement to provide an assessment of landscape and visual amenity impacts, many are submitted with an accompanying standalone LVIA.

9. The Welsh National Marine Plan also requires proposals to demonstrate how potential impacts on the coastal historic environment and its assets, designated landscapes and seascapes have been taken into consideration.

Landscape and Visual Impacts

10. The assessment of landscape impacts and visual impacts are distinctly different. The landscape has a reality and an appearance. It is made up of rocks, water, plants, animals, building, monuments and other things that can be accurately measured and described. It also has an appearance that is more difficult to measure and describe because we react to it in different ways.

11. Landscape impacts are concerned with features or fabric, such as local topography, water bodies, hedgerows, trees, stone walls and other forms of boundary treatment. These also make up landscape character but also encompass the landscape's aesthetic qualities, (such as scale, sense of enclosure, diversity, pattern, colour etc.), and perceptual and experiential qualities (such as tranquillity, beauty, a sense of place). Impacts to the landscape can result from large scale changes such as those impacting on topography or landform, or from the loss of a rural, undeveloped character apparent over a wide area. They can also be localised, resulting from the loss of a characteristic field pattern, or as a result of small changes or the loss of, or impact to, individual features, such as trees and hedgerows.

12. Visual impact assessment differs as it is concerned with how people will be affected by changes. The visual receptors in LVIA will always be people not landscape features (normally defined according to a use e.g. residential, business, road, footpath etc.) An assessment of the visual impacts will consider how people will be affected by changes in views and visual amenity at different places, including publicly accessible locations and residential properties and how their enjoyment of a place will be affected.

Landscape and Visual Designations

13. LVIA's will need to take account of any designations relating to landscape and visual importance. There are a number of relevant designations that are outlined below.

International Designations

14. A World Heritage Site (WHS) is an international designation confirmed by UNESCO and recognises a site's Outstanding Universal Value. Of the ten selection criteria for a WHS, six are cultural and four are natural. Wales currently has three WHS; the castles and town walls of Edward I at Caernarfon, Conwy, Beaumaris and Harlech; Blaenavon Industrial Landscape and Pontcysyllte Aqueduct and Canal. Proposed development may have a direct impact on landscape features or character which relates to the criteria adopted for designation of a WHS, but indirect impacts, such as impact to the setting of a WHS, may also result where a site is designated under cultural criteria.

15. Wherever necessary for the protection of the WHS, an adequate buffer zone should be provided. A Buffer Zone is an area which has complementary legal and/or customary restrictions placed on its use and development to give an added layer of protection to the WHS. This should include the immediate setting of the Site, important views and other areas or attributes that are functionally important as a support to the site and its protection. A map indicating the boundary of the site plus any buffer is included in the information published on the World Heritage List. PPW states that the impacts on a WHS, its setting and buffer zone where it exists is a material consideration.

National designations

16. Natural Resources Wales (NRW) is the Welsh Government's statutory advisor in relation to areas which are subject to national landscape designations.

17. National Parks, and Areas of Outstanding Natural Beauty (AONB) are landscape designations of national importance. The Environment Act 1995 provides National Parks with two purposes; the first of conserving and enhancing their natural beauty, wildlife and cultural heritage and the second encouraging understanding and enjoyment of their special qualities. There is a need to achieve a balance between these purposes. Where there is a conflict between these purposes, greater weight should be attached to the conservation purpose.

18. The Countryside and Rights of Way Act 2000 (the CRoW Act) provides AONBs with the purpose of conserving and enhancing their natural beauty. There is a statutory duty on decision makers to have regard to National Parks and AONB purposes both for activities and development inside the designated area and within their settings.

19. PPW requires great weight to be given to the statutory purposes of National Parks and AONBs and to the special qualities of such areas. Both are afforded the highest status of protection from inappropriate developments. Proposals in National Parks and AONBs should be carefully assessed to ensure that their effects on those features which the designation is intended to protect are acceptable.

20. 'Special qualities' is a term used in the Environment Act and the CRoW Act. For individual National Parks and AONBs 'special qualities' may be defined in a relevant management plan. An LVIA should set out how the defined 'special qualities' may be affected by a proposed development.

21. The Register of Historic Landscapes in Wales produced by Cadw is a non-statutory advisory register. It has two purposes. The first is to inform policy making and decision making at a strategic level about the historic importance of the identified areas. The second is that information on the register should be taken into account for EIA development, or, if on call in, in the opinion of Welsh Ministers, development is of a sufficient scale to have more than a local impact on the historic landscape. It also has a wider purpose to promote the value of the historic landscape as a resource for social and economic well-being.

22. There is no statutory designation process for heritage coasts. However, PPW requires the particular landscapes of the coastline to be recognised and protected where they represent significant characteristics of place. Heritage coasts are the most scenically outstanding stretches of undeveloped and unspoilt coast. PPW states that recognition of heritage coasts does not affect the status of the area in planning terms, however the features which contributed to their designation will

be important considerations in development plans and development management decisions.

Local Designations

23. PPW requires planning authorities to provide for the conservation and, where appropriate, the enhancement of local landscapes. This may include policies relating to landscape and the designation of Special Landscape Areas (SLAs). SLAs are non-statutory designations that define local areas of high landscape importance.

24. Geological features are also a fundamental part of landscape. Regionally Important Geodiversity Sites (RIGS) are non-statutory site designations that recognise locally or regionally important geological or geomorphological landscape features. Some Sites of Special Scientific Interest (SSSIs) are also designated for their geological or geomorphological interest.

25. Some features within the landscape such as trees can also be protected by Tree Preservation Orders or as ancient woodland.

26. Substantial areas of landscape in Wales are also registered as Common Land. PPW recognises that common land is a finite resource and should not be developed unnecessarily.

Other Designations

27. Green Belts and Green Wedges are not landscape designations and they are not protected for their intrinsic landscape character, value or quality. However, the Courts have confirmed that openness can have a visual aspect as well as a spatial one, albeit this is a matter of planning judgement rather than one of legal principle[1]. PPW requires their openness to be maintained and the impact of new development on Green Belts and Green Wedges may be covered by an LVIA. The Green Belt and Green Wedges chapter of the manual provides more information.

28. Other designations that may be considered in a LVIA include conservation areas, registered parks and gardens, and listed buildings. In this regard there is a close inter-relationship with the assessment of impact to heritage assets, including impacts to their settings. Generally, impacts to the setting of heritage assets are found in a cultural heritage assessment, and the assessment of impacts to the visual amenity of users of those heritage assets (for example, visitors to a Scheduled Monument) in a LVIA. However, there is no hard and fast rule in this respect, and there is often a cross over, duplication or contradiction between landscape and visual and heritage reports or ES chapters on these topics.

[1] R (on the application of Samuel Smith Old Brewery (Tadcaster) & Others) (Respondents) v North Yorkshire County Council (Appellant) [2020] UKSC 3

29. There may also be crossover with sites designated for their biodiversity value. The contribution of particular vegetation types or landscapes occurring in European sites, National Nature Reserves or SSSIs may play an important role in the landscape character and/or views in an area.

LANDMAP and other landscape character assessments

30. LANDMAP is an all Wales landscape resource which records and evaluates landscape characteristics, qualities and influences in a nationally consistent data set. It takes a whole landscape approach that covers all landscapes whether designated or not and captures the information in a digitally based resource managed as a spatial dataset.

31. It provides a comprehensive and integrated landscape baseline from which change can be monitored. It divides Wales into discrete geographical areas known as aspect areas and for each area there are five datasets. These are geological landscape, landscape habitats, visual and sensory, historic landscape and cultural landscape. Each aspect area is evaluated based on its value, condition and trend and is evaluated from a local to national scale of landscape importance.

32. LANDMAP was developed by the Landscape Partnership Group comprising key government and agency stakeholders. PPW recognises its importance as an information resource, methodology and monitoring baseline for the landscapes of Wales. It requires planning authorities to draw upon LANDMAP in the preparation of landscape plans and assessments needed to inform development plans, SPGs, and the development management process.

33. NRW has defined National Landscape Character Areas (NLCAs) and Marine Character Areas (MCAs) at a broad landscape scale. There are 48 individual NLCAs and 29 MCAs in Wales and their profiles describe their distinct natural, cultural and perceptual characteristics. The MCA profiles include land – sea inter-visibility maps. Links to the defined areas and detailed information about LANDMAP can be found on NRW's web-site https://naturalresources.wales/guidance-and-advice/business-sectors/planning-and-development/advice-for-developers/landscape/?lang=en. Information relating to landscape assessment can also be found on the Landscape Institute's web-site https://www.landscapeinstitute.org/.

34. Submitted LVIAs should refer to the above character areas and LANDMAP together with local character assessments produced by local planning authorities and/or their own assessment of the proposed development on landscape character.

LVIA Methodology

35. There is no mandatory standard for most LVIAs. However, it is generally accepted that the industry standard guidance "Guidelines for Landscape and Visual Impact Assessment" published by the Landscape Institute and the Institute of Environmental Management and Assessment is best practice. The current version is the third edition published in April 2013 and is often referred to as GLVIA3. There are copies available in the library at CP2.

36. The introduction of the 3rd edition has given rise to queries from landscape consultants. The document 'Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessments Third Edition (CLVIA3)' prepared by the Landscape Institutes provides a compilation of clarifications on the GLVIA3 and supersedes all other clarification documents. Inspectors may also need to refer to this document which can be viewed here : Notes and Clarifications on aspects of the 3rd Edition Guidelines on Landscape and Visual Impact Assessment (GLVIA3) LITGN-2024-01 - Landscape Institute.

37. Reference to the guidelines is needed to gain a full understanding of GLVIA3, but the recommended approaches to landscape and visual assessments are outlined in the paragraphs below. In all assessments the distinction between the impact (the action being taken) and the effect (the result of that action) should be clear.

38. The assessment of landscape and visual impacts should firstly describe the development and the baseline landscape and visual receptors. It should identify the sensitivity of the landscape and the magnitude of the impacts of the development drawing on designations and identified aspect/character areas. This will enable assessment of the likely significance of the effects which can be positive or negative.

39. The sensitivity of the landscape to change is determined by judging the susceptibility of the landscape to specific change and the value attached to the landscape receptor. The magnitude of landscape impact is determined through consideration of the size/scale, duration and reversibility of the impact. This may include avoidance/mitigation effects for any identified negative effects.

40. For visual impacts, consideration of the sensitivity of the receptor (people based) and the magnitude of the impact will enable assessment of the likely significance of visual effects.

41. The sensitivity of visual receptors is assessed by consideration of the susceptibility of the receptor to change and the value attached to particular views. A zone of theoretical visibility (a ZTV) will normally be identified. The magnitude of visual impacts is determined through consideration of the size/scale, duration and reversibility of impacts. Again avoidance/mitigation measures may be considered.

42. LVIAs should also take into account the cumulative landscape and visual effects arising from combined projects. This should include past, present and future proposals but should remain proportionate to the development proposed. Future proposals should be those at an advanced stage with a high likelihood of going ahead.

43. The presentation of an LVIA may use a number of visual aids including photomontages, wireframes, maps and visual representations. A proportionate approach should be taken depending on the nature and scale of the development and the sensitivity of the landscape and visual receptors. The Landscape Institute published a technical guidance note TGN 06/19 "Visual Representation of development proposals" in September 2019 in support of GLVIA3. The guidance note aims to help in the selection, production and presentation of types of visualisation appropriate to the circumstances in which they will be used and follows and amplifies the broad principles set out in GLVIA3.

44. Interim Advice Note 135/10(W) sets out the requirements of the Welsh Government and Managing Agents and their service providers for the assessment and reporting of the effects of highway projects on landscape character and views from visual receptors. The note has been prepared in accordance with the principles set out in the Design Manual for Roads and Bridges (DMRB) Volume 11 Sections 1 and 2 and draws on advice in GLVIA3. It provides a methodology for considering the significance of identified effects resulting from road projects and replaces DMRB Volume 11 Section 3, Part 5 for use in Wales.

Landscape and Visual impact assessment of onshore wind farms

45. When examining onshore wind farm cases, Inspectors should also consider a set of specific guidelines which have been prepared by the Scottish Nature Heritage but are applicable to Wales. These are listed at the Key legislation and policies table at the beginning of the chapter.

Considering and reviewing the LVIA

46. There may be two or more LVIAs prepared by different parties. LVIAs involve subjective judgement, generally within the framework of a stated objective methodology. Assessments could be prepared by landscape expert(s) appointed by the appellant, by objectors to the proposed development, by the local authority and/or by statutory consultees.

47. There may be different interpretations of the GLVIA3 method especially in the criteria used and the justification for conclusions; and different views on thresholds for significant effects. There may also be genuine differences of

opinion between parties where the same method is applied. It is necessary to understand what agreements and disagreements there are between the parties and to reach your own position on the conclusions drawn.

48. For clarity, and to avoid confusion between the two, it is good practice to report the assessment and conclusions of landscape impacts and visual impacts separately. When reviewing a LVIA, there are a number of commonly arising issues to look for:-

- The description of the development/coverage of the LVIA
- Baseline Assessment and Zone of Theoretical Visibility
- Application of the Methodology
- Assessment of Mitigation Measures
- Visual Presentation Methods

The description of the development/coverage of the LVIA

49. The description of the development should ideally be summarised in the LVIA, to give confidence that the assessment carried out has been based on the anticipated impacts of the application or appeal development. A well written assessment should either refer back to another chapter containing the description or have its own description which confirms the basis of the assessment. Care should be taken that the assessment was carried out based on the development to be determined rather than an earlier version. Where schemes have evolved, LVIAs should include an addendum or be revised to take account of subsequent changes.

50. Matters such as the location of construction compounds and construction plant and equipment, and the materials proposed for elevational treatments, may be of particular relevance to the preparation of LVIAs.

51. The LVIA should also include the mitigation measures proposed as part of the development and that have been taken into account in the assessment of the residual effects. An assessment of effects before and after mitigation will often be included to demonstrate the difference made by the mitigation. Mitigation may not solely refer to planting or landscape schemes but could include design features of any buildings such as siting, scale, massing, colour etc. which would be considered as embedded mitigation, responding to adverse visual effects.

52. Mitigation proposals may be included for the construction stage as well as operational stage. These might include temporary screening or advance planting where early installation of mitigation planting would achieve screening of construction activities. Phasing and restoration may also be an aspect of mitigation which is considered for proposed developments such as quarries and landfill sites.

53. A description of the alternative sites considered on landscape and visual grounds may also be included and should always be included in any assessment provided for EIA development.

54. Where a proposal is EIA development it will be necessary for it to take account of the combined effect of other projects. Inspectors should be satisfied that the appellant has taken all necessary steps to include relevant projects based on a proportionate basis for the development proposed.

Baseline Assessment and Zone of Theoretical Visibility

55. Consideration as to whether the baseline description and area affected is sufficiently wide is important, and this is not necessarily readily established by desk study alone. It is good practice for those preparing LVIAs to agree the extent of the ZTV (if prepared) and locations of photograph and photomontage viewpoints with the local planning authority and relevant consultees. These should include important views into/out of designated areas, public footpaths, national trails, public viewpoints and, residential properties. If there is disagreement on views, or they have not been fully reflected in the LVIA, Inspectors should do their own assessment from public viewpoints during the site visit.

56. If a computer-generated ZTV is produced, the resolution of the Digital Terrain Model (DTM) should ideally be 5m or 10m, rather than 50m, which provides a less than accurate representation of the potential visibility of the development, due to the increased interval between data points. A DTM model is also a 'bare earth' model and does not indicate screening that may be provided by existing vegetation blocks or built form, so it does represent a 'worst case'. The LVIA may also present a ZTV based on a Digital Surface Model (DSM), which represents not only the earth's surface but also the objects on it. Nevertheless, computer generated ZTVs models always need checking on site for accuracy and the actual extent of visibility of the proposed development from individual viewpoints.

57. Some larger projects may be submitted on the basis of the "Rochdale Envelope". This approach allows some flexibility where the exact details of a scheme may not yet be finalised (i.e. the precise dimensions of the plant or buildings). The LVIA will need to take account of the parameters that have been established to provide for the worst-case scenario and to allow for the necessary flexibility. Further advice can be found here: https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-advice-note-nine-rochdale-envelope

Application of the Methodology

58. Under GLVIA3, those undertaking the LVIA develop their own methodology and criteria for the assessment of impacts. Inspectors may need to consider whether the stated methodology and criteria are appropriate for the assessment in each case, and, if they are, whether they have been applied consistently throughout. The methodology should explain what factors have been used to assess the significance of the effects. If the conclusions do not reflect these, they should be treated with caution. However, any approach should be proportionate to the development proposed.

59. GLVIA3 recognises that professional judgement is an important part of LVIA. It is unlikely that an LVIA will be "wrong", but all judgements need to be based on the methodology and be clear and transparent as to how decisions were reached.

60. Common mistakes include new criteria being introduced in the text of the LVIA that are not defined in the methodology, or the downplaying of the sensitivity of landscape and visual receptors to result in reduced significance of effect in the assessment.

61. The methodology often comprises a series of steps, some of which are evidence based and some the opinion of the expert undertaking the LVIA. The way the steps are combined is often presented on a matrix or series of matrices. You need to follow these steps in the methodology description and ensure they are applied. GLVIA3 states that LVIAs should always distinguish clearly between what are significant and non-significant effects.

62. In reaching decisions, Inspectors should make reference to the methodology and conclusions reached. If a decision is being made that goes against the LVIA's conclusions this should be explained clearly with reference to the methodology.

Assessment of mitigation measures

63. LVIAs should include consideration of mitigation, avoidance or offsetting/remedying/compensatory measures. These could be either primary measures that are an integral part of the scheme and should be set out in the description of the development, or secondary measures that address the adverse effects identified. In the case of secondary mitigation measures, the likelihood and ability to secure their implementation will require assessment. The general approach to mitigation should be hierarchical, with the ideal strategy being to prevent or avoid. If this is not possible alternative strategies for reducing the effects followed by offsetting/remedying/compensating should be considered.

64. The terms Year 1 and Year 15 are commonly used in describing the assessment of effects (these were originally derived from DMRB Volume 11). Winter of Year 1 usually represents the 'worst case' impact immediately following completion of construction, before the establishment of screen planting, whilst Summer of Year

15 is usually taken as representing the longer term ‘average’ residual effect, although in practice new planting will not be fully mature until sometime after Year 15.

65. It is also useful to note and ask whether the assumptions made about the proposed landscape mitigation measures are realistic and achievable. Screen planting needs to be in character with the landscape of the surrounding area or may instead draw attention to the development. Realistic assumptions also need to be made about the growth of planting in the first 15 years (or such other period as may be assumed for the residual effects assessment) particularly if climatic or soil conditions at the site are extreme or if proposed planting is on bunds, which tend to provide less than ideal growing conditions. The continued maintenance of new planting will also be a factor in its successful establishment, and it may be appropriate to make this the subject of a planning condition if an appeal is to be allowed. There may be difference of opinion as to how long any maintenance period should extend.

66. There is a difference between landscape or visual mitigation and enhancement. Some schemes may also include enhancement proposals, which generally are not deemed necessary to mitigate the adverse effect but Inspectors may wish to give some weight to if there is evidence the proposed enhancement will be secured and delivered.

Visual Presentation methods

67. The production and presentation of photographs, photomontages and wireframes is often a matter of dispute between parties. The Landscape Institute’s guidance TGN 06/19 provides good practice advice on the preparation of all types of visual presentation methods. It covers four types of static visualisations comprising annotated viewpoint photographs, 3D wireline/model, photomontages/photowires and photomontages/photowires with quantifiable verification. Of the four, photomontages and photowires with quantifiable verification provide the most locational accuracy and scaling. Advice is provided on the best way to portray all types, but any visual presentation should be scrutinised to ensure that it does present an accurate depiction of the proposed development. LVIAs should include information indicating how data was used in how the visual representations were obtained (ie. angle of view, grid reference of location, date of photograph etc.).

68. Photomontages should not be considered in isolation from a visit to the viewpoint in question. It will be necessary to visit any photomontage viewpoints which are intended to be referenced in decisions/reports and give them appropriate weight depending on their accuracy based on the best practice advice and the information provided. These should be compared with the findings from your own visual inspection. Photomontages and the way that they are perceived by the

human eye is such that they are only a representation of the likely impact and an aid to decision making.

69. Where computer modelling is presented, the developer's own methodology of how the computer model has been built, and what safeguards have been adopted to ensure accuracy should be checked and compared against any photomontages/photographs/wireframes presented.

70. For larger schemes, there is increasing use of dynamic visualisations including augmented reality and virtual reality technologies. Augmented reality visualisations typically use phones, tablets or headsets to provide a moving viewpoint. Care is needed when interpreting the outputs due to the range of scales depending on the device used to capture the images.

71. Virtual reality headsets use computer modelled backgrounds rather than photographic ones. They provide an alternative way of visualising development. Both methods are likely to develop as technology advances.

Overall Considerations

72. LVIA is an inherently subjective matter and Inspectors may find that they disagree with the findings of an assessment, either in the methodology or approach, or in the judgements which have been made with regards to the impacts and effects on the sensitivity of receptors or the expected magnitude of change resulting from the proposed development.

73. In writing decisions, Inspectors should avoid the use of new criteria which are not already defined in the submitted assessment, as this will cast doubt on the basis of the judgement made. In reporting impacts/effects, it should be made clear how likely harm has been determined and how judgements have been reached. If the findings of the LVIA are the basis on which a planning judgement is made, then direct reference to the relevant sections/paragraphs in the assessment should be provided for the avoidance of doubt. If the Inspector disagrees with the findings of the submitted LVIA then clear reasons to support this judgement should be provided including reference to any pertinent supporting information e.g. experience from a site visit, technical guidance or expert witness statement. If presented with more than one LVIA the Inspector will need to set out reasons for agreeing or disagreeing with the findings of all the LVIAs.

74. Inspectors should be aware that they should not comment on the impact to a particular view without visiting that view. Those included in a LVIA are usually located in publicly accessible locations. It is unusual for access to be granted to residential properties to an appellant when they are producing a LVIA and the methodology in the assessment will usually contain a caveat that where impacts such private views have been assessed, these have necessarily been assessed on the basis of the information available and by visiting local representative,

publicly accessible viewpoints. As the Inspector may on occasion be invited into a private property to see a view that may be affected, where the appellant has not previously had access, it should be made clear in the decision/report where access has and has not been available to the Inspector.

75. In conclusion, the outcome of an LVIA is largely a matter of judgement as subjectivity is involved. It may be difficult to say that the findings of an LVIA are 'wrong' but there may be obvious omissions of fact or judgements made that may be questionable. It may also be apparent that the methodology adopted is not robust or appropriate or that it has not been applied systematically in the presented assessment. Such matters are for the Inspector's judgement.