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INTRODUCTION

- 13.1 This Chapter of the EIAR assesses the landscape and visual impacts arising from the development of the proposed clay lined inert landfill and C&D waste recovery facilities at Ballinclare Quarry, Kilbride, Co. Wicklow.
- 13.2 The application site is located approximately 2.5km south of the village of Glenealy, 5.5km east of Rathdrum and 6km southwest of Wicklow town. The recently opened M11 motorway runs approximately 400m to the east of the site. Details of the proposed development within the application site area are provided in Chapter 2 of this EIAR.
- 13.3 Landscape and visual effects are independent but related issues. Landscape effects are changes in the landscape, its character and quality, while visual effects relate to the appearance of these changes and the resulting effect on visual amenity. Wherever possible, identified effects are quantified, however the nature of landscape and visual impact assessment requires interpretation by professional judgement. Please refer to Appendix 13-A at the end of this section, for a description of the detailed methodology applied in making this assessment.

Scope of Work / EIA Scoping

- 13.4 This landscape and visual assessment (LVIA) is structured in the following manner:
- *Introduction* – a description of the context and structure of this report,
 - *Regulatory Background* – a description of the planning context relevant to this LVIA (e.g. planning policies, designated landscapes, sites of nature conservation importance);
 - *Receiving Environment* – a description of the landscape and visual baseline, including the identification of relevant landscape and visual receptors;
 - *Impact Assessment* – a description of the aspects of the development which are likely to cause a landscape and/or visual effects, an assessment of landscape and visual receptor sensitivity, as well as the magnitude and significance of the landscape and visual effects;
 - *Mitigation Measures* – a description of the measures which will be implemented to mitigate the landscape and visual effects of the proposed development; and
 - *Residual Impact Assessment* – a summary of the degree of landscape and visual impact, following the implementation of all mitigation measures.
- 13.5 The assessment is illustrated by a Landscape Baseline and Viewpoint Locations Map and two Viewpoint Sheets (refer to Figures 13-1 to 13-3). A description of the proposed development which will provide for the backfill and restoration of the existing quarry void at Ballinclare can be found in Chapter 2 of this EIAR.

Consultations / Consultees

- 13.6 A pre-planning consultation meeting was held between officials of Wicklow County Council and representatives of Kilsaran Concrete and SLR Consulting Ireland on 7th February 2019 at the offices of Wicklow County Council in Wicklow Town. Staff from the roads, water and environment services departments of Wicklow County Council were also in attendance. No specific concerns were raised at the meeting in respect of the potential landscape or visual impacts of the proposed development.
- 13.7 Following a review of published development plans and the site survey, it was considered that there was no requirement for a separate formal consultation to be carried out specifically in respect of the landscape and visual impacts of the proposed development.

- 13.8 As this development constitutes Strategic Infrastructure Development (SID), a formal consultation exercise was also undertaken with statutory consultees and nearby residents / members of the general public between October and December 2020. Details of these consultations and the feedback obtained therefrom is provided in a separate report submitted in support of the SID application to An Bord Pleanála. Any specific feedback provided in respect of landscape and visual impacts has been considered and addressed as appropriate in drafting this Chapter of the EIAR.

Contributors / Author(s)

- 13.9 The assessment including site work and completion of figures was carried out by Anne Merkle, an Associate Landscape Architect with SLR Consulting Ireland. Anne graduated from the University of Applied Sciences in Nürtingen (Germany) in Landscape Architecture (Dipl.-Ing. (FH)), in 2002. She has since gained over 17 years' experience working for landscape consultancies in Ireland, specialising in Landscape and Visual Impact Assessments for a wide range of projects, including quarries, waste recovery facilities, wind farms, powerlines and mixed developments. In 2017, Anne successfully completed an MSc in Biodiversity and Land Use Planning (NUIG). She is a full member of the Irish Landscape Institute (MILI) since 2005.

Limitations / Difficulties Encountered

- 13.10 No difficulties were encountered during the desktop study, field survey or in the preparation of this report.

REGULATORY BACKGROUND

- 13.11 The following paragraphs set out the regulatory background with regard to LVIA in Ireland in general and the site specific planning background relevant to the proposed development, in particular.

Legislation

- 13.12 In 2002, Ireland ratified the European Landscape Convention which promotes the protection, management and planning of landscapes. The National Landscape Strategy for Ireland 2015-2025 was published *“to ensure compliance with the European Landscape Convention and establish principles for protecting and enhancing the landscape while positively managing its change”*.¹
- 13.13 Article 1a of the European Landscape Convention defines landscape as *“an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors”*.² This definition has been included in the Planning and Development (Amendment) Act 2010, along with the requirement that objectives relating to landscape shall be included in development plans.
- 13.14 There is no Irish legislation specifically governing preparation of landscape and visual impact assessment.

Planning Policy and Development Control

- 13.15 The Wicklow County Council Development Plan (WCDP) 2016-2022³ is the current statutory plan detailing the development objectives / policies of the local planning authority, covering the application site. Those policies/ objectives, with relevance to this assessment, are listed below.

¹ National Landscape Strategy for Ireland 2015-2025: <https://www.chg.gov.ie/app/uploads/2015/07/N-Landscape-Strategy-english-Web.pdf>

² European Landscape Convention: <https://www.coe.int/en/web/conventions/full-list/-/conventions/rms/0900001680080621>

³ Wicklow County Development Plan 2016-2022: <https://www.wicklow.ie/Living/Services/Planning/Development-Plans-Strategies/National-Regional-County-Plans/Wicklow-County-Development-Plan/Wicklow-County-Development-Plan-2016-2022>

- 13.16 In addition, the National Parks and Wildlife Service (NPWS) website (www.npws.ie) was consulted to identify any protected nature conservation sites in proximity to the application site. Refer to Figure 13-1 – Landscape Baseline and Viewpoint Locations for the location and extent of the relevant landscape and conservation designations within the study area.

Landscape

- 13.17 Section 10.3.9 of Volume 1 of the WCDP contains 3 Landscape Objectives, two of which are of specific relevance to this assessment.
- NH49: *“All development proposals shall have regard to the County landscape classification hierarchy in particular the key landscape features and characteristics identified in the Wicklow Landscape Assessment (set in Volume 3 of this plan) and the ‘Key Development Considerations’ set out for each landscape area set out in Section 5 of the Wicklow Landscape Assessment.”*
 - NH51: *“To resist development that would significantly or unnecessarily alter the natural landscape and topography, including land infilling / reclamation projects or projects involving significant landscape remodelling, unless it can be demonstrated that the development would enhance the landscape and / or not give rise to adverse impacts.”*
- 13.18 The General Development Considerations (GDC) listed in Volume 3: Appendix 5 *Wicklow Landscape Assessment* of the WCDP include the following measures:
- 3: *“The preservation and enhancement of native and semi-natural woodlands, groups of trees and individual trees will be encouraged as part of the development management process and the planting of native and appropriate local characteristic species will be required in all new developments.”*
 - 4: *“New development shall be required to be visually integrated into the landscape by ensuring the retention, conservation and enhancement where possible of local characteristics such as stone walls, hedgerows, entrances and field boundaries.”*
- 13.19 The Corridor Area Key Development Considerations (KDC) listed in Volume 3: Appendix 5 *Wicklow Landscape Assessment* of the WCDP include the following objectives:
- 1: *“To protect views and prospects from the corridor area towards the surrounding landscape areas from development that would either obstruct the views / prospect from the identified vantage point or form an obtrusive or incongruous feature in that view / prospect. Due regard will be paid in assessing development applications to the span and scope of the view / prospect and the location of the development within that view / prospect.”*
 - 2: *“Development proposals within this area should aim to locate within existing clusters of structures / tree stands and avoid locating new development in open fields.”*

Views and Prospects

- 13.20 Section 10.3.10 of Volume 1 of the WCDP contains the following Views and Prospects Objective:
- NH52: *“To protect listed views and prospects from development that would either obstruct the view / prospect from the identified vantage point or form an obtrusive or incongruous feature in that view / prospect. Due regard will be paid in assessing development applications to the span and scope of the view / prospect and the location of the development within that view / prospect”.*
- 13.21 None of the ‘Views of Special Amenity Value or Special Interest’ listed in the current WCDP are located in the vicinity of the application site.

- 13.22 The following three listed ‘Prospects of Special Amenity Value or Special Interest’ are located within a 3km radius of the application site, although none are directed towards the site:
- 29: N11 South of Rathnew – Prospect of Murrough and sea.
 - 32: N11 at the Tap and Kilbride – Prospect of Kilbride and Castletimon Hills.
 - 40: L5118 Deputy’s Pass, Glenealy – Prospect both sides of Deputy’s Pass including woodland.

Waste Management / Extractive Industry

- 13.23 The current WCDP does not contain any specific policies or objectives with regard to inert soil recovery / disposal facilities or C&D waste recovery facilities other than
- Objective WE6: “To facilitate the development of sites, services and facilities to achieve implementation of the objectives of the Regional Waste Management Plan’.
- 13.24 The proposed development is located within a disused quarry and the inert landfilling / deposition activities will essentially provide for the long-term backfill and restoration of the quarry. In this regard, the following objectives with regard to Extractive Industry, set out in Section 5.6 of the WCDP, may be of some relevance to this assessment:
- Strategic Objective: “To support and facilitate the exploitation of County Wicklow’s natural aggregate resources in a manner, which does not unduly impinge on the environmental quality, and the visual and residential amenity of an area.”
 - Objective EX1: “To facilitate and encourage the exploration and exploitation of minerals in the County in a manner, which is consistent with the principle of sustainability and protection of residential, environmental and tourism amenities.”
 - Objective EX2: “To have regard to the following guidance documents (as may be amended, replaced or supplemented) in the assessment of planning applications for quarries and ancillary facilities:
 - ... ‘Environmental Management Guidelines – Environmental Management in the Extractive Industry (Non Scheduled Minerals)’, EPA 2006; ...”

Protected Nature Conservation Sites

- 13.25 One Special Areas of Conservation (SAC) and one proposed Natural Heritage Area (pNHA) are located within a 3km radius of the application site, as detailed further in Table 13-1 below and Chapter 5 of this EIAR – Biodiversity.

Table 13-1
Nature Conservation Sites

Type	Site Code	Site Name	Distance and Direction from Application Area
SAC	000717	Deputy’s Pass Nature Reserve SAC	1.7 km to the northwest
pNHA	001756	Glenealy Woods	1.1km to the northwest

Guidelines

- 13.26 This landscape and visual impact assessment was undertaken based on the Landscape Institute and Institute of Environmental Management and Assessment *Guidelines for Landscape and Visual Impact Assessment* (Third Edition, 2013, published by Routledge; hereafter referred to as GLVIA3).

13.27 The report format and some of the descriptions of effects are based on the *Guidelines on the Information to be contained in Environmental Impact Assessment Reports* (Draft), published by the Environmental Protection Agency (EPA) in August 2017.

Technical Standards

13.28 Photography and visual presentations are based on the Landscape Institute – Technical Guidance Note 06/19 – ‘Visual Representation of Development Proposals’. However, since there is no Irish standard / guidance and in our experience a less stringent approach to visual representations is acceptable in Ireland, it is considered sufficient to provide annotated viewpoint photography only (i.e. Type 1 in said guidance), despite this LVIA forming part of an EIAR. It is further considered sufficient to illustrate three viewpoints on one A3 sized sheet.

13.29 No other specific technical standards were referred to as part of this landscape and visual impact assessment.

Significant Risks

13.30 There are no known significant risks to human health or environmental effects, which may occur in relation to this landscape and visual impact assessment.

RECEIVING ENVIRONMENT

Study Area

13.31 A study area of up to 3km surrounding the application area was identified following the desktop study, taking account of the undulating topography surrounding the application site and the presence of many wooded areas, which minimise the likelihood of visibility of the proposed development from further distances. In SLR’s experience, the visual effects from a quarry backfilling operation, such as the proposed landfill, on views from a distance greater than 3km are largely negligible. This is due to the small extent of the development and the effects of distance. It should be noted that the visual envelope, i.e. the area from where the application site is actually visible, is much smaller than the study area.

Baseline Study Methodology

13.32 Refer to Appendix 13-A at the end of this EIAR Chapter for information in respect of selection of landscape and visual receptors.

Viewpoints

13.33 Refer to Figures 13-2 and 13-3 for the six selected representative and illustrative viewpoints (VP A-F). All photographs were taken in May 2019, using a Nikon D610 digital SLR camera, with a fixed 50mm lens. The nature of some of the views was that of wide panoramas and it was, therefore, considered beneficial to present the photographs in this way. The panoramic views comprise two to four photographic frames merged together using ‘Panorama Maker 4’ software. It should be noted that photography is a tool to assist in the visualisation process and cannot be expected to replicate the actual view that would be attained on the ground.

Sources of Information

13.34 The desktop study and field work was supported by, *inter alia*:

- the Wicklow County Council Development Plan (WCDP) 2016-2022;
- digital as well as paper (Ordnance Survey Ireland) mapping at different scales; and

- information obtained via the internet (such as information on recreational facilities and nature conservation sites).

Field Survey

- 13.35 A detailed site survey was carried out on 13th May 2019 in sunny and bright conditions with clear visibility. The assessment concentrated on the publicly accessible areas such as the road and public footpath networks, residential and outdoor recreational areas.

Landscape Baseline

Existing Relevant Landscape Character Assessments

- 13.36 A Landscape Assessment undertaken as part of the current WCDP is referred to in Section 10.3.9 *Wicklow's Landscape* of Volume 1 of the plan. The detailed assessment is included in Volume 3: Appendix 5 of the plan. The Landscape Assessment identifies 6 distinctive landscape categories, which are divided further into 15 Landscape Areas. The landscape categories include Areas of Outstanding Natural Beauty (AONB) and Areas of High Amenity (AHA).
- 13.37 The application site at Ballinclare Quarry is located within the 'Corridor Area' landscape category and within 'The N11/Eastern Corridor' Landscape Area, which comprises a 1-8km wide band following the route of the N11 from the boundary with Co. Dublin in the north to the boundary with Co. Wexford in the south.
- 13.38 The nearest other Landscape Areas to the application site are the 'South East Mountain Lowlands', 350m to the south and the 'North East Mountain Lowlands', 850m to the north. Both of these are classed as AHAs, which are described as *"lands adjoining the AONB which act as a form of gateway to the more remote and wild upland areas"*.
- 13.39 The 'N11/Eastern Corridor' Landscape Area is described in Section 4.5.4 of the Wicklow Landscape Assessment (Volume 3: Appendix 5 of the WCDP) as follows : *"This area covers the main access corridor area along the east of the County. The boundary of the eastern access corridor generally follows what is considered to be the areas upon which the greatest influence is exerted by this primary access route. This route, for the most part, runs through the more low-lying and accessible tracts of land, dissects the Glen of the Downs wood in the north of the County and provides expansive coastal views north of Wicklow Town. This landscape area acts as the main connection between the major towns along the east coast of the County"*.
- 13.40 Table 1 in Appendix 2 of the Wicklow Landscape Assessment presents the following description / characterisation : *"Corridor area landscape category relates to lands adjoining, surrounding or considered to be influenced by the man-made features of the N11 and N81. These lands generally fall between the 80m and 150m contour line following the path of the more low-lying and easily developable lands for such road infrastructure.*
- 13.41 It further states that *'Development proposals within the western and north eastern corridor landscape area should not unduly impinge on any views or prospects in these areas.'*
- 13.42 Table 1 in Appendix 2 of the Wicklow Landscape Assessment presents the following description / characterisation of the 'North East Mountain Lowlands' Landscape Area: *"The North East Mountain Lowlands are characterised by undulating topography generally extending north of Rathdrum, east of the village of Laragh towards the Village of Roundwood as far as The Great Sugar Loaf. The area provides for varying hill formations and forestry plantations most notably at Devil's Glen."*

- 13.43 Table 1 in Appendix 2 further presents the following description / characterisation of the ‘South East Mountain Lowlands’ Landscape Area: *“The South East Mountain Lowlands are characterised by undulating topography generally extending from south of Rathdrum through the valley of Avoca north east of Aughrim. The valley follows the path of Avonbeg and Avonmore rivers providing for an enclosed landscape created by the presence of the above hill formation to the north east and the rising lands to the west towards Cushbawn. ...”*

Outdoor Recreational Facilities within the Study Area

- 13.44 Kilmacurragh Botanic Gardens, an outpost of the National Botanic Garden in Glasnevin, Dublin, is located just under 1km to the southwest of Ballinclare Quarry.
- 13.45 An approximately 5km section of the Parnell Drive self-drive route passes through the study area. The drive enters the study area at Deputy’s Pass, approximately 2km to the north-west of the application area. It then continues along the north-western boundary of the application area and past the entrance to Kilmacurragh Botanic Gardens and from there towards Rathdrum and out of the study area.
- 13.46 A number of walking trails are located within the Deputy’s Pass nature reserve, which can be accessed from a public car park about halfway along the pass.

Landscape of the Site and its Context

- 13.47 The application site covers the entire existing disused Ballinclare Quarry development, made up from the quarry void, former processing/manufacturing areas, old structures and settlement lagoons, as well as boundary and internal screening berms and vegetation.
- 13.48 The former quarry is located in the eastern foothills of the Wicklow Mountains, on the southern side of a low hill south of the Potters River. It is bound to the west and south by local roads and to the north and east by areas of dense woodland / scrub. Ground levels along the site boundaries range from 50m Ordnance Datum (OD) in the vicinity of the site entrance, to 65mOD in the western corner of the site to 90mOD at the highest point at the top of the quarry face along the northern boundary. The existing quarry void covers approximately the north-eastern half of the application site. Extraction across the quarry generally extended to a floor level of approximately 37mOD, although it extends locally to 22mOD in one area .
- 13.49 To the north, east and south the application area is adjoined by woodland / scrub areas; to the west by agricultural land. The wider landscape is made up of a mix of agricultural land and blocks of deciduous woodland and conifer plantations. The deciduous woodlands are mostly located near the valley floors, while the conifer plantations are more typical on higher elevations and on hill tops. The agricultural land is made up from small to medium sized fields, most of which are under pasture. Almost all field boundaries are marked by dense hedgerows lined with mature trees.
- 13.50 The topography surrounding the application area is complex. The Potters River valley is winding through the study area in an approximate northwest-southeast direction and is surrounded by several local highpoints and ridgelines. The levels along the river range from approximately 75mOD at the western end of Deputy’s Pass to just under 30mOD at Kilbride.
- 13.51 Local highpoints include elevations of 217mOD to the northwest, 147mOD to the west, 270mOD to the southwest, 135mOD to the south, 137mOD to the east, 75mOD to the northeast and 158mOD to the north of the application area. Further west, beyond the study area boundary, the land first falls slightly towards Rathdrum and the Avonmore River valley before rising to heights over 400mOD in the Wicklow Mountains. To the east of the study area boundary, the topography continues to be fairly undulating but ultimately falls towards the Irish Sea.

- 13.52 The undulating site boundaries and vegetation covered sections of the application site are characteristic of the surrounding landscape. The existing quarry void and associated tall rock faces are atypical elements, although their appearance has softened in recent years, as the rock has weathered and benches and crevices have been colonised by scrub .
- 13.53 The main transport route within the study area is the M11-motorway, which is located approximately 400m to the east of the application site. The former N11 National Primary Road, now reclassified as the R772-Regional Road, is located just east of the M11. The R752 and the R754 Regional Roads traverse areas in the north-western and south-eastern corners of the study area respectively. A dense network of local roads straddles the highpoints within the study area and connect areas between the higher rated regional roads (and N11 motorway).
- 13.54 The village of Glenealy, approximately 2.5km to the north, and Barndarrig, approximately 3km to the southeast are the closest settlements to the application site. In addition to these formal settlements, residential development within the study area consists of ribbon development and one-off housing along the network of local roads surrounding the site. The largest accumulations of properties are present along the roads around Ballycapple Hill and to the north of Kilbride. The larger settlements of Rathdrum and Wicklow town are located 5.5km west and 6km northeast, respectively.
- 13.55 As indicated within the Landscape Characterisation of Wicklow (see above), the study area is under pressure from development, due to its proximity to the M11 corridor, which is reflected in the presence of manmade structures, such as the national / regional roads, a 220kV transmission line just east of the application site, residential and farm properties, as well as Ballinclare Quarry itself, another quarry previously operated by a third party quarry to the south-west and an established municipal landfill site at Ballynagran, approximately 2.5km to the northeast. Notwithstanding this, the landscape within the study area is quite scenic, in particular in elevated locations, where long distance views over the undulating lush green landscape and towards the Wicklow Mountains open up. In those scenic elevated locations, there are periodic opportunities to experience stillness and tranquillity.
- 13.56 The landscape surrounding the application site is in good condition, with a mix of well-tended fields, managed forests and lush natural vegetation. The scale of the landscape ranges from small at the lower elevations, where it is restricted by roadside and intervening vegetation, to large at the higher elevations, where long-distance views open up. The dense hedgerows enclosing fields, as well as many woodland areas provide good screening potential for low rise development, such as the proposed inert landfill and C&D waste recovery facility.
- 13.57 The key characteristics of the landscape surrounding the application area can be summarised as:
- Undulating rural landscape with varied mix of agricultural fields, deciduous woodlands, scrub vegetation and forestry plantations;
 - Signs of human presence in the form of roads, residential and farm buildings, walls, fences telephone poles, a high voltage powerline and two quarries.

Visual Baseline

Existing Visibility

- 13.58 The visibility of the application area was initially assessed by a desktop study of OSI Discovery Maps (1:50,000), available aerial photography and having regard to a previous landscape and visual impact assessment carried out for Ballinclare Quarry. It was therefore known that the undulating landscape surrounding the application area, combined with the presence of mature vegetation reduces the visual envelope significantly (i.e. the area from where the site is actually visible).

- 13.59 The site survey confirmed that almost all views towards the application site are screened by topography, as well as roadside and intervening vegetation. Dense vegetation along the site boundaries reduces the visibility of the existing Ballinclare Quarry to almost zero in views from a close proximity (refer to **Viewpoints A-C** on Figure 13-2).
- 13.60 The only views of the application site are available from the sloping land to the west and south-west, from elevations above approximately 100m OD. This includes a small number of partial views from Kilmacurragh Botanic Gardens and from short stretches of the local road to the north of Westaston Hill. It should however be noted that roadside and intervening vegetation screens part, if not all, of the existing quarry development, in the majority of views from this area (refer to **Viewpoints D-F** on Figure 13-3).

Sensitive Receptors

Landscape Receptors

- 13.61 The components of the landscape that are likely to be affected by the proposed development, i.e. the landscape receptors, are the
- the undulating richly vegetated landscape character of the site and surrounding area (note: due to the proximity of three Wicklow Landscape Areas to the application site and the inter-visibility between the three, it was found more suitable to describe the landscape character specific to the area surrounding the application site as one of the landscape receptors, instead of listing the three landscape areas separately); and
 - the sense of naturalness and tranquility in the elevated scenic locations within the study area.
- 13.62 A small amount of scrub vegetation will be lost on the benches and in crevices in the quarry face, due to the inert landfilling activities. This is not considered a key landscape element (i.e. landscape receptor), owing to its location within the disused quarry void, which in turn is not a typical element of the local landscape character.
- 13.63 Further to that, approximately 1.2ha of improved agricultural grassland, approximately 0.8ha of wet grassland, 235m of hedgerow and the existing settlement lagoons in the western part of the application area will be removed to facilitate the construction of the wetland treatment area. While grassland and hedgerows are typical elements in the local landscape, that which will be removed within the application site are not visible from the surrounding landscape and therefore do not contribute noticeably to the landscape character. The existing settlement ponds are not typical in the local landscape. None of the elements to be lost to the wetland treatment area are therefore considered key landscape elements (i.e. landscape receptors).

Visual Receptors

- 13.64 The receptors with views of the application site comprise road users, visitors and local residents. Those experiencing similar views of the application site are placed into Visual Receptor Groups (VRGs). The location and extent of each of the VRGs is indicated on Figure 13-1 and described in Table 13-2 below. The table further lists the types of receptors present in each VRG, describes the nature of views / visual amenity within the areas and lists the representative viewpoints provided (refer to Figures 13-2 and 13-3).

Table 13-2
Visual Receptor Groups (VRG)

VRG	Location / Extent	Types of Receptors	Nature of Views / Visual Amenity
1	Individual views from Kilmacurragh Botanic Gardens and some properties, between 1-1.5km west and south-west of the application site.	Visitors to Kilmacurragh and approx. 7 private properties.	<p>Long distance views over the Potters River valley, towards ridgelines at the northern and eastern edge of the study area.</p> <p>The upper section of the existing face of the disused Ballinclare Quarry is visible as a narrow band in the middle ground of the views. In views from more western locations, slightly more of the faces and small parts of the former processing area become visible.</p> <p>A mix of agricultural land, woodlands and forestry plantations is visible on an undulating landform in the foreground and background.</p> <p>High visual amenity, due to the panoramic views of richly vegetated land and low level of manmade structures visible.</p> <p>Viewpoint D represents a typical view.</p>
2	Approx. 1km along the local road to the north of Westaston Hill.	Approx. 7 private properties and road users within the area.	<p>Long distance views over the Potters River valley, towards ridgelines at the northern and western edge of the study area.</p> <p>The majority of the existing northern face of the disused Ballinclare Quarry is visible as a narrow band in the middle ground of the views. Residual items of processing infrastructure to the east of the access road into Ballinclare Quarry (at the former processing area) are partially visible in front of the quarry face.</p> <p>A mix of agricultural land, woodlands and forestry plantations is visible on an undulating landform in the foreground and background.</p> <p>High visual amenity, due to the panoramic views of richly vegetated land and low level of manmade structures visible.</p> <p>Viewpoints E & F represent typical views.</p>

IMPACT ASSESSMENT

Evaluation Methodology

13.65 Refer to Appendix 13-A at the end of this section for information on the assessment of landscape and visual sensitivity, the assessment of the magnitude of change in the landscape and on views, as well as the assessment of landscape and visual effects and their significance.

Operational Stage Landscape Effects

13.66 The operational stage of the proposed development, for the purpose of this assessment, is the period over which the inert landfilling activities and the associated phased restoration of the former quarry to its original landform and grassland / scrub habitat will take place. Depending on the availability of inert materials (principally inert soil and stone), the operational stage is expected to last for a maximum period of 20 years, but is likely to be shorter.

13.67 The proposed C&D waste recovery activities will also be taking place over this 20-year period. Considering the proposed location of the C&D waste recovery facility, including the C&D waste recovery shed and the ample screening provided by the boundary vegetation, the C&D recovery activities are not considered to cause landscape effects.

13.68 Similarly, the proposed soil washing plant will be located in a well screened location slightly below surrounding ground level within the existing concrete yard in the south-eastern corner of the application site, and as such, is not considered to cause landscape effects.

13.69 The components of the proposed development likely to cause landscape effects are as follows:

- changes to the landform within the existing quarry void, due to the backfilling activities;
- changes to the land use and therefore the appearance of the landfilling area, from a mineral extraction use, to a waste management use and finally to grassland / scrub habitat; and
- the introduction of the wetland treatment area and associated change of land use in the western part of the application site.

Landscape Sensitivity

13.70 The values attached to each of the identified landscape receptors and their susceptibility to the changes caused by the proposed development are described in Table 13-3 below. Also, a judgement of the overall sensitivity of each of the landscape receptors is provided.

Table 13-3
Sensitivity of Landscape Receptors

Landscape Receptor	Value	Susceptibility	Overall Sensitivity
Undulating richly vegetated landscape character	Parts of the local landscape designated as Area of High Amenity within the current Wicklow CDP. Presence of Kilmacurragh Botanic Gardens, a scenic driving route and nature conservation areas in the local landscape. LOCAL AUTHORITY	The rich vegetation throughout the local landscape provides ample screening of the application site. The inert landfill is contained within an existing quarry void, thereby not affecting characteristic landscape elements. Therefore, the local landscape character is assessed as having low susceptibility to the proposed development. LOW	LOW

Landscape Receptor	Value	Susceptibility	Overall Sensitivity
Sense of naturalness and tranquillity	The sense of naturalness and tranquillity is considered to be of value to the local community and to visitors to the local area. LOCAL AUTHORITY	The sense of tranquillity is experienced intermittently only, due to the proximity to roads. The sense of naturalness is reduced, due to the presence of manmade elements within the local landscape. Both senses are therefore assessed as having medium susceptibility to the proposed development. MEDIUM	MEDIUM

Magnitude of Landscape Change

13.71 Table 13-4 below describes the size and scale, geographical extent and duration/reversibility of the landscape change, all of which contribute to the assessment of the magnitude of this change.

Table 13-4
Factors of Magnitude of Landscape Change

Factor	Description	Level of effect
Size & Scale	<p>The landfilling activities will have similarities to the extraction activities that have previously taken place within the quarry area, to agricultural activities within the study area and to the activities at the pre-existing landfill to the north-east of the application area. The landfilling activities are therefore not considered a new element within the local landscape. With phased restoration to grassland / scrub habitat, the size of the area affected will continually decrease throughout the operational stage.</p> <p>The proposed wetland treatment area, while strictly speaking a new landscape element, will not be prominent, due to the existing screening vegetation along the application site boundaries, its relative small scale within the overall application site and its vegetated appearance, which will be similar to rough grassland.</p> <p>Due to the containment of the landfilling activities within the existing extraction void, the similarity to the former extraction activities, the presence of roads in the local area, including the M11 motorway, and the ample screening provided by vegetation, the degree to which aesthetic / perceptual aspects, including the senses of naturalness and tranquillity, will be altered is minimal.</p> <p>Similarly, the composition / balance of the landscape will not be altered much, and the key characteristics will not be changed. Or rather the proposed re-establishment of a sloping landform and grassland / scrub habitat will ultimately contribute positively to key characteristics of the landscape.</p>	SMALL
Geographical Extent	The changes within the application site will influence the landscape at the site level and within a small extent of the undulating richly vegetated landscape character area surrounding the site, i.e. within 1.5km to the south and west of the application area.	SMALL

Factor	Description	Level of effect
Duration / Reversibility	The operational stage will last for a maximum of 20 years, with sections of the landfill area to be progressively restored to grassland / scrub habitat in four principal phases. The works are theoretically reversible; however, reversibility is not desirable in this case, considering the positive impact the restored site will have on landscape character.	LONG-TERM REVERSIBLE

13.72 The magnitude of landscape change on all landscape receptors, due to the proposed development, is judged to be **SLIGHT**, owing to the small changes to the composition of the landscape and its perceptual aspects and the limited area affected in the context of the large area surrounding the site of similar character, as well as the ultimately positive contribution of the development to the local landscape character.

Significance of Landscape Effects

13.73 The sensitivity of the undulating richly vegetated landscape character was assessed LOW. The magnitude of landscape change was assessed as SLIGHT. In combination the landscape effect is judged to be **MINOR-NEGLIGIBLE**. This is not considered to be a significant landscape effect.

13.74 The sensitivity of the sense of naturalness and tranquillity was assessed as MEDIUM. The magnitude of landscape change was assessed as SLIGHT. In combination the landscape effect is judged to be **MINOR**. This is not considered to be a significant landscape effect.

Post – Operational Stage Landscape Effects

13.75 The post-operational stage of the proposed development, for the purpose of this assessment, is the period following the completion of the landfilling activities and full restoration of the landfilled area to grassland / scrub habitat. The C&D waste recovery activities will also cease on completion of landfilling and restoration of the quarry void.

13.76 The landform within the landfill area will be sloping, with levels similar to those present prior to any extraction works taking place. Also, considering the restoration to grassland / scrub habitat, including native hedgerows, the site will fully merge with the surrounding landscape. The wetland treatment area will be retained as a wildlife feature during the post-operational stage and will continue to be fully integrated into the surrounding landscape, with a rough grassland like appearance. Both the restored landfill area and the wetland treatment area will contribute to the sense of naturalness and tranquillity in the local area. As a result, the landscape effects on all landscape receptors will be reduced to **NONE** at the post-operational stage.

Operational Stage Visual Effects

13.77 For the duration of the operational stage, i.e. the landfilling and restoration stage, the proposed development will be screened in the vast majority of views from within the study area, including all views from locations to the north-west, north, east and south-east of the application area, as well as locations immediately to the west, south-west and south and beyond 2km in these directions (refer to **Viewpoints A-C** on Figure 13-2). While a glimpsed view of part of the existing quarry face is available from the site entrance, this will not be assessed further, as there are no residential receptors and road users are unlikely to take notice of any changes due to the proposed development. Visual effects will be experienced only in views from within the two VRGs identified previously in this Chapter (refer to Table 13-2).

- 13.78 In views from a number of locations between approximately 1-1.5km to the west and south-west of the application site, the upper sections of the existing quarry faces are visible. In views from the more western locations, some of the former processing area is also likely to be visible. Therefore, the landfilling and restoration activities above approximately the 70m contour in views from the south-western locations and above the 60m contour in views from the more western locations will be visible, during the operational stage of the development.
- 13.79 Considering the phased restoration of the site, parts of the landfill area will become progressively visible as restored grassland / scrub during operational stage. The construction of the finished wetland treatment area will be fully screened by intervening topography and vegetation in the vast majority of views for this VRG. The northern end may be partially visible in views from the most western locations of this VRG, but will appear similar to rough grassland and will therefore be imperceptible. The C&D material recovery and soil washing activities will be fully screened in all views for this VRG. Refer to **VRG1: Viewpoint D**, on Figure 13-3.
- 13.80 In views from a section of the local road to the north of Westaston Hill large parts of the existing northern quarry face and some of the former processing area of Ballinclare Quarry are visible. The filling and restoration activities above approximately the 50m contour will be visible, during the operational stage of the development. Again, considering the phased restoration of the site, parts of the fill area will become visible as agricultural land progressively during operational stage. The construction of and finished wetland treatment area, as well as the C&D material recovery and soil washing activities will be fully screened by intervening topography and vegetation in all views for this VRG. Refer to **VRG2: Viewpoint E & F**, on Figure 13-3.
- 13.81 Views from Kilmacurragh Arboretum are restricted to a small number of locations along its eastern boundary, from where the uppermost section of the existing quarry face at Ballinclare Quarry is visible: refer to **Viewpoint D on Figure 13-2** and the description of visual effects for **VRG 1**. It should be noted that the proposed development will be fully screened in views from the vast majority of locations within the Arboretum, due to the screening provided by the trees within the Arboretum, as well as topography.
- 13.82 Views from the Parnell Drive are restricted to a very short stretch of the road to the north-west of Kilmacurragh Quarry (refer to the visual effects for **VRG1**). There will be no views of the proposed development from Deputy's Pass.
- 13.83 While there will be up to 30 HGV movements an hour at peak periods along the local road to the east of the site entrance (along the L1157 Local Road), this is not considered to result in significant visual effects, as there are very few visual receptors (i.e. residential properties and road users) located along this road and as the visibility of HGVs would be similar to that experienced as part of the previously permitted scheme at Ballinclare Quarry. The avoidance of the former haul route along the local roads to the north and west of Ballinclare Quarry has the added advantage of avoiding cumulative impacts with HGVs accessing the Ballynagran Landfill and passing by a lower number of residential properties overall.
- 13.84 Lighting will be provided on mobile plant / machinery for winter time operations and when darkness has fallen within the permitted site operating hours. Any lighting associated with the site facilities, including the C&D recovery area, will be directed downwards and inwards towards the site and will also only be in used during operating hours. The site will operate until 6pm (Monday to Friday) and, as such, there could be a period where lighting will be required for up to 2 hours in mid-winter. Night-time light pollution caused by the proposed development will therefore be of brief duration during winter months.

Visual Receptor Sensitivity

13.85 Table 13-5 below describes the value placed on views from within each of the VRGs identified earlier (refer to Table 13-2 above). It further describes the susceptibility of each of the identified Visual Receptor Groups (VRGs) to change. The table further describes the value placed on views from within each of the VRGs and makes a judgement of the overall sensitivity of each VRG.

Table 13-5
Sensitivity of Visual Receptors

VRG	Value	Susceptibility	Sensitivity
1	No designated or locally promoted views towards the application area. LOW	Residents / Tourists: HIGH Road users, where views are incidental to the journey: LOW	MEDIUM LOW
2	No designated or locally promoted views towards the application area. LOW	Residents: HIGH Road users, where views are incidental to the journey: LOW	MEDIUM L

Magnitude of Visual Change

13.86 **Table 13-6** below describes the magnitude of change to views from each of the VRGs, in terms of the size and scale, geographical extent and duration/reversibility.

Table 13-6
Magnitude of Visual Change

VRG	Description of Factors of Visual Change	Level of Effect	Magnitude
1	<p>Size and Scale:</p> <p>The visual changes in views for this VRG (landfilling activities and visibility of restored lands) will take place at a minimum distance of 1km, within a narrow band in the middle ground of wide panoramic views. Only partial views of the application site are available.</p> <p>The skyline will not be affected, and all activities will be contained within the existing quarry area visible in the views, thereby not affecting the mass or scale of the visible elements.</p> <p>The appearance of the landfilling activities will be similar to agricultural activities. The areas being landfilled will have a similar colour / texture to ploughed fields, while the restored areas will wholly blend with surrounding fields under pasture.</p> <p>The overall composition of the view will be barely altered during the landfilling works and will be positively altered by the replacement of the visible quarry face with that of sloping grassland / scrub, matching that of the surrounding landscape.</p>	<p>SMALL (ultimately POSITIVE)</p>	<p>SLIGHT</p>

VRG	Description of Factors of Visual Change	Level of Effect	Magnitude
	<p>Geographical Extent: The views are available from a small number of locations at Kilmacurragh Arboretum, from a very short stretch of the local road to the north-west and from approximately 7 residential properties, as indicated on Figure 13-1 (note: the majority of land within the area indicated on Figure 13-1 is private land). There will be a small number of viewers, due to the small number of properties and short stretch of road affected and since the visitors at Kilmacurragh Arboretum tend to concentrate on other areas within the site.</p> <p>Duration / Reversibility: The changes within the application site will become visible when the filling works reach above approximately the 60mOD - 70mOD contour and will be visible for the remainder of the operational stage. It is expected that the visual effects will last for less than 15 years (due to the delayed visibility and a potentially faster landfilling rate, which would reduce the overall life of the development). While the visual effects are theoretically reversible, this is not desirable in this case, considering the positive impact the restored site will have on the visual appearance of the application area.</p>	<p>SMALL</p> <p>MEDIUM-TERM REVERSIBLE</p>	
2	<p>Size and Scale: The visual changes in views for this VRG (landfilling activities and visibility of restored land) will take place at a minimum distance of 1.3km, within a narrow band in the middle ground of wide panoramic views. Only partial views of the application site are available. The skyline will not be affected, and all activities will be contained within the existing quarry area visible in the views, thereby not affecting the mass or scale of the visible elements. The appearance of the landfilling activities will be similar to agricultural activities. The areas being landfilled will have a similar colour / texture to ploughed fields, while the restored areas will wholly blend with surrounding fields under pasture. The overall composition of the view will be barely altered during the landfilling works and will be positively altered by the replacement of the visible quarry face with that of sloping grassland / scrub, matching that of the surrounding landscape.</p> <p>Geographical Extent: The views are available intermittently from a short linear route, i.e. 1km along the local road north of Westaston Hill, as indicated on Figure 13-1. There will be a very small number of viewers, as the infrequent road users are likely to focus their views along the road and only seven properties are part of this VRG.</p>	<p>SMALL (ultimately POSITIVE)</p> <p>SMALL</p>	<p>SLIGHT</p>

VRG	Description of Factors of Visual Change	Level of Effect	Magnitude
	<p>Duration/Reversibility:</p> <p>The changes within the application site will become visible when the landfilling works reach above approximately the 50mOD contour and will be visible for the remainder of the operational stage. It is expected that the visual effects will last for less than 15 years (due to the delayed visibility and a potentially faster landfilling rate, which would reduce the overall life of the development).</p> <p>While the visual effects are theoretically reversible, this is not desirable in this case, considering the positive impact the restored site will have on the visual appearance of the application area.</p>	<p>MEDIUM-TERM REVERSIBLE</p>	

Significance of Visual Effects

- 13.87 The sensitivity of residents / tourists which form part of **VRG 1** was assessed as MEDIUM and that of road users as LOW. The magnitude of visual change on views for VRG 1 was assessed as SLIGHT. In combination the visual effect on residents / tourists is judged to be **MINOR** and that on road users as **MINOR-NEGLIGIBLE**. Both are not considered to be significant visual effects.
- 13.88 The sensitivity of residents within **VRG 2** was assessed as MEDIUM and that of road users as LOW. The magnitude of visual change on views for VRG 2 was assessed as SLIGHT. In combination the visual effect on residents is judged to be **MINOR** and that on road users as **MINOR-NEGLIGIBLE**. Both are not considered to be significant visual effects.

Post – Operational Stage Visual Effects

- 13.89 As described above, the post-operational stage of the proposed development, for the purpose of this assessment, is considered to be the period following the completion of the landfilling activities and full restoration of the landfilled area to a grassland / scrub habitat. The C&D recovery activities will also cease on completion of landfilling and restoration of the quarry void.
- 13.90 While the restored site will continue to be visible in views for the two VRGs, it will fully merge with the surrounding landscape and it will not be noticeable that extraction and landfilling activities have previously taken place, resulting in a fully positive visual effect. Any negative visual effects will have reduced to **NONE** at the post-operational stage.

Direct/Indirect Effects

- 13.91 All landscape and visual effects described above are direct effects. The proposed development is not considered to have indirect effects in landscape and visual terms, i.e. the proposed development is unlikely to cause consequential changes to the surrounding landscape character areas or to existing views of the areas surrounding the applications site.

Compliance with Relevant Planning Policies

Landscape

- 13.92 The above assessment has had regard to the Wicklow Landscape Assessment in the description of the landscape baseline and judgement of landscape sensitivity. Further to that the Corridor Area Key Development Considerations (KDC) area were examined. The first such Corridor KDC relates to the protection of views and prospects. While there are a number of ‘Prospects of Special Amenity Value

or Special Interest’ within the study area, none of them are directed at the application site and the proposed development will therefore not obstruct or form an obtrusive feature in a prospect.

- 13.93 The second Corridor KDC relates to locating development within existing clusters of structures and avoiding open fields. While the proposed development is not located within a cluster of ‘structures’ it is located within an existing disused quarry and avoids open fields. In light of the above, it is considered that the proposed development is **in compliance with Landscape Objective NH49**.
- 13.94 The proposed development will alter the topography of part of the application site. However, the changes will return the site to a state similar to what it was like prior to any extraction works taking place (i.e. its former natural topography) and will thereby ultimately enhance the local landscape. The proposed development is therefore considered to be **in compliance with Landscape Objective NH51**.
- 13.95 The vast majority of existing vegetation within the application area, in particular trees, will be retained as part of the proposed development. The proposed hedge planting on the restored site consists of native species, appropriate to the local area (refer to Figure 2-4, Restoration Surface and Landscaping Plan). Also, the retention of all boundary vegetation and the restoration of the landfilled quarry void to a grassland / scrub habitat will ensure that the final landform will ultimately visually integrate into the surrounding landscape. The proposed development is therefore considered to **fulfil the requirements of the General Development Considerations (GDC) No. 3 and 4**.

Views and Prospects

- 13.96 As stated previously, there are no ‘Views of Special Amenity Value or Special Interest’ located in the vicinity of the application site and none of the ‘Prospects of Special Amenity Value or Special Interest’ are directed at it. The proposed development is therefore considered to be **in compliance with View and Prospects Objective NH52**.

Waste Management / Extractive Industry

- 13.97 As well as meeting a waste management need, the proposed development also constitutes restoration of a former quarry to a beneficial afteruse, in line with the *Environmental Management Guidelines – Environmental Management in the Extractive Industry (Non Scheduled Minerals)*, EPA 2006. The resulting restored land will have the added benefit of full visual integration into the surrounding landscape, ultimately improving the visual and residential amenity of the area. The proposed development is considered to be **in compliance with the Waste Objective WE6, the Extractive Industry Strategic Objective and Objectives EX1 and EX2**.

Unplanned Events (i.e. Accidents)

- 13.98 It is highly unlikely that any unplanned events within the application site would result in noticeable landscape or visual impact.

Cumulative / Synergistic Impacts

- 13.99 From a landscape perspective, activities at the existing residual waste landfill at Ballynagran, 2.5km to the northeast, are similar to the proposed development and therefore a potential for cumulative landscape or visual impacts exist. One possible element associated with both developments is the presence / visibility of HGVs on local roads. Access to the existing landfill site at Ballynagran from the M11 Motorway travels along a very short stretch of the L1113 Local Road west of the M11-Junction 18. All HGV’s hauling soil and stone / C&D waste to the proposed waste facility at Ballinclare Quarry will be routed along the L1157 Local Road and no HGV traffic will be routed along the L1113. There will therefore be no cumulative visual impact associated with HGV movements generated by both developments along the L1113 Local Road.

- 13.100 Both the Ballynagran landfill site and the application area are visible in views from a small number of elevated locations north of Westaston Hill (refer to **Viewpoints E & F** on Figure 13-3). The two sites are visually separated by agricultural land, tree-lined hedgerows and scrub areas in all available views and take up small areas in the overall panoramic views. Also considering the limited remaining lifespan of the existing residual landfill and that of the proposed development and the ultimate positive landscape and visual effects at the application site, the cumulative landscape and visual impact of both the existing and proposed landfill are considered to be small and not significant.
- 13.101 Further to the above there are no other existing developments or known developments currently in planning and development that would result in cumulative landscape or visual impacts in combination with the proposed development.

Transboundary Impacts

- 13.102 The proposed development is not located in the vicinity of a national boundary. Therefore transboundary landscape or visual impacts will not arise.

Interaction with Other Impacts

- 13.103 There are no known interactions with other impacts.

‘Do-Nothing Scenario’

- 13.104 If the proposed development is not carried out, no further works will take place within the application site. The quarry void would continue to fill with water and the quarry faces will be left to natural recolonisation by locally occurring grass and scrub species, thereby slowly reducing the visibility of the existing quarry faces. While the landscape and visual effects will ultimately be reduced, the quarry face will remain noticeable in distant external views.

MITIGATION MEASURES

Operational Stage

- 13.105 The proposed development has been designed to minimise the potential landscape and visual effects. This design included the containment of the development within the existing quarry development footprint and retention of all existing boundary vegetation, which reduces the visibility of the proposed development from local roads and nearby residential properties significantly. Further to that, the restoration of the landfilled area to grassland / scrub habitat, to include a number of hedgerows, will result in better visual integration of the site into the local landscape (refer to Figure 2-4, the Restoration Surface and Landscaping Plan).
- 13.106 The visibility of the elevated elements of the application site in a small number of views from likewise elevated locations cannot be prevented. Therefore, no additional landscape / visual mitigation measures are considered necessary during the operational stage of the proposed development.

Post – Operational Stage

- 13.107 During the post-operational stage, the restored landfill area will be fully integrated into the surrounding landscape, resulting in no further landscape or visual effects, or rather entirely positive effects. It is also envisaged that C&D waste recovery activities will cease on completion of landfilling and restoration works. Any remaining site infrastructure will be fully screened in views from the surrounding area. Additional mitigation measures are therefore not required at this stage of the proposed development.

RESIDUAL IMPACT ASSESSMENT

Operational Stage

- 13.108 As no additional mitigation measures are proposed during the operational stage, the residual landscape and visual effects will be as per the assessment above. In summary, the assessment has found that the proposed development will have **MINOR-NEGLIGIBLE** landscape effects on the undulating richly vegetated landscape character and **MINOR** landscape effects on the sense of naturalness and tranquillity in elevated parts of the study area. Both levels of impact are not considered significant.
- 13.109 The visual effects on receptors range from **NONE** for the majority of locations within the study area to **MINOR** and **MINOR-NEGLIGIBLE** (i.e. impacts not regarded as significant) for a small number of viewpoints within the elevated areas between 1-1.5km to the west and south-west of the site.

Post – Operational Stage

- 13.110 As no additional mitigation measures are proposed during the post-operational stage, the residual landscape and visual effects will be as per the assessment above. Due to the integration of the restored landfill area into the surrounding landscape the predicted landscape and visual effects will reduce to **NONE** at the post-operational stage.

MONITORING

- 13.111 There are no monitoring requirements, arising from this landscape and visual assessment.

REFERENCES

Environmental Protection Agency (August 2017) Guidelines on the Information to be contained in Environmental Impact Assessment Reports - Draft, EPA Ireland

The Landscape Institute with the Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, Third Edition, Routledge

The Landscape Institute (2019) Technical Guidance Note 06/19: Visual Representation of Development Proposals, Landscape Institute

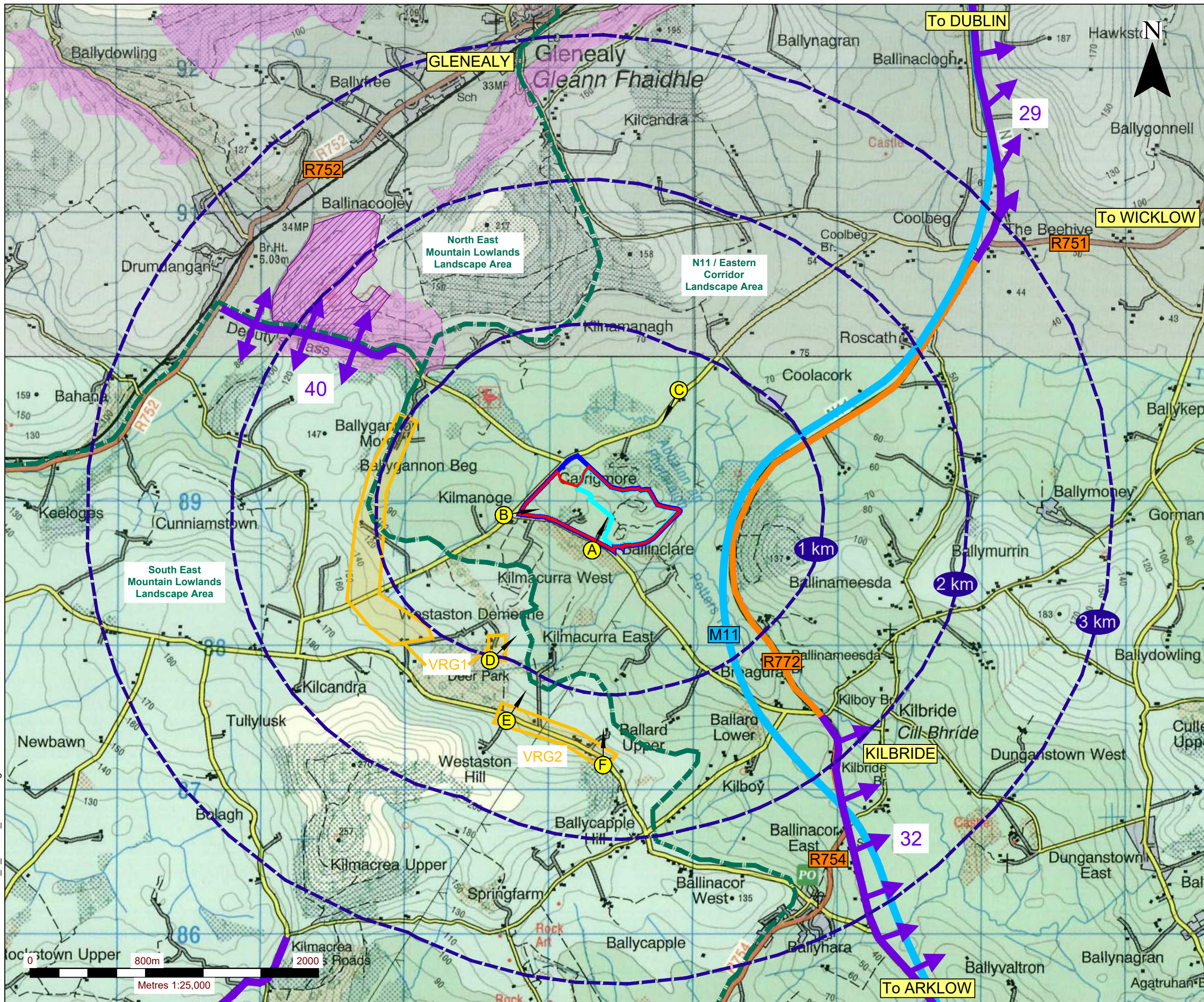
FIGURES

Figure 13-1
Landscape Baseline and Viewpoint Locations

Figure 13-2
Viewpoints A, B & C

Figure 13-3
Viewpoints D, E & F

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NOTES
 Extraction from OSI Discovery Series Map No. 56 & 62
CYAL50167032
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- LEGEND**
- LANDHOLDING BOUNDARY
 - PLANNING APPLICATION AREA
 - PROPOSED INERT LANDFILL AREA
 - VIEWPOINT LOCATIONS
 - APPROXIMATE DISTANCE FROM APPLICATION SITE BOUNDARY
 - VISUAL RECEPTOR GROUPS (I.E. GROUPS OF RECEPTORS WITH SIMILAR VIEWS OF THE PROPOSED DEVELOPMENT)

- LANDSCAPE BASELINE:**
- PROSPECTS OF SPECIAL AMENITY VALUE OR SPECIAL INTEREST (Wicklow County Development Plan 2016-2022)
 - LANDSCAPE CHARACTER AREA BOUNDARY (Wicklow County Development Plan 2016-2022)
 - SPECIAL AREAS OF CONSERVATION (SACs)
 - PROPOSED NATURAL HERITAGE AREAS (pNHAs)

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SLR CONSULTING IRELAND
 7 DUNDRUM BUSINESS PARK
 WINDY ARBOUR
 DUBLIN 14
 T: +353-1-2964667
 F: +353-1-2964676
 www.slrconsulting.com

KILSARAN CONCRETE
 ENVIRONMENTAL IMPACT ASSESSMENT REPORT

BALLINCLARE QUARRY RESTORATION
 INERT LANDFILL & C+D WASTE RECOVERY FACILITY
 KILBRIDE (N11), CO. WICKLOW

LANDSCAPE BASELINE & VIEWPOINT LOCATIONS

FIGURE 13-1

Scale: 1:25,000 @ A3 Date: MARCH 2021



The view of the quarry face will be replaced by one of sloping agricultural grassland


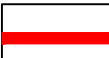
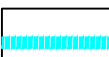


VIEWPOINT A: Local Road at the entrance to Ballinclare Quarry

Grid Reference (ITM): **725228:688721** Elevation: **50m** Distance from planning application boundary: **10m** Direction of View: **Northeast**

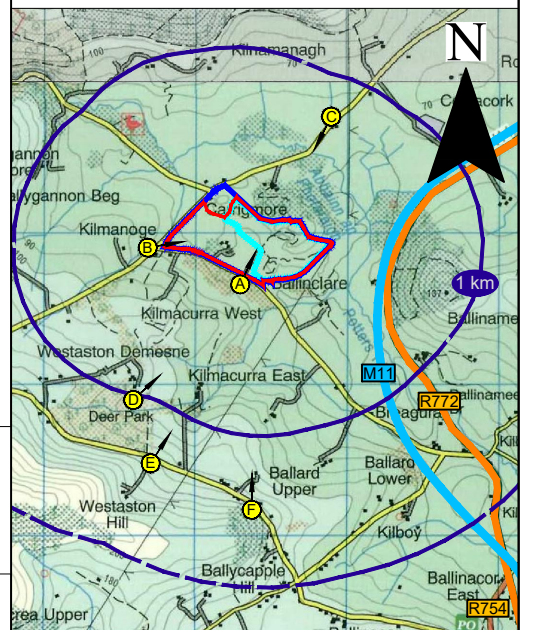
Description: The existing quarry is fully screened along the full length of this road by roadside and intervening vegetation, with the exception of this glimpse along the access road. A small section of the existing northern quarry face is visible in this view. The proposed landfilling activities will be visible for a short duration towards the end of the works, as the more elevated levels are reached. The works will result in an area of sloping ground, which will be restored to agricultural grassland, becoming visible instead of the quarry face.

NOTES
 Extraction from OSI Discovery Series Map No. 56 & 62
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 Photos taken in May 2019

LEGEND

-  LANDHOLDING BOUNDARY
-  PLANNING APPLICATION AREA
-  PROPOSED INERT LANDFILL AREA
-  VIEWPOINT LOCATIONS
-  APPROXIMATE DISTANCE FROM APPLICATION SITE BOUNDARY

VIEWPOINT LOCATION MAP (1:50,000 @ A3)



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SLR CONSULTING IRELAND
 7 DUNDRUM BUSINESS PARK
 WINDY ARBOUR
 DUBLIN 14
 T: +353-1-2964667
 F: +353-1-2964676
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 ENVIRONMENTAL IMPACT ASSESSMENT REPORT

BALLINCLARE QUARRY RESTORATION
 INERT LANDFILL & C+D WASTE RECOVERY FACILITY
 KILBRIDE (N11), CO. WICKLOW

VIEWPOINTS A, B & C

FIGURE 13-2

Scale: 1:50,000 @ A3 Date: MARCH 2021

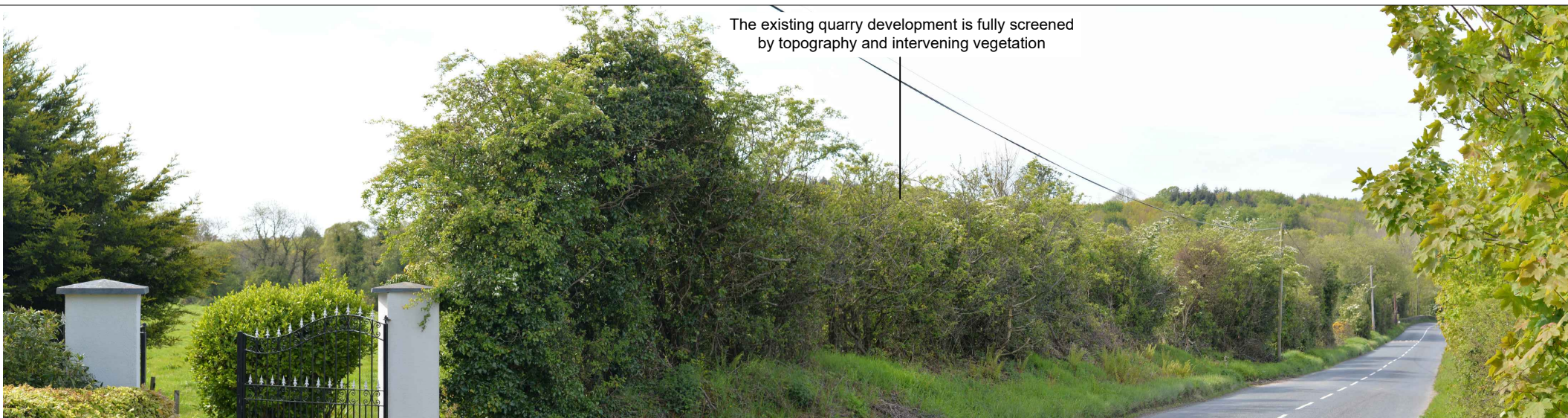


The existing quarry development is fully screened by mature vegetation along the site boundaries

VIEWPOINT B: Junction of local roads at Kilmanogue at the southwestern corner of the application site

Grid Reference (ITM): **724657:688978** Elevation: **65m** Distance from planning application boundary: **50m** Direction of View: **Northeast**

Description: The existing quarry development is fully screened in views from the road along the western and southern site boundaries by roadside vegetation. The proposed landfilling activities will be fully screened at all times from both roads (also refer to Viewpoints A & C).



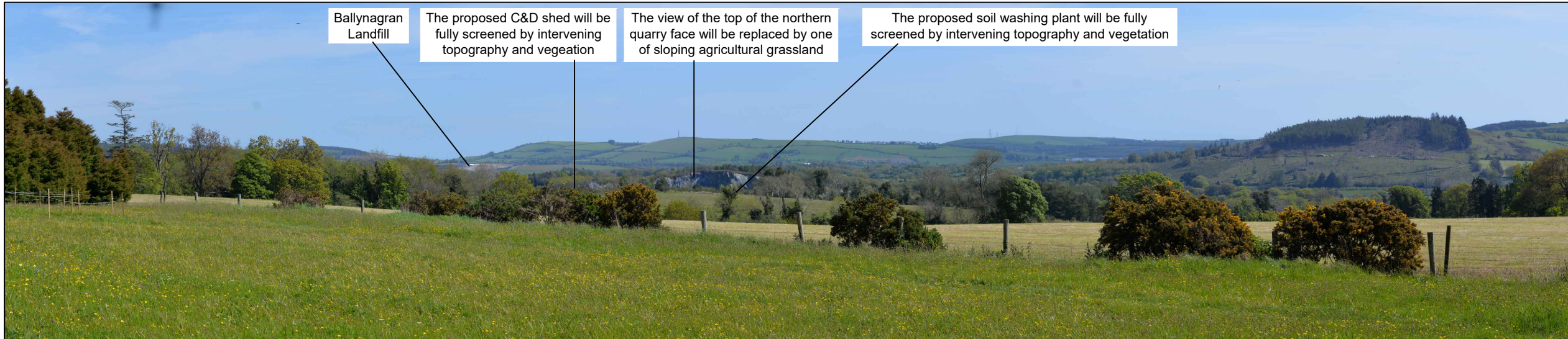
The existing quarry development is fully screened by topography and intervening vegetation

VIEWPOINT C: Local Road at Kilnamanagh, just northeast of the bridge over Potters River

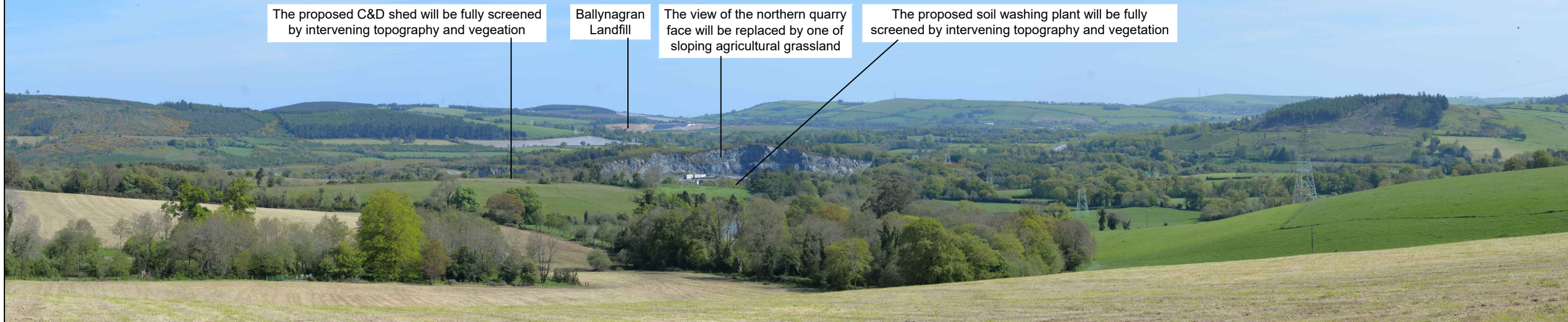
Grid Reference (ITM): **725799:689741** Elevation: **58m** Distance from planning application boundary: **650m** Direction of View: **Southwest**

Description: The existing quarry development is fully screened by topography and intervening vegetation, in views from the local road north of the application area and locations to the north of the site in general. The proposed landfilling activities will also be fully screened at all times.

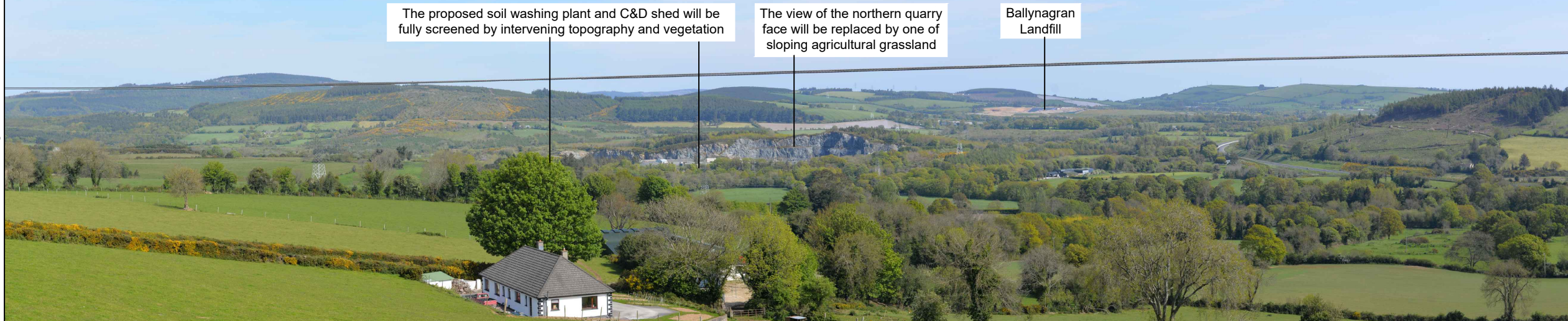
00036.00080.0.16.FIG 13-1_2_3.LVIA_Mar21.dwg



VIEWPOINT D: Kilmacurragh Arboretum, from one of the main paths through the Arboretum, just south of Kilmacurragh House
 Grid Reference (ITM): **724627:688027** Elevation: **115m** Distance from planning application boundary: **1020m** Direction of View: **Northeast**
Description: The upper section of the existing northern face at Ballinclare Quarry is visible in a number of views along the eastern boundary of Kilmacurragh Arboretum. Similar views are available from a short section of the local road to the northwest of the Arboretum and a number of private properties in elevated locations to the west/southwest of the application area (refer to VRG 1 on Figure 13-1). The proposed landfilling activities will be temporarily visible, when the most elevated levels are reached. The works will result in an area of sloping ground, which will be restored to agricultural grassland, becoming visible instead of the quarry face, ultimately improving the visual amenity of available views. The proposed soil washing plant and C&D shed will be fully screened at all times.



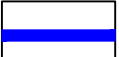

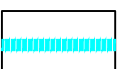
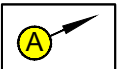

VIEWPOINT E: Local road, just east of the southeastern corner of Kilmacurragh Arboretum
 Grid Reference (ITM): **724660:687546** Elevation: **140m** Distance from planning application boundary: **1330m** Direction of View: **Northeast**
Description: This is one of the first available open views of Ballinclare Quarry from the road to the south of Kilmacurragh Arboretum, when travelling eastwards. It should be noted that this photo was taken from a standing position over the generally dense roadside vegetation and would not be available, when seated in a car. Further west of this viewpoint intervening vegetation fully screens the quarry. Further east intermittent views are available for about 1km, as far as the location of Viewpoint F (refer to VRG 2 on Figure 13-1). The upper two benches of the existing northern face at Ballinclare Quarry are visible in the available views. The proposed landfilling activities will be temporarily visible, when the levels approximately above the 50m contour are reached. The works will result in an area of sloping ground, which will be restored to agricultural grassland, becoming visible instead of the quarry face, ultimately improving the visual amenity of available views. The proposed soil washing plant and C&D shed will be fully screened at all times.

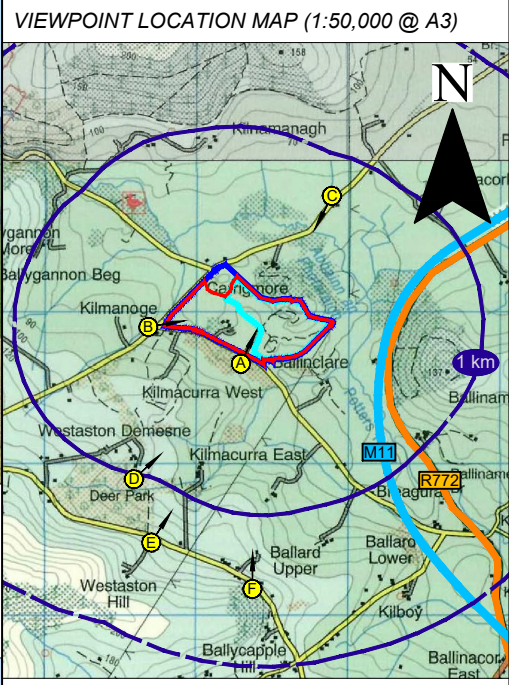


VIEWPOINT F: Local Road at Ballard Upper
 Grid Reference (ITM): **725312:687246** Elevation: **145m** Distance from planning application boundary: **1420m** Direction of View: **North**
Description: This is one of the first available open views of Ballinclare Quarry from the road to the south of Kilmacurragh Arboretum, when travelling west along this road. It should be noted that this photo was taken from a standing position over the generally dense roadside vegetation and would not be available, when seated in a car. Further east of this viewpoint intervening topography and vegetation fully screens the quarry. Further west intermittent views are available for about 1km, as far as the location of Viewpoint E (refer to VRG 2 on Figure 13-1). The upper two benches of the existing northern face at Ballinclare Quarry are visible in the available views. The proposed landfilling activities will be temporarily visible, when the levels approximately above the 50m contour are reached. The works will result in an area of sloping ground, which will be restored to agricultural grassland, becoming visible instead of the quarry face, ultimately improving the visual amenity of available views. The proposed soil washing plant and C&D shed will be fully screened at all times.

NOTES
 Extraction from OSI Discovery Series Map No. 56 & 62
CYAL50167032
 © Ordnance Survey Ireland / Government of Ireland
 Photos taken in May 2019

LEGEND

-  LANDHOLDING BOUNDARY
-  PLANNING APPLICATION AREA
-  PROPOSED INERT LANDFILL AREA
-  VIEWPOINT LOCATIONS
-  APPROXIMATE DISTANCE FROM APPLICATION SITE BOUNDARY



Kilsaran
 ideas taking shape

SLR
 global environmental solutions

SLR CONSULTING IRELAND
 7 DUNDUM BUSINESS PARK
 WINDY ARBOUR
 DUBLIN 14
 T: +353-1-2964667
 F: +353-1-2964676
 www.slrconsulting.com

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 ENVIRONMENTAL IMPACT ASSESSMENT REPORT

BALLINCLARE QUARRY RESTORATION
 INERT LANDFILL & C+D WASTE RECOVERY FACILITY
 KILBRIDE (N11), CO. WICKLOW

VIEWPOINTS D, E & F

FIGURE 13-3

Scale: 1:50,000 @ A3 Date: MARCH 2021

00036.00080.0.16.FIG 13-1_2_3.LVIA_Mar21.dwg

APPENDIX 13-A
Methods used in Assessing Landscape and Visual Impact Effects

Methods used in Assessing Landscape and Visual Impact Effects

Introduction

Landscape and Visual Impact Assessment (LVIA) is a tool used to identify and assess the significance of the effects of development on “*landscape as an environmental resource in its own right and on people’s views and visual amenity*” (GLVIA3⁴, paragraph 1.1). Although it refers to landscape, GLVIA3 (paragraphs 2.6 - 2.8) also makes clear that the same principles apply to townscapes and seascapes. GLVIA3 is the main source of guidance in Ireland on the principles and processes of LVIA. Having signed and ratified the European Landscape Convention, the Irish government has obligations to deal with such matters. The guidance also takes into account the formal requirement for Environmental Impact Assessment in response to European Union Directives.

Landscape is a definable set of characteristics resulting from the interaction of natural, physical and human factors: it is a resource in its own right. Its assessment is distinct from visual assessment, which deals specifically with effects on the views and visual amenity of different groups of people at particular locations. GLVIA3 (paragraph 2.22) makes clear that these two elements, although inter-related, should be assessed separately and that the assessment should clearly demonstrate the difference between them.

As GLVIA3 (paragraph 2.23) states, professional judgement is an important part of the LVIA process: whilst there may be some scope for objective measurement of landscape and visual changes, much of the assessment must rely on qualitative judgements. It is critical that these judgements are based upon a clear and transparent method so that the reasoning can be followed and examined by others.

GLVIA3 sets out a framework for making judgements about the level of effects that may result from change or development. It describes a step by step approach in which: judgements about the value and susceptibility of the receptor are combined into a judgement about sensitivity; judgements about the size/scale of the effect, its geographical extent and its duration and reversibility are combined into a judgement about the magnitude of the effect; and finally the judgements about sensitivity of the receptor and the magnitude of the effect are combined to judge the level of the effect. If the assessment forms part of an EIA, a threshold may then be identified to show which effects are considered to be significant and which are not. In non-EIA appraisals this step is not required though levels of effect may be described in terms of their relative importance.

GLVIA3 is not prescriptive about exactly how the various judgments required in this framework should be made. This is a matter for individual practitioners to decide and explain. This document therefore sets out the criteria and definitions used by SLR, in both EIA and non-EIA landscape and visual assessments, to make judgements about levels of effects and their importance or significance.

⁴ Landscape Institute and Institute of Environmental Management and Assessment ‘Guidelines for Landscape and Visual Impact Assessment’ (Third Edition, April 2013)

LANDSCAPE EFFECTS

Landscape, as defined in the European Landscape Convention, is “an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors”, (Council of Europe, 2000). Landscape does not apply only to special or designated places, nor is it limited to countryside.

GLVIA3 (paragraph 5.34) recommends that the effect of the development on landscape receptors is assessed. Landscape receptors are the components of the landscape that are likely to be affected by the proposed development, and can include individual elements (such as hedges or buildings), aesthetic and perceptual aspects (for example sense of naturalness, tranquillity or openness), or, at a larger scale, the character of a defined character area or landscape type. Designated landscapes, such as National Parks or Areas of Outstanding Natural Beauty (AONBs), may also be treated as landscape receptors, in which case attention is also given to effects on their special qualities.

This assessment is being undertaken because the proposed development has the potential to remove or add elements to the landscape, to alter aesthetic or perceptual aspects, and to add, remove or alter characteristics and thus potentially change overall character.

Judging landscape effects requires a methodical assessment of the sensitivity of the landscape receptors to the proposed development and the magnitude of effect which would be experienced by each receptor. The criteria and definitions used in making these judgements are set out below.

Landscape Sensitivity

The sensitivity of landscape receptors is assessed by combining assessments of the value attached to each receptor and the susceptibility of each receptor to the type of change which is proposed. (GLVIA3, paragraph 5.39).

Value Attached to Landscape Receptors

Landscape value is generally assessed as part of the baseline and is not influenced by the nature of the project, whereas susceptibility and overall landscape sensitivity form part of the detailed assessment of the effects and are specific to the particular project and its landscape context.

Landscape receptors may be valued at community, local, national or international level. Existing landscape designations provide the starting point for this assessment, as set out in **Table 1** below.

The table sets out the interpretation of landscape designations in terms of the value attached to different landscape receptors. As GLVIA3 (paragraph 5.24) notes, at the local scale of an LVIA study area it may be found that the landscape value of a specific area may sometimes be different to that suggested by the presence or absence of a formal designation.

Table 1: Interpretation of Landscape Designations

Designation	Description	Value
World Heritage Sites, candidate World Heritage Site	Unique sites, features or areas identified as being of international importance according to UNESCO criteria. Consideration should be given to their settings especially where these contribute to the attributes of outstanding universal value for which such an area of landscape is valued.	International
National Parks	Areas of landscape identified as being of national importance. Consideration should be given to their settings especially where these contribute to the special qualities for which the landscape is valued.	National
Local Landscape Designations (such as Areas of Outstanding Natural Beauty or Areas of High Amenity) included in local planning documents; or other landscapes of identified value.	Areas of landscape identified as having value, which are either recognised at the local authority level by a local designation or other equivalent recognition of value OR are landscapes considered to have elevated value, having regard to the criteria in Table 2 below and/or by virtue of demonstrable physical attributes.	Local Authority
Undesignated landscapes	Landscapes which do not have any formal designation and which are not considered to have demonstrable physical attributes that elevate their value but which may be valued by local communities.	Community
Undesignated landscapes with negative attributes	Landscapes with no designations or demonstrable physical attributes that elevate their value, which are in poor condition or are degraded or fundamentally altered by presence of man-made structures judged to be intrusive.	Low

Where landscapes are not designated and where no other local authority guidance on value is available (for example, a Landscape Character Assessment that may be referred to in planning policies) an assessment is made by reference to criteria in the **Table 2** below. This is based on Box 5.1 in GLVIA3. In such cases landscapes may be judged to be of local authority, community or low value on the basis of one or more of these factors.

An overall assessment is made for each receptor, based on an overview of the above criteria, to determine its value - whether for example it is comparable to a local authority landscape designation or similar, or whether it is of value to local people and communities. For example, an intact landscape in good condition, where scenic quality, tranquillity, and/or conservation interests make a particular contribution to the landscape, or where there are important cultural or historical associations, might be of equivalent value to a local landscape designation. Conversely, a degraded landscape in poor condition, with no particular scenic qualities or natural or cultural heritage interest is likely to be considered of limited landscape value.

In applying the criteria, and in accordance with the UK judgement of Justice Ouseley,⁵ an assessment is also made to determine whether the site has demonstrable physical attributes which elevate its value.

Table 2: Factors Considered in Assessing the Value of Non-Designated Landscapes

Factor	Criteria
Landscape Quality	Intactness of the landscape demonstrated by, for example: presence of characteristic natural and man-made elements, which are generally in good condition; absence of significant incongruous elements (or elements having only localised or temporary effects).
Scenic Quality	General appeal of the landscape to the senses through, for example, combinations of some of the following: a clear and recognisable sense of place; striking landform or patterns of land cover; strong aesthetic qualities such as scale, form, colour and texture; simplicity or diversity; presence of ephemeral or seasonal interest.
Rarity	Presence of landscape character areas, types or features that are relatively rare in the local area.
Representativeness	Presence of locally important examples representing particular landscape character areas or types or particular characteristics/features/elements.
Conservation Interests	Presence of some of the following where they contribute positively to the experience of the landscape : natural heritage features, including geological or geomorphological features, wildlife, and habitats, including those that are designated as (proposed) Natural Heritage Areas and features such as veteran trees; cultural heritage features, including buildings, especially listed buildings, settlements including conservation areas, gardens, parkland and other designed landscapes, and historic landscape types which demonstrate the time depth of the landscape.
Recreation Value	The extent to which experience of the landscape makes an important contribution to recreational use and enjoyment of an area.
Perceptual Aspects including tranquillity	Presence of ephemeral or seasonal interest and/or notable sensory stimuli such as sounds and smells, qualities of light, or weather patterns. Opportunities to experience a sense of relative wildness and/or relative tranquillity in comparison with other local landscapes in the vicinity, demonstrated by degree of influence of overt man-made structures, level of visual and audible intrusions, and degree of perceived naturalness..
Associations	Evidence that the landscape is associated with locally important written descriptions of the landscape, or artistic representation of it in any media, or events in history, or notable people or important cultural traditions or beliefs.

⁵ CO/4082/2014 Neutral Citation Number: [2015] EWHC 488 (Admin) In the High Court of Justice Queen's Bench Division the Administrative Court Before: Mr Justice Ouseley Between: Stroud District Council, Claimant V Secretary of State for Communities and Local Government, Defendant

Susceptibility of Landscape Receptors to Change

As set out in GLVIA3, susceptibility refers to the ability of the landscape receptor to “accommodate the proposed development without undue adverse consequences for the baseline situation and/or the achievement of landscape planning policies and strategies”. Judgement of susceptibility is particular to the specific characteristics of the proposed development and the ability of a particular landscape or feature to accommodate the type of change proposed, and makes reference to the criteria set out in **Table 3** below. Aspects of the character of the landscape that may be affected by a particular type of development include landform, skylines, land cover, enclosure, human influences including settlement pattern and aesthetic and perceptual aspects such as the scale of the landscape, its form, line, texture, pattern and grain, complexity, and its sense of movement, remoteness, wildness or tranquillity. They will vary with the type of development in question.

For example, an urban landscape which contains a number of industrial buildings may have a low susceptibility to buildings of a similar scale and character. Conversely a rural landscape containing only remote farmsteads is likely to have a high susceptibility to large scale built development.

Table 3: Landscape Receptor Susceptibility to Change

Susceptibility	Criteria
High	The landscape receptor is highly susceptible to the proposed development because the key characteristics of the landscape have no or very limited ability to accommodate it without transformational adverse effects, taking account of the existing character and quality of the landscape.
Medium	The landscape receptor is moderately susceptible to the proposed development because the relevant characteristics of the landscape have some ability to accommodate it without transformational adverse effects, taking account of the existing character and quality of the landscape.
Low	The landscape receptor has low susceptibility to the proposed development because the relevant characteristics of the landscape are generally able to accommodate it without transformational adverse effects, taking account of the existing character and quality of the landscape.

Defining Sensitivity

As noted above, the sensitivity of landscape receptors is defined in terms of the relationship between value and susceptibility to the proposed change, as indicated in **Figure 1** and **Table 4**. These summarise the general nature of the relationship but the combination of the two factors is not formulaic. **Table 4** provides examples of common combinations but is not comprehensive and other combinations may be judged appropriate. Professional judgement is applied on a case by case basis in determining the sensitivity of individual receptors with the diagram and table only serving as a guide.

Where, taking into account the component judgements about the value and susceptibility of the landscape receptor, sensitivity is judged to lie between levels, an intermediate assessment of high/medium or medium/low may be adopted. In a few limited cases a category of less than low (very low) may be used where the landscape is of low value and susceptibility is particularly low.

Figure 1 : Example Levels of Sensitivity defined by Value and Susceptibility of Landscape Receptors

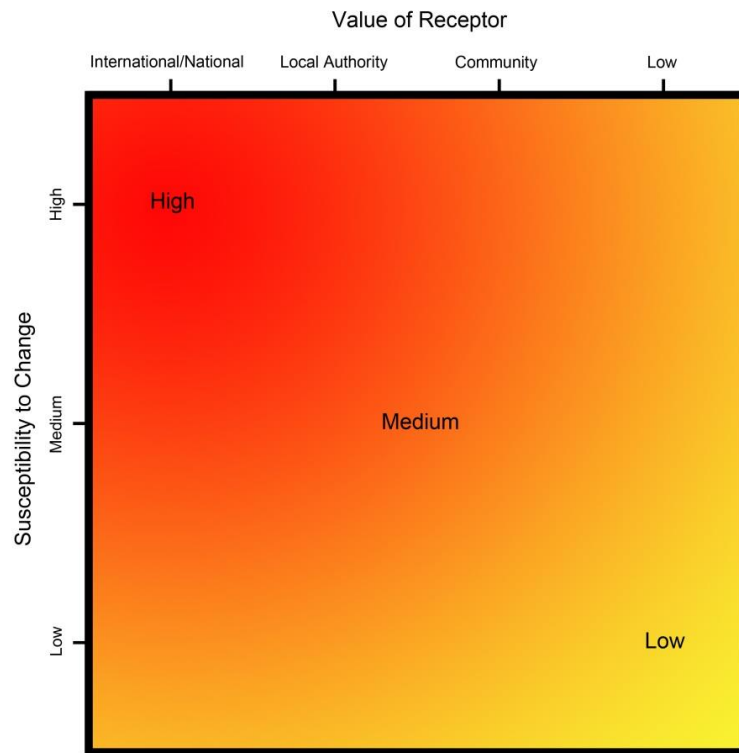


Table 4: Example Levels of Sensitivity defined by Value and Susceptibility of Landscape Receptors

Sensitivity	Criteria
High	<p>The landscape receptor is of international or national value and is considered to have high susceptibility to the effects of the proposed development</p> <p>OR</p> <p>The landscape receptor is of national value and is considered to have medium susceptibility to the effects of the proposed development</p> <p>OR</p> <p>The landscape receptor is of local authority value and is considered to have high susceptibility to the effects of the proposed development</p>
Medium	<p>The landscape receptor is of international or national value and is considered to have low susceptibility to the effects of the proposed development</p> <p>OR</p> <p>The landscape receptor is of local authority value and is considered to have medium susceptibility to the effects of the proposed development</p> <p>OR</p> <p>The landscape receptor is of community value and is considered to have high susceptibility to the effects of the proposed development</p>

Sensitivity	Criteria
Low	<p>The landscape receptor is of local authority value and is considered to have low susceptibility to the effects of the proposed development</p> <p>OR</p> <p>The landscape receptor is of community value and is considered to have medium susceptibility to the effects of the proposed development</p> <p>OR</p> <p>The landscape receptor is of community value and is considered to have low susceptibility to the effects of the proposed development</p>

Magnitude of Landscape Change

The magnitude of landscape change is established by assessing the size or scale of change, the geographical extent of the area influenced and the duration and potential reversibility of the change.

Size and Scale of Change

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

- *the loss or addition of landscape elements; and/or*
- *the degree to which aesthetic/perceptual aspects are altered; and*
- *whether this is likely to change the key characteristics of the landscape.*

The criteria used to assess the size and scale of landscape change are based upon the amount of change that will occur as a result of the proposed development, as described in **Table 5** below.

Table 5: Size/Scale of Change

Category	Description
Large level of landscape change	<p>There would be a large level of change in landscape character, and especially to the key characteristics if, for example, the proposed development:</p> <ul style="list-style-type: none"> • <i>becomes a dominant feature in the landscape, changing the balance of landscape characteristics; and/or</i> • <i>would dominate important visual connections with other landscape types, where this is a key characteristic of the area.</i>
Medium level of landscape change	<p>There would be a medium level of change in landscape character, and especially to the key characteristics if, for example:</p> <ul style="list-style-type: none"> • <i>the proposed development would be more prominent but would not change the overall balance or composition of the landscape; and/or</i> • <i>key visual connections to other landscape types may be interrupted intermittently by the proposed development, but these connections would not be dominated by them.</i>
Small level of landscape change	<p>There would be a small level of change in landscape character, and especially to the key characteristics if, for example:</p> <ul style="list-style-type: none"> • <i>there would be no introduction of new elements into the landscape and the proposed development would not significantly change the composition/balance of the landscape.</i>

Category	Description
Negligible level of landscape change/ No change	There would be a negligible level of change in landscape character, and especially to the key characteristics if, for example, the proposed development would be a small element and/or would be a considerable distance from the landscape receptor/ the proposed development will cause no change to the landscape.

Geographical Extent of Change

The geographical extent of landscape change is assessed by determining the area over which the changes will influence the landscape, as set out in **Table 6**. For example, this could be at the site level, in the immediate setting of the site, or over some or all of the landscape character types or areas affected.

Table 6: Geographical Extent

Category	Description
Large extent of landscape change	The change will affect all or the majority of the landscape receptor under consideration.
Medium extent of landscape change	The change will affect approximately half of the landscape receptor under consideration.
Small extent of landscape change	The change will affect a small extent of the landscape receptor under consideration.
Negligible extent of landscape change	The change will affect only a limited or negligible extent of the landscape receptor under consideration.

Duration and Reversibility of Change

The duration of the landscape change is categorised in **Table 7** below, which considers whether the change will be permanent and irreversible or temporary and reversible. The levels of duration are based on the EPA Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports (2017).

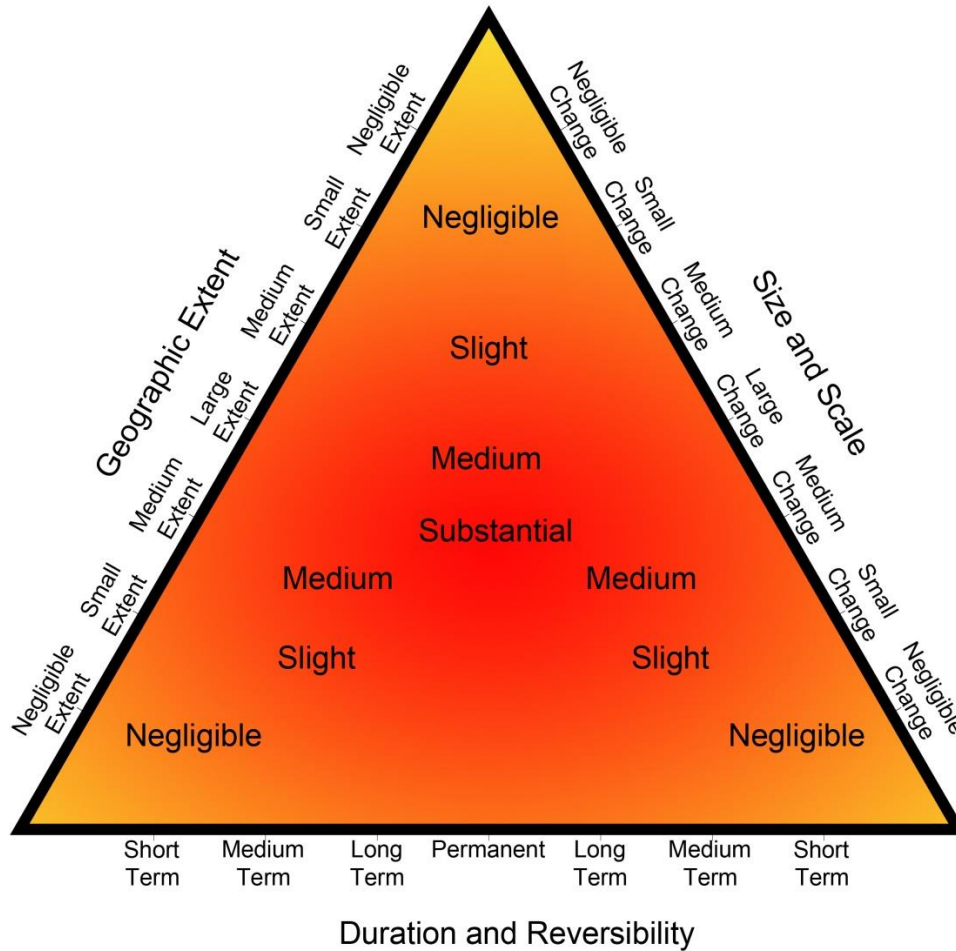
Table 7: Duration and Reversibility

Category	Description
Permanent/ Irreversible	Change that will last for over 60 years and is deemed permanent or irreversible.
Long-term reversible	Change that will last between 15 and 60 years and is potentially, or theoretically reversible.
Medium-term reversible	Change that will last between 7 and 15 years and is wholly or partially reversible.
Temporary/ Short-term reversible	Change that will last from 0 to 7 years and is reversible - includes construction effects.

Deciding on Overall Magnitude of Landscape Change

The relationships between the three factors that contribute to assessment of the magnitude of landscape effects are illustrated graphically, as a guide, in **Figure 2** below. Various combinations are possible and the overall magnitude of each effect is determined using professional judgement rather than by formulaic application of the relationships in the diagram.

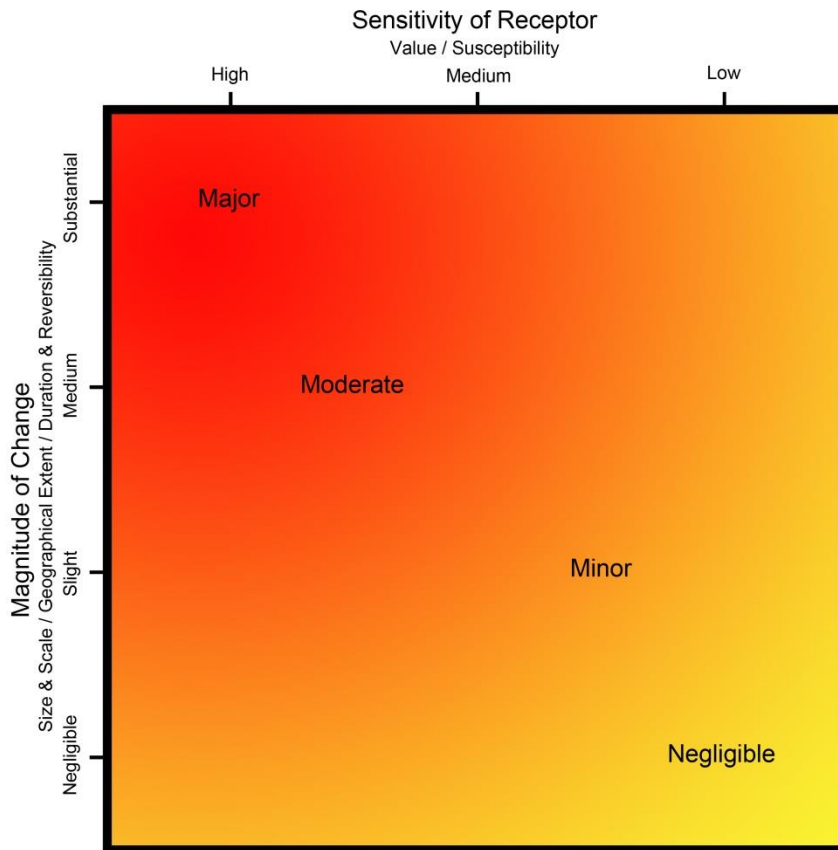
Figure 2: Determining the Magnitude of Landscape Change



Assessment of Landscape Effects and Significance

The assessment of landscape effects, and whether these are significant or not significant, is defined in terms of the relationship between the sensitivity of the landscape receptors and the magnitude of the change. The diagram below (**Figure 3**) summarises the nature of the relationship but it is not formulaic. Judgements are made about each landscape effect using this diagram as a guide.

Figure 3: Assessment of Landscape Effects and Overall Significance



Effects that fall in the red (darker) section of the diagram, that is those which are considered to be major and major/moderate effects by virtue of the more sensitive receptors and the greater magnitude of effects, are generally considered to be the **significant landscape effects**. Those effects falling outside the major or major/moderate categories are generally considered to be not significant. However, it should be noted that GLVIA3 states ‘there are no hard and fast rules about what effects should be deemed significant’ and in some cases professional judgement may determine that a moderate effect is significant. Moderate effects are considered individually on a case by case basis, to determine whether each effect is considered to be significant or not significant. In determining whether moderate effects are or are not significant, particular attention is given to the constituent judgements leading to the assessment of a moderate effect and particularly to value, susceptibility and size/scale of effect, and in addition whether the effect is found across a number of receptors or in a pattern that intensifies the overall impact.

VISUAL EFFECTS

Visual effects are the effects of change and development on the views available to people and their visual amenity. Visual receptors are the people whose views may be affected by the proposed development. They may include:

- *Communities within settlements (i.e. towns and villages);*
- *Residents of individual properties and clusters of properties outside settlements;*
- *People using nationally designated or regionally promoted footpaths and cycle routes;*
- *Visitors at publicly accessible sites including, for example, gardens and designed landscapes, historic sites, and other visitor attractions or outdoor recreational facilities where the landscape or seascape is an important part of the experience;*
- *Users of outdoor sport and recreation facilities;*
- *Visitors staying at caravan parks or camp sites;*
- *Road users on recognised scenic or promoted tourist routes;*
- *Travellers using other roads who may pass through the study area because they are visiting, living or working there;*
- *Rail passengers;*
- *People at their place of work.*

Judging visual effects requires a methodical assessment of the sensitivity of the visual receptors to the proposed development and the magnitude of effect which would be experienced by each receptor.

Viewpoints are chosen for a variety of reasons but most commonly because they represent views experienced by relevant groups of people although they may also include specific promoted or otherwise important viewpoints.

Visual Sensitivity

Sensitivity of visual receptors is assessed by combining an assessment of the susceptibility of visual receptors to the type of change which is proposed with the value attached to the views. (GLVIA3, paragraph 6.30).

Value Attached to Views

Different levels of value are attached to the views experienced by particular groups of people at particular viewpoints. Assessment of value takes account of a number of factors, including:

- *Recognition of the view through some form of planning designation or by its association with particular heritage assets; and*
- *The popularity of the viewpoint, in part denoted by its appearance in guidebooks, literature or art, or on tourist maps, by information from stakeholders and by the evidence of use including facilities provided for its enjoyment (seating, signage, parking places, etc.); and*
- *Other evidence of the value attached to views by people including consultation with local planning authorities, some of whom have carried out assessments of valued views, and professional assessment of the quality of views.*

The assessment of the value of views is summarised in **Table 8** below. These criteria are provided for guidance only.

Table 8: Examples of Factors Considered in assessing the Value Attached to Views

Value	Criteria
High	<p>Views from nationally (and in some cases internationally) known viewpoints, which:</p> <ul style="list-style-type: none"> • <i>have some form of planning designation; or</i> • <i>are associated with internationally or nationally designated landscapes or important heritage assets; or</i> • <i>are promoted in sources such as maps and tourist literature; or</i> • <i>are linked with important and popular visitor attractions where the view forms a recognised part of the visitor experience; or</i> • <i>have important cultural associations.</i> <p><i>Also, may include views judged by assessors to be of high value.</i></p>
Medium	<p>Views from viewpoints of some importance at regional or local levels, which:</p> <ul style="list-style-type: none"> • <i>have some form of local planning designation associated with locally designated landscapes or areas of equivalent landscape quality; or</i> • <i>are promoted in local sources; or</i> • <i>are linked with locally important and popular visitor attractions where the view forms a recognised part of the visitor experience; or</i> • <i>have important local cultural associations.</i> <p><i>Also, may include views judged by the assessors to be of medium value.</i></p>
Low	<p>Views from viewpoints which, although they may have value to local people:</p> <ul style="list-style-type: none"> • <i>have no formal planning status; or</i> • <i>are not associated with designated or otherwise high-quality landscapes; or</i> • <i>are not linked with popular visitor attractions; or</i> • <i>have no known cultural associations.</i> <p><i>Also, may include views judged by the assessors to be of low value.</i></p>

Where judgements are made about the value attached to views experienced by residential receptors, the following considerations also apply:

- *Views in a rural or designed context (e.g. an avenue of trees or designed view from a parkland), especially if associated with landscapes of national or local authority value, where residential receptors are positioned to take advantage of the views, will generally be considered to be of high value;*
- *Views in a semi-rural or general townscape context, and/or where locations of residential receptors are not positioned to take full advantage of views, will generally be considered of medium value; and*
- *Views in an urban/industrial context, and/or where locations of residential receptors are not positioned to take advantage of views, will generally be considered of low value.*

Susceptibility of Visual Receptors to Change

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

- *The occupation or activity of the viewer at a given viewpoint; and*
- *The extent to which the viewer's attention or interest be focussed on a particular view and the visual amenity experienced at a given view.*

The susceptibility of different groups of viewers is assessed with reference to the guidance in **Table 9** below. However, as noted in GLVIA3 “*this division is not black and white and, in reality, there will be a gradation in susceptibility to change*”. Therefore, the susceptibility of each group of people affected is considered for each project and assessments are included in the relevant text in the report.

Table 9: Visual Receptor Susceptibility to Change

Susceptibility	Criteria
High	Residents; People engaged in outdoor recreation where their attention is likely to be focused on the landscape and on particular views; Visitors to heritage assets or other attractions where views of the surroundings are an important part of the experience; Communities where views contribute to the landscape setting enjoyed by the residents.
Medium	Travellers on scenic routes where the attention of drivers and passengers is likely to be focused on the landscape and on particular views. People engaged in outdoor sport or recreation, which may involve appreciation of views e.g. users of golf courses.
Low	People engaged in outdoor sport or recreation, which does not involve appreciation of views; People at their place of work whose attention is focused on their work; where the setting is not important to quality of working life; Travellers, where the view is incidental to the journey.

Defining Sensitivity

As noted above, the sensitivity of visual receptors is defined in terms of the relationship between the value of views and the susceptibility of the different receptors to the proposed change, as indicated in Figure 4 and **Table 10**. These summarise the general nature of the relationship but the combination of the two factors is not formulaic. **Table 10** provides examples of common combinations but is not comprehensive and other combinations may be judged appropriate. Professional judgement is applied on a case by case basis in determining the sensitivity of individual receptors with the diagram and table only serving as a guide.

Where, taking into account the component judgements about the value and susceptibility of the visual receptor, sensitivity is judged to lie between levels, an intermediate assessment of high/medium or medium/low may be adopted. In a few limited cases a category of less than low (very low) may be used where the visual receptor is of low value and susceptibility is particularly low.

Figure 4: Levels of Sensitivity Defined by Value and Susceptibility of Visual Receptor Groups

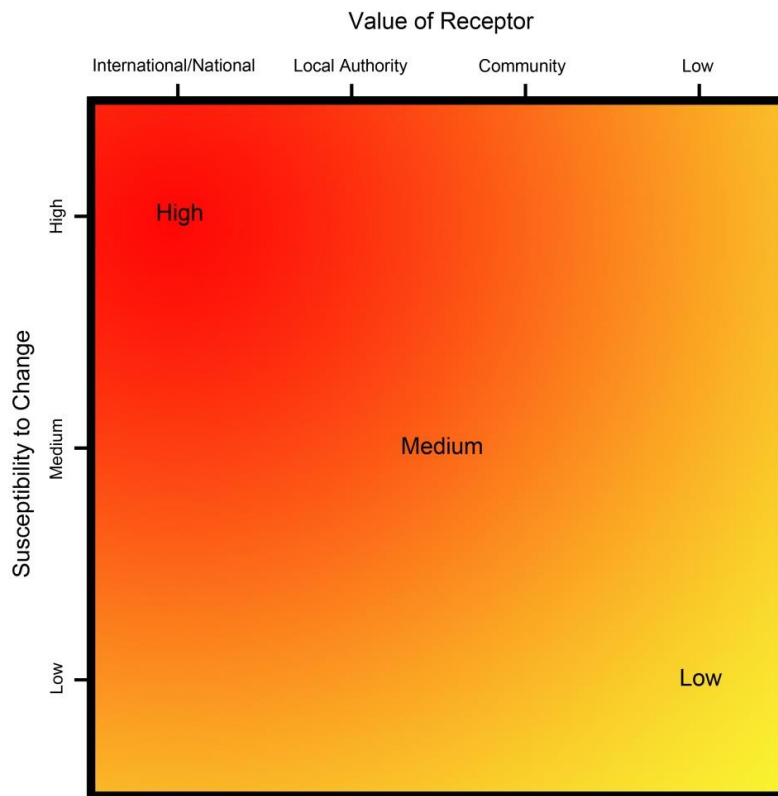


Table 10: Example Levels of Sensitivity defined by Value and Susceptibility of Visual Receptors

Sensitivity	Criteria
High	<p>The visual receptor group is highly susceptible to changes in views and visual amenity and relevant views are of high value</p> <p>OR</p> <p>The visual receptor group has a medium level of susceptibility to changes in views and visual amenity and relevant views are of high value</p> <p>OR</p> <p>The visual receptor group is highly susceptible to changes in views and visual amenity and relevant views are of value at the medium level.</p>
Medium	<p>The visual receptor group is highly susceptible to changes in views and visual amenity and relevant views are of value at the low level</p> <p>OR</p> <p>The visual receptor group has a medium level of susceptibility to changes in views and visual amenity and relevant views are of value at the medium level</p> <p>OR</p> <p>The visual receptor group has a low level of susceptibility to changes in views and visual amenity and relevant views are of value at the high level.</p>

Sensitivity	Criteria
Low	<p>The visual receptor group has a medium level of susceptibility to changes in views and visual amenity and relevant views are of value at the low level</p> <p>OR</p> <p>The visual receptor group has a low level of susceptibility to changes in views and visual amenity and relevant views are of value at the medium level</p> <p>OR</p> <p>The visual receptor group has a low level of susceptibility to changes in views and visual amenity and relevant views are of value at the low level.</p>

Magnitude of Visual Change

The magnitude of visual change is established by assessing the size or scale of change, the geographical extent of the area influenced and the duration and potential reversibility of the change. Representative viewpoints are used as 'sample' points to assess the typical change experienced by different groups of visual receptors at different distances and directions from the proposed development.

Size and Scale of Change

The criteria used to assess the size/scale of visual change are as follows:

- *the scale of the change in the view with respect to the loss or addition of features in the view, changes in its composition, including the proportion of the view occupied by the proposed development and distance of view;*
- *the degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of factors such as form, scale and mass, line, height, colour and texture; and*
- *the nature of the view of the proposed development, for example whether views will be full, partial or glimpses or sequential views while passing through the landscape.*

The above criteria are summarised in the **Table 11** overleaf:

Table 11: Size/Scale of Change

Category	Criteria
Large visual change	The proposed development will cause a complete or large change in the view, resulting from the loss of important features in or the addition of important new ones, to the extent that this will substantially alter the composition of the view and the visual amenity it offers.
Medium visual change	The proposed development will cause a clearly noticeable change in the view, resulting from the loss of features or the addition of new ones, to the extent that this will alter to a moderate degree the composition of the view and the visual amenity it offers. Views may be partial/intermittent.
Small visual change	The proposed development will cause a perceptible change in the view, resulting from the loss of features or the addition of new ones, to the extent that this will partially alter the composition of the view and the visual amenity it offers. Views may be partial only.
Negligible visual change	The proposed development will cause a barely perceptible change in the view, resulting from the loss of features or the addition of new ones, to the extent that this will barely alter the composition of the view and the visual amenity it offers. Views may be glimpsed only.
No change	The proposed development will cause no change to the view.

Geographical Extent of Change

The geographical extent of the visual change identified at representative viewpoints is assessed by reference to a combination of the Zone of Theoretical Visibility (ZTV), where this has been prepared, and field work. The way that geographical extent is assessed varies with circumstances.

Most commonly a number of representative viewpoints are used as 'sample' points to assess the typical change experienced by a particular group of visual receptors in locations at different distances and directions from the proposed development. In such cases the geographical extent of the visual change is judged for each group of receptors (for example, people using a particular route or public amenity) drawing on the relevant viewpoint assessments, plus information about the approximate number and distribution of that particular group of people in the Study Area. For example the geographical extent would be small if the change is experienced at only one or two locations and/or by a smaller number of viewers. Community views may, for example, be experienced from a small number of dwellings, or affect numerous properties in the community, or several different communities. Similarly, changes to a view from a public footpath may be visible from a single isolated viewpoint (small geographical extent), or over a prolonged stretch of the route (large geographical extent).

In the case of individual (rather than representative) viewpoints in a specific location, the following factors (as noted in GLVIA3), are considered in judging geographical extent:

- *the angle of view in relation to the main activity of the receptor;*
- *the distance of the viewpoint from the proposed development; and*
- *the extent of the area over which changes would be visible.*

For example, from an elevated area of Open Access Land the proposed development may be widely visible from much or all of the accessible area, be close to it and so occupy a wide angle of the view, suggesting large geographical extent. Alternatively, the proposed development may be visible from only a small proportion of the area, be quite distant from it and so occupy a small proportion of the view, suggesting small geographical extent.

Table 12 describes the most common categories of geographical extent based on these two approaches.

Table 12: Geographical Extent of Change

Category	Description
Large extent of visual change	Either: The proposed development is seen by the group of receptors in many locations across the Study Area or from the majority, or a large proportion, of a linear route and/or by large numbers of viewers; Or: The proposed development is visible from much or all of a specific site is close to it and so occupies a wide angle of the view.
Medium extent of visual change	Either: The proposed development is seen by the group of receptors in several locations across the Study Area or from a moderate proportion of a linear route and/or by moderate numbers of viewers; Or: The proposed development is visible from a moderate part of a specific site, is at a moderate distance from it and so occupies a moderate angle of the view.
Small extent of visual change	Either: The proposed development is seen by the group of receptors at a small number of locations across the Study Area or from limited sections of a linear route and/or by a small numbers of viewers; Or: The proposed development is visible from a small part of a specific site, is at some distance from it and so occupies a small angle of the view.
Negligible extent of visual change	Either: The proposed development is not visible in the Study Area or is seen by the group of receptors at only one or two locations or from a very short length of a linear route and/or by a very small number of viewers; OR: The proposed development is visible from only a very small part of a site, is at a considerable distance from it and so occupies a very small angle of the view.

Duration and Reversibility of Change

The duration of the visual change at viewpoints is categorised in **Table 13** below, which considers whether views will be permanent and irreversible or temporary and reversible. The levels of duration are based on the EPA Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports (2017).

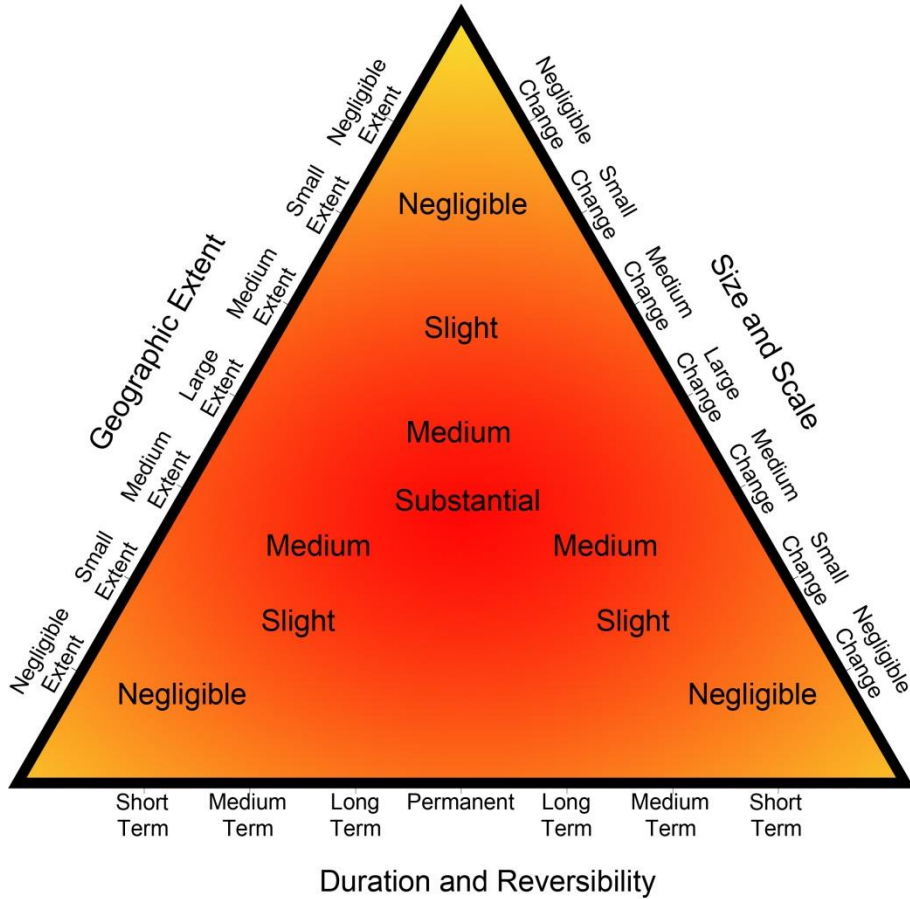
Table 13: Duration and Reversibility

Category	Description
Permanent/ Irreversible	Change that will last for over 60 years and is deemed permanent or irreversible.
Long-term reversible	Change that will last between 15 and 60 years and is potentially, or theoretically reversible.
Medium-term reversible	Change that will last between 7 and 15 years and is wholly or partially reversible.
Temporary/ Short-term reversible	Change that will last from 0 to 7 years and is reversible - includes construction effects.

Deciding on Overall Magnitude of Visual Change

The relationships between the three factors that contribute to assessment of the magnitude of visual effects are illustrated graphically, as a guide, in **Figure 5** below. Various combinations are possible and the overall magnitude of each effect is made using professional judgement rather than by formulaic application of the relationships in the diagram.

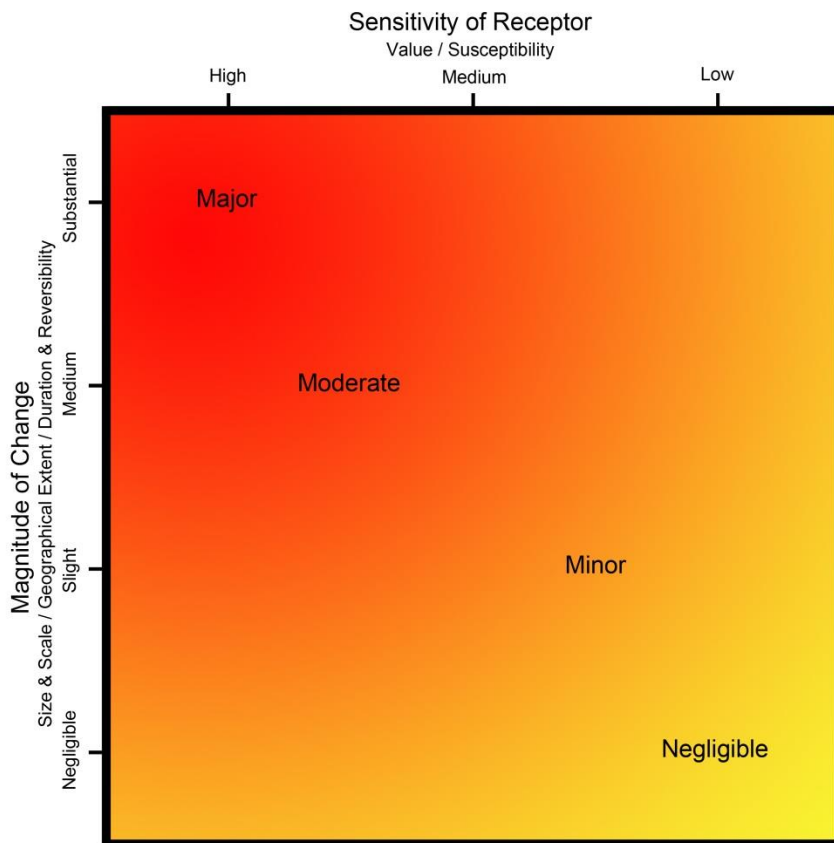
Figure 5: Determining the Magnitude of Visual Change



Assessment of Visual Effects and Significance

The assessment of visual effects, and whether these are significant or not significant, is defined in terms of the relationship between the sensitivity of the visual receptors and the magnitude of the change. The diagram below (Figure 6) summarises the nature of the relationship but it is not formulaic and only indicates broad levels of effect. Judgements are made about each visual effect using this diagram as a guide.

Figure 6: Assessment of Visual Effects and Overall Significance



Effects that fall in the red (darker) section of the diagram, that is those which are considered to be major and major/moderate effects by virtue of the more sensitive receptors and the greater magnitude of effects, are generally considered to be the **significant landscape effects**. Those effects falling outside the major or major/moderate categories are generally considered to be not significant. However, it should be noted that GLVIA3 states ‘there are no hard and fast rules about what effects should be deemed significant’ and in some cases professional judgement may determine that a moderate effect is significant. Moderate effects are considered individually on a case by case basis, to determine whether each effect is considered to be significant or not significant. In determining whether moderate effects are or are not significant, particular attention is given to the constituent judgements leading to the assessment of a moderate effect and particularly to value, susceptibility and size/scale of effect, and in addition whether the effect is found across a number of receptors or in a pattern that intensifies the overall impact.