

13.0 LANDSCAPE AND VISUAL IMPACT ASSESSMENT

13.1 INTRODUCTION

The Proposed Development will comprise the establishment and operation of a soil recovery facility at the Applicant's lands in Kilmartin, Coynes Cross, Co. Wicklow. It is proposed to progressively restore the infilled lands to long-term grassland / hedgerow habitat, similar to that which existed prior to the development of the soil recovery facility. The long-term use of the land will be a return to agriculture. Full details of the Proposed Development are provided in Chapter 3.0: Project Description, and a summary is provided in Section 13.2 below. The Application Site ('the Site') is shown in Figure 13-1 below (as defined therein by the 'application boundary').

13.1.1 STATEMENT OF AUTHORITY

This Landscape and Visual Impact Assessment was prepared by Jorden Derecourt (BLA Hons, MLA Hons), Landscape Architect at Macro Works Ltd, a specialist LVIA company with over 20 years of experience in the appraisal of effects from a variety of energy, infrastructure and commercial developments. It was reviewed by Richard Barker, Principal Landscape Architect at Macro Works Ltd. Macro Works and its senior staff members are affiliated with the Irish Landscape Institute, both authors are full professional members of the ILI.

13.1.2 TECHNICAL SCOPE

The LVIA report describes the landscape context of the Proposed Development and assesses the likely landscape and visual impacts of the scheme on the receiving environment.

Landscape Impact Assessment (LIA) relates to assessing effects of a development on the landscape as a resource in its own right and is concerned with how the proposal will affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character.

Visual Impact Assessment (VIA) relates to assessing effects of a development on specific views and on the general visual amenity experienced by people. This deals with how the surroundings of individuals or groups of people may be specifically affected by changes in the content and character of views as a result of the change or loss of existing elements of the landscape and/or introduction of new elements. Visual impacts may occur from; Visual Obstruction (blocking of a view, be it full, partial or intermittent) or Visual Intrusion (interruption of a view without blocking).

13.1.3 GUIDANCE

This LVIA uses methodology as prescribed in the following guidance documents:

- Environmental Protection Agency (EPA) publication 'Guidelines on the Information to be contained in Environmental Impact Statements (2022) and the accompanying Advice Notes on Current Practice in the Preparation of Environmental Impact Statements (Draft 2015);
- Institute of Environmental Management and Assessment ("IEMA") Guidelines for Landscape and Visual Assessment (3rd edition 2013)
- Landscape Institute and the Institute of Environmental Management and Assessment publication entitled Guidelines for Landscape and Visual Impact Assessment (2013).

13.1.4 GEOGRAPHICAL AND TEMPORAL SCOPE

The geographical study area for the assessment includes the Proposed Development and a 2 km study area extending from the application boundary (see Figure 13-1). This study area allows for the identification of potential visual impacts to significant landscape/townscape associated with the Proposed Development.



Figure 13-1 - Extent of the study area

Under the current programme, it is expected that the duration of operation of the soil recovery facility may operate for between approximately 4 -10 years depending on availability of clean soil and stone to complete the Proposed Development. A restoration and aftercare phase for the Proposed Development has been considered along with the phasing of activities which is described in Chapter 3.0: Project Description.

For the purpose of clarity, this assessment uses the term 'works phase' to describe the period of time comprising the following construction activities:

- Enabling works to provide facilities required for the operation of the soil recovery facility (i.e., entrance upgrades, establishment of office and welfare facilities, etc); and
- The operation of the soil recovery facility (i.e. acceptance of clean soil and stone to Site and its subsequent emplacement within the fill area).

It is noted that construction activities will take place across the work phase and the description above is provided to distinguish between construction works carried out to prepare the development of the soil recovery facility (e.g. topsoil stripping, installation of facility infrastructure) and construction work carried out during the day-to-day operation of the soil recovery facility (e.g. emplacement of fill material).

A restoration phase, broadly following the work phase (with some temporal overlap), will comprise the shaping on the final landform in the fill level, restoration of stored topsoil, seeding (where necessary), and planting with subsequent aftercare and maintenance.

Both the works phase and restoration phase are considered in this chapter.

13.1.5 PRE-CONSULTATION

A non-statutory consultation process was carried out with prescribed bodies and other parties over the period from 25 May–26 June 2023 to seek comments and observations about the Proposed Development. This process is fully documented in the Pre-Consultation Report accompanying the Strategic Infrastructure Development (SID) application submission and a summary is provided in Section 1.8 (Chapter 1:0 Introduction) of this EIAR. Pre-consultation opinions/comments received have been considered in the preparation of this EIAR chapter, where relevant.

13.2 PROJECT DESCRIPTION

A full project description is provided in Chapter 3.0 (Project Description). A project description summary is provided below:

The Proposed Development is the establishment and operation of a soil recovery facility within a 17.08 hectare site at Kilmartin, Co. Wicklow (approximately 4 km north-east of Ashford) (referred to as ‘the Site’). The soil recovery facility will import up to 2,160,000 tonnes of inert waste, primarily clean soils and stones from construction and development sites. Clean soil and stone will be used to progressively infill a steep-sided natural valley within the Site and raise ground levels to approximately 57 mOD, tying in with the surrounding landscape. The infill area covers approximately 14 hectares.

The soil recovery facility will accept up to 100 loads per day on average (maximum 150 in exceptional circumstances) with a projected operational lifespan of up to 10 years depending on market conditions within the construction sector, followed by one year for final restoration and aftercare of the lands.

The Proposed Development will require the following structures be installed and maintained for the operational life of the Soil Recovery Facility: office and welfare facilities, six parking bays for private vehicles, weighbridge and associated weighbridge cabin, one wheel wash and one spray-system wheel wash, two waste inspection bays and one bunded waste quarantine area, hardstanding area (for vehicle movement and storage), surface water drainage infrastructure from hard standing and discharge to ground (including two interceptors and two soakaways), an internal access road, internal haul roads (constructed from recycled aggregates where available), security features including security gates and fencing, and power supply. These structures will be removed from the Site at the end of life point of the soil recovery facility.

Approval will be sought for a connection to the ESB Network for the Site office and welfare facilities. Diesel generators will be used to power mobile lighting, if required. Temporary lighting, if required, will be cowed to prevent light spillage.

The temporary relocation of ESB poles within the fill area will be required. This will be subject to prior agreement with ESB.

Wastewater from office and welfare facilities will be managed by a third-party provider, with no connection to foul water mains.

All truck deliveries will access the Site via the N11/M11 and Coyne's Cross Road, with internal queuing space provided within the Site and no parking on public roads.

The existing land entrance located on R772 will be upgraded and will be retained following the completion of the Proposed Development.

A groundwater abstraction borehole will be installed to supply water for wheel washes, dust suppression, and welfare facilities, and will be retained for monitoring after restoration.

Restoration will return the Site to grassland and hedgerow habitat, similar to its pre-development state. Approximately 140 m of fence and hedgerow opposite the entrance will be temporarily removed to improve sightlines during the life of the soil recovery facility and this will be subsequently reinstated. Native species will be used in hedgerow planting. The restored land will revert to agricultural management.

Permission is sought from An Coimisiún Pleanála for a period of up to 10 years, with an additional year for restoration. The Proposed Development will require a waste licence¹ from the Environmental Protection Agency (EPA) and aligns with national and regional policy objectives to provide adequate licensed soil recovery capacity for the Dublin and Wicklow regions.

13.3 LEGISLATIVE AND POLICY CONTEXT

13.3.1 WICKLOW COUNTY DEVELOPMENT PLAN 2022-2028

Chapter 17 of the County Development Plan 'Natural Heritage and Biodiversity' identifies the Landscape Categories surrounding the Site and notes that "The landscape assessment that was undertaken for the previous County Development Plan in 2016 has not been updated for the purposes on this plan and is considered to remain a robust and up to date reflection of the landscape character zones of the County." The summary of the Landscape Character Assessment is included within Chapter 17, as follows.

The county's landscape is subdivided into 6 landscape categories and a subsequent 15 landscape character areas within these. The Proposed Development is located in the 'Corridor Area' Landscape Character Category and the subsequent Landscape Character Area 4(a) Corridor Area East. To the east of the Site is the Landscape Category 'Coastal Areas Area of Outstanding Natural Beauty', more specifically Landscape Character Area 2(a) The Northern Coastline (AONB). Lastly,

¹ The proposed development will be carried out in accordance with a waste licence from the EPA or in accordance with by-product regulations, Article 27 of the European Communities (Waste Directive) Regulations 2011 (see Section 3.5 in Chapter 3.0: Project Description of this EIAR for further detail).

to the west is the Landscape Category 'Area of High Amenity', which contains the Landscape Character Area 3 (a) Northeast Mountain Lowlands (AHA).



Figure 13-2 - Wicklow Landscape Categories within the study area – Derived from Map 17.09A As Altered

The hierarchy of the landscape categories in the 2016 Landscape Assessment states:

“A vulnerability range is applied to each area in accordance with the hierarchy i.e. 1 - high vulnerability on a sliding scale to 6 - low vulnerability.”

Therefore, the sensitivity/vulnerability of the different landscape areas can be inferred from the location of each landscape area within this table/hierarchy.

The Site itself is located in the Hierarchy Level 4 'Corridor Area', specifically Landscape Character Area 4(a) – The N11, which is described 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 majors towns along the east coast of the County.”

To the east of the Site is the higher sensitivity/vulnerability Landscape Character Area 2(a) The Northern Coastline, which is classified as Area of Outstanding Natural Beauty (AONB), which is a level 2 hierarchy landscape, with the following description:

“The northern coastline comprises of the lands between Wicklow Town/Rathnew and Greystones. The northern coastline provides intermittent views of the sea from the coast road with this area being somewhat more developed than the southern coastline. This landscape category includes a number of key environmental features such as the Murrough SAC/SPA (a designated Natura 2000 site) and Natural Heritage Area (NHA). While this section of the Wicklow coastline is not as heavily utilised from a tourist perspective compared to the southern coastline, it does act as a significant recreational resource to the local residential population the use of which must be managed in an appropriate manner.”

To the west of the study area is the Northeast Mountain Lowlands, which is a Level 3 landscape (3 – Areas of High Amenity) within the identified hierarchy. The Northeast Mountain Lowlands are described as:

“Transitional lands located between the corridor zone and the AONB, comprising of Trooperstown Hill, large tracts of forestry lands, including Devils Glen (a listed County Geological site) and a number of views and prospects in particular those surrounding the Vartry Reservoir.”

The following policies apply to Landscape and Visual within Chapter 17 of the CDP

CPO 17.35 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 the 2016 County Development Plan) and the ‘Key Development Considerations’ set out for each landscape area set out in Section 5 of the Wicklow Landscape Assessment.

CPO 17.36 Any application for permission in the AONB which may have the potential to significantly adversely impact the landscape area shall be accompanied by a Landscape / Visual Impact Assessment, which shall include, inter alia, an evaluation of visibility and prominence of the proposed development in its immediate environs and in the wider landscape, a series of photos or photomontages of the Site / development from clearly identified vantage points, an evaluation of impacts on any listed views / prospects and an assessment of vegetation / land cover type in the area (with particular regard to commercial forestry plantations which may be felled thus altering character / visibility). The Assessment shall demonstrate that landscape impacts have been anticipated and avoided to a level consistent with the sensitivity of the landscape and the nature of the designation.

CPO 17.37 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.

CPO 17.38 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.

13.3.2 VIEWS OF RECOGNISED SCENIC VALUE

Views of recognised scenic value are primarily indicated within Development Plans in the context of scenic views/routes designations, but they might also be indicated on touring maps, guidebooks, websites, roadside rest stops or on post cards that represent the area.

Scenic Routes and Protected Views are identified in Chapter 17 – Natural Heritage and Biodiversity of the current Wicklow County Development Plan. Within the study area are two Scenic Routes, 14 and 15. Of these, 15 is the nearest to the Site, running along the N11 to the immediate west of the Site. Route 14 is described as “N11 at Kilmullin” with a “Prospect of Kilcoole and the coast”, while Route 15 is described as “From Coyne’s Cross on N11 towards Wicklow”, with a “View of Wicklow Head and Coastline”. There are no designated views within the study area. NOTE: Although shown on these maps for wider context, Views 40, 44, 45, 46 and Route 7 are located outside of the study area.



Figure 13-3 - Excerpts from Wicklow CDP 2022-2028, Natural Heritage and Biodiversity, Map 17.10A (Views of Special Amenity Value or Special Interest) and Map 17.11 (Prospects of Special Amenity Value or Special Interest)

13.4 ASSESSMENT METHODOLOGY AND SIGNIFICANCE CRITERIA

Production of this Landscape and Visual Impact Assessment involved:

- A desktop study to establish an appropriate study area, relevant landscape and visual designations in the Wicklow County Development Plan as well as other sensitive visual receptors.

This stage culminates in the selection of a set of potential viewpoints from which to study the effects of the proposal;

- Fieldwork to establish the landscape character of the receiving environment and to confirm and refine the set of viewpoints to be used for the visual assessment stage;
- Assessment of the significance of the landscape impact of the Proposed Development as a function of landscape sensitivity weighed against the magnitude of the landscape impact; and
- Assessment of the significance of the visual impact of the Proposed Development as a function of visual receptor sensitivity weighed against the magnitude of the visual impact. This aspect of the assessment is supported by photomontages prepared in respect of the selected viewpoints (See Appendix 13A).
- Incorporation of mitigation measures to reduce potential impacts and estimation of residual impacts once mitigation has become established.

13.4.1.1 Landscape Impact Assessment Criteria

When assessing the potential impacts on the landscape resulting from a Proposed Development, the following criteria are considered:

- Landscape character, value and sensitivity;
- Magnitude of likely impacts; and
- Significance of landscape effects.

The sensitivity of the landscape to change is the degree to which a particular landscape receptor (Landscape Character Area (LCA) or feature) can accommodate changes or new elements without unacceptable detrimental effects to its essential characteristics. Landscape Value and Sensitivity is classified using the following criteria set out in Table 13-1 (derived from *Landscape Institute and the Institute of Environmental Management and Assessment publication entitled Guidelines for Landscape and Visual Impact Assessment (2013)*).

Table 13-1 – Landscape Value and Sensitivity

Sensitivity	Description
Very High	Areas where the landscape character exhibits a very low capacity for change in the form of development. Examples of which are high value landscapes, protected at an international or national level (World Heritage Site/National Park), where the principal management objectives are likely to be protection of the existing character.
High	Areas where the landscape character exhibits a low capacity for change in the form of development. Examples of which are high value landscapes, protected at a national or regional level (Area of Outstanding Natural Beauty), where the principal management objectives are likely to be considered conservation of the existing character.
Medium	Areas where the landscape character exhibits some capacity and scope for development. Examples of which are landscapes, which have a designation of protection at a county level or at non-designated local level where there is evidence of local value and use.
Low	Areas where the landscape character exhibits a higher capacity for change from development. Typically, this would include lower value, non-designated landscapes that may also have some elements or features of recognisable quality, where landscape management objectives include, enhancement, repair and restoration.

Sensitivity	Description
Negligible	Areas of landscape character that include derelict, mining, industrial land or are part of the urban fringe where there would be a reasonable capacity to embrace change or the capacity to include the development proposals. Management objectives in such areas could be focused on change, creation of landscape improvements and/or restoration to realise a higher landscape value.

The magnitude of a predicted landscape impact is a product of the scale, extent or degree of change that is likely to be experienced as a result of the Proposed Development. The magnitude takes into account whether there is a direct physical impact resulting from the loss of landscape components and/or a change that extends beyond the application boundary that may have an effect on the landscape character of the area Table 13-2 refers.

Table 13-2 – Magnitude of Landscape Impacts

Magnitude of Impact	Description
Very High	Change that would be large in extent and scale with the loss of critically important landscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to an extensive change of the landscape in terms of character, value and quality.
High	Change that would be more limited in extent and scale with the loss of important landscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to a considerable change of the landscape in terms of character, value and quality
Medium	Changes that are modest in extent and scale involving the loss of landscape characteristics or elements that may also involve the introduction of new uncharacteristic elements or features that would lead to noticeable changes in landscape character, and quality.
Low	Changes affecting small areas of landscape character and quality, together with the loss of some less characteristic landscape elements or the addition of new features or elements that would lead to discernible changes in landscape character, and quality.
Negligible	Changes affecting small or very restricted areas of landscape character. This may include the limited loss of some elements or the addition of some new features or elements that are characteristic of the existing landscape or are hardly perceivable leading to no material change to landscape character, and quality.

The significance of a landscape impact is based on a balance between the sensitivity of the landscape receptor and the magnitude of the impact. The significance of landscape impacts is arrived at using the following matrix set out in Table 13-3 (overleaf).

Table 13-3 – Impact Significance Matrix

	Sensitivity of Receptor				
Scale/Magnitude	Very High	High	Medium	Low	Negligible
Very High	Profound	Profound-substantial	Substantial	Moderate	Slight
High	Profound-substantial	Substantial	Substantial-moderate	Moderate-slight	Slight-imperceptible
Medium	Substantial	Substantial-moderate	Moderate	Slight	Imperceptible
Low	Moderate	Moderate-slight	Slight	Slight-imperceptible	Imperceptible
Negligible	Slight	Slight-imperceptible	Imperceptible	Imperceptible	Imperceptible
<p>Note: The significance matrix provides an indicative framework from which the significance of impact is derived. The significance judgement is ultimately determined by the assessor using professional judgement. Due to nuances within the constituent sensitivity and magnitude judgements, this may be up to one category higher or lower than indicated by the matrix. Judgements indicated in orange are considered to be 'significant impacts' in EIA terms.</p>					

13.4.1.2 Visual Impact Assessment Criteria

As with the landscape impact, the visual impact of the Proposed Development will be assessed as a function of sensitivity versus magnitude. In this instance, the sensitivity of the visual receptor, weighed against the magnitude of the visual effect.

13.4.1.3 Sensitivity of Visual Receptors

Unlike landscape sensitivity, the sensitivity of visual receptors has an anthropocentric basis. It considers factors such as the perceived quality and values associated with the view, the landscape context of the viewer, the likely activity they are engaged in and whether this heightens their awareness of the surrounding landscape. A list of the factors considered by the assessor in estimating the level of sensitivity for a particular visual receptor is outlined below and used in Table 1-6 below to establish visual receptor sensitivity at each VRP:

13.4.1.4 Susceptibility of Receptors

In accordance with the Institute of Environmental Management and Assessment (“IEMA”) Guidelines for Landscape and Visual Assessment (3rd edition 2013) visual receptors most susceptible to changes in views and visual amenity are:

- *“Residents at home;*
- *People, whether residents or visitors, who are engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focussed on the landscape and on particular views;*
- *Visitors to heritage assets, or to other attractions, where views of the surroundings are an important contributor to the experience;*

- *Communities where views contribute to the landscape setting enjoyed by residents in the area; and*
- *Travellers on road, rail or other transport routes where such travel involves recognised scenic routes and awareness of views is likely to be heightened”.*

Visual receptors that are less susceptible to changes in views and visual amenity include;

- *“People engaged in outdoor sport or recreation, which does not involve or depend upon appreciation of views of the landscape; and*
- *People at their place of work whose attention may be focussed on their work or activity, not their surroundings and where the setting is not important to the quality of working life”.*

13.4.1.5 Values Associated with the View

1. **Recognised scenic value of the view** (County Development Plan designations, guidebooks, touring maps, postcards etc). These represent a consensus in terms of which scenic views and routes within an area are strongly valued by the population because in the case of County Developments Plans, for example, a public consultation process is required;
2. **Views from within highly sensitive landscape areas.** Again, highly sensitive landscape designations are usually part of a county’s Landscape Character Assessment, which is then incorporated within the County Development Plan and is therefore subject to the public consultation process. Viewers within such areas are likely to be highly attuned to the landscape around them;
3. **Primary views from dwellings.** A Proposed Development might be seen from anywhere within a particular residential property with varying degrees of sensitivity. Therefore, this category is reserved for those instances in which the design of dwellings or housing estates, has been influenced by the desire to take in a particular view. This might involve the use of a slope or the specific orientation of a house and/or its internal social rooms and exterior spaces;
4. **Intensity of use, popularity.** This relates to the number of viewers likely to experience a view on a regular basis and whether this is significant at county or regional scale;
5. **Connection with the landscape.** This considers whether or not receptors are likely to be highly attuned to views of the landscape i.e. commuters hurriedly driving on busy national route versus hill walkers directly engaged with the landscape enjoying changing sequential views over it;
6. **Provision of elevated panoramic views.** This relates to the extent of the view on offer and the tendency for receptors to become more attuned to the surrounding landscape at locations that afford broad vistas;
7. **Sense of remoteness and/or tranquillity.** Receptors taking in a remote and tranquil scene, which is likely to be fairly static, are likely to be more receptive to changes in the view than those taking in the view of a busy street scene, for example;
8. **Degree of perceived naturalness.** Where a view is valued for the sense of naturalness of the surrounding landscape it is likely to be highly sensitive to visual intrusion by distinctly manmade features;
9. **Presence of striking or noteworthy features.** A view might be strongly valued because it contains a distinctive and memorable landscape feature such as a promontory headland, lough or castle;

10. **Historical, cultural and / or spiritual significance.** Such attributes may be evident or sensed by receptors at certain viewing locations, which may attract visitors for the purposes of contemplation or reflection heightening the sense of their surroundings;
11. **Rarity or uniqueness of the view.** This might include the noteworthy representativeness of a certain landscape type and considers whether the receptor could take in similar views anywhere in the broader region or the country;
12. **Integrity of the landscape character.** This looks at the condition and intactness of the landscape in view and whether the landscape pattern is a regular one of few strongly related components or an irregular one containing a variety of disparate components;
13. **Sense of place.** This considers whether there is special sense of wholeness and harmony at the viewing location; and
14. **Sense of awe.** This considers whether the view inspires an overwhelming sense of scale or the power of nature.

Those locations which are deemed to satisfy many of the above criteria are likely to be of higher sensitivity. No relative importance is inferred by the order of listing in the Table 13-5. Overall sensitivity may be a result of a number of these factors or, alternatively, a strong association with one or two in particular.

13.4.1.6 Visual Impact Magnitude

The magnitude of visual effects is determined on the basis of two factors; the visual presence (relative visual dominance) of the proposal and its effect on visual amenity.

Visual presence is a somewhat quantitative measure relating to how noticeable or visually dominant the proposal is within a particular view. This is based on a number of aspects, aside from scale in relation to distance. Some of these aspects include the extent and complexity of the view, as well as the degree of existing contextual movement experienced. The backdrop against which the development is presented and its relationship with other focal points or prominent features within the view is also considered. Visual presence is essentially a measure of the relative visual dominance of the proposal within the available vista and is often, though not always, expressed as one of the following terms:

- Minimal;
- Sub-dominant;
- Co-dominant;
- Dominant; and
- Highly dominant.

The magnitude of visual impacts is classified in Table 13-4.

Table 13-4 – Magnitude of Visual Impact

Criteria	Description
Very High	The proposal obstructs or intrudes into a large proportion or critical part of the available vista and is without question the most noticeable element. An extensive degree of visual change will occur within the scene completely altering its character, composition and associated visual amenity

Criteria	Description
High	The proposal obstructs or intrudes into a significant proportion or important part of the available vista and is one of the most noticeable elements. A considerable degree of visual change will occur within the scene substantially altering its character, composition and associated visual amenity
Medium	The proposal represents a moderate intrusion into the available vista and is a readily noticeable element. A noticeable degree of visual change will occur within the scene perceptibly altering its character, composition and associated visual amenity
Low	The proposal intrudes to a minor extent into the available vista and may not be noticed by a casual observer and/or the proposal would not have a marked effect on the visual amenity of the scene
Negligible	The proposal would be barely discernible within the available vista and/or it would not influence the visual amenity of the scene

13.4.1.7 Visual Impact Significance

As stated above, the significance of visual impacts is a function of visual receptor sensitivity and visual impact magnitude. This relationship is expressed in the same significance matrix and applies the same EPA definitions of significance as used earlier in respect of landscape impacts (Table 13-3 refers).

13.4.1.8 Quality and Timescale of Effects

In addition to assessing the significance of landscape effects and visual effects, EPA Guidance for EIAs (2022) requires that the quality of the effects is also determined. This could be negative/adverse, neutral, or positive/beneficial. In the case of new energy / infrastructure developments within rural and semi-rural settings, the landscape and visual change brought about by an increased scale and intensity of built form is seldom considered to be positive / beneficial.

- Landscape and Visual effects are also categorised according to their duration:
- Temporary – Lasting for one year or less;
- Short Term – Lasting one to seven years;
- Medium Term – Lasting seven to fifteen years;
- Long Term – Lasting fifteen years to sixty years; and
- Permanent – Lasting over sixty years.

13.4.2 EXTENT OF STUDY AREA

It is anticipated that the Proposed Development will be difficult to discern due to the surrounding context and nature of the proposal and is not likely to give rise to significant landscape/townscape or visual impacts beyond 2km. As a result, a 2km study area is to be used in this instance with a focus on those receptors within 1km of the Site.

13.5 EXISTING ENVIRONMENT

The existing environment is described in Section 13.6 of this EIAR chapter.

13.6 BASELINE CONDITIONS

The landscape baseline represents the existing landscape context and is the scenario against which any changes to the landscape brought about by the Proposed Development will be assessed. A description of the landscape context of the proposed application site and wider study area is

provided below. Although this description forms part of the landscape baseline, many of the landscape elements identified also relate to visual receptors i.e. places and transport routes from which viewers can potentially see the Proposed Development.

13.6.1 LANDSCAPE CONTEXT

The Site consists of agricultural lands with field boundary hedgerow measuring ca. 15.9 ha and occupies a relatively deep valley running north to south with steep sides to the east and west, with the existing ground level ranging from approximately 40 mOD to 60m OD. The depression which the Site is located runs parallel to the coastline along the east of the study area, bracketed on either side by small hills. To the west (inland) the landform rises slightly to plateau slightly before stepping up to 150mOD these trends further upwards out of the study area to Dunran Hill (343m), while the topography generally rolls towards sea level to the east. There are minor waterways in the central study area, in the form of two small streams, one to the north and one to the south of the Site. The northern stream runs from west to east along the L-5064 road ca. 300 m north of the footprint area. The southern stream (called the Cullenmore Stream) runs from west to east across the southern Application boundary. These streams confluence ca. 600 m to the southeast of the Site and flow southwards into Broad Lough where they confluence with the Vartry river to form the Leitrim River and ultimately discharge to the Irish Sea at Wicklow town.

Along the slight plateau in landform to the west of the Site, the land use is dominated by the N11/M11 corridor. In particular as immediately southwest of the Site, there is the junction with the R772 and associated infrastructure such as on/off ramps, an underpass, and roundabouts on either side of the main corridor. On the far (west) side of the study area, behind the motorway embankment is Coyne's Cross Services, consisting of an Applegreen service station. To the north and south of the Site, smaller local roads traverse the rolling topography to connect with the R761, which passes over the east of the study area in a north/south alignment.

The north of the study area is more densely populated than the south, however this is limited to clusters of residences with spacious surrounds and a high degree of vegetation. The largest cluster is at Coyne's Cross, to the north of the Site, along the N11 corridor, with the southern residences of this cluster the closest to the Site, c. 200m north along the R772. Otherwise, the landcover of the study area is farmland with treelined hedgerows and irregularly shaped fields which follow the rolling topography. The west of the study area is more varied, with land managed by Ashford studios located to the south, with a variety of landcovers and land uses (as required for current film projects). To the northwest, the sides of Dunran Hill feature large areas of conifer plantations.

There is a collection of monuments service points in the surrounds, however the majority of these are not evident from public locations or signposted with associated visitor facilities (parking, signposting, etc). The most intact and visible recorded feature is Dunran Castle, located in the north-western periphery of the study area, however this does not have any of the forementioned facilities, but rather is visible from the L1063 in either direction. Closer to the Site, immediately to the east of the Site, is the vegetated ruin of Kilmartin Church, a RMP protected structure, however this site is not equipped with visitor facilities, or prominently visible from surrounding public areas. Killougher Graveyard, located in the southeast of the study area is more accessible, but is well enclosed by trees and is not visible from the surrounding public areas. As such, these are deemed to be local features.

13.6.2 IDENTIFICATION OF VIEWSHED REFERENCE POINTS AS A BASIS FOR ASSESSMENT

Viewshed Reference Points (VRP's) are the locations used to study the visual impacts of a proposal in detail. It is not warranted to include each and every location that provides a view of a development as this would result in an unwieldy report and make it extremely difficult to draw out the key impacts arising from the Proposed Development. Instead, the selected viewpoints are intended to reflect a range of different receptor types, distances and angles. The visual impact of a Proposed Development is assessed by Macro Works using up to 6 no. categories of receptor type as listed below:

- Key Views (from features of national or international importance);
- Designated Scenic Routes and Views;
- Local Community views;
- Centres of Population;
- Major Routes; and,
- Amenity and heritage features.

VRP's might be relevant to more than one category and this makes them even more valid for inclusion in the assessment. The receptors that are intended to be represented by a particular VRP are listed at the beginning of each viewpoint appraisal. The Viewshed Reference Points selected in this instance are set out in the Table 13-5 and Figure 13-4 below.

Table 13-5 – Outline Description of Selected Viewshed Reference Points (VRPs)

VRP No.	Location	Direction of view
VP1	Timmore Lane north of site	S
VP2	R772 west of site	E
VP3	R772 southwest of site	E/NE
VP4	R772 junction with M11 southwest of site	N/NE

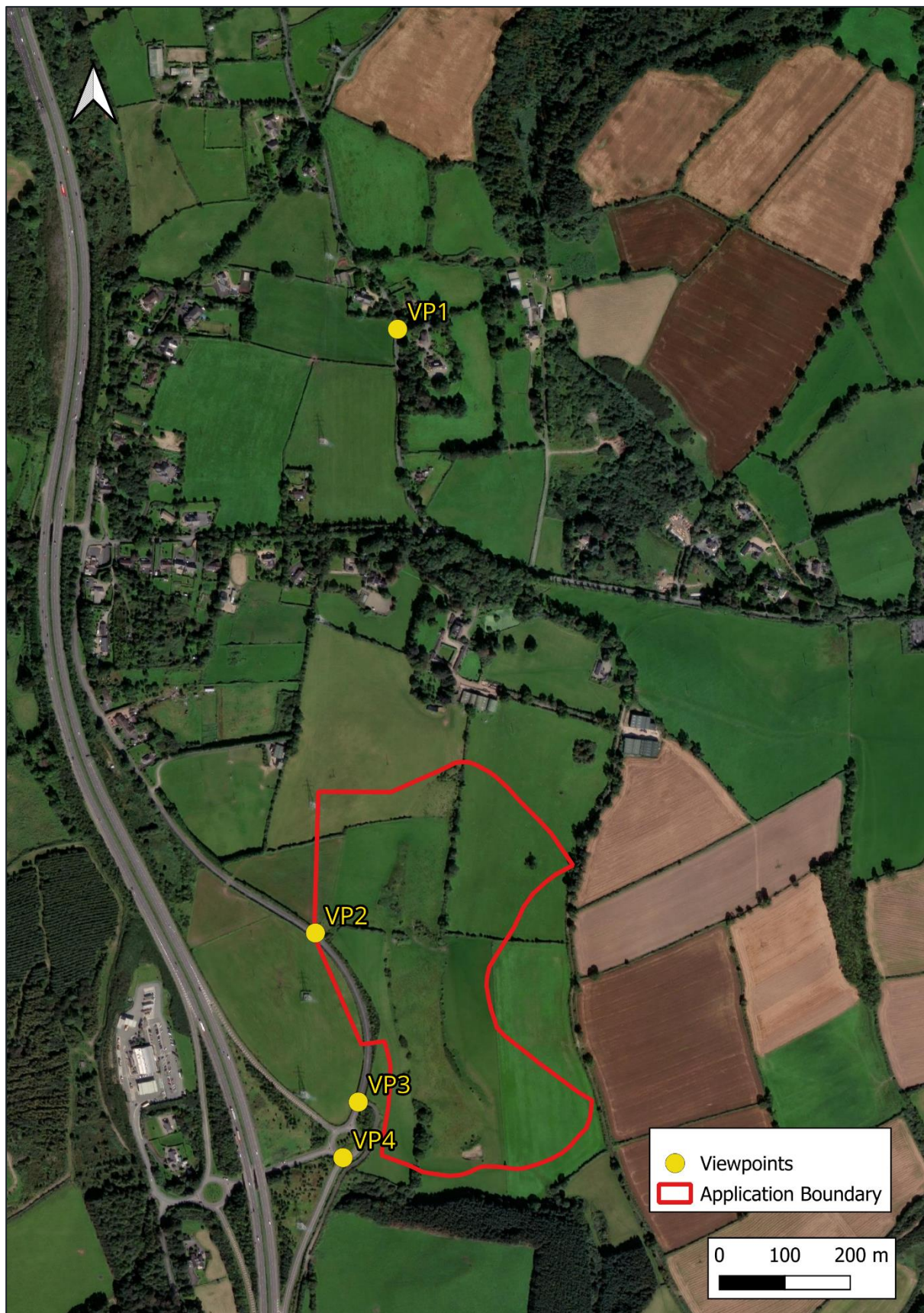


Figure 13-4 - Viewpoint location map

13.7 CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

The development proposals are described in Chapter 3.0 (Project Description) and summarised in Section 13.2 of this EIAR chapter.

13.8 POTENTIAL EFFECTS

13.8.1 LANDSCAPE

13.8.1.1 Landscape Value and Sensitivity

The immediate surrounds of the Site are dominated by the presence of the N11/M11 transport corridor. The wider study area consists of a typical rural landscape of rolling pastoral fields with some pockets of rural tranquillity, it is neither rare nor distinctive, which is reflected in the below average (4 out of 6) landscape classification in the Wicklow Landscape Assessment. The Site and its immediate context are classified with a 'Low' to 'Low to Medium' Sensitivity in the 2016 landscape sensitivity mapping included and 'generally corresponded' the landscape category hierarchy. The M11/N11 national primary route also has 'notable influence on the central study area, extending north and south. While the character of the road corridor itself is not high, the presence of designated views increases the importance of this receptor. It is important to note that views of the Site are relatively contained by the rolling terrain and existing mature vegetation. Furthermore, any views afforded from this section of the route are fleeting and encompass the junction features with the R772 in the immediate vicinity and therefore, are not considered as highly sensitive as other aspects of this route that afford clear views of the coastline and Wicklow Head.

On balance of the reasons outlined above it is considered that whilst the surrounding landscape is that of a typical rolling rural landscape, with some pleasant rural lanes and clusters of residences, the immediate context of the Site and its surrounds is that typical pastoral landscape overlaid by a main transport corridor. While there are higher sensitivity landscapes to the east and west of the study area, these are separated from the central study area by changes in landform, landcover and the other features defined within the Wicklow Landscape Character Assessment. Thus, on the balance of these factors and in accordance with the criteria outline in Table 13-1, the landscape sensitivity is deemed to be 'Medium-Low'.

13.8.1.2 Magnitude of Landscape Effects

The magnitude of landscape effects is considered for the proposed enabling works carried during the works phase, the operation of the soil recovery during the works phase, and the restoration phase (as described in Section 13.1.4).

Works Phase – Enabling Works

Much of the effects during enabling works will relate to the movement of vehicles on sites. It is proposed to remove approximately 140 m of fence and hedgerow from the field opposite the Site entrance to facilitate sightlines at the proposed site entrance. The infilling operations will also require the removal of existing hedgerows and occasional trees within the valley fill area². The construction of the features required to operate the soil recovery facility (i.e., internal

² The restoration of the Site will include for planting of hedgerows and trees once suitable fill levels are reached.

road, office and welfare facilities, etc) will also feature as a concentration of movement and tool use. After the initial site preparation, the ongoing movement of earthmoving equipment and deliveries in the soil recovery facility operational activities carried out within the works phase will be the most notable change. These are considered in the following section 'Works Phase – Soil Recovery Facility Operation'.

In terms of the physical landscape, the aforementioned enabling works activities will result in alterations to the existing topography and natural drainage of the Site. The most notable interventions relate to the construction of the Site facilities, which will involve the movement of (relatively) small areas of soil, with stripped topsoil stored for later reinstatement. In addition, there will be an increase in site activity, which will involve HGV traffic travelling to and from the Site. While the N11/M11 route is already a busy haulage route, the R772 is secondary to this and therefore this will represent an increase in this type of vehicle in the immediate surrounds. The potential for this development to noticeably alter the landscape character is limited by the fact that the development is located in close proximity to the primary access route, with no residences of receptors located between the proposed access and existing M11 junction. Nevertheless, some of the proposed construction works will be a noticeable feature from the immediate surrounds of the Site, especially from the nearest sections of the R772 to the Site.

On the basis of the reasons outlined above, the magnitude of landscape effects is deemed to be 'Medium' within the immediate surrounds of the Site, which relates to the more rural character section of the R772 to the northwest. However, this rapidly reduces to 'Low' and 'Negligible' in the wider surrounds of the study area where visibility of additional movement of construction activity is likely to be very limited and fleeting. In combination with the 'Medium-Low' landscape sensitivity designation outlined above, the significance of impacts is deemed to be 'Moderate-Slight' within the immediate surrounds of the Site, however this quickly reduces to 'Slight-Imperceptible' and 'Imperceptible' within the wider study area where construction activities will be barely discernible and are therefore considered to be **Not Significant**. The quality of the effects will be Negative.

Works Phase – Soil Recovery Facility Operation

The operational life of the soil recovery facility will be up to 10 years. The most notable operation phase effects relate to the movement of HGVs to and from the Site to import c into the Site. This will involve the movement of HGVs between the N11/M11 and R772/Coynes Cross Road to the existing gateway, which will be noticed along the nearest sections of the R772. As noted in the discussion of the enabling works effects in the section above, the movement of HGVs will not generate any notable landscape effects on the surrounding regional and national roads, as HGV traffic is not uncommon in the vicinity of the Site.

The effects from the operation of the soil recovery facility represent the introduction of new land uses. As with the enabling works effects, the most notable effects will occur in the immediate surrounds of the proposed access, between the N11/M11 and site entrance. However, whilst the deposition of clean soil and stone within the existing landform in the Site also has the potential to generate some additional impacts, visibility of the Site is generally limited to immediate surrounds of the Site, and in many cases, activity within the Site will be screened from the nearest local receptors, which diminishes the potential for effects to occur.

On balance of the factors discussed above, it is considered that the magnitude of landscape impact within the immediate context is 'Medium-Low'. However, this rapidly reduces to 'Low-Negligible' and

'Negligible' in the wider surrounds of the study area where visibility of operation activities is likely to be very limited. With reference to the significance graph (Table 13-3 refers), the 'Medium-Low' landscape sensitivity designation outlined above, coupled with the 'Medium-Low' magnitude of landscape impact during the operation of the sil recovery facility is considered to result in an overall significance of no greater than 'Moderate-Slight' within the immediate surrounds of the Site. Nevertheless, this quickly reduces to 'Slight' and 'Imperceptible' within the wider study area where operational stage activities will be barely discernible and are therefore considered to be **Not Significant**. The quality of the effects will be Negative.

Restoration Phase.

The restoration phase of the Proposed Development will commence as the fill reaches final topographical levels and will comprise reinstatement of the stored topsoil and subsequent seeding and hedgerow planting to establish a habitat similar to that which existed prior to the Proposed Development. Once the restoration phase is fully complete, and the proposed hedgerow and pasture cover has established, it will likely be difficult to discern where the existing landform was located. Thus, it is considered that the restoration phase will result in a 'Low' magnitude landscape impact. Coupled with the 'Medium-Low' landscape sensitivity, is considered to result in an overall significance of no greater than 'Slight' and the quality of the restoration phase effects will be Positive/Neutral. Effects are therefore considered to be **Not Significant**.

13.8.2 VISUAL

13.8.2.1 Sensitivity of Visual Receptors

The analysis of visual receptor sensitivity at viewshed reference points is provided in Table 13.6 (overleaf).

Table 13.6 – Analysis of Visual Receptor Sensitivity at Viewshed Reference Points

Strong association	Moderate association	Mild association	Negligible association	

Values associated with the view	VP1	VP2	VP3	VP4
Susceptibility of viewers to changes in views				
Recognised scenic value of the view				
Views from within highly sensitive landscape areas				
Primary views from residences				
Intensity of use, popularity (number of viewers)				
Viewer connection with the landscape				
Provision of vast, elevated panoramic views				
Sense of remoteness / tranquillity at the viewing location				
Degree of perceived naturalness				
Presence of striking or noteworthy features				
Sense of Historical, cultural and / or spiritual significance				
Rarity or uniqueness of the view				
Integrity of the landscape character within the view				
Sense of place at the viewing location				
Sense of awe				
Overall sensitivity assessment	ML	ML	ML	ML
N = Negligible; L = low sensitivity; ML = medium-low sensitivity M = medium sensitivity; HM = High-medium sensitivity; H = high sensitivity; VH = very high sensitivity				

13.8.2.2 Magnitude of Visual Effects

The assessment of visual impacts at each of the selected viewpoints is aided by photomontages of the Proposed Development. Photomontages are a ‘photo-real’ depiction of the scheme within the view utilising a rendered three-dimensional model of the development, which has been geo-referenced to allow accurate placement and scale. For each viewpoint, the following images have been produced:

- Existing view.
- Pre-mitigation view.
- Montage view with mitigation established.

Table 13-7 – Assessment of visual effects

VP NO.	EXISTING VIEW	VP SENSITIVITY	VISUAL IMPACT MAGNITUDE (OPERSTIONAL & RESTORATION PHASE)	OPERATIONAL PHASE SIGNIFICANCE / QUALITY / DURATION OF IMPACT	RESTORATION PHASE SIGNIFICANCE / QUALITY / DURATION OF IMPACT
VP1	Timmore Lane north of site – This is a highly enclosed view down a rural lane north of the Site, with hedgerows and established trees containing views towards to the coastline to the left/east. Inland, to the right/west of the depicted view, features rolling landform and high voltage lines which extend into the distance. This is backed by conifer plantations and taller vegetation along the skyline, with snippets of roiling hills viewed into the distance.	Medium-low	The proposal will be screened by vegetation and landform from this location. Thus, the magnitude of visual impact is deemed Negligible, and the quality of effect is deemed Neutral.	Imperceptible / Neutral / Medium Term	Imperceptible / Neutral / Permanent
VP2	R772 west of site – This is a locally elevated view afforded from the R772 road corridor. The depicted view is oriented to the east and extends across the existing pasture cover of the Site and areas of scrub to the south (right of the depicted view) with the R772 road corridor extending in the periphery of the view. The view is contained in the distance by further low rolling ridges cloaked in agricultural farmland and a tree lined hedgerow. Between and over this	Medium-low	The proposed operational stage works will be clearly visible from this location to the north (left of the depicted view). In particular the access, weigh bridge and welfare blocks, creating a cluster of built form that differs from the rural surrounds. The extent of landform change will progressively visible as the fill operation is completed, introducing further contrasting landcover. However, this is mitigated by the receptors of this view being limited to those using the road corridor, who will experience fleeting views from the gate and does not include any stationary or residential receptors, and only when	Moderate / Negative/ Medium Term	Slight-Imperceptible / Positive/neutral / Permanent

VP NO.	EXISTING VIEW	VP SENSITIVITY	VISUAL IMPACT MAGNITUDE (OPERSTIONAL & RESTORATION PHASE)	OPERATIONAL PHASE SIGNIFICANCE / QUALITY / DURATION OF IMPACT	RESTORATION PHASE SIGNIFICANCE / QUALITY / DURATION OF IMPACT
	vegetation, snippets of the ocean are visible along the horizon.		travelling south. Thus, the operational phase magnitude of visual impact is Medium. Once fully restored, a brief view of the grassed landform is briefly afforded view by this view. The reinstated lands are partially visible beyond the existing landform in the foreground. Once fully reinstated, the lands are unlikely to draw the eye and will visually blend with the surrounding pastoral landscape. While there is a slight increase in the mid-ground ridgeline/landform which will partially screen the distant rural vegetation, there is no additional screening of views to the ocean. The reinstated lands will also not break the existing ridgeline that rises beyond the reinstated lands. On balance of the above reasons, the magnitude of visual impact during the restoration phase is deemed Low-negligible and the quality of effect is deemed Positive/neutral.		
VP3	R772 southwest of site – As with VP2, this view is afforded through a gateway, providing a wider than usual degree of visibility in order to represent the worst-case scenario. The central foreground of the view overlooks and sealed accessway, lined by gorse scrub and concrete post and rail fence. Over and through these intervening features are views	Medium-low	The proposed operational stage works will be partially visible from this location, as the extent of landform change and vegetation removal progresses over the Site. This will initially present as disturbed ground associated with vegetation removal, followed by movement of vehicles and finally exposed soil/graded surfaces. As above, this is mitigated by the limited number and duration of viewers. With a slight increase from this location (relative to VP2) as it is	Moderate-Slight / Negative/ Medium Term	Slight-Imperceptible / Positive/neutral / Permanent

VP NO.	EXISTING VIEW	VP SENSITIVITY	VISUAL IMPACT MAGNITUDE (OPERSTIONAL & RESTORATION PHASE)	OPERATIONAL PHASE SIGNIFICANCE / QUALITY / DURATION OF IMPACT	RESTORATION PHASE SIGNIFICANCE / QUALITY / DURATION OF IMPACT
	into the Site itself clearly showing the lower elevation area/subtle valley located to the southern extent of the proposal site.		<p>representative of the adjacent off-ramp from the N11. On balance, taking account of the lack of views to the access and weigh bride/welfare blocks, the operational phase magnitude of visual impact is Medium-Low.</p> <p>Once fully restored, the key difference will be the increase in foreground elevation, which reduces the perceived 'rolling rural' nature of the view. While this difference is apparent in the montages, once the landcover is fully reinstated, the change is unlikely to draw the eye and will visually blend with the surrounding landscape. The subtle rolling ridgeline along the horizon will not be obscured or changed. As such, the restoration phase is deemed Low-negligible and the quality of effect is deemed Positive/neutral.</p>		
VP4	R772 junction with M11 southwest of site – This is a relatively open view, located at the junction to the southwest of the Site, where the R772 passes under the N11/M11 and is a four-way junction of users leaving or entering the motorway, or alternatively traveling along the R772. The foreground is covered by the sealed roadway, with the road island within the roundabout featuring small trees which partially obscure views north. The Site itself is clearly visible	Medium-low	The primary visual impact from this location will be the change in landcover and disturbance as new material is introduced to the Site. The built features of the operational stage will not be visible. As the proposed fill process nears completion, the modified landform/surface and material will progressively increase visibility. Finally, the landform will present as a more uniform elevation north/south across the depicted view, visible through the gap in vegetation on the far side of the road, and prior to resurfacing and seeding will contrast with the surrounds in terms of a lack of vegetation cover. Thus, the	Moderate-Slight / Negative / Medium Term	Slight-Imperceptible / Positive/neutral / Permanent

VP NO.	EXISTING VIEW	VP SENSITIVITY	VISUAL IMPACT MAGNITUDE (OPERSTIONAL & RESTORATION PHASE)	OPERATIONAL PHASE SIGNIFICANCE / QUALITY / DURATION OF IMPACT	RESTORATION PHASE SIGNIFICANCE / QUALITY / DURATION OF IMPACT
	to the northeast, where the low road barrier and scrub allow clear views across the fields towards the coast. To the north and south of this section however, views are screened by vegetation along the road corridor or intervening landscape. The horizon is punctuated by trees along the low hedgerow which lines the far field boundary.		operational phase magnitude of visual impact is Medium-Low. Following the establishment of mitigation/vegetation cover, the Site will be hard to distinguish from the surrounds, as it blends into the distant field surface and into the bordering hedgerow. The extent of landform change is subtle from this location due to being clearly set below the viewer eye level and allowing more visual context to the horizon. Therefore, the deemed Low-Negligible and the quality of effect is deemed Positive/neutral.		

13.9 DO NOTHING SCENARIO

In the do-nothing scenario, the Site is likely to remain in grazing land use, consistent with the described 'existing' conditions, above.

13.10 MITIGATION AND MONITORING

13.10.1 MITIGATION MEASURES

The main mitigation by avoidance measure employed in this instance is the siting of the Proposed Development in a robust rural setting that is currently overlaid by anthropogenic influences such as a major route corridor and existing rural land uses and built form (to the north).

The final mitigation of the infill will be reinstatement of topsoil, seeding and planting to establish a pastoral landcover similar to that which existed prior to works. Once fully established, the grassland landcover will blend with the surrounding pastoral character of the local landscape.

13.10.2 MONITORING

No ongoing monitoring is deemed necessary.

13.11 RESIDUAL EFFECTS

As outlined above, there is no specific landscape and visual mitigation proposed. The Site will be re-vegetated with a grass cover similar to existing (noting that stripped topsoil will be stockpiled to allow for existing seed bank to be conserved and reinstated in the restoration of the Site) and as presented in the photomontages used within the potential effects sections. Therefore, it is considered that the potential effects outlined above will not change following measures set out above, and there is no additional assessment required for residual impact.

13.12 CUMULATIVE EFFECTS

The cumulative effects associated with other permitted / under construction third-party developments have been considered in Chapter 15.0 of this EIAR. It is considered that there is no potential for cumulative impacts.

13.13 DIFFICULTIES ENCOUNTERED

There were no difficulties encountered in the preparation of this chapter.

13.14 REFERENCES

Environmental Protection Agency (EPA) publication 'Guidelines on the Information to be contained in Environmental Impact Statements (2022) and the accompanying Advice Notes on Current Practice in the Preparation of Environmental Impact Statements (Draft 2015);

Institute of Environmental Management and Assessment ("IEMA") Guidelines for Landscape and Visual Assessment (3rd edition 2013)

Landscape Institute and the Institute of Environmental Management and Assessment publication entitled Guidelines for Landscape and Visual Impact Assessment (2013).

Wicklow County Development Plan 2022-2028, Volume 1 Written Statement (As altered September 2022), Ministerial Direction 21 February 2023.



Wicklow County Development Plan 2016-2022, Appendix 5 - Landscape Assessment.

Appendix 13A

PHOTOMONTAGES



Kilmartin Infill

Photomontages

This book contains imagery for the viewpoints chosen for the LVIA study

August 2023



INDEX

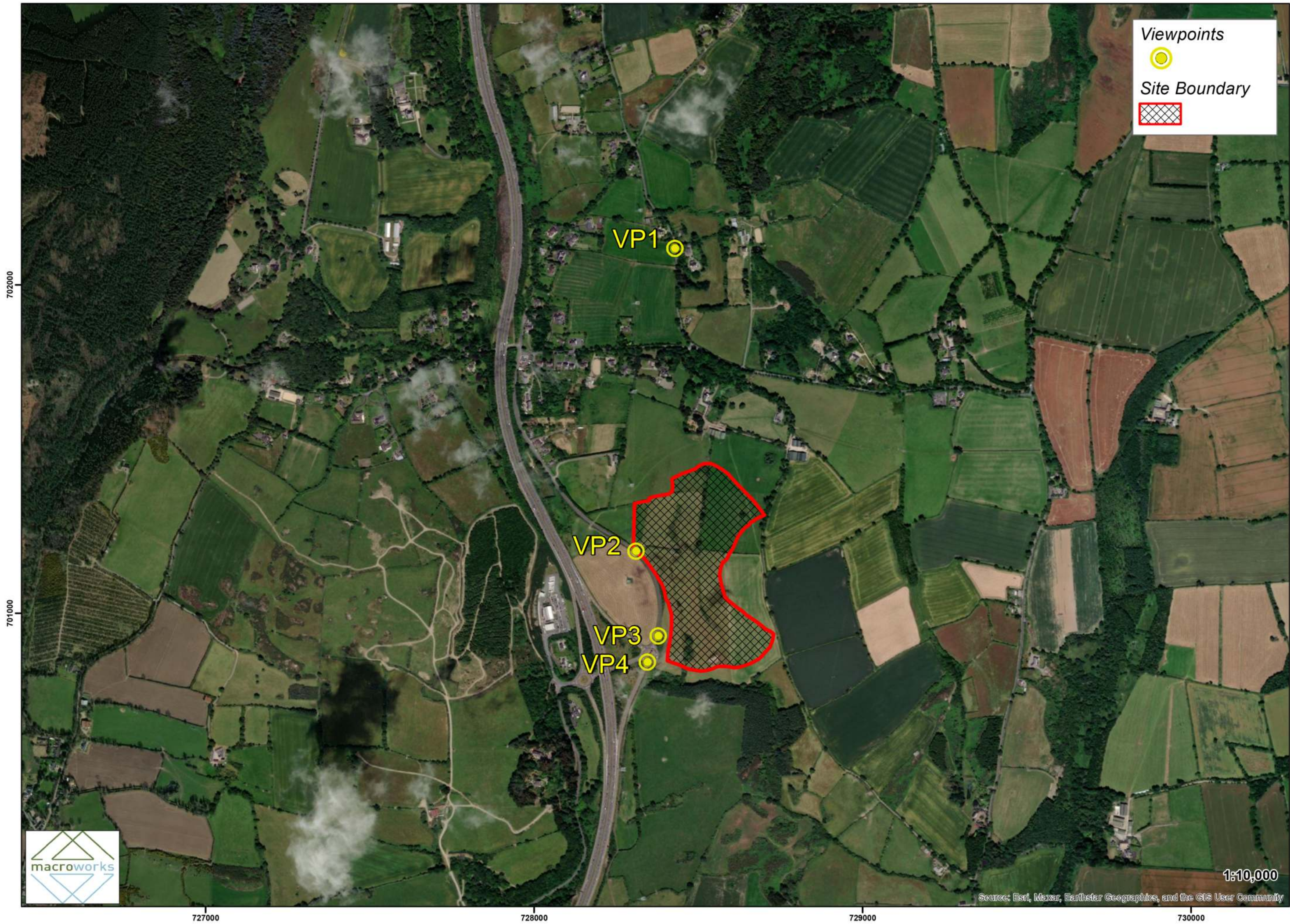
Viewpoint 1 - Existing View + Montage View
NB - There is no Montage for this viewpoint

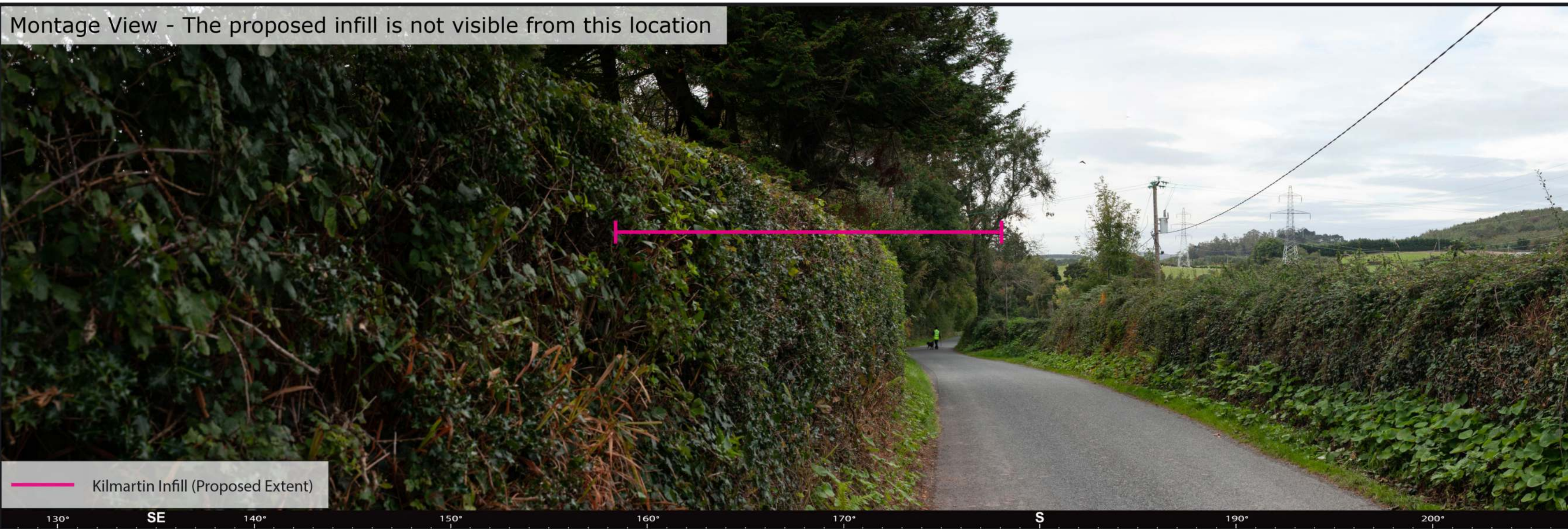
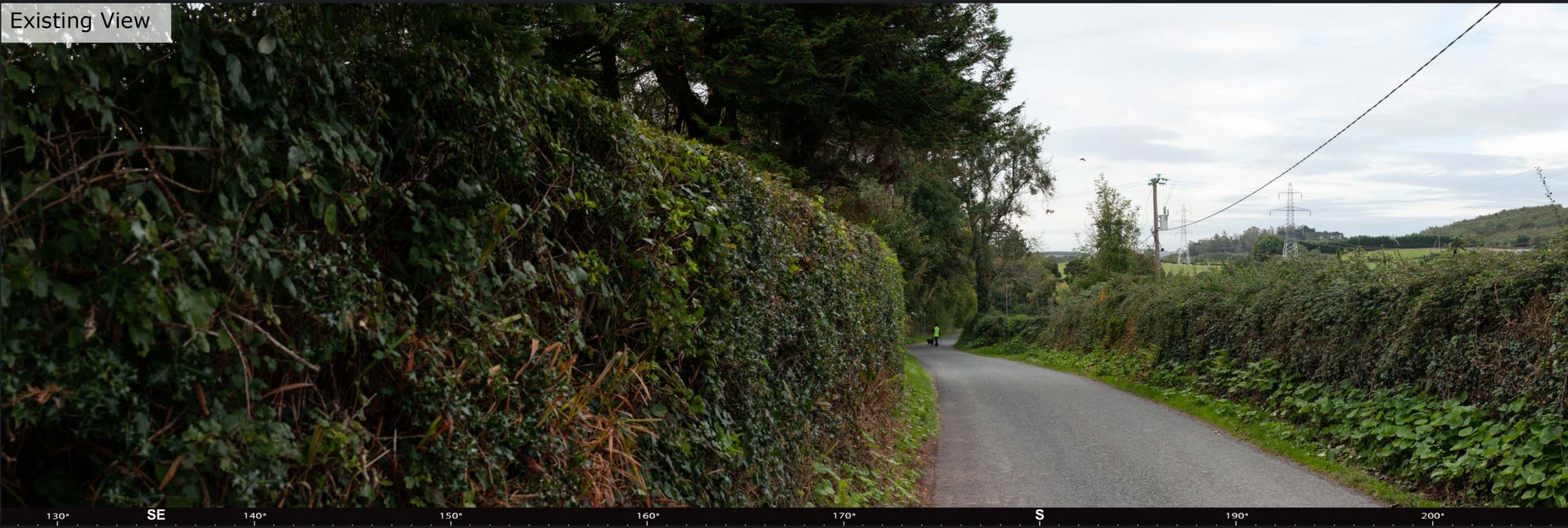
Viewpoint 3 - Existing View + Montage View
Established Montage View

Viewpoint 2 - Existing View + Montage View
Established Montage View

Viewpoint 4 - Existing View + Montage View
Established Montage View

Viewpoint locations selected for the Kilmartin Infill project





These are 80° panoramic montages captured and presented in accordance with the guidance set by the British Landscape Institute 2011 - Advice Note 01/11.

To view these panoramas on a flat surface one must move from left to right along its length whilst maintaining a perpendicular viewing direction and the specified correct viewing distance of 30cm. To see this entire panoramic scene in reality would necessitate turning one's head through 40°.

Easting (ITM):	728428	Lens:	50mm / Full Frame Sensor	Date:	11/10/2022
Northing (ITM):	702112	Camera:	Canon 1-D Mark II digital SLR	Time:	10:06
Direction of View	167° E of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	80°				





These are 120° panoramic montages captured and presented in accordance with the guidance set by the British Landscape Institute 2011 - Advice Note 01/11.

To view these panoramas on a flat surface one must move from left to right along its length whilst maintaining a perpendicular viewing direction and the specified correct viewing distance of 30cm. To see this entire panoramic scene in reality would necessitate turning one's head through 80°.

Easting (ITM):	728309	Lens:	50mm / Full Frame Sensor	Date:	11/10/2022
Northing (ITM):	701189	Camera:	Canon 1-D Mark II digital SLR	Time:	09:44
Direction of View	80° E of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	120°				





These are 120° panoramic montages captured and presented in accordance with the guidance set by the British Landscape Institute 2011 - Advice Note 01/11.

To view these panoramas on a flat surface one must move from left to right along its length whilst maintaining a perpendicular viewing direction and the specified correct viewing distance of 30cm. To see this entire panoramic scene in reality would necessitate turning one’s head through 80°.

Easting (ITM):	728309	Lens:	50mm / Full Frame Sensor	Date:	11/10/2022
Northing (ITM):	701189	Camera:	Canon 1-D Mark II digital SLR	Time:	09:44
Direction of View	80° E of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	120°				





These are 160° panoramic montages captured and presented in accordance with the guidance set by the British Landscape Institute 2011 - Advice Note 01/11.

To view these panoramas on a flat surface one must move from left to right along its length whilst maintaining a perpendicular viewing direction and the specified correct viewing distance of 30cm. To see this entire panoramic scene in reality would necessitate turning one's head through 120°.

Easting (ITM):	728377	Lens:	50mm / Full Frame Sensor	Date:	11/10/2022
Northing (ITM):	700931	Camera:	Canon 1-D Mark II digital SLR	Time:	09:40
Direction of View	88° E of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	160°				



These are 160° panoramic montages captured and presented in accordance with the guidance set by the British Landscape Institute 2011 - Advice Note 01/11.

To view these panoramas on a flat surface one must move from left to right along its length whilst maintaining a perpendicular viewing direction and the specified correct viewing distance of 30cm. To see this entire panoramic scene in reality would necessitate turning one's head through 120°.

Easting (ITM):	728377	Lens:	50mm / Full Frame Sensor	Date:	11/10/2022
Northing (ITM):	700931	Camera:	Canon 1-D Mark II digital SLR	Time:	09:40
Direction of View:	88° E of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	160°				



These are 120° panoramic montages captured and presented in accordance with the guidance set by the British Landscape Institute 2011 - Advice Note 01/11.

To view these panoramas on a flat surface one must move from left to right along its length whilst maintaining a perpendicular viewing direction and the specified correct viewing distance of 30cm. To see this entire panoramic scene in reality would necessitate turning one's head through 80°.

Easting (ITM):	728344	Lens:	50mm / Full Frame Sensor	Date:	11/10/2022
Northing (ITM):	700851	Camera:	Canon 1-D Mark II digital SLR	Time:	09:27
Direction of View	58° E of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	120°				





These are 120° panoramic montages captured and presented in accordance with the guidance set by the British Landscape Institute 2011 - Advice Note 01/11.

To view these panoramas on a flat surface one must move from left to right along its length whilst maintaining a perpendicular viewing direction and the specified correct viewing distance of 30cm. To see this entire panoramic scene in reality would necessitate turning one’s head through 80°.

Easting (ITM):	728344	Lens:	50mm / Full Frame Sensor	Date:	11/10/2022
Northing (ITM):	700851	Camera:	Canon 1-D Mark II digital SLR	Time:	09:27
Direction of View	58° E of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	120°				

