

East Meath - North Dublin Grid Upgrade Environmental Impact Assessment Report (EIAR): Volume 2

Chapter 18 – Landscape and Visual

EirGrid

March 2024



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18. Landscape and Visual

18.1 Introduction

This Chapter presents the assessment of the likely potential landscape and visual impacts of the East Meath - North Dublin Grid Upgrade (hereafter referred to as the Proposed Development) during the Construction and Operational Phases. A full description of the Proposed Development is provided in Chapter 4 (Proposed Development Description) in Volume 2 of this Environmental Impact Assessment Report (EIAR).

Although closely linked, landscape and visual impacts are assessed separately.

Landscape Impact Assessment relates to assessing impacts of the Proposed 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 relates to assessing impacts of the Proposed 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 the 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).

18.2 Methodology

The methodology employed for this EIAR assessment is as follows:

- A desk-based study to establish an appropriate study area, relevant landscape and visual designations in the appropriate County Development Plans, 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 Proposed Development;
- Fieldwork to establish the landscape character of the baseline 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;
- 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; and
- Assessment where mitigation measures are proposed to reduce potential impacts and an estimation of residual impacts once the mitigation planting has become established.

18.2.1 Study Area

According to the Landscape Institute and the Institute of Environmental Management and Assessment (IEMA) Guidelines for Landscape and Visual Impact Assessment 3rd edition (hereafter referred to as the GLVIA) (Landscape Institute and IEMA 2013), the first step in the process of landscape and visual impact assessment (LVIA) is to determine a bespoke study area which is appropriate to the combination of the development type and the receiving landscape and visual context. A 500m (metre) buffer study area was applied to either side of the proposed cable route, substation upgrades and Temporary Construction Compounds (TCCs) and Horizontal Directional Drilling (HDD) Compounds as, based on professional experience and judgement, it is anticipated that significant landscape or visual impacts are highly unlikely beyond this 1km (kilometre) wide swathe due to the nature of the proposed infrastructure and the transient nature of the proposed construction works (refer to Image 18.1 and Figure 18.1 in Volume 3 of this EIAR).

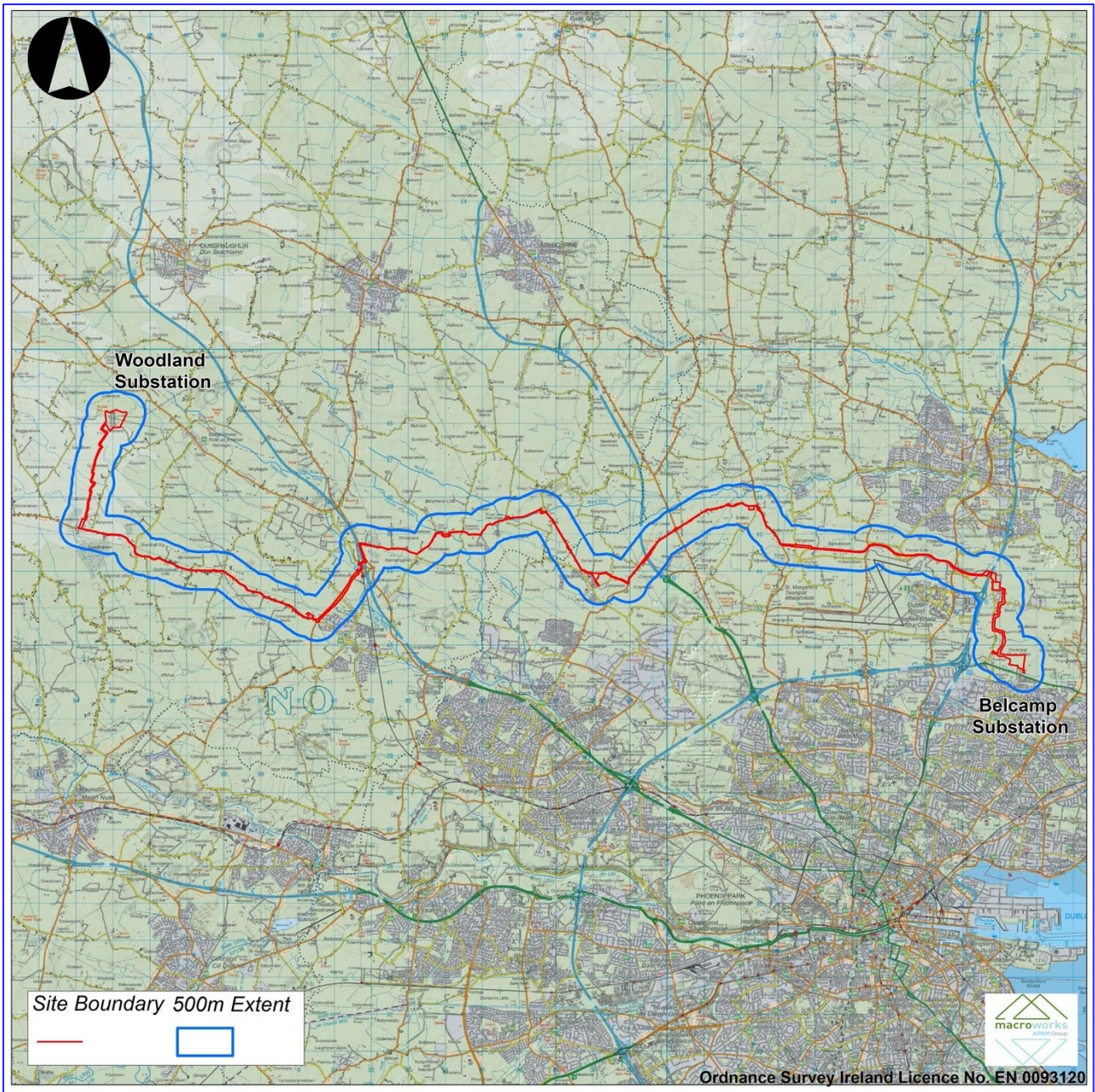


Image 18.1: Study Area

18.2.2 Relevant Guidelines, Policy and Legislation

This assessment was carried out in line with the GLVIA (Landscape Institute and IEMA 2013) and in compliance with the Environmental Protection Agency (EPA) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (hereafter referred to as the EPA Guidelines) (EPA 2022). The Meath County Council (MCC) Meath County Development Plan 2021 – 2027 (MCC 2021) and the Fingal County Council (FCC) Fingal Development Plan 2023 – 2029 (FCC 2023) were also reviewed.

18.2.3 Data Collection and Collation

18.2.3.1 Desk Study

The desk-based study element of data collection involved a review of project documents and Geographical Information System (GIS) datasets for the Proposed Development. These were read against a backdrop of aerial photography and topographical information. GIS datasets included highly sensitive landscape area scenic designations, and these were cross-checked against the relevant County Development Plans, in the interest of thoroughness. This was undertaken on 18 May 2023 (noting there have been no amendments to the relevant development plans since this cross-check was undertaken).

Data to inform the assessment was extracted from the following data sources on 18 May 2023:

- Meath County Development Plan 2021 - 2027 (MCC 2021);
- Fingal Development Plan 2023 – 2029 (FCC 2023);
- National Parks and Wildlife Service mapping (NPWS 2023);
- The Heritage Council – Heritage mapping (Heritage Council 2023);
- Ordnance Survey Ireland (OSI) maps (OSI 2023);
- Coillte Recreation map (Coillte 2023);
- Discover Ireland (Discover Ireland 2023);
- The National Inventory of Architectural Heritage (NIAH) survey data (NIAH 2021); and
- Sport Ireland Trails (Sport Ireland 2023).

18.2.3.2 Field Survey

Fieldwork was undertaken on 29 May 2023 as part of the preparation of this assessment. This involved reviewing and recording aspects of landscape character within the study area and at selected locations in relation to the visual baseline. This was undertaken to establish an understanding of the landscape and visual context of the Proposed Development and to validate the County Landscape Character Assessments. Fieldwork was undertaken from publicly accessible roads / land. High resolution photography for the verified photomontages was captured at each of the selected viewshed reference points on this date, apart from VP4. VP4 was selected as a viewpoint location within the LVIA undertaken by Macro Works of the Greater Dublin Drainage Project. The location of VP4 was not accessible on 29 May 2023, so the photography captured on 12 June 2018 was used as the basis of the photomontage to represent the Proposed Development from there.

18.2.4 Appraisal Method for the Assessment of Impacts

Assessment of impacts was undertaken in accordance with the GLVIA (Landscape Institute and IEMA 2013), from which the methodology is derived and described herein.

18.2.4.1 Landscape Impact Assessment Criteria

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

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

The sensitivity of the landscape to change is the degree to which a particular landscape receptor (Landscape Character Area or landscape element) can accommodate changes or new elements without unacceptable

detrimental effects to its essential characteristics. Landscape value and sensitivity are classified using the criteria set out in Table 18.1.

Table 18.1: 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, 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. |
| 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 potential 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 accounts for whether there is a direct physical impact resulting from the loss of landscape components and / or a change that extends beyond the application site boundary that may have an effect on the landscape character of the area. The magnitude of landscape impacts is classified in Table 18.2.

Table 18.2: Magnitude of Landscape Impacts

| Magnitude | 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 overall 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 an overall 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 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. |
| 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. |

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 matrix set out in Table 18.3.

Table 18.3: 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 |

Note: For the purposes of this Chapter, judgements deemed 'substantial' and above are considered to be equivalent to or greater than 'significant impacts'.

18.2.4.2 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 impact.

18.2.4.2.1 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:

1. Susceptibility of receptors - In accordance with the GLVIA (Landscape Institute and IEMA 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 the use of public rights of way, whose attention or interest is likely to be focused 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
 - People travelling on road, rail or other transport routes, where such travel involves recognised scenic routes and awareness of views, is likely to be heightened.
2. 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 focused on their work or activity, not their surroundings, and where the setting is not important to the quality of working life.
3. 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;
4. 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 a public consultation process. Viewers within such areas are likely to be highly attuned to the landscape around them;
5. 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;
 6. Intensity of use, and popularity. This relates to the number of viewers likely to experience a view on a regular basis and whether this is significant at a County or Regional scale;
 7. 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 a busy national route versus hill walkers directly engaged with the landscape enjoying changing sequential views over it);
 8. 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;
 9. 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;
 10. 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;
 11. 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;
 12. 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;
 13. 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;
 14. 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;
 15. Sense of place. This considers whether there is a special sense of wholeness and harmony at the viewing location; and
 16. 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. Overall sensitivity may be a result of a number of these factors or, alternatively, a strong association with one or two in particular.

18.2.4.2.2 Visual Impact Assessment Magnitude

The magnitude of visual impacts is determined based on two factors: the proposal's visual presence (relative visual dominance), and its effect on visual amenity. The magnitude of visual impacts is classified in Table 18.4.

Table 18.4: Magnitude of Visual Impact

| Magnitude of Impact | 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. |
| 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. |

18.2.4.2.3 Visual Impact Significance

As stated in Section 18.2.4.2, 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 Guidelines' definitions (EPA 2022) of significance, as used earlier in respect of landscape impacts (Table 18.3).

18.2.4.3 Quality and Timescale Impacts

In addition to assessing the significance of landscape impacts and visual impacts, the EPA Guidelines (EPA 2022) require that the quality of the impacts is also determined. This could be negative / adverse, neutral, or positive.

Landscape and visual impacts 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 15 years;
- Long Term – Lasting 15 years to 60 years; and
- Permanent – Lasting over 60 years.

18.3 Baseline Environment

18.3.1 Extent of Study Area

The landscape is the visible environment in its entirety, comprised of both natural and built elements including topography, water bodies, vegetation, wildlife habitats, open spaces, buildings and structures. Landscape and visual sensitivities considered include statutory and non-statutory landscape designations, natural features, Landscape Character Areas, notable deciduous trees of woodland, amenities and historic landscapes. Chapter 4 (Proposed Development Description) in Volume 2 of this EIAR presents a full description of the Proposed Development.

The proposed cable route will commence at the existing Woodland Substation near Batterstown, County Meath, and will terminate at the extension to the existing Belcamp Substation, in the townlands of Clonshagh and Belcamp in Fingal in County Dublin. A portion of the proposed cable route between Woodland and Belcamp Substations will be located within County Meath and will fall under the remit of the Meath County

Development Plan 2021 – 2027 (MCC 2021), and the remaining portion of the proposed cable route will be located within Fingal in County Dublin and will fall under the remit of the Fingal Development Plan 2023 – 2029 (FCC 2023). Therefore, these County Development Plans were reviewed for this assessment. The review of these County Development Plans considered Landscape Character Areas, landscape elements and scenic designations.

In general, the Proposed Development will be located within a robust, modified landscape that is partially contained in well-developed peri-urban areas, alongside low rolling pastoral fields. Due to the location of the study area, on the peripheries of Dublin City and its hinterland, it presents as a highly modified landscape, with a slight pastoral aesthetic, which is more apparent toward the western and north-western portions of the study area within County Meath. The sections of the proposed cable route that will be located within County Dublin read as a typical modified landscape under anthropogenic influence, whilst the sections of the proposed cable route that will be located within County Meath read as a typical productive rural landscape that is not particularly rare or distinctive at a National or Regional scale.

18.3.2 Landform and Drainage

The study area has a gently undulating topography that is slightly more elevated to the west of Dublin Airport, and gradually increases toward the more inland areas (west / north-west). Watercourses in the area generally drain in an easterly direction. The most notable watercourse in the study area is the River Tolka which flows through the western portion of the study area, through Dunboyne, then Mulhuddart, through North Dublin, and eventually into Dublin Bay.

18.3.3 Vegetation and Land Use

A large proportion of the study area is occupied by agricultural fields. Field patterns are generally composed of small to medium sized fields demarcated by mature hedgerows. Outside of agricultural land use, the predominant land use is urban, in the form of built-up residential areas, and industrial estates in and around Dublin Airport and surrounding Dunboyne Village.

18.3.4 Centres of Population and Houses

The greatest population densities within the study area are in the settlements of The Baskins, along Baskin Lane, to the east of Dublin Airport, and at Dunboyne Village. There are some smaller cross road settlements present, in the form of isolated housing estates, alongside one-off houses dispersed throughout the study area, generally spread along the local roads. It is also of note that there are numerous planning applications in the vicinity of the Proposed Development, as detailed in Chapter 21 (Cumulative Impacts and Environmental Interactions) in Volume 2 of the EIAR, and in the Planning Report, which is a standalone document in this planning application pack.

18.3.5 Transport Routes

The M1, M2 and M3 Motorways are the most significant transport routes that pass through the study area. Several regional roads also fall within the study area, namely the R156, R157, R122, R121 and R108 Regional Roads. The Dublin to M3 Parkway / Dunboyne rail line also passes through the study area. The proposed cable route will have varying levels of interaction with each of these transport routes, as well as several smaller local roads that traverse the study area.

18.3.6 Tourism, Heritage and Public Amenities

There are no notable landscape related tourism or heritage amenities within the study area. There are several public amenities, in the form of golf clubs and other sports recreation areas. St. Margaret's Golf and Country Club is located along the R122 Regional Road to the north-west of Dublin Airport and the Forrest Little Golf

Club is located immediately north of Dublin Airport, along the Naul Road. Additionally, there are several sports recreation grounds located throughout the study area, both within County Dublin and County Meath, namely AUL Complex in Clonshaugh, Craobh Chiaráin Hurling and Football Club pitches in Belcamp (although noting that this is not the main club facility for this club), Dublin Ward Cross Football Complex and St. Margaret's GAA in County Dublin, and Dunboyne AFC in County Meath.

18.3.7 Policy Context - Landscape

The Meath County Development Plan 2021 – 2027 (MCC 2021) and Fingal Development Plan 2023 – 2029 (FCC 2023) have identified Landscape Character Areas across each respective County. A map showing those that occur within the study area is presented in Image 18.2.

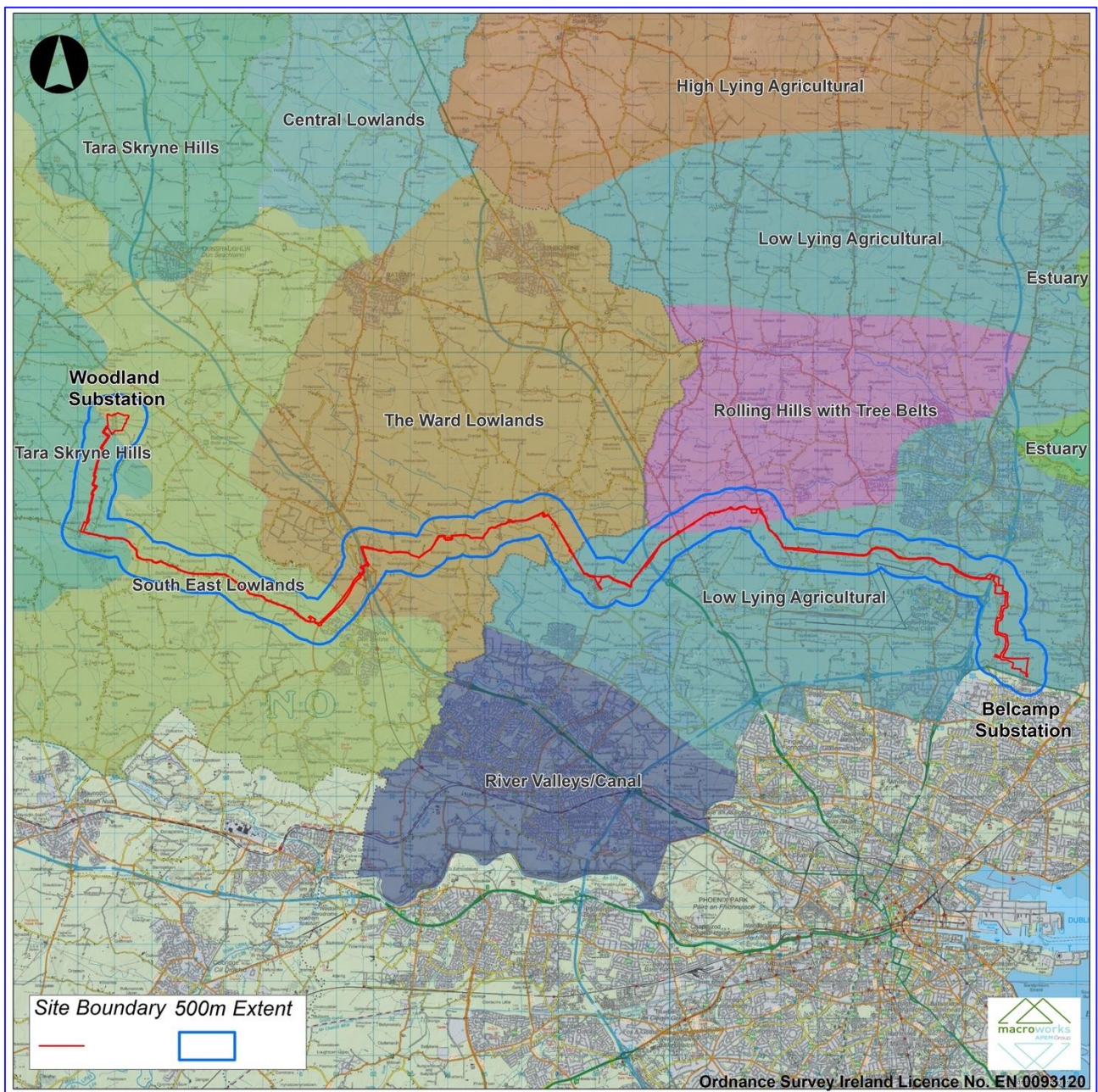


Image 18.2: Landscape Character Areas within the Study Area

18.3.7.1 County Meath

The Landscape Character Assessment for County Meath is contained in Appendix 7 of the Meath County Development Plan 2021 – 2027 (MCC 2021). There are three Landscape Character Areas within the study area; Tara Skryne Hills, South East Lowlands, and The Ward Lowlands. Each Landscape Character Area within County Meath is assigned a rating in relation to ‘value’, ‘importance’, ‘sensitivity’ and potential capacity to accommodate various forms of development. These are presented in Table 18.5, and are shown on Image 18.2.

Table 18.5: Summary of Landscape Character Areas

| Landscape Character Area | Summary of Landscape Character Assessment in the County Development Plan |
|---------------------------------------|---|
| Meath: 12. Tara Skryne Hills | <ul style="list-style-type: none"> Landscape Character Type: Hills and Upland Areas; Value: Exceptional; Importance: National / International; Sensitivity: High; and Potential capacity to accommodate development - underground services: Low. <p>The south-east portion of this Landscape Character Area, where the Proposed Development will be located, does not encompass the Hill of Tara or Skryne Hill.</p> |
| Meath: 11. South East Lowlands | <ul style="list-style-type: none"> Landscape Character Type: Lowland Landscape; Value: Very High; Importance: Regional; and Sensitivity: Medium. <p>Potential capacity to accommodate development - underground services: Medium</p> |
| Meath: 10. The Ward Lowlands | <ul style="list-style-type: none"> Landscape Character Type: Lowland Landscape; Value: Very High; Importance: Regional; and Sensitivity: Medium. <p>Potential capacity to accommodate development - underground services: Medium.</p> |
| Fingal: Rolling Hills with Tree Belts | <ul style="list-style-type: none"> Landscape Character Type: Rolling Hills Type; Value: Modest; and Sensitivity: Medium. |
| Fingal: Low Lying Agricultural | <ul style="list-style-type: none"> Landscape Character Type: Low Lying Type; Value: Modest; and Sensitivity: Low. |

18.3.7.2 Fingal

The Fingal Development Plan 2023 – 2029 (FCC 2023) divides North County Dublin into various Landscape Character Areas. There are two Landscape Character Areas within the Fingal portion of the study area: Rolling Hills with Tree Belts, and Low Lying Agricultural, as presented in Table 18.5 and shown on Image 18.2. In the Fingal Development Plan 2023 – 2029, each Landscape Character Area is assigned a rating in relation to ‘value’ and ‘sensitivity’.

Accompanying the Fingal Development Plan 2023 – 2029 are Sheets 14 to 16 which indicate the Green Infrastructure Maps. Sheet 14 includes ‘Highly Sensitive Landscape’ areas, ‘Historic Landscape Characterisation (HLC) Areas’ and ‘Special Amenity Areas’. There are no ‘Highly Sensitive Landscape’ areas, nor ‘Special Amenity Areas’ located within the study area. However, a section of the proposed cable route will pass through a HLC Area, which encompasses Swords Village and surrounds, extending toward Dublin Airport.

With consideration of the nature and scale of the Proposed Development in respect of the Landscape Character Assessments for County Meath and Fingal, sensitivity ratings have been assigned to each Landscape Character Area and are indicated in Table 18.5. These judgements refer to material contained within the relevant County Development Plans but are independent judgements specifically in relation to the

scale and context of the Proposed Development and are determined with respect to Table 18.1 and the descriptions of the baseline environment in Section 18.3.

18.3.8 Policy Context – Visual

Map 8.6 of the Meath County Development Plan 2021 – 2027 (MCC 2021) identifies ‘views and prospects’. None of these designations are located within the study area.

Accompanying the Fingal Development Plan 2023 – 2029 (FCC 2023) is ‘Sheet 14 – Green Infrastructure 1’ which outlines routes with the objective to ‘Preserve Views’ typically pertaining to scenic sections of road. None of these routes with views to be preserved occur within the study area. Furthermore, it is outlined in the Fingal Development Plan 2023 – 2029 that:

“In assessing views and prospects it is not proposed that this should give rise to the prohibition of development along these routes, but development, where permitted, should not hinder or obstruct these views and prospects and should be designed and located to minimise their impact.”

18.4 Potential Impacts

The following descriptions focus on those aspects of the Proposed Development that are most relevant to landscape and visual impacts and should be read in conjunction with Chapter 4 (Proposed Development Description) in Volume 2 of this EIAR. The greatest potential for significant impacts on landscape character and for visual impacts to occur in relation to the Proposed Development will be during the Construction Phase, as, apart from the proposed upgrade works at Woodland Substation and the proposed new Gas Insulated Switchgear (GIS) Hall and associated transformers at Belcamp Substation, there will only be very minor surface expression of the Proposed Development during the Operational Phase (i.e., permanent Joint Bays, marker posts, permanent access tracks and limited locations of permanent vegetation loss). However, as the Construction Phase will be temporary at any one location, its effects will be transient along the proposed cable route and almost fully reversible through reinstatement of the prevailing land cover. Therefore, there is limited potential for significant impacts to occur.

18.4.1 ‘Do Nothing’ Scenario

With respect to landscape and visual, the ‘Do Nothing’ scenario means that the Proposed Development would not be implemented and associated changes to the landscape and visual environment as a result of the Proposed Development would not arise. Therefore, there would be a Neutral impact on landscape and visual under the Do Nothing scenario.

18.4.2 Sensitivity – Landscape

In terms of heritage and amenity, the study area comprises relatively typical features such as old churches, graveyards, local sports clubs and golf courses. It is not considered that the study area is highly synonymous with outdoor recreation, which is further reflected by the lack of any waymarked walking or cycling trails within the study area. Overall, the study area is primarily made up of peri-urban landscape, and typical working rural landscape. Parts of the study area within County Dublin and around Dunboyne in County Meath, have a stronger peri-urban character and are not considered to be highly susceptible to change as they are currently influenced by an array of anthropogenic land uses. Whilst other parts of the study area present with a pastoral aesthetic, the landscape throughout the study area is not considered to be highly rare or distinctive.

The proposed underground cable route will run within the existing road network and occasionally underground through private farmland from Woodland Substation to Belcamp Substation. Open cut

trenching will be required to lay the cables during the Construction Phase generating temporary and transient effects. The prevailing road surface will be fully reinstated following the Construction Phase.

There will be limited material surface expression of the proposed cable route during the Operational Phase even at the sub-surface concrete Joint Bays, which will be covered in with dry fill and the prevailing surface reinstated. Stream crossings will be achieved using open cut trenching options and will not result in permanent surface expression during the Operational Phase. Above-ground infrastructure is proposed where the proposed cable route will connect into the existing Woodland Substation and into a new GIS Hall at the extended Belcamp Substation. The existing Woodland and Belcamp Substations contribute to a landscape character in their respective locations with a greater degree of complexity than would be generally associated with typical agricultural land uses. Furthermore, in terms of sensitivity, road corridors themselves are not considered to be a particularly sensitive element within the landscape, as they are a highly modified transport routes and works can be readily reinstated. For this reason, for the vast majority of the proposed underground cable route is designed to be laid under existing road surfaces where the sensitivity of the immediate landscape is deemed to be low. However, there is a greater degree of landscape sensitivity where the proposed underground cable route is being laid off-road. For the off-road sections, the Joint Bays (surrounded by a maintenance hard standing composed of crushed rock / stone) and marker posts will be visible at the surface level. Off-road Joint Bays will also be connected to the public road by permanent access tracks. Permanent access tracks will result in permanent vegetation removal. These tracks will be unbound, also made from crushed rock/stone. Off-road sections will result in the removal of vegetation which contributes to the hedgerow patterns and character of the receiving landscape. Industrial farm machinery is commonly present in these off-road sections, and while the intensity of construction activities would be greater than typical agricultural activities it would not be novel to have plant movement occurring. Taking the above factors into account, it is not considered that Construction or Operational Phase impacts are likely to be significant beyond 500m of the proposed cable route.

Table 18.6 presents a summary of the sensitivities of Landscape Character Areas of relevance to the Proposed Development.

Table 18.6: Summary of Landscape Character Area Sensitivity

| Landscape Character Area | Sensitivity |
|---------------------------------------|----------------|
| Meath: 12. Tara Skryne Hills | High - Medium |
| Meath: 11. South East Lowlands | Medium - Low |
| Meath: 10. The Ward Lowlands | High - Medium |
| Fingal: Rolling Hills with Tree Belts | Medium - Low |
| Fingal: Low Lying Agricultural | Low |
| Woodland Substation | Low-negligible |
| Belcamp Substation | Low-negligible |

18.4.3 Sensitivity - Visual

Views of the agricultural landscape are generally pleasant in terms of its rolling pastoral aesthetic and 'green', settled working character. The network of hedgerows and vegetation that occur throughout the landscape contribute to some sense of naturalness, and in combination with its undulating topography, generates a high degree of containment in many locations.

However, whilst the agricultural context forms the primary landscape and visual experience in the local landscape of the Proposed Development, this is interrupted by features and activity associated with the built area on the outskirts of Dunboyne and Darndale, residential development, major transport routes, light industry and Dublin Airport. Indeed, all parts of this landscape, including those areas in agricultural use, demonstrate longstanding human intervention in the landscape.

There are no scenic route designations within the study area that are applicable to sections of the local, regional and national level road network in the vicinity of the Proposed Development. Views towards the Proposed Development are not considered to be unique, or form a core part of any key views. Likewise, the integrity and quality of landscape features is not considered to contribute to, or generate any specific scenic value. Views within the study area tend to be typical and contained agricultural views rather than expansive and / or exceptional views.

Key differentials in terms of visual receptor sensitivity relate to the occupation of the visual receptor, and whether views of the surrounding landscape are an inherent part of the experience. Static residential receptors are considered generally more susceptible to changes in views over those where views are experienced transiently by those travelling through the landscape particularly on major transport routes where road infrastructure and traffic volume draw from visual amenity. Likewise, receptors located at closer proximity to the Proposed Development are considered more susceptible to changes in views over those where views are experienced at a distance.

Above-ground infrastructure is proposed where the proposed cable route will connect with the existing Woodland and Belcamp Substations. There will not be any new above-ground infrastructure along the proposed cable route that would have the potential for significant landscape of visual impacts, alone or cumulatively during the Operational Phase. There are no public roads within the study area around Woodland Substation. There are public roads in the vicinity of Belcamp Substation. Therefore, in accordance with the guidelines and the methodology of this assessment, it was deemed necessary to select representative viewpoints in relation to the latter only.

It is not warranted to include each and every location that provides a view of the Proposed Development. Instead, in accordance with GLVIA (Landscape Institute and IEMA 2013), a representative selection of viewpoint locations have been selected. One viewpoint can be representative of a range of receptors (see Table 18.7). The viewpoints selected in this instance are set out in Table 18.7 and Image 18.3. The existing (along with proposed) view from these viewpoints are presented in Appendix A18.1 (Verified Photomontages) in Volume 3 of this EIAR.

On the basis of the site-specific factors outlined above and in accordance with the general visual receptor sensitivity considerations contained in the methodology (Section 18.2.4.2.3 and Section 18.2.4.2.2), a visual receptor sensitivity judgement is provided for each representative viewpoint in Table 18.7.

Table 18.7: Outline Description of Selected Viewpoints

| Viewpoint (VP) | Location | Representative of: | Direction of View | Receptor Sensitivity at this Location |
|----------------|-------------------------------------|--|-------------------|---------------------------------------|
| VP1 | Local Road, Clonshaugh | <ul style="list-style-type: none"> Local community views (residents on and near Clonshaugh Road); and Tourist site (Holiday Inn Dublin Airport and Clayton Hotel Dublin Airport). | South-East (SE) | Medium-Low |
| VP2 | R139 Regional Road, Clonshaugh | <ul style="list-style-type: none"> Local community views (St. Michael's House and Cara Park); A major route (R139 Regional Road); and A recreational site (Belcamp Park). | North-East (NE) | Low |
| VP3 | R139 Regional Road, Belcamp | <ul style="list-style-type: none"> Local community views (Tara Lawns and Cara Park); and A major route (R139 Regional Road). | North-West (NW) | Low |
| VP4 | Sports Ground adjacent to R139 Road | <ul style="list-style-type: none"> A recreational site (Craobh Chiaráin Hurling and Football Club). | North-West (NW) | Low |



Image 18.3: Map of Viewpoints with Respect to the Proposed Development

18.4.4 Construction Phase Impacts – Landscape

The degree of habitat loss as a result of the Proposed Development during the Construction Phase has been quantified in Chapter 10 (Biodiversity) in Volume 2 of this EIAR. The degree of tree loss as a result of the Proposed Development during the Construction Phase has been quantified using a variety of metrics in Appendix A18.2 (Arboricultural Assessment) in Volume 3 of this EIAR and shown on Figure 18.5 in Volume 4 of this EIAR. Proposed diversion routes are detailed in Chapter 14 (Traffic and Transport) in Volume 2 of this EIAR and shown on Figure 14.2 in Volume 4 of this EIAR. These resources were referenced while undertaking this assessment.

18.4.4.1 Magnitude of Landscape Impacts – Proposed Underground Cable Route

The impacts on the physical terrain of the Proposed Development will be restricted mainly to the vicinity of the proposed underground cable trench. These trenches will be excavated to allow for the conductors to be installed below the ground. There will be associated and ancillary development, including TCCs, permanent

Joint Bays (including associated hardstanding), temporary HDD Compounds, Passing Bays, temporary access tracks, permanent access tracks, site development, landscaping works, fencing and vegetation removal. The physical impact of the proposed cable trench on the landscape will be modest in scale and primarily contained within the already modified ground of the road network. There will be an increase in vehicle movements within the road network in the vicinity of the Proposed Development, which will be more noticeable along the smaller local roads within the study area.

Impacts on the land cover for the off-road portions of the proposed underground cable will be limited to the Planning Application Boundary, within which it is predominantly grassland and hedgerow vegetation that will need to be removed. Details are quantified in Chapter 10 (Biodiversity) in Volume 2 of this EIAR and Appendix A18.2 (Arboricultural Assessment) in Volume 3 of this EIAR. This includes a combination of temporary and permanent losses. The longest section of off-road track will be between Stockhole Lane and the connection point at Belcamp Substation (Chainage 36,300 to Chainage 37,600), where there will be vegetation removal to facilitate temporary and permanent access tracks that will access the Joint Bays along this section of the proposed cable route. During the Construction Phase, there may be a degree of impact at specific locations along the proposed cable route. However, it will not be at a scale that will have any material impact on the overall landscape fabric or on the broader landscape character along the proposed cable route. Although construction activity may alter the landscape character near to where the cable is being installed, it will be transitory and temporary. Impacts will predominantly occur in the road network where vehicular movements are already part of the existing character.

Open cut trenching and Joint Bay construction will involve localised vegetation removal and the felling of healthy mature trees will be unavoidable, but no Tree Preservation Order (TPO) or National Biodiversity Data Centre (NBDC) heritage trees will be removed. Details are quantified in Chapter 10 (Biodiversity) in Volume 2 of this EIAR and Appendix A18.2 (Arboricultural Assessment) in Volume 3 of this EIAR. There may be some instances where vegetation removal may open up views previously screened. Removed vegetation will be replanted insofar as possible, but there will be occasions where this is not practical such as within the easement area, along proposed permanent access tracks to Joint Bays or at the Joint Bays themselves, resulting in a permanent but very localised change. The proposed cable trench on off-road sections will be backfilled, then top soiled and re-seeded, having regard for agricultural land use.

Construction Phase works will be transient, reversible and, in terms of the overall duration, short-term. Works at individual locations will be temporary. The cable trench will be completed at approximately 40m to 50m per day so the construction area will pass receptors relatively quickly. Chapter 4 (Proposed Development Description) in Volume 2 of this EIAR provides further details on the indicative preliminary construction programme. During the Construction Phase, the proposed underground cable route will result in a Low magnitude of impact along the sections of the proposed cable route that follow the existing road network. The magnitude of impact will be Medium-Low along the off-road sections of the proposed cable route. However, this quickly reduces to Low-Negligible in the periphery of the study area where visibility of construction activity is likely to be limited.

18.4.4.2 Magnitude of Landscape Impacts – Proposed Substation Works

Woodland and Belcamp Substations will require additional infrastructure and equipment to accommodate connections with the proposed underground cable route. Thus, with new structures and electrical apparatus to be installed for both substations. As a result, there will be an increase in construction-related activity within the substation sites and an increase in vehicular movements within the surrounding road network. However, these works will occur within the footprint of the existing Woodland Substation and the Belcamp Substation Extension (permitted as part of planning application reference F23A/0040). A new permanent physical impact on the landscape will not occur at the existing Woodland Substation. The proposed underground cable route to tie-in with the Belcamp Substation Extension (F23A/0040) at Chainage 37,624 and will consist of the provision of new electricity transmission infrastructure (refer to Figure 4.1 (Sheet 48) in Volume 4 of this EIAR for a graphic of the proposed works at Belcamp Substation). This will not result in a new physical impact on the landscape as this infrastructure will be located within the extension to the hardstand

compound at Belcamp Substation which forms part of a planning application that has been recently granted permission (in December 2023) by Fingal County Council (planning reference F23A/0040). The proposed works at Belcamp Substation will not appear incongruous in this landscape context, instead will be perceived as part of a series of characteristic extensions to the existing Belcamp Substation facility. There may be some sense that electrical infrastructure is becoming a proportionally more dominant influence on the prevailing landscape character. However, this is in the context of a rapidly evolving urban hinterland where a broad range of land uses are being augmented with both new and familiar forms of development. Given the relative scale and aesthetic of the proposed works at Belcamp Substation, in relation to the adjoining consented Belcamp Substation Extension (F23A/0040), the adjacent proposed consented work by others and the adjacent existing Belcamp Substation, no new significant additional impacts on the landscape character are anticipated. TCC6 will facilitate the construction of the proposed Belcamp Substation works and will result in a negative change to land use within its extents but it will be Short-Term in nature. As a result, the magnitude of impact on the landscape due to the works at Woodland and Belcamp Substations is deemed to be Low-Negligible.

18.4.4.3 Significance of Construction Phase Landscape Impacts

Construction Phase landscape impacts as a result of the Proposed Development will be Negative.

The magnitude of landscape impacts during the Construction Phase is assessed to be Medium-Low within the immediate surrounds of the proposed underground cable route. Therefore, the significance of Construction Phase impacts is assessed to be Slight for both in-road and off-road sections. However, this quickly reduces to Slight-Imperceptible and Imperceptible within the periphery of the study area.

The Low-Negligible landscape sensitivity within the footprints of the two substations, in conjunction with the Low-Negligible magnitude of impacts, will result in a Construction Phase impact significance of Imperceptible.

The duration of the landscape impacts is deemed to be Short-Term for both the proposed underground cable route and the works at the two substations.

Impacts in relation to each Landscape Character Area are presented in Table 18.8.

Table 18.8: Summary of Construction Phase Impacts on Landscape Character Areas

| Landscape Character Area | Sensitivity | Positive / Neutral / Negative | Magnitude of effect | Significance of Impact | Duration |
|---------------------------------------|----------------|-------------------------------|---------------------|------------------------|------------|
| Meath: 12. Tara Skryne Hills | High-Medium | Negative | Medium-Low | Slight | Short-Term |
| Meath: 11. South East Lowlands | Medium-Low | Negative | Medium-Low | Slight | Short-Term |
| Meath: 10. The Ward Lowlands | High-Medium | Negative | Medium-Low | Slight | Short-Term |
| Fingal: Rolling Hills with Tree Belts | Medium-Low | Negative | Medium-Low | Slight | Short-Term |
| Fingal: Low Lying Agricultural | Low | Negative | Medium-Low | Slight | Short-Term |
| Woodland Substation | Low-Negligible | Negative | Medium-Low | Imperceptible | Short-Term |
| Belcamp Substation | Low-Negligible | Negative | Medium-Low | Imperceptible | Short-Term |

18.4.5 Construction Phase Impacts - Visual

Construction Phase visual impacts are an inevitable consequence of the Proposed Development being brought forward. The most notable influence will be as a result of the movement of construction related plant, and deliveries of materials within the study area and all temporary works such as Passing Bays, HDD

Compounds and TCCs, resulting in Negative impacts. The greatest potential for adverse visual impacts would be at the proposed Belcamp Substation, when the proposed substation is nearing completion because, at such time the visual change for nearby visual receptors will be at the greatest, as per the Operational Phase visual assessment at the selected viewpoints in Table 18.10, and associated photomontages, refer to Appendix A18.1 (Verified Photomontages) in Volume 3 of this EIAR), but with the construction related activity coinciding.

Given the limited degree of visibility, Construction Phase visual impacts will be localised to the immediate landscape of the proposed underground cable route and at Woodland Substation, relating primarily to the vehicle movement on the local road network during the Construction Phase.

In relation to the assessment viewpoints and residential receptors in the landscape to whom filtered views of construction activities may be possible, the change is deemed to be Negative and the magnitude is deemed to be Low. When combined with the Medium-Low sensitivity of the visual receptors, the overall significance of impact during construction is assessed to be Slight. The duration of the impacts is deemed to be Short-Term.

18.4.6 Operational Phase Impacts - Landscape

18.4.6.1 Magnitude of Landscape Impacts – Proposed Underground Cable Route

Chapter 4 (Proposed Development Description) in Volume 2 of this EIAR provides comprehensive details on reinstatement and decommissioning. Once the Construction Phase is complete, the road surface / agricultural grassland will be reinstated along the proposed underground cable route. All temporary works such as Passing Bays, HDD Compounds and TCCs, and working areas within the Planning Application Boundary will be restored to their current land use. Thus, any material surface expression of the underground features will be minimal. Although there will be permanent and temporary hedgerow and mature tree loss, no TPO or NBDC heritage trees will be removed. Planting will be provided where existing vegetation has been removed for temporary works areas. Vegetation removed during the Construction Phase at Passing Bays will be reinstated along their original alignment and will also be replanted with species-rich hedgerows which is likely to be more ecologically diverse than what was removed. Trees will also be provided, where it is appropriate, ensuring sufficient set-back from the proposed cable route.

The main identifiable features will be the Joint Bays and the proposed permanent access tracks, and hardstanding areas around the off-road Joint Bays. However, these will have minimal impact on the landform / physical landscape or on vegetation / land use when considered in the context of the wider landscape within the study area. Hedgerows / treelines within the permanent easement will not be replanted and thus, will result in a negative and permanent impact. Operational Phase impacts will mainly relate to the maintenance works for the proposed underground cable route, which will be infrequent and will be brief in nature. Maintenance operations will be less intensive than the activity at the Construction Phase. For these reasons, the proposed underground cable route is deemed to have a Negligible magnitude of impact on landscape character during the Operational Phase.

18.4.6.2 Magnitude of Landscape Impacts – Substations

The proposed changes to Woodland and Belcamp Substations will occur within or immediately adjacent to the existing substation footprints and, consequently, will be located where the landscape character is already influenced by electrical infrastructure. Thus, there will be no material change to the landscape character. For these reasons, the magnitude of impact on the landscape due to the proposed works at Woodland and Belcamp Substations is deemed to be Negligible.

18.4.6.3 Significance of Operational Phase Landscape Impacts

The quality of the Operational Phase impacts will be Negative for both the proposed underground cable route and the substations. The proposed underground cable route and the substations will both have a Negligible magnitude of impact on the landscape during the Operational Phase. This combined with the landscape sensitivity along the proposed underground cable route and the Low-Negligible landscape sensitivity at the substations, will result in an overall Operational Phase impact significance of Imperceptible for both. The duration of the impacts is deemed to be Permanent.

Impacts in relation to individual Landscape Character Areas are presented in Table 18.9.

Table 18.9: Summary of Operational Phase Impacts on Landscape Character Areas

| Landscape Character Area | Sensitivity | Positive / Neutral / Negative | Magnitude of Impact | Significance of Impact | Duration |
|---------------------------------------|----------------|-------------------------------|---------------------|------------------------|-----------|
| Meath: 12. Tara Skryne Hills | High-Medium | Negative | Negligible | Imperceptible | Permanent |
| Meath: 11. South East Lowlands | Medium-Low | Negative | Negligible | Imperceptible | Permanent |
| Meath: 10. The Ward Lowlands | High-Medium | Negative | Negligible | Imperceptible | Permanent |
| Fingal: Rolling Hills with Tree Belts | Medium-Low | Negative | Negligible | Imperceptible | Permanent |
| Fingal: Low Lying Agricultural | Low | Negative | Negligible | Imperceptible | Permanent |
| Woodland Substation | Low-Negligible | Negative | Negligible | Imperceptible | Permanent |
| Belcamp Substation | Low-Negligible | Negative | Negligible | Imperceptible | Permanent |

18.4.7 Operational Phase Impacts - Visual

The assessment of visual impacts at each of the selected viewpoints is aided by photomontages of the Proposed Development (refer to Appendix A18.1 (Verified Photomontages) in Volume 3 of this EIAR). Photomontages are a 'photo-real' depiction of the Proposed Development within the view, utilising a rendered three-dimensional model of the development, which has been geo-referenced to allow accurate placement and scale. These were prepared in accordance with GLVIA (Landscape Institute and IEMA 2013) and the Technical Guidance Note TGN 06/19 on Visual Representation of development proposals (Landscape Institute 2019). Table 18.10 presents the Operational Phase visual impacts and resulting impact significance. All selected viewpoints are in the vicinity of the proposed Belcamp Substation works.

Table 18.10: Operational Phase Visual Impacts and Significance of Impact

| Viewpoint | Existing View Context | Receptor Sensitivity | Description and Magnitude of Visual Impact | Quality / Significance / Duration |
|-----------|--|----------------------|--|--|
| VP1 | <p>Local Road, Clonshaugh</p> <p>This is a heavily enclosed view from the side of a busy local road. There is a high degree of mature vegetation on both sides of this road. This view is uncharacteristic of the experience of the view afforded to users of this road as it affords views beyond the otherwise enclosed road corridor. Although views are afforded in both directions along the road corridor, roadside vegetation and a berm on the eastern side foreshortens the view to the south-east. A glimpse view of an agricultural field is afforded in the middle ground where vegetation partially screens the existing Belcamp Substation. In the background of the view, Howth Head forms a distant backcloth as it rises above intervening hedgerows.</p> | Medium-Low | The proposed underground cable route will not be visible and there will not be any visible signs of its presence. The proposed Belcamp Substation works will appear to the fore of the existing Belcamp Substation and the consented Belcamp Substation Extension (F23A/0040). The proposed 400kV GIS Hall will be the largest new structure and will be of a similar scale, tone and texture as the existing Belcamp Substation and the consented Belcamp Substation Extension (F23A/0040). The proposed Air Insulated Switchgear (AIS) equipment will have a smaller massing and will not be as high. For these reasons, the visual change is deemed to be sub-dominant. The grey colour of the proposed Belcamp GIS Hall will help to visually integrate it with the colours of the existing Belcamp Substation and it will have a thematic link with this existing electrical infrastructure in the view. For these reasons, the magnitude of visual impact is deemed to be Low. | Negative, Slight to Imperceptible and Permanent |
| VP2 | <p>R139 Regional Road, Clonshaugh</p> <p>This is a channelled view from an urban regional road. There is a high degree of mature vegetation on both sides of this road. This view is uncharacteristic of the experience of the view afforded to users of this road as it affords views beyond the otherwise enclosed road corridor. In the foreground, the landform falls away from this viewpoint such that a view is afforded over a green palisade fence. The middle ground is occupied by land that is not under agricultural management and contains rough grass and scrub. There is a private access road with metal crash barriers in the left-hand side of the view. Views are foreshortened by a hedgerow with mature hedgerow trees in the background of the view. A portion of the existing Belcamp Substation is identifiable to the north-east through a gap in this vegetation.</p> | Low | The proposed underground cable route will not be visible and there will not be any visible signs of its presence. The proposed Belcamp Substation works will be situated to the rear of the hedgerow with mature hedgerow trees in the background of the view which will screen a large proportion of the proposed Belcamp Substation works. The upper portions of the proposed 400kV GIS will be visible above the existing intervening vegetation in the middle ground of the view. The grey colour of the proposed Belcamp GIS Hall will help to visually integrate with the colours in the receiving landscape. The visible portions of the proposed Belcamp Substation works will be viewed within an already complex view characterised by industrial style elements and it has a thematic link with the existing electrical infrastructure in the view. For these reasons, the magnitude of visual impact is deemed to be Low. | Negative, Slight to Imperceptible and Permanent |
| VP3 | <p>R139 Regional Road, Belcamp</p> <p>This is a channelled view along the road corridor of a busy urban regional road. The fore to middle ground is occupied with the pavement of a wide (four lane) road flanked by crash barriers and lighting columns. The view to the north-west is foreshortened by a wall adorned</p> | Low | The Proposed Development will be completely screened from view due to the intervening wall and the existing Belcamp Substation. By default, the magnitude of visual impact is deemed to be Negligible. | Neutral, Imperceptible and Permanent |

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| Viewpoint | Existing View Context | Receptor Sensitivity | Description and Magnitude of Visual Impact | Quality / Significance / Duration |
|-----------|--|----------------------|---|---|
| | with graffiti, over which it is possible to see tree canopies and the upper portions of the existing Belcamp Substation in the background. | | | |
| VP4 | <p>Sports Ground adjacent to N32 (Craobh Chiaráin Hurling and Football Club)</p> <p>This is a view to the north across a modest sports ground facility consisting of two pitches and a two-storey clubhouse. The existing Belcamp Substation is visible to the rear of the clubhouse. There is a minor degree of containment provided by surrounding tree lined hedgerows and these also limit more distant views to the north.</p> | Low | The Proposed Development will be completely screened from view due to the existing clubhouse, the existing Belcamp Substation and the existing intervening vegetation. By default, the magnitude of visual impact is deemed to be Negligible. | Neutral, Imperceptible and Permanent |

18.5 Mitigation and Monitoring Measures

The primary measure employed in respect of landscape and visual impacts for the Proposed Development was avoidance of impacts through design. The key embedded design measure relevant to landscape and visual, as well as many of the other environmental factors, is to place the proposed cable route underground, mainly within the existing road bed, in order to minimise the amount of vegetation loss (hedgerows and riparian). This has been applied in the design of the Proposed Development in so far as is feasible (i.e., for approximately 70% of the proposed cable route).

Appendix A18.2 (Arboricultural Assessment) in Volume 3 of this EIAR advises that there has been an effort at this current design phase to design out impact on trees, where possible. Mitigation of potential impacts on landscape and visual receptors is neither possible nor practicable, in some instances. For example, it is not possible to provide landscape mitigation for the loss of land from private properties, or to provide mitigation for the loss of mature trees in the short / medium-term until the proposed replacement planting becomes established.

18.5.1 Construction Phase

The following mitigation measures will be implemented during the detailed design stage:

- A Project Arboriculturalist will be appointed by the Electricity Supply Board (ESB) to provide relevant additional input to be addressed at appropriate points;
- The Generic Arboricultural Method Statement (AMS) (Appendix C of Appendix A18.2 in Volume 3 of this EIAR) will be reviewed and updated into a site-specific AMS to provide appointed contractors with details on how specific operations need to be performed to protect trees, including the use of exclusion zones and ground protection; and
- A Tree Protection Plan will be produced providing schematic details of how protective fencing will be installed and any other pre-planned targeted tree protection measures.

In addition, at the detailed design stage, a locally reduced separation between adjacent cable circuits (CP0966 development, under An Bord Pleanála planning reference number 316372, and the Proposed Development) will be considered at the following key locations to reduce the potential impact on adjacent trees:

- Chainage 950 to Chainage 1,100;
- Chainage 1,450 to Chainage 1,650;
- Chainage 2,350 to Chainage 2,500; and
- Chainage 3,050 to Chainage 3,150.

This will allow a greater setback between the Proposed Development cable circuit and the adjacent field boundary. Areas of land between the Proposed Development cable circuit and field boundary will also be fenced off and will not be trafficked by heavy plant or machinery.

The following mitigation measures will be implemented during the Construction Phase:

- The site-specific AMS and Tree Protection Plan produced during the detailed design stage will be implemented as soon as works begin on-site;
- As far is reasonably practicable, all cable installation works, particularly in the existing road surfaces will adhere to Volume 4 of the Guidance for The Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees is a widely adopted document within the utilities sector (National Joint Utilities Group (NJUG) 2007);
- The Project Arboriculturalist will be retained to advise and resolve any unforeseen tree related issue which might occur during the Construction Phase and to provide general tree related advice; and

- On-site monitoring will be undertaken at agreed intervals before and during the Construction Phase (this will be achieved through a combined effort between the ESB and the appointed contractor) to ensure protection measures and the site-specific AMS produced during the detailed design stage are being implemented correctly.

Once construction is complete, the road surface / agricultural grassland will be reinstated along the proposed underground cable route for all temporary works areas. Thus, any permanent material surface expression of the underground features will be minimal. Hedgerows removed for temporary works within the Planning Application Boundary will be replanted with a new species-rich hedgerow which is estimated to reach similar maturity in 30 years and is likely to be more ecologically diverse than what was removed. Where applicable, vegetation removed during the Construction Phase at temporary Passing Bays will be reinstated along the original alignment and will also be replanted with species-rich hedgerows, albeit immediately above the proposed underground cable route will remain absent of woody species to aid periodic maintenance. Additional specific landscape and visual mitigation measures are not considered necessary during the Construction Phase as all impacts will be either temporary or short-term and not considered 'significant'.

The avoidance measures outlined in the Generic AMS (Appendix C of Appendix A18.2 in Volume 3 of this EIAR) will be adopted in full and will help limit the impacts on the landscape and for visual receptors. However, this will not materially reduce the magnitude of impacts on landscape and visual during the Construction and Operational Phases.

18.5.2 Operational Phase

Specific additional landscape and visual mitigation and monitoring measures are not considered necessary in relation to the Proposed Development during the Operational Phase, as there is no potential for significant impacts. There are no anticipated direct impacts on the retained trees along the proposed cable route during the Operational Phase.

18.6 Residual Impacts

Residual landscape and visual impacts during the Construction and Operational Phases of the Proposed Development will not be any different to those determined in Section 18.4 and are summarised in Table 18.11 and Table 18.12. Significant impacts are not predicted.

Table 18.11: Summary of Residual Impacts on Landscape Character Areas

| Landscape Character Area | Sensitivity | Positive / Neutral / Negative | Magnitude of Impact | Significance of Impact | Duration |
|---------------------------------------|----------------|-------------------------------|---------------------|------------------------|-----------|
| Meath: 12. Tara Skryne Hills | High-Medium | Negative | Negligible | Imperceptible | Permanent |
| Meath: 11. South East Lowlands | Medium-Low | Negative | Negligible | Imperceptible | Permanent |
| Meath: 10. The Ward Lowlands | High-Medium | Negative | Negligible | Imperceptible | Permanent |
| Fingal: Rolling Hills with Tree Belts | Medium-Low | Negative | Negligible | Imperceptible | Permanent |
| Fingal: Low Lying Agricultural | Low | Negative | Negligible | Imperceptible | Permanent |
| Woodland Substation | Low-Negligible | Negative | Negligible | Imperceptible | Permanent |
| Belcamp Substation | Low-Negligible | Negative | Negligible | Imperceptible | Permanent |

Table 18.12: Summary of Residual Visual Impacts

| Viewpoint | Receptor Sensitivity | Positive / Neutral / Negative | Magnitude of Visual Impact | Significance | Duration |
|-----------|----------------------|-------------------------------|----------------------------|-------------------------|-----------|
| VP1 | Medium-Low | Negative | Low | Slight to Imperceptible | Permanent |
| VP2 | Low | Negative | Low | Slight to Imperceptible | Permanent |
| VP3 | Low | Neutral | Negligible | Imperceptible | Permanent |
| VP4 | Low | Neutral | Negligible | Imperceptible | Permanent |

Potential tree removal required to deliver the Construction Phase of the Proposed Development is discussed in Appendix A18.2 (Arboricultural Assessment) in Volume 3 of this EIAR and shown on Figure 18.5 in Volume 4 in this EIAR. Out of a total of 9,103 trees within the study area, 512 will be required to be removed (5% of all the trees). A further 662 trees are at-risk in the study area (7% of all trees). Based on a precautionary approach scenario, where all at-risk trees will be required to be removed, 1,174 trees will need to be felled, representing 12% of the total trees within the study area. Of the five significant tree ‘features’ identified during the surveys (refer to Appendix A18.2 in Volume 3 of the EIAR for further detail), one can be retained, three are at-risk, and one requires partial removal. It is expected to be able to retain the at-risk ‘features’ with the implementation of mitigation measures during the Construction Phase. There will be limited opportunity for the replacement of trees lost, and therefore, losses identified in the Construction Phase are considered permanent.

18.7 Conclusion

Landscape and visual impacts have been considered in respect of the Proposed Development. There is the potential for adverse landscape and visual impacts during the Construction Phase which will be either Negative, Slight or Imperceptible and Short-Term.

Operational Phase impacts as a result of the Proposed Development will be limited. Apart from the proposed substations works, the Proposed Development will be predominantly below-ground with the land cover above reinstated insofar as possible, resulting in landscape and visual impacts that will be Negative, Imperceptible and Permanent. The proposed Belcamp Substation works will be visually identifiable, but the visual impacts are deemed to be Negative, Slight to Imperceptible and Permanent at VP1 and VP2, while at VP3 and VP4 they are deemed to be Neutral, Imperceptible and Permanent. As a result of the setback distance of the proposed Woodland Substation from the public roads, the visual impacts are deemed to be Negative, Imperceptible and Permanent. For the reasons outlined within this Chapter, it is considered that the Proposed Development will not give rise to any significant landscape or visual impacts.

Based on a precautionary approach scenario, where all at-risk trees will be required to be removed, 1,174 trees will need to be felled, representing 12% of the total trees within the study area. Of the five significant tree ‘features’ identified during the surveys (refer to Appendix A18.2 in Volume 3 of the EIAR for further detail), one can be retained, three are at-risk, and one requires partial removal. It is expected to be able to retain the at-risk ‘features’ with the implementation of mitigation measures during the Construction Phase. There will be limited opportunity for the replacement of trees lost, and therefore, losses identified in the Construction Phase are considered permanent. There are no anticipated direct impacts on retained trees along the proposed cable route during the Operational Phase.

18.8 References

- Coillte (2022). Coillte Recreation map. [Online] Available from <https://www.coillte.ie/our-forests/recreation-map/> [Accessed: 18 May 2023]
- Discover Ireland (2023). Available from: <https://www.DiscoverIreland.ie> [Accessed: 18 May 2023]
- Environmental Protection Agency (2022). Guidelines on the Information to be Contained in Environmental Impact Assessment Reports. [Online] Available from: https://www.epa.ie/publications/monitoring--assessment/assessment/EIAR_Guidelines_2022_Web.pdf [Accessed: 18 May 2023]
- Fingal County Council (2023). Fingal Development Plan 2023 – 2029. Available from: <https://www.fingal.ie/development-plan> [Accessed: 18 May 2023]
- Heritage Council (2023). Heritage Maps. [Online] Available from <https://heritagemaps.ie/> [Accessed: 18 May 2023]
- Landscape Institute and the Institute of Environmental Management and Assessment (IEMA) (2013). Guidelines for Landscape and Visual Impact Assessment, 3rd edition
- Landscape Institute (2019) Landscape Institute Technical Guidance Note TGN 06/19 Visual Representation of development proposals
- Meath County Council (2021). Meath County Development Plan 2021-2027. Available from: <https://consult.meath.ie/en/consultation/meath-adopted-county-development-plan> [Accessed: 18 May 2023]
- National Inventory of Architectural Heritage (2021). Survey Data. [Online] Available from <https://www.buildingsofireland.ie/niah-data-download/> [Accessed: 18 May 2023]
- National Joint Utilities Group (2007). Vol 4 Issue 2 – Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees [Accessed: 1 September 2023].
- National Parks and Wildlife Service (2023). Map viewer. [Online] Available from <http://webgis.npws.ie/npwsviewer/> [Accessed: 18 May 2023]
- Ordnance Survey Ireland (2023). GeoHive [Online] Available from <https://webapps.geohive.ie/mapviewer/index.html> [Accessed: 18 May 2023]
- Sport Ireland (2023). Sport Ireland Trails. [Online] Available from www.irishtrails.ie [Accessed: 18 May 2023]