

Volume 4: Onshore Chapters

**Chapter 25**  
**Onshore Archaeology,  
Architectural and Cultural  
Heritage**

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# 25. Onshore Archaeology, Architectural and Cultural Heritage

## 25.1 Introduction

This chapter of the Environmental Impact Assessment Report (EIAR) presents an assessment of likely significant effects from the North Irish Sea Array (NISA) Offshore Wind Farm (hereafter referred to as the ‘proposed development’) on onshore archaeological, architectural and cultural heritage assets that occur landwards of the High Water Mark (HWM) regardless of whether the impact arises as a result of the onshore or offshore infrastructure of the proposed development. Offshore Archaeological, Architectural and Cultural Heritage effects, which deals with the potential intertidal and marine archaeological and cultural heritage resource, are addressed in Volume 3, Chapter 18: Offshore Archaeology and Cultural Heritage.

This assessment sets out the methodology followed (Section 25.2), describes the baseline environment (Section 25.3) and summarises the main characteristics of the proposed development which are of relevance to archaeology, architecture and cultural heritage (Section 25.4), including any embedded mitigation. Potential impacts and relevant receptors are identified, and an assessment of likely significant effects on archaeology, architecture and cultural heritage are described in Section 25.5. Additional mitigation measures are proposed to mitigate and monitor these effects if required (Section 25.6) and any residual effects are then described in Section 25.7. Transboundary effects are considered in Section 25.8. Cumulative effects are summarised in Section 25.9 and detailed in full in Chapter 38 Cumulative and Inter-Related Effects. The chapter then provides a reference section (Section 25.10).

The EIAR also includes the following:

- Detail on the competent experts that have prepared this chapter is provided in Appendix 1.1 Competent Experts.
- Detail on the extensive consultation, which has been undertaken with a range of stakeholders during the development of the EIAR including those relating to archaeology, architecture and cultural heritage is set out in Appendix 1.2 Consultation report; and
- A glossary of terminology, abbreviations and acronyms is provided at the beginning of Volume 2 of the EIAR.

A detailed description of the proposed development including construction, operation and decommissioning is provided in Volume 2, Chapter 7: Description of the Proposed Development – Onshore (hereafter referred to as the ‘Onshore Description Chapter’), and the construction methodology is described in Volume 2, Chapter 9: Construction Strategy – Onshore (hereafter referred to as the ‘Onshore Construction Chapter’).

## 25.2 Methodology

### 25.2.1 Introduction

Volume 2: Chapter 2, EIA, and Methodology for the Preparation of an EIAR provides a summary of the general impact assessment methodology applied to the proposed development. The following sections confirm the methodology used to assess the potential impacts on archaeological, architectural, and cultural heritage.

The approach to the assessment of transboundary effects and cumulative and interrelated effects is provided in Volume 6: Chapter 37, Transboundary Effects and Volume 6: Chapter 38, Cumulative and Inter-Related Effects respectively.

### 25.2.2 Study Area

The study area is defined as the onshore development area (all infrastructure located landward of the HWM) and an area measuring c. 250m from the edge of the onshore development area for archaeological, architectural, and cultural heritage sites and c. 50m (along the cable route of the onshore development area) for architectural sites.

The smaller study area for architectural sites along the route of the proposed onshore cable route is due to the fact that works, for the most part, are located within the existing road network and will be below ground at operation stage.

Measurements between the archaeological, architectural, or cultural heritage sites are taken from the boundary of the onshore development area to the upstanding remains of a site or structure. Where there are no upstanding remains, the measurement is taken to the centre of the site as indicated within Figures 25.1-25.14 as found in Volume 7A of this EIAR.

As part of this assessment, it is also necessary to assess the potential impact of the proposed offshore infrastructure (e.g. wind turbine generators (WTGs) and the offshore substation platform (OSP)) (hereafter referred to as the ‘offshore development area’) on the setting of onshore archaeological, architectural, and cultural heritage assets. The study area for this exercise is 60km from the array area, as defined by the Zone of Theoretical Visibility mapping (Figures 29.5a/b) and this covers a potential tip height of 290m as proposed in Project Option 1 and a tip height of 316m as proposed in the Project Option 2 layout for the array.

### 25.2.3 Relevant Guidance and Policy

The study has been carried out in accordance with the following guidelines and policy:

National Monuments Act 1930 to 2014.

- The Planning and Development Act 2000, as amended.
- Heritage Act, 1995, as amended.
- Advice Notes on Current Practice (in preparation of Environmental Impact Statements), 2003, Environmental Protection Agency (EPA)
- Draft Advice Notes on Current Practice (in preparation of Environmental Impact Statements), 2015, EPA
- Guidelines on the information to be contained in Environmental Impact Statements, 2022, EPA
- Frameworks and Principles for the Protection of the Archaeological Heritage, 1999, (formerly) Department of Arts, Heritage, Gaeltacht, and Islands; and
- Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act, 1999 and the Local Government (Planning and Development) Act 2000.

### 25.2.4 Data Collection and Collation

#### 25.2.4.1 Desk Study

The following sources were consulted as part of the desk study for the onshore development study area:

- United Nations Educational, Scientific and Cultural Organization (UNESCO): properties inscribed on the World Heritage List and those nominated for inclusion on the tentative list.
- Record of Monuments and Places for County Dublin.
- Sites and Monuments Record for County Dublin.
- National Monuments in State Care Database.
- Preservation Orders List
- Topographical files of the National Museum of Ireland.
- Cartographic and written sources relating to the study area.
- Fingal County Development Plan 2023–2029.
- Dublin City Development Plan 2022-2028.

- National Inventory of Architectural Heritage.
- Dublin City Industrial Heritage Record.
- Place Name Analysis
- Aerial photographs; and
- Excavations Bulletin (1970–2024).

The function of a *UNESCO World Heritage list* is to encourage member states to protect and manage their natural and cultural heritage. Properties considered for inclusion have cultural, historical, scientific or other significance, considered to be of outstanding value to humanity. There are three sites inscribed onto the UNESCO World Heritage List on the island of Ireland. These comprise the Giant's Causeway and Causeway Coast, Brú na Bóinne and Skellig Michael, none of which lie within the study area of the onshore proposed development. In addition, there are no sites included on the tentative list located within the study area.

*Record of Monuments and Places (RMP)* is a list of archaeological sites known to the National Monuments Section, which are afforded legal protection under Section 12 of the 1994 National Monuments Act and are published as a record.

*Sites and Monuments Record (SMR)* holds documentary evidence and field inspections of all known archaeological sites and monuments. Some information is also held about archaeological sites and monuments whose precise location is not known e.g. only a site type and townland are recorded. These are known to the National Monuments Section as 'un-located sites' and cannot be afforded legal protection due to lack of locational information. As a result, these are omitted from the RMP. SMR sites are also listed on a website maintained by the Department of Housing, Local Government and Heritage (DoHLGH) – [www.archaeology.ie](http://www.archaeology.ie).

*National Monuments in State Care Database* is a list of all the National Monuments in State guardianship or ownership. Each is assigned a National Monument number whether in guardianship or ownership and has a brief description of the remains of each monument. The Minister for the DoHLGH may acquire national monuments by agreement or by compulsory order. The state or local authority may assume guardianship of any national monument (other than dwellings). The owners of national monuments (other than dwellings) may also appoint the Minister or the local authority as guardian of that monument if the state or local authority agrees. Once the site is in ownership or guardianship of the state, it may not be interfered with without the written consent of the Minister.

*Preservation Orders List* contains information on Preservation Orders and/or Temporary Preservation Orders, which have been assigned to a site or sites. Sites deemed to be in danger of injury or destruction can be allocated Preservation Orders under the 1930 Act. Preservation Orders make any interference with the site illegal. Temporary Preservation Orders can be attached under the 1954 Act. These perform the same function as a Preservation Order but have a time limit of six months, after which the situation must be reviewed. Work may only be undertaken on or in the vicinity of sites under Preservation Orders with the written consent, and at the discretion, of the Minister.

*The topographical files of the National Museum of Ireland* are the national archive of all known finds recorded by the National Museum. This archive relates primarily to artefacts but also includes references to monuments and unique records of previous excavations. The find spots of artefacts are important sources of information on the discovery of sites of archaeological significance.

*Cartographic sources* are important in tracing land use development within the onshore development area as well as providing important topographical information on areas of archaeological potential (AAP) and the development of buildings. Cartographic analysis of all relevant maps has been made to identify any topographical anomalies or structures that no longer remain within the landscape.

*Documentary sources* were consulted to gain background information on the archaeological, architectural, and cultural heritage landscape of the proposed development.

*Development Plans* contain a catalogue of all the Protected Structures (RPS) and archaeological sites within the county. The Fingal County Development Plan 2023–2029 and Dublin City Development Plan 2022–2028 were consulted to obtain information on cultural heritage sites in and within the immediate vicinity of the proposed development.

*The National Inventory of Architectural Heritage* (NIAH) is a state initiative established under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999 tasked with making a nationwide record of significant local, regional, national and international structures, which in turn provides county councils with a guide as to what structures to list within the Record of Protected Structures.

*The Dublin City Industrial Heritage Record* (DCIHR) is a database of industrial heritage sites across the Dublin City administrative area maintained by the Local Authority. The DCIHR survey makes recommendations for sites to be added to the Record of Protected Structures (RPS) in the life of the Plan. The record is available from DCC and online at: [www.heritagemaps.ie](http://www.heritagemaps.ie).

*Place Names* are an important part in understanding both the archaeology and history of an area. Place names have, in some cases, been found to have their root deep in the historical past.

*Aerial photographic coverage* is an important source of information regarding the precise location of sites and their extent. It also provides initial information on the terrain and its likely potential for archaeology. A number of sources were consulted including aerial photographs held by the Ordnance Survey and Google Earth.

*Excavations Bulletin* is a summary publication that has been produced every year since 1970. The hard copy publication summarises every archaeological excavation that has taken place in Ireland during that year up until 2010. This information is vital when examining the archaeological content of any area, which may not have been recorded under the SMR and RMP files. Since 2011 the summaries have been published online ([www.excavations.ie](http://www.excavations.ie)) with records from 1970–2024 available.

#### 25.2.4.2 *Field Inspections*

Field inspection is necessary to determine the extent and nature of archaeological and historical remains and can also lead to the identification of previously unrecorded or suspected sites and portable finds through topographical observation and local information. Field inspections took place in April, June and November 2022 and June 2023. The detailed report on the field inspection and associated images are included in Appendix 25.1 of Volume 10.

The archaeological, architectural, and cultural heritage field inspections entailed:

- Walking the onshore proposed development area and its immediate environs.
- Noting and recording the terrain type and land usage.
- Noting and recording the presence of features of archaeological or historical significance.
- Verifying the extent and condition of any recorded sites; and
- Visually investigating any suspect landscape anomalies to determine the possibility of their being anthropogenic in origin.

#### 25.2.4.3 *Geophysical Survey*

Geophysical survey is used to create ‘maps’ of subsurface archaeological features. Features are the non-portable part of the archaeological record, whether standing structures or traces of human activities left in the soil. Geophysical instruments can detect buried features when their electrical or magnetic properties contrast measurably with their surroundings. In some cases, individual artefacts, especially metal, may be detected as well. Readings, which are taken in a systematic pattern, become a dataset that can be rendered as image maps. Survey results can be used to guide excavation and to give archaeologists insight into the pattern of non-excavated parts of the site. Unlike other archaeological methods, the geophysical survey is not invasive or destructive.

Geophysical survey of the proposed landfall and grid facility site was carried out in order to inform this assessment in August 2022 (Dowling 2022, Licence no. 22R0244). Multiple potential archaeological features were identified across the five fields that form the proposed landfall and grid facility sites. Detailed results of the geophysical survey are included in this chapter (section 25.3.16) and the full report and figures are included in Appendix 25.2 in Volume 10 of this EIAR.

#### 25.2.4.4 Archaeological Testing

Archaeological Test Trenching can be defined as ‘a limited programme... of intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land or underwater. If such archaeological remains are present test trenching defines their character and extent and relative quality’ (Chartered Institute for Archaeologists [CIfA] 2020a, 4).

A programme of archaeological testing based on the results of the geophysical survey was carried out within the proposed landfall and grid facility sites in March 2023. This was undertaken by Jane Whitaker of IAC under licence 23E0149. Detailed results of the archaeological testing are included in this chapter (section 25.3.17) and Appendix 25.3 in Volume 10 of this EIAR.

#### 25.2.5 Onshore Heritage Assets within the Study Area of the WTGs and OSP

In order to provide a meaningful assessment of potential impacts on cultural heritage sites within the defined 60km study area (Figure 25.15 and Figures 25.15a/b), all recorded and previously unrecorded sites of archaeological, architectural and cultural heritage significance that have a direct relationship with the coast were assessed, along with sites of international heritage value (UNESCO World Heritage Sites). This includes the following archaeological, architectural, and cultural heritage sites in Northern Ireland as the study area extends into County Down:

- Northern Ireland Sites and Monuments Record.
- Schedule of Historic Monuments, including Monuments in State Care.
- Defence Heritage Record
- Industrial Heritage Record
- Listed Buildings Database; and
- Register of Historic Parks and Gardens.

*Northern Ireland Sites and Monuments Record (NISMR)* is maintained by the Department of the Communities: Historical Environment Division. The Planning (General Permitted Development) Order (Northern Ireland) 2015 defines, in the first instance ‘a site of archaeological interest’ to mean land which has been scheduled for protection or taken into care under the Historic Monuments and Archaeological Objects (NI) Order 1995(c). However, the definition is expanded to include [an area] which is within a site registered in the Department’s SMR. A number of ‘unlocated’ sites are also listed within the NISMR. These consist of sites that have been identified in historic documents, although their exact position has yet to be determined, or the site has since been removed and is no longer present in the landscape. This site type provides an indication of archaeological potential in an area, rather than a site-specific designation.

*The Schedule of Historic Monuments.* Sites and monuments listed in this Schedule are all protected under Article 3 of the Historic Monuments and Archaeological Objects (Northern Ireland) Order 1995. As of the end of April 2023, there were 2035 Scheduled Historic Monuments within Northern Ireland. It is an offence to damage or alter a scheduled site in any way. Scheduled Monuments that are subject to State Care (186 sites/complexes in total) are considered to be of National importance.

*Defence Heritage Record (DHR).* In 1995 the Defence of Britain Project was launched by The Council for British Archaeology (CBA) to coordinate recording work undertaken by volunteers. Two years later Northern Ireland joined the project with the Defence Heritage Project (DHP). A number of sites have been scheduled for protection under the Historic Monuments and Archaeological Objects (NI) Order 1995 whilst other sites have been listed for protection under the Planning Act (NI) 2011. To date over 500 sites have been recorded.



*Industrial Heritage Record (IHR)*. This record lists more than 16,000 features, but only limited information is currently available for most. A number of sites have been scheduled for protection under the Historic Monuments and Archaeological Objects (NI) Order 1995, whilst other sites have been listed for protection under the Planning Act (NI) 2011.

*The Register of Historic Parks, Gardens and Demesnes*. This record has been established to identify those sites that can be considered of exceptional importance within Northern Ireland. Inclusion is based upon a clear set of criteria, as listed in the Register, and 154 sites have been selected to date. This is currently under revision as part of the preparation of the local (council) Area Plans. A further 150 sites have been identified as having a high level of interest and are included as an appendix to the main Register as designated 'Supplementary' sites. Inclusion in the Register affords these sites protection and their status as a material consideration to planning and development projects.

*The Register of Listed Buildings (LB)*. Protection of the historic buildings began in Northern Ireland in 1974. Section 80 of The Planning Act (NI) 2011 places a duty on the Department of Communities to compile lists of buildings of special architectural or historic interest. The Act gives the Department powers to manage change to these structures through Listed Building Consent, grant aid and enforcement against unauthorised works.

The following sources, which are defined in section 25.3.4.1, within the Republic of Ireland were also examined in relation to the 60km study area:

- United Nations Educational, Scientific and Cultural Organization (UNESCO): properties inscribed on the World Heritage List
- Record of Monuments and Places for Counties Dublin, Wicklow, Meath, and Louth.
- Sites and Monuments Record for Counties Dublin, Wicklow, Meath, and Louth.
- National Monuments in State Care Database.
- Preservation Orders List
- Fingal County Development Plan 2023–2029.
- Dublin City Development Plan 2022-2028.
- Dun Laoghaire Rathdown Development Plan 2022-2028.
- Wicklow County Development Plan 2022-2028.
- Meath County Development Plan 2021-2027.
- Louth County Development Plan 2021-2027; and
- National Inventory of Architectural Heritage, Counties Dublin, Wicklow, Meath, and Louth.

### 25.2.6 Impact Assessment Methodology

The significance of potential effects has been evaluated using a systematic approach, based upon identification of the importance/value of receptors and their sensitivity to the proposed development activity, together with the predicted magnitude of the impact. This is in accordance with the approach laid out in the “Guidelines on Information to be Contained in Environmental Impact Statements” (EPA 2022).

#### 25.2.6.1 Assessment of Design

Within the landfall site, the construction footprint required to bring the offshore export cables ashore and subsequently connect to the grid facility will be smaller than the proposed development boundary at the landfall site. The larger area is required to ensure that any obstacles or constraints (both offshore and onshore) identified during detailed design or encountered during construction can be avoided.



Therefore, the onshore archaeology, architectural and cultural heritage assessment has been conducted with the assumption that the onshore cables will be located anywhere within the landfall site boundary and all archaeological features (see section 25.3.16 and 25.3.17) within this boundary have the potential to be impacted. Similarly, it is possible that the archaeological sites will be avoided.

Both Project Option 1 and Project Option 2 have been assessed in order to identify potential impacts on the setting of cultural heritage sites within the 60km study area. Project Option 1 WTGs have a tip height of 290m, Project Option 2 WTG have a tip height of 311m to 316m (Table 25.1).

**Table 25.1 High Level Overview of the two Project Options for the proposed development**

Parameter	Project Option 1	Project Option 2
Number of WTGs	49	35
WTG tip height (m above LAT)	290	316 outside aviation restricted zone, 311 inside aviation restricted zone*
Rotor Diameter (m)	250	276
Foundation type	Monopiles	Monopiles or multi-leg pin piled jackets (hereafter referred to as 'jackets')
Number of OSPs	1	1

\*An aviation restricted zone (of 312m LAT) has been identified by the Developer due to the partial overlap of the array area with a Dublin Airport controlled airspace meaning 13 turbines will have a 5m reduction in tip height due to being within the aviation restricted zone. This is further detailed in Volume 3, Chapter 19: Aviation and Radar.

For more information on the design of the proposed development, please refer to Section 7.2.1 of the Onshore Description Chapter and Section 6.2 of the Offshore Description Chapter.

#### 25.2.6.2 Sensitivity of receptor

For each impact, the assessment identifies receptors sensitive to that impact and implements a systematic approach to understanding the impact pathways, magnitude, and the level of effects on given receptors.

The definitions of receptor sensitivity for the purpose of the archaeology, architectural and cultural heritage assessment are provided in Table 25.2. This is based on the presence (or not) of statutory protection and the determination by the author.

**Table 25.2: Criteria for determination of receptor sensitivity**

Sensitivity	Criteria
Very High	<p>Sites of International Importance: UNESCO World Heritage Properties (excluding tentative list)</p> <p>National Monuments</p> <p>Monuments subject to Preservation Orders</p> <p>Schedule of Historic Monuments in State Care (NI)</p>
High	<p>RMP</p> <p>Proposed RMP</p> <p>Record of Protected Structures (RPS)</p> <p>Schedule of Historic Monuments (NI)</p> <p>Architectural Conservation Area (ACA)</p> <p>UNESCO Cultural Heritage Sites (associated tangible elements only)</p> <p>Well-preserved demesne landscapes</p> <p>Previously unrecorded archaeological sites</p> <p>The Register of Historic Parks, Gardens and Demesnes (NI)</p> <p>Register of Listed Buildings (NI)</p>

Sensitivity	Criteria
Medium	Conservation Areas (CA) SMR NISMR Sites listed on the NIAH (upstanding) AAPs identified through documentary or cartographic research. Dublin City Industrial Heritage Record (DCIHR) sites Sculptures/Memorials/Buildings not on NIAH/RPS (based on professional judgement) Tangible Cultural Heritage Moderately well-preserved demesne landscapes Defence Heritage Record (NI) Industrial Heritage Record (NI)
Low	Lands where previous disturbance may have affected the potential archaeological resource. Sculptures/Memorials/Buildings not on NIAH/RPS (based on professional judgement) Poorly preserved demesne landscapes
Very Low	Modified landscapes where extensive disturbance is known
Neutral	Landscape that that has been the subject of extensive archaeological investigations and/or extensive development. SMR – Record only Proposed RMP – excavated NIAH – demolished Fully developed demesne landscapes

### 25.2.6.3 *Magnitude of Impact*

The scale or magnitude of potential impacts (both beneficial and adverse) depends on the degree and extent to which the proposed development activities may change the environment, which usually varies according to project phase (i.e. construction, operation and maintenance and decommissioning).

As per the Environmental Protection Agency (EPA) Guidelines, the nature of impacts can be categorised as follows:

- Quality: Positive, neutral, or negative
- Nature: Direct, indirect
- Probability: Likely or unlikely
- Duration: Momentary, brief, temporary, short-term, medium-term, long-term, permanent, reversible
- Frequency: Once, rarely, occasionally, frequently, constantly

The criteria used to assess the different impacts associated with the proposed development are shown in Table 25.3. The criteria have been defined in consideration of the “Guidelines on Information to be Contained in Environmental Impact Statements” (EPA 2022).

**Table 25.3: Criteria for determination of magnitude of impact**

Magnitude	Criteria
Very High	These impacts arise where an archaeology or cultural heritage site, either below ground or upstanding, is completely and irreversibly destroyed.
High	An impact which, by its magnitude, duration, or intensity, alters an important aspect of the archaeological and cultural heritage environment, including the setting of upstanding monuments. An impact like this would be where part of a site would be permanently impacted upon, leading to a loss of character, integrity, and data about an archaeological or cultural heritage feature/site.  A beneficial or positive impact that permanently enhances or restores the character and/or setting of a feature of archaeological or cultural heritage significance in a clearly noticeable manner,
Medium	A medium impact arises where a change to a site/monument is proposed which though noticeable, is not such that the archaeological or cultural heritage integrity of the site is compromised. The change is likely to be consistent with existing and emerging trends. Impacts are probably reversible and may be of relatively short duration.  A beneficial or positive impact that results in partial or temporary enhancement of the character and/or setting of a feature of archaeological or cultural heritage significance in a clearly noticeable manner
Low	An impact which causes changes in the character of the environment, such as a visual impact, which are not high or very high and do not directly impact or affect an archaeological or cultural heritage feature or monument.  A beneficial or positive impact that causes some minor or temporary enhancement of the character of an upstanding archaeological or cultural heritage structure or feature which, although positive, is unlikely to be readily noticeable.
Very Low	An impact on an archaeological or cultural heritage feature or monument capable of measurement but without noticeable consequences.  A beneficial or positive impact on an upstanding archaeological or cultural heritage structure or feature that is capable of measurement but without noticeable consequences.
Neutral	No predicted impact, either negative or positive, to an archaeological or cultural heritage site.

#### 25.2.6.4 Significance of effect

An Impact Assessment Matrix (IAM) is used to determine the significance of an effect. In basic terms, the potential significance of an effect is a function of the sensitivity of the receptor and the magnitude of the impact, as shown in Table 25.4.

The matrix provides a framework for the consistent and transparent assessment of predicted effects although it is important to note that the assessments are based on the application of expert judgement.

The matrix provides levels of effect significance ranging from imperceptible to profound. For the purposes of this assessment, potential effects identified to be of significant significance or above (i.e., significant, very significant or profound) are considered to be “significant in EIA terms” and additional mitigation will be required. Potential effects identified as less than significant (i.e. moderate, slight, imperceptible or not significant) significance are generally considered to be not significant in EIA terms.

**Table 25.4 Impact assessment matrix for determination of significance of effect**

Sensitivity of Receptor	Magnitude of Impact				
	Very High	High	Medium	Low	Very Low
Very High	Profound	Very Significant	Significant	Moderate	Slight
High	Very Significant	Significant	Significant - Moderate	Moderate - Slight	Not Significant

Sensitivity of Receptor	Magnitude of Impact				
	Very High	High	Medium	Low	Very Low
<b>Medium</b>	Significant	Significant - Moderate	Moderate	Slight	Imperceptible
<b>Low</b>	Moderate	Moderate - Slight	Slight	Not Significant	Imperceptible
<b>Very Low</b>	Slight	Not Significant	Imperceptible	Imperceptible	Imperceptible

## 25.3 Baseline Environment

### 25.3.1 Introduction

The proposed landfall and grid facility sites are located within six agricultural fields in the townland of Bremore to the north of Balbriggan town, Co. Dublin. The majority of the onshore cable route is located within the public road (online) with the exception of some offline sections, which pass through agricultural fields. From the grid facility, the onshore cable route runs south along regional roads, mainly the R132 as far as Swords and the R106, R107 and R139 from Swords to Balgriffin on the northern edge of Dublin City. Shorter sections of the onshore cable route deviate from these main carriageways following local roads including Harry Reynolds Road in Balbriggan and the L2141 (Estuary Road) between Swords and Malahide. An alternative route at the southern end of the onshore cable route follows the L2100 (Chapel Road), the R124 and the L2145 (Hole in the Wall Road) before rejoining the R139. The onshore cable route passes through the settlements of Balbriggan, Balrothery, Ballough and Corduff before skirting the northeastern edge of Swords and passing through the western edge of Malahide. The southern end of the onshore cable route passes through Kinsaley and Belmayne before terminating at Belcamp substation in the townlands of Belcamp and Clonshagh.

The study area and archaeological, architectural and cultural heritage sites, as described in section 25.2.4, that have a direct relationship with the coastal resource are described in Section 25.3.18.

### 25.3.2 Archaeological and Historical Background

#### 25.3.2.1 Prehistoric Period

##### *Mesolithic Period (7000–4000 BC)*

The Mesolithic period is the earliest time for which there is clear evidence for prehistoric human colonisation of the island of Ireland. During this period people hunted, foraged, and gathered food and appear to have led a primarily mobile lifestyle. The presence of Mesolithic communities is most commonly evidenced by scatters of worked flint material, a by-product of the production of flint implements or rubbish middens consisting largely of shells. The latter are commonly discovered in coastal regions or at the edge of lakes and a number of shell middens and flint scatters are located along the coast from Sutton and Malahide to Balbriggan, notably at Barnageeragh, c. 5.5km to the southeast of the proposed landfall site (Baker 2010).

##### *Neolithic Period (4000–2500 BC)*

During this period communities became less mobile, and their economy became based on the rearing of stock and cereal cultivation. The transition to the Neolithic was marked by major social change. Communities had expanded and moved further inland to more permanent settlements. This afforded the development of agriculture which demanded an altering of the physical landscape. Forests were rapidly cleared, and field boundaries were constructed. Pottery was also being produced, possibly for the first time. The advent of the Neolithic period also provided the megalithic tomb. There are four types of tombs in Ireland, namely the Court Cairn, Portal, Passage and Wedge; of which the latter style straddles the Neolithic to Bronze Age transition. A passage tomb cemetery is located at Bremore (DU002-001001-5), c. 410m north of the proposed development area.

Evidence for settlement dating to this period is hard to identify as the land has been so intensively farmed that the majority of sites have no above surface expression. However, records held by the National Museum of Ireland indicate the presence of a Neolithic population in Fingal due to the discovery of stray artefacts dating to this period.

Flint scatters are commonly found along the north Dublin coastline, the largest of which is located at Paddy's Hill, Robswalls, southeast of Malahide and approximately 3km east of the onshore cable route along the R107 (Dublin Road). Nearly 3,000 stone tools, including axeheads, flint scrapers, blades, knives and arrowheads, were recovered from this area. A stone axe factory has also been identified on Lambay Island, and stray finds of stone axeheads are common with examples recorded throughout Fingal.

Human remains associated with a flint blade (AH22, Figure 22.7) were discovered c. 67m east of the onshore cable route at Daws Bridge during the 1950s (NMI 1957:5). Nothing further of archaeological significance was revealed during archaeological monitoring of extensive drainage works in this area (Licence Ref.: 08E0178, Kyle 2009).

### *Bronze Age (2500–800 BC)*

This period is marked by the use of metal for the first time. As with the transition from Mesolithic to Neolithic, the transition into the early Bronze Age was accompanied by changes in society. Megaliths were replaced in favour of individual, subterranean cist or pit burials that were either in isolation or in small cemeteries. These burials contained inhumed or cremated remains and were often, but not always, accompanied by a pottery vessel. Burials were often made within cemeteries which were either unenclosed or else marked in the landscape with the construction of an earthen barrow. Barrows of this period often vary in form and can include the ring ditch, the embanked ring ditch, the ring barrow, the bowl barrow and the bowl barrow lacking an external bank. In general, ring ditches date to the Bronze Age, with the earlier examples being simpler in form and later examples incorporating entrances and a wider range of burials practices. Ring ditches appear to have continued to be built and earlier monuments re-used, during the Iron Age and early medieval period.

A number of ring ditches are recorded within the study area, the closest of which (AH16, Figure 25.3) is located c. 157m to the southeast of the onshore cable route along the R132, south of Balrothery. A mound (AH10, Figure 25.2) recorded west of Balrothery and c. 69m west-northwest of the onshore cable route may date to the Bronze Age and evidence of Bronze Age settlement and funerary activity was revealed during excavations for housing estates on the eastern side of Balrothery. c. 255m southeast of the onshore cable route (Carroll et al. 2008).

Over 7,000 burnt mounds or *fulacht fia* sites have been recorded in the country and c. 1,500 examples excavated, making them the most common prehistoric monument in Ireland (Waddell 2022, 164). Although burnt mounds of shattered stone occur as a result of various activities that have been practiced from the Mesolithic to the present day, the Bronze Age has long been believed to have seen the peak of this activity. Dating evidence from a growing number of burnt mounds, suggests activities resulting in burnt mounds were being carried over a span of 3,500 years in Ireland (Hawkes 2018). They are typically located in areas where there is a readily available water source, often in proximity to a river or stream or in places with a high-water table. In the field burnt mounds may be identified as charcoal-rich mounds or spreads of heat shattered stones, however, in many cases, the sites have been disturbed by later agricultural activity and are no longer visible on the field surface. Nevertheless, even disturbed spreads of burnt mound material often preserve the underlying associated features, such as troughs, pits and gullies, intact.

Numerous areas of burnt mound/*fulachta fia* activity were revealed during testing within the landfall site of the proposed development. A further *fulacht fia* site (AH18, Figure 25.4) was excavated within the onshore cable route at Jordantown during topsoil removal for a gas pipeline in 2002.

### *Iron Age (800 BC–AD 500)*

There is increasing evidence for Iron Age settlement and activity in recent years as a result of development-led excavations as well as projects such as Late Iron Age and Roman Ireland (LIARI). Yet this period is distinguishable from the rather rich remains of the preceding Bronze Age and subsequent early medieval period, by a relative paucity within the current archaeological record.

The Iron Age in Ireland is problematic for archaeologists as few artefacts dating exclusively to this period have been found and without extensive excavation it cannot be determined whether several monument types, such as ring-barrows or standing stones, date to the late Bronze Age or Iron Age. It is likely that there was significant continuity in the Iron Age, with earlier monuments re-used in many cases.

With the expanding population, there was an increased need for defence at this time. Coastal promontory forts were constructed around Ireland as defensive settlements, of which four are located in Fingal. The largest of these four is located at Drumanagh (DU008-006001), c.7.5km east of the proposed development. A further two promontory forts are located on Lambay Island (DU009-001013), c. 10km to the east, with another recorded at Howth (DU016-003001), c. 8km to the southeast.

Whilst no sites of definitive Iron Age date are located within the study area, an Iron Age hilltop enclosure (DU005-057008) was discovered just outside the study area during the excavations on the eastern side of Balrothery (Carroll 2008).

#### 25.3.2.2 Early Medieval Period (AD 500–1100)

The early medieval period is depicted in the surviving sources as an almost entirely rural based society. Territorial divisions were based on the *túath*, or petty kingdom, with Byrne (1973) estimating probably at least 150 kings in Ireland at any given time. This period, with a new religious culture and evolving technologies, saw significant woodland clearance and the expansion of grassland. A new type of plough and the horizontal mill were two innovations that improved agriculture and allowed for the population to increase. Consequently, from c. AD 500 onwards, the landscape became well settled, as evidenced by the profuse distribution of ringforts, a dispersed distribution of enclosed settlements, normally associated with various grades of well-to-do farming and aristocratic classes in early medieval Ireland (Stout and Stout 1997, 20).

The ringfort or rath is considered to be the most common indicator of settlement during the early medieval period. One of the most recent studies of early medieval settlement enclosures has suggested that there is potential for at least 60,000 such sites to have existed on the island (O’Sullivan et al. 2014, 49). Ringforts were often constructed to protect rural farmsteads and are usually defined as a broadly circular enclosure delineated by a bank and ditch. Ringforts can be divided into three broad categories – univallate sites, with one bank or ditch; multivallate sites, with as many as four levels of enclosing features, and platform or raised ringforts, where the interior of the ringfort has been built up. These enclosed sites were intimately connected to the division of land and the status of the occupant.

Whilst no ringforts are recorded within the study area several of the seven recorded enclosures in the study area may represent the remains of ploughed out ringforts or habitation sites, the closest of which is AH29 (Figure 25.11), c. 30m to the east of the onshore cable route north of Kinsaley.

This period was also characterised by the foundation of a large number of ecclesiastical sites throughout Ireland during the centuries following the introduction of Christianity in the 5th century AD. These early churches tended to be constructed of wood or post-and-wattle. Between the late 8th and 10th centuries, mortared stone churches gradually replaced the earlier structures. Many of the sites, some of which were monastic foundations, were probably originally defined by an enclosing wall or bank similar to that found at the coeval secular sites. This enclosing feature was probably built more to define the sacred character of the area of the church than as a defence against aggression. An inner and outer enclosure can be seen at some of the more important sites: the inner enclosure surrounding the sacred area of church and burial ground and the outer enclosure providing a boundary around living quarters and craft areas.

The early ecclesiastical enclosure, church and associated features of Saint Doolaghs (AH30) are located within the study area, immediately adjacent to the onshore cable route along the R107 (Malahide Road, Figure 25.12)). An element of this complex, a cross (AH30g), lies within the boundary of the proposed development at this point (albeit that it will be protected during construction) and it is possible that the R107 crosses the ecclesiastical enclosure itself.

The earliest reference to St. Doolagh is found in the 9th century Martyrology of Oengus, where he is referred to as *Duilech of Clochar*. Archaeological investigations were undertaken at Saint Doolagh’s in 1989, and a number of coins and tokens were recovered in association with an outer and inner ditch and burial area.



A further investigation was carried out in 2015, where a section was excavated across a portion of the northern part of the outer enclosure. This produced a late 9th/early 10th century date (Duffy pers. com.).

The St Doolaghs complex also includes two holy wells, St Doolaghs Well and St Catherines Well (AH30e and f), within an ornate stone structure to the north of the church itself.

The church and well structure are also protected structures (BH27). Holy wells are a common feature of early medieval ecclesiastical sites and two further such sites are recorded within the study area, AH09 and AH25 (Figures 25.2 and 25.8). The latter falls within the boundaries of the proposed development at the southern end of the M1 crossing greenfield area. The well was filled in during roadworks in the 1970s and no surface expression remains (Healy 1975).

### 25.3.2.3 Medieval Period (AD 1100–1600)

The piecemeal conquest by the Anglo-Normans of Ireland, which commenced in AD 1169, had a fundamental impact on the Irish landscape. The Anglo-Norman presence was strongest in the southeast of the country, and it is mainly in this region that land was carved up and granted to the Anglo-Norman lords who participated. The main success of the Anglo-Norman occupation was the welding of scattered territories into a cohesive unit through the introduction of the English form of shire government. The rural landscape became a network of manorial centres; these units would generally contain a castle, a manorial house and a number of dwellings, with extensive surrounding acreage. Characteristic of Anglo-Norman initial settlement is the motte structure, an artificial raised earth platform that commonly held a timber tower or *bretagh*. Some motte structures had attached enclosures called baileys. These castles were built hastily to establish territorial claims and were later replaced by stone castles.

The earliest references to a possible castle or manor at Bremore Castle (AH04, Figure 25.1) are found in the Gormanston Register, which names *Wylliam Rosselle as Lord of Dunbegh in County Derby and Bremore in Ireland* (O’Carroll 2009). The Gormanston Register is a collection of manuscripts dating from 1175 to 1397, which were collected by the Viscounts Gormanston and are now held by the National Library. The Dunbegh title presumably refers to the knight’s fee in County Derby that was held by Patrick de Rosel at the turn of the 13th century. William is also mentioned in association with Bremore in the Calendar of Documents Relating to Ireland in 1299-1300 (ibid.).

The Annals of Inisfallen refer to the church at Bremore (AH05) in 1164, following which it fell under the control of the Augustinian priory of Tristernagh in Westmeath. The present structure would appear to have been a manorial chapel attached to the adjacent castle (AH04).

During the 14th to 16th centuries, tower houses were the typical residence of the Irish gentry and are a common feature in the Irish landscape. Two such structures are located within the study area for the proposed development. One, AH13/BH05c (Figure 25.3), is located to the south of the church complex at Bremore, c. 59m southeast of the onshore cable route. The second, AH28/BH17 (Figure 25.9) is located c. 20m south of the onshore cable route along Estuary Road. Both are also protected structures.

The present-day church of the ecclesiastical complex at Balrothery (AH12, Figure 25.3) is a 19th-century Board of First Fruits, Church of Ireland building, now housing the Balrothery Heritage Centre. The church replaced the medieval parish church in 1816, except for the 15th century fortified residential tower which still survives (Lewis 1837). The current church building and the medieval tower are both protected structures (BH05a and b), the tower is also a National Monument (No. 590). A ballaun stone (AH12e) recorded within the graveyard of the complex hints at an early medieval origin for the ecclesiastical site.

Two further medieval churches, both with associated graveyards and both in ruins, are located within the study area. St Nicholas’s Church and graveyard (AH32, Figure 25.11) is located immediately north of the onshore cable route along Chapel Road in Kinsaley. Grange Abbey and graveyard (AH36, Figure 25.13) is located immediately northeast of the onshore cable route at the R139/Hole in the Wall Road. St Nicholas’s is also a protected structure (BH35) and Grange Abbey is a National Monument (No. 605).

Lissenhall Bridge (AH26/BH14, Figure 25.8), to the west of the onshore cable route, has been dated to between 1450 and 1550 (O’Keeffe and Simington 1991, 186-188). Much of the medieval fabric of the bridge survives and it is visible on the Down survey map of c. 1655.



Additional potential medieval sites are also recorded in the study area in the form of field systems (AH03, AH14, AH30i, AH34a and AH35a) and corn-drying kilns (AH11 and AH19).

#### 25.3.2.4 Post-Medieval Period (AD 1600–1800)

The cultural heritage of this period is more visible within the study area as it is characterised by structures and demesne landscapes (DLs) that have survived due to being more recent in date. However, there are also several recorded post-medieval sites listed within the RMP, including two 19th century water mills, AH07 and AH08, c. 165m north and c. 120m west of the onshore cable route respectively (Figure 25.2), on the south side of Balbriggan. Newhaven Quay, within the study area to the north of the proposed landfall site, is also recorded on both the RMP and RPS (AH02/BH01, Figure 25.1), as are a number of houses (AH04 Bremore Castle, AH06, AH31) and the two tower houses within the study area (AH13/BH05c and AH28/BH17). Newhaven appears to have been a small fishing-village to the north of the townland of Bremore, with the Civil Survey of 1654 stating; *‘There is upon Breemore one Burnt Castle with a great Barne & eight tenements one orchard & parke with some small young Ashtrees & on Newhaven ten small cottages both valued by the Jury at one hundred & ten poundes (they being both as one)’*.

The ending of the Williamite Wars saw the beginning of a comparative politically calm era, which allowed the country's landowners the security to experiment with the latest styles of architecture without the need to refer to defensive matters. Initially, constraints on available resources resulted in mansions of a relatively modest scale and relatively plain appearance, but as the aristocracy's sense of security grew over the following decades, their greater access to wealth helped foster a shift towards more ostentatious buildings. These large houses were initially set within lands turned over to formal gardens, which were much the style of continental Europe. Gradually this style, utilising formal avenues and geometric garden design, was replaced during the mid-18th century with the adoption of parkland landscapes – to be able to view a large house within a more ‘natural’ setting, although considerable constructional effort went into their creation.

Spanning this transition from security to opulence is Bremore Castle (AH04). Prior to the Williamite Wars the castle was the seat of the Barnewalls of Bremore, who held the castle since its construction during the 14th century. The family rose to prominence during the 16th and 17th centuries, with extensive lands in north County Dublin. The family were closely linked with the Catholic cause during the confederate wars and suffered accordingly, as did the castle. The line of the Barnewall family subsequently became extinct at the end of the 17th century; the castle of Bremore and its surrounding lands passed into the possession of the first earl of Shelburn, no longer functioning as a manorial seat but undergoing renovation, nonetheless.

There are 29 demesne landscapes (DLs) within the study area for the proposed development, varying in size and level of preservation. These are shown throughout Figure 25.1 to 25.14. Probably the most important of these, as well as being the largest and best preserved, is Malahide Castle (DL11, Figure 25.10). The castle is a protected structure and whilst the main building lies outside the study area, two associated gate lodges (BH18a and b) lie immediately adjacent to the onshore cable route along the R107, as do the demesne walls (BH18c). The RPS includes these ancillary features. Two further demesnes retain ancillary buildings that fall within the study area. St Doolaghs (DL16, Figure 25.11) is well preserved and retains a gate lodge (BH26), a protected structure c. 6m to the west of the onshore cable route along the R107 Malahide Road. Limehill House (DL17, Figure 25.12) to the south of St Doolaghs, is well preserved and also retains a gate lodge (BH30), c. 4m to the west of the onshore cable route. In addition, a protected milestone (BH29) is built into the wall at the entrance to DL17.

Two of the demesnes retain principal structures that do fall within the study area. Bremore Cottage (BH03, DL01) is protected structure, c. 9m west of the onshore cable route along Drogheda Street, Balbriggan (Figure 25.1). Other than the cottage, the remainder of the demesne has been developed. At the southern end of the scheme, St Doolaghs Lodge/Wellfield House (BH31, DL18, Figure 25.12) is a protected structure lying c. 24m to the east of the onshore cable route along Malahide Road. The northern half of DL18, containing the house, is well preserved, the southern half is occupied by Fingal Burial Ground.

Belcamp House (BH 33, DL21, Figure 25.14) was located at the terminus of the proposed development, west of the existing Belcamp substation and planned Belcamp extension project. The house dated to c. 1820 but was demolished after a fire in 2001. The demesne landscape is moderately preserved but has been affected by the construction of the Belcamp substation.

Vernacular architecture is defined in James Stevens Curl's (1997) *Encyclopaedia of Architectural Terms* as 'a term used to describe the local regional traditional building forms and types using indigenous materials, and without grand architectural pretensions', i.e. the homes and workplaces of the ordinary people built by local people using local materials.

This is in contrast to formal architecture, such as the grand estate houses of the gentry, churches and public buildings, which were often designed by architects or engineers. The majority of vernacular buildings are domestic dwellings. Examples of other structures that may fall into this category include shops, outbuildings, mills, limekilns, farmsteads, forges, gates, and gate piers. Various such vernacular elements of the built heritage resource are located within the study area, including thatched cottages (BH07, BH08) and items of street furniture such as water pumps (BH09, BH20), post boxes (BH24, BH32), a number of milestones (BH06, BH10, BH13, BH19, BH21, BH29) and a former smithy (BH37). A number of bridges, are also present within the study area, including Daws Bridge (BH12), within the boundaries of the onshore cable route along with BH11 (Corduff Bridge), BH15 (Balheary Bridge) and BH22.

### 25.3.3 Recorded Monuments (AH sites) within the Study Area

A total of 36 Archaeological Heritage sites (AH) are recorded within the onshore study area around the onshore development area, 30 of which are recorded on the RMP (Table 25.5). The remainder comprise proposed RMP sites or sites that have been subject to archaeological excavation and therefore exist as 'record only'.

Of the 36 sites and groups of sites, nine are also recorded on the Record of Protected Structures (RPS), one on the National Inventory of Architectural Heritage (NIAH) and a further four on both the RPS and NIAH.

Three sites, Balrothery Church tower (AH12a), Lissenhall Bridge (AH26) and Grange Abbey (AH36) are National Monuments in State Care. The AH sites are shown in Figures 25.1-14 in Volume 7A.

**Table 25.5 Archaeological Heritage Sites located within the study area**

AH No.	SMR/RMP No.	Classification	Distance from onshore development area	Status	Sensitivity of Receptor
AH01	DU002-018	Enclosure	c. 125m NNW of access to landfall site (Figure 25.1)	Proposed RMP	High
AH02	DU002-015	Quay	c. 120m N of landfall site (Figure 25.1)	Proposed RMP, RPS	High
AH03	DU002-014	Field system	c. 140m E of onshore cable route (Figure 25.1)	SMR	Neutral
AH04	DU002-002001	House - fortified house	c. 130m NE of onshore cable route (Figure 25.1)	RMP, RPS	High
AH05a-d	DU002-002002	Church	c. 94m NE of onshore cable route (Figure 25.1)	RMP, RPS	High
	DU002-002003	Graveyard			
	DU002-002005	Architectural fragment			
	DU002-002006	Architectural fragment			
AH06	DU002-011	House - 16th/17th century	c. 188m SE of onshore cable route (Figure 25.1)	RMP, RPS	High
AH07	DU005-050	Water mill - unclassified	c. 165m N of onshore cable route (Figure 25.2)	RMP, RPS, NIAH	High

AH No.	SMR/RMP No.	Classification	Distance from onshore development area	Status	Sensitivity of Receptor
AH08	DU005-051	Water mill - unclassified	c. 120m W of onshore cable route (Figure 25.2)	RMP, RPS	High
AH09	DU005-057001	Ritual site - holy well	c. 37m E of onshore cable route (Figure 25.2)	RMP	High
AH10	DU005-008	Mound	c. 69m WNW of onshore cable route (Figure 25.2/3)	RMP, RPS	High
AH11	DU005-065	Kiln - corn-drying	c. 193m E of onshore cable route (Figure 25.3)	Proposed RMP (excavated)	Neutral
AH12a-f	DU005-057003 (original church) DU005-009001 (surviving tower)	Church	c. 8m E of onshore cable route (Figure 25.3)	National Monument (No. 590), RMP, RPS	Very High/High
	DU005-057005	Graveyard		RMP	
	DU005-070	Burial ground		RMP	
	DU005-076	Burial ground		RMP	
	DU005-009004	Bullaun stone		RMP	
	DU005-009002	Inscribed stone		SMR	
AH13	DU005-057006	Castle - tower house	c. 59m SE of onshore cable route (Figure 25.3)	RMP, NIAH	High
AH14	DU005-064	Field system	c. 17m SE of onshore cable route (Figure 25.3)	Proposed RMP	High
AH15	DU005-014	Ring-ditch	c. 181m NW of onshore cable route (Figure 25.3)	RMP	High
AH16	DU005-197	Ring-ditch	c.157m SE of onshore cable route (Figure 25.3)	Proposed RMP	High
AH17	DU004-048	Burnt pit	c. 22m NW of onshore cable route (Figure 25.3)	Proposed RMP (site excavated)	High
AH18	DU008-062	Fulacht fia	0m of onshore cable route (Figure 25.4)	SMR (record only)	Neutral
AH19	DU008-091	Kilns - corn-drying	c. 46m NE of onshore cable route (Figure 25.4/5)	SMR (record only)	Neutral
AH20	DU008-007	Windmill	c. 87m NE of onshore cable route	SMR	Medium

AH No.	SMR/RMP No.	Classification	Distance from onshore development area	Status	Sensitivity of Receptor
			(Figure 25.5)		
AH21	DU008-064	Burial	c. 112m W of onshore cable route (Figure 25.7)	SMR (record only)	Neutral
AH22	DU008-023	Burial	c. 67m E of onshore cable route (Figure 25.7)	Proposed RMP	High
AH23	DU012-003	Ring-ditch	c. 200m N of onshore cable route (Figure 25.8)	Proposed RMP	High
AH24a-b	DU012-079001	House - Neolithic	c. 5m S of onshore cable route (Figure 25.8)	SMR (record only)	Neutral
	DU012-079002	House - Neolithic			
AH25	DU012-011	Ritual site - holy well	0m of onshore cable route (Figure 25.8)	RMP	High
AH26	DU011-081	Bridge	c. 25m W of onshore cable route (Figure 25.8)	National Monument, RMP, RPS, NIAH	Very High
AH27	DU012-137	Earthwork	c. 124m S of onshore cable route (Figure 25.9)	Proposed RMP	High
AH28	DU012-021	Castle - tower house	c. 20m S of onshore cable route (Figure 25.9)	RMP, RPS	High
AH29	DU015-115	Enclosure	c. 30m E of onshore cable route (Figure 25.11)	Proposed RMP	High
AH30a-i	DU015-009001	Church	c. 42m W of onshore cable route (Figure 25.12)	RMP	High
	DU015-009005/009	Ecclesiastical enclosure	0m - onshore cable route (Figure 25.12)	RMP	
	DU015-009006	Graveyard	c. 33m W of onshore cable route (Figure 25.12)	RMP	
	DU015-009003	Ritual site - holy well	c. 35m W of onshore cable route (Figure 25.12)	RMP	
	DU015-009004	Ritual site - holy well	c. 35m W of onshore cable route (Figure 25.12)	RMP, RPS, NIAH	
	DU015-009002	Cross	0m - onshore cable route (Figure 25.12)	RMP	
	DU015-009007	Architectural fragment	c. 54m W of onshore cable route (Figure 25.12)	RMP	
	DU015-009008	Field system	c. 60m W of onshore cable route	RMP	

AH No.	SMR/RMP No.	Classification	Distance from onshore development area	Status	Sensitivity of Receptor
			(Figure 25.12)		
AH31	DU015-061	House - 16th/17th century	c. 165m S of onshore cable route (Figure 25.14)	RMP	High
AH32a-b	DU015-002001	Church	To the immediate N of onshore cable route (Figure 25.11)	RMP, RPS, NIAH	High
	DU015-002002	Graveyard			
AH33	DU015-114	Enclosure	c. 180m N of onshore cable route (Figure 25.11)	Proposed RMP	High
AH34a-e	DU015-113	Field system	c. 86m N of onshore cable route (Figure 25.11)	Proposed RMP	High
	DU015-112	Enclosure			
	DU015-129	Enclosure			
	DU015-131	Ring-ditch			
	DU015-132	Ring-ditch			
AH35	DU015-123	Field system	To the immediate W and N of onshore cable route (Figure 25.12)	Proposed RMP	High
AH36a-b	DU015-069001	Church	c. 40m W of onshore cable route (Figure 25.13)	National Monument (No. 605), RMP	Very High
	DU015-069002	Graveyard			

Of these 36 sites/groups, four fall within the boundaries of the proposed development; a cross (DU015-009002, AH30g) forming an element of the St Doolaghs Church complex (AH30); along with a section of the ecclesiastical enclosure (AH30b/d), a holy well (AH25) and the site of a *fulucht fia* (AH18). The holy well was infilled during roadworks in the 1970s and no upstanding remains survive, it is not known if below ground remains survive. The *fulucht fia*, AH18, has previously been excavated and preserved by record.

#### 25.3.4 Protected Structures (BH sites) within the Study Area

A review of the Fingal County Development Plan 2023-2029 and Dublin City Development Plan 2022-2028 has shown that a total of 28 Protected Structures and groups of Protected Structures (BH sites) are recorded within the study area of the onshore development area (see Table 25.6).

Of the 28 structures and groups of structures, three are also listed on both the RMP and the NIAH Survey; two are also listed in the RMP. As such, these sites are also subject to statutory protection under the National Monuments Act.

Each BH site is included is marked on Figures 25.1 to 25.14 in Volume 7A.

**Table 25.6 Protected Structures (BH) located within the study area**

BH No.	RPS No.	Classification	Distance from onshore development area	Status	Sensitivity of Receptor
BH01	875	Newhaven Quay	c. 120m N of landfall site (Figure 25.1)	RPS, Proposed RMP	High

BH No.	RPS No.	Classification	Distance from onshore development area	Status	Sensitivity of Receptor
BH02	12	Railway Bridge	c. 7m S of landfall site (Figure 25.1)	RPS	High
BH03	15	Bremore Cottage	c. 9m W of onshore cable route (Figure 25.1)	RPS, NIAH	High
BH04	62	Catholic Church of Saint Peter and Saint Paul	To the immediate NE of onshore cable route (Figure 25.2)	RPS, NIAH	High
BH05a-c	83	Medieval Church Tower of Balrothery Church	c. 8m E of onshore cable route (Figure 25.3)	RPS, RMP	High
	84	Former St. Peter's Church of Ireland Church			
	85	Tower House			
BH06	869	Milestone (not located during field inspection)	0m - onshore cable route (Figure 25.5)	RPS	High
BH07	315	Thatched cottage	c. 4m E of onshore cable route (Figure 25.6)	RPS, NIAH	High
BH10	868	Milestone	To the immediate W of onshore cable route (Figure 25.6)	RPS	High
BH11	905	Corduff Bridge	c. 44m N of onshore cable route (Figure 25.7)	RPS	High
BH12	906	Daws Bridge	0m - onshore cable route (Figure 25.7)	RPS	High
BH13	867	Milestone	c. 2m W of onshore cable route (Figure 25.7)	RPS	High
BH14	341	Lissenhall Bridge	c. 25m W of onshore cable route (Figure 25.8)	RPS, NIAH, RMP, National Monument	Very High
BH15	340	Balheary Bridge	c. 13m W of onshore cable route (Figure 25.8)	RPS, NIAH	High
BH17	379	Seatown House	c. 20m S of onshore cable route (Figure 25.9)	RPS, RMP	High
BH18a-c	383	Malahide Castle (Gate lodge)	To the immediate E of onshore cable route (Figure 25.10)	RPS, NIAH	High
		Malahide Castle (Gate lodge)			
		Malahide Castle (demesne walls)			
BH19	447	Milestone	0m - onshore cable route (Figure 25.10)	RPS, NIAH	High

BH No.	RPS No.	Classification	Distance from onshore development area	Status	Sensitivity of Receptor
BH21	453	Milestone	0m - onshore cable route (Figure 25.11)	RPS, NIAH	High
BH22	913	Road bridge	0m - onshore cable route (Figure 25.11)	RPS	High
BH23	454	Saint Nicholas' Roman Catholic Church	c. 12m E of onshore cable route (Figure 25.11)	RPS, NIAH	High
BH25	914	Malahide Portmarnock Educate Together National School	c. 28m E of onshore cable route (Figure 25.11)	RPS	High
BH26	790	Gate lodge	c. 6m W of onshore cable route (Figure 25.11)	RPS, NIAH	High
BH27a-b	459	Saint Doolagh's Church	c. 35m W of onshore cable route (Figure 25.12)	RPS, NIAH, RMP	High
		Saint Catherine's Well			
BH28	461	Saint Doolagh's Park Gate Lodge	To the immediate E of onshore cable route (Figure 25.12)	RPS, NIAH	High
BH29	462	Milestone	c.4m W of onshore cable route (Figure 25.12)	RPS, NIAH	High
BH31	468	Wellfield House	c. 24m E of onshore cable route (Figure 25.12)	RPS, NIAH	High
BH35	455	Church (in ruins) and graveyard	To the immediate N of onshore cable route (Figure 25.11)	RPS, NIAH, RMP	High
BH37	915	Former forge/smithy	c. 7m NE of onshore cable route (Figure 25.11)	RPS, NIAH	High
BH38	457	Saint Marnock's Former Church of Ireland church and graveyard	c. 22m E of onshore cable route (Figure 25.11)	RPS, NIAH	High

Of these 28 BH sites, five fall within the boundaries of the proposed development: three milestones (BH06, BH19 and BH21) and two bridges (BH12 and BH22). Many of the remaining structures immediately border the onshore cable route of the proposed development.

#### 25.3.5 National Inventory of Architectural Heritage structures (BH sites) within the Study Area

A review of the National Inventory of Architectural Heritage (NIAH) has shown that there are 26 NIAH structures located within the study area of the onshore development area (Table 25.7). Of these, 16 structures are listed in the RPS within the Fingal County Development Plan (2023-2029).

Each BH site is marked on Figures 25.1 to 25.14.



**Table 25.7 National Inventory of Architectural Heritage (BH) sites located within the study area**

BH No.	NIAH No.	Classification	Distance from onshore development area	Status	Sensitivity of Receptor
BH03	11304003	Bremore Cottage	c. 9m W of onshore cable route (Figure 25.1)	NIAH, RPS	High
BH04	11305036	Catholic Church of Saint Peter and Saint Paul	To the immediate NE of onshore cable route (Figure 25.2)	NIAH, RPS	High
BH07	11323013	Thatched cottage	c. 4m E of onshore cable route (Figure 25.6)	NIAH, RPS	High
BH08	11323014	Thatched cottage. Completely demolished, no upstanding remains	c. 8m W of onshore cable route (Figure 25.6)	NIAH	Neutral
BH09	11323023	Cast-iron water pump	c. 3m E of onshore cable route (Figure 25.6)	NIAH	Medium
BH14	11335019	Lissenhall Bridge	c. 25m W of onshore cable route (Figure 25.8)	NIAH, RPS, RMP, National Monument	Very High
BH15	11335018	Balheary Bridge	c. 13m W of onshore cable route (Figure 25.8)	NIAH, RPS	High
BH16	11335012	Lissenhall Bridge	c. 30m NE of onshore cable route (Figure 25.9)	NIAH	Medium
BH18a-c	11344044	Malahide Castle (Gate lodge)	To the immediate E of onshore cable route (Figure 25.10)	NIAH, RPS	High
	11344024	Malahide Castle (Gate lodge)			
	11344025	Malahide Castle (demesne walls)			
BH19	11344043	Milestone	0m - onshore cable route (Figure 25.10)	NIAH, RPS	High
BH20	11350001	Cast-iron water pump	c. 2m E of onshore cable route (Figure 25.11)	NIAH	Medium
BH23	11350003	Saint Nicholas' Roman Catholic Church	c. 12m E of onshore cable route (Figure 25.11)	NIAH, RPS	High
BH24	11350005	Wall-mounted cast-iron post box	c. 40m E of onshore cable route (Figure 25.11)	NIAH	Medium
BH26	11350012	Gate lodge	c. 6m W of onshore cable route (Figure 25.11)	NIAH, RPS	High
BH27a-b	11350016	Saint Doolagh's Church	c. 35m W of onshore cable route	NIAH, RPS, RMP	High

BH No.	NIAH No.	Classification	Distance from onshore development area	Status	Sensitivity of Receptor
	11350017	Saint Catherine's Well	(Figure 25.12)		
BH28	11350018	Saint Doolagh's Park Gate Lodge	To the immediate E of onshore cable route (Figure 25.12)	NIAH, RPS	High
BH29	11350029	Milestone	c.4m W of onshore cable route (Figure 25.12)	NIAH, RPS	High
BH30	11350027	Limehill House lodge and entrance	c.4m W of onshore cable route (Figure 25.12)	NIAH	Medium
BH31	11350021	Wellfield House	c. 24m E of onshore cable route (Figure 25.12)	NIAH, RPS	High
BH32	11350026	Wall-mounted cast-iron post box (removed)	c. 3m W of onshore cable route (Figure 25.13)	NIAH	Neutral
BH33	11349005	Belcamp House (demolished)	0m - onshore cable route (Figure 25.14)	NIAH	High
BH34	50130214	Icehouse	c. 95m S of onshore cable route (Figure 25.14)	NIAH	Medium
BH35	11350033	Church (in ruins) and graveyard	To the immediate N of onshore cable route (Figure 25.11)	NIAH, RMP, RPS,	High
BH36	11350008	Kinsaley Hall (gate lodge)	c. 2m N of onshore cable route (Figure 25.11)	NIAH	Medium
BH37	11350032	Former forge/smithy	c. 7m NE of onshore cable route (Figure 25.11)	NIAH, RPS	High
BH38	11350030	Saint Marnock's Former Church of Ireland church and graveyard	c. 22m E of onshore cable route (Figure 25.11)	NIAH, RPS	High

### 25.3.6 Architectural Conservation Areas (ACAs) within the Study Area

A review of the Fingal County Development Plan 2023-2029 has shown that the onshore cable route passes through Abbeville Demesne ACA (ACA01) at its eastern end. Two further ACAs are designated immediately adjacent to the proposed development; Balrothery ACA (ACA02) and Malahide Castle Demesne ACA (ACA03). The ACAs are marked on Figure 25.1-25.14. An extract from Appendix 5 of the Fingal County Development Plan 2023-2029, which describes each ACA, is included below:

Abbeville Demesne (ACA01) (Figure 25.11)

*DF-ACA-01 Abbeville is an 18<sup>th</sup> century Country House Demesne. The designed landscape is centred around the Protected Structure (RPS Ref. 452) of Abbeville House which is an 18<sup>th</sup> century nine-bay two-storey over basement house with stables, outbuildings, and walled garden. In the mid-18<sup>th</sup> century, a house existed on the lands. In 1760 the Right Honourable John Beresford, bought the house and lands naming it Abbeville. Beresford was a leading figure in 18<sup>th</sup> century Irish life as a Member of Parliament, Chief Commissioner of the Wide Streets Commission, and Commissioner of the Revenue.*

*In the latter role he oversaw the building of the Customs House designed by the renowned architect James Gandon. He engaged Gandon in 1790 to alter and extend the pre-existing dwelling at Abbeville. Gandon added a ballroom, dining room and bedrooms along with stables and a dairy. Abbeville has also been home to: Austin Cooper, deputy constable of Dublin Castle; James William Cusack, surgeon ordinary to the crown; and Charles Haughey, late 20<sup>th</sup> century politician and Taoiseach of Ireland. While the size of the estate has changed considerably over its history the core around the historic house has been retained. It is in private ownership. The special interest of the ACA relates to its architectural and designed landscape significance and its historical associations to leading figures in Irish political and social life in past centuries.*

**Balrothery (ACA02) (Figure 25.3)**

*DF-ACA-06 Balrothery ACA is centred around its medieval core of a former ecclesiastical site which sits above the village on an enclosed elevated site and with an open green below it. While the earlier church has been replaced by an 19<sup>th</sup> century building dating from 1816, the 15<sup>th</sup> century church tower survives within the historic graveyard. In close proximity to the church site are the remains of a medieval tower house. The ACA also encompasses the former early 19<sup>th</sup> century Glebe House and glebe lands. Sited around the perimeter of the fair green are several vernacular houses and a much-modified historic coaching inn that served the old coach route north out of Dublin. The special character of the ACA is defined by the medieval towers, the historic church site and the vernacular buildings around the green.*

**Malahide Castle Demesne ACA (ACA03) (Figure 25.10)**

*DF-ACA-17 Malahide Demesne encompasses Malahide Castle, the ruins of Malahide Abbey, four gate lodges and entrances, outbuildings and important gardens including the walled garden and Talbot Botanic Gardens. The demesne is within the ownership of the local authority and provides amenity and recreational facilities within the parkland including a Par 3 golf course, tennis courts, boules lawn, cricket ground, playing pitches and associated sports facilities. Malahide Castle stands as the centre of the designed landscape and is the strongest identifying feature of the demesne. The lands of Malahide were given to Richard Talbot by King Henry II at the end of the 12<sup>th</sup> century. The current castle is an amalgamation of different phases of construction from the early medieval period onwards.*

*It operates as a tourist attraction. The surrounding designed landscape was laid out to complement and enhance the castle. The castle and views to and from the castle contributes significantly to the character of the ACA.*

**25.3.7 Designed Landscapes**

A number of sources were reviewed in order to define the nature and extent of designed landscapes within the study area of the onshore proposed development. These included the historic Ordnance Survey (OS) mapping, aerial photographic coverage, the NIAH Garden Survey and field inspections.

A total of 34 designed landscapes have been identified within the study area of the proposed development (see Table 25.7). The landscapes are shown as shaded ‘demesne’ landscapes on the first edition OS mapping. These environments were intended to represent a natural parkland setting for a large house, a practice that became fashionable from the latter part of the 18th century onwards. The landscapes, which can vary greatly in size, often possess specific features, such as long driveways, gate lodges, elaborate entrances, walled gardens, bodies of water and belts, avenues and clumps of deciduous and specimen trees.

The identified designed landscapes are listed in Table 25.8 and shown on Figures 25.1 to 25.14.

**Table 25.8: Demesne Landscapes within the study area**

DL No.	Name/Description	Distance from onshore development area	Status	Sensitivity of Receptor
DL01	Bremore Cottage/Seaview Cottage. Principal structure of Bremore Cottage survives (BH03), but Seaview Cottage is no longer extant. The remainder of the small landscape has been fully developed.	To the immediate W of onshore cable route (Figure 25.1)	-	Neutral

DL No.	Name/Description	Distance from onshore development area	Status	Sensitivity of Receptor
DL02	Tankardville. Principal structure remains and is on the RPS but is located outside of the study area. The remainder of the demesne has been fully developed.	To the immediate S of onshore cable route (Figure 25.1)	-	Neutral
DL03	Glebe House. Principal structure remains and is on the RPS but located outside study area. The eastern and northern sides of the demesne have been developed but many of the mature tree belts survive and the centre of the demesne remains relatively undisturbed.	c. 16m SE of onshore cable route (Figure 25.3)	NIAH Gardens	Medium
DL04	Lissen Hall Little. The principal structure has been demolished and a large portion of the eastern section of the demesne has been affected by the construction of the M1. Many tree-lined boundaries survive but the majority of the landscape has been subsumed into agricultural production.	0m - onshore cable route (Figure 25.8)	NIAH Gardens	Low
DL05	Balheary House. The principal structure is no longer extant, with a modern college established to the south of the site. The northern part of the demesne retains some of its original design characteristics, but the southern portion has been developed with industrial structures and sports pitches.	To the immediate W of onshore cable route (Figure 25.8)	NIAH Gardens	Medium
DL06	Meudon. The principal structure is in ruins and the southern section of the demesne has been affected by industrial development. The western boundary has been impacted by the realigned R132. Some mature tree belts survive along the eastern boundary.	0m - onshore cable route (Figure 25.8)	NIAH Gardens	Low
DL07	Green Meadow. House and small landscape has been removed by the time of the 1910 OS map and today is covered by residential development.	To the immediate N of onshore cable route (Figure 25.10)	-	Neutral
DL08	Gay Brook. The principal structure, gate lodge and small demesne, as marked on the first edition OS map, has today been subject to full residential development.	To the immediate S of onshore cable route (Figure 25.10)	-	Neutral
DL09	Mill View. The principal structure has been demolished and the small demesne, as marked on the first edition OS map, has been fully developed. Several specimen trees survive in a small green area in what was the northern part of the landscape.	To the immediate N of onshore cable route (Figure 25.10)	-	Neutral
DL10	La Mancha. The principal structure has been demolished and the landscape entirely developed. Specimens of demesne planting exist within portions of the demesne.	To the immediate N of onshore cable route (Figure 25.10)	-	Neutral
DL11	Malahide Castle. This landscape is very well preserved within the principal structure of Malahide Castle, listed on the RPS and situated outside the study area. The record also includes two gatehouses and the demesne walls which are immediately adjacent to the proposed development (BH18). The demesne is also listed as an ACA due to the level of preservation.	To the immediate E of onshore cable route (Figure 25.10)	NIAH Gardens	High
DL12	Auburn House. The principal structure is present and listed in the RPS, although is outside the study area. A large portion of the landscape has been affected by residential development, although tree belts do survive along with some specimen planting. The outbuildings and walled gardens have been redeveloped for housing.	To the immediate W of onshore cable route (Figure 25.10)	NIAH Gardens	Medium
DL13	Feltrim House. Principal structure has been demolished and the landscape subsumed into agricultural production, with no designed elements apparent.	To the immediate W of onshore cable route (Figure 25.11)	-	Neutral

DL No.	Name/Description	Distance from onshore development area	Status	Sensitivity of Receptor
DL14	Abbeyville House. Very well-preserved landscape, reflected by the fact a portion of it is included in an ACA. The principal structure is listed in the RPS but is outside the study area. The south-eastern portion of the demesne is more agricultural in nature but the core of the landscape retains its designed elements.	0m - onshore cable route (Figure 25.11)	NIAH Gardens	High
DL15	Emsworth. The principal structure is listed on the RPS outside the study area. The landscape retains the main access avenue but has been subject to modern tree planting. Some tree belts and mature planting survive, but the surrounding fields are more agricultural in form today.	To the immediate W of onshore cable route (Figure 25.11)	NIAH Gardens	Medium
DL16	Bohomer. Well preserved landscape with principal structure remaining. Structure is on RPS, but outside the study area. An associated gate lodge is also on the RPS and within the study area (BH26). The landscape retains its designed features.	To the immediate W of onshore cable route (Figure 25.11)	NIAH Gardens	High
DL17	Lime Hill House. Well preserved landscape with principal structure remaining, but outside the study area. An associated gate lodge is recorded on the NIAH, within the study area (BH30). The landscape retains its designed features and walled garden.	To the immediate W of onshore cable route (Figure 25.12)	NIAH Gardens	High
DL18	St Doolaghs Lodge/St Doolagh's Park. A smaller landscape was originally associated with St Doolagh's Lodge. However, this landscape was incorporated into a large landscape associated with St Doolagh's Park (which also extended east to include the site of Wellfield House DL 24). Today both principal structures survive with some mature planting and tree belts, although development has taken place. The southern part of the landscape is now in use as a modern cemetery (CH11). The eastern portion of the landscape has been subsumed back into agriculture.	To the immediate E of onshore cable route (Figure 25.12)	-	Medium
DL19	Sea View. Small house and landscape marked on the first edition OS map, but removed by the time of the 1910 map. Now occupied by a car park associated with the extended cemetery.	To the immediate E of onshore cable route (Figure 25.12)	-	Neutral
DL20	Belcamp Hutchinson. Principal structure is present and listed in the RPS, but is outside the study area. The southern, eastern and north-western sections of the landscape have been development, but mature planting does survive around the main house and along some of the boundaries.	To the immediate W of onshore cable route (Figure 25.12)	NIAH Gardens	Medium
DL21	Belcamp. The principal structure has been demolished although it remains recorded on the NIAH (BH33) and the wall of the walled garden survives. The southern edge of the demesne has been affected by widening of the road and a substation has been constructed within the landscape. Some mature boundaries and tree belts survive but the remaining landscape has been subsumed back into agriculture.	0m - onshore cable route (Figure 25.14)	NIAH Gardens	Low
DL22	Belcamp Park. The principal structure is no longer present but is recorded as AH31. The western portion of the demesne remains relatively well preserved as it is in use as a park. The eastern section has been subject to development.	To the immediate S of onshore cable route (Figure 25.14)	NIAH Gardens	Medium

DL No.	Name/Description	Distance from onshore development area	Status	Sensitivity of Receptor
DL23	Drumnigh Cottage. The principal structure remains within the small demesne, which has seen some additional development, but retains its designed nature and mature boundaries.	To the immediate W of onshore cable route (Figure 25.12)	-	Medium
DL24	Wellfield Cottage. House, outbuildings and a demesne marked on the first edition OS map but removed and incorporated into DL 18 by the time of the 1910 OS map.	To the immediate N of onshore cable route (Figure 25.12)	-	Neutral
DL 25	Snugborough Cottage. Small house and demesne marked on the first edition OS map but removed by the time of the 1910 edition.	To the immediate N of onshore cable route (Figure 25.12)	-	Neutral
DL26	Newgrove House. A large house and demesne landscape marked within the historic OS maps, but today entirely developed with the exception of occasional specimen trees.	0m - onshore cable route (Figure 25.12/13)	NIAH Gardens	Neutral
DL27	Grange House. Small demesne established around the ruins of Grange Abbey (AH36, Nat. Mon. 605). Today the main house is no longer extant and much of the demesne is occupied by development and road infrastructure.	0m - onshore cable route (Figure 25.13)	NIAH Gardens	Neutral
DL28	Balgriffin Park. Marked on Rocque's 1760 map as a large park, but depicted as a much smaller landscape by the time of the first edition OS map. Today the site of the house (RMP) is preserved within green space, outside of the study area, but the remainder of the landscape has been fully developed.	To the immediate W of onshore cable route (Figure 25.12)	-	Neutral
DL29	Ayrfield Lodge. Marked within the historic mapping with a house, outbuildings, walled garden and gate lodge. Today nothing remains of the original landscape due to modern development.	0m - onshore cable route (Figure 25.12)	NIAH Gardens	Neutral/No Impact
DL 30	Corduff House. The principal structure is listed in the RPS and outside the study area. The demesne retains its main entrance avenue, and the boundaries are planted with mature trees. Outbuildings survive to the north of the main house. The western boundary of the demesne has been affected by the widening of the R132.	To the immediate E of onshore cable route (Figure 25.6)	-	Medium
DL 31	Seatown House. A small, designed landscape, surrounding Seatown House (BH17), castle (AH28) and outbuildings. Mature planting survives today but the northern boundary wall and entrances are replacements, and the eastern boundary has been removed.	To the immediate S of onshore cable route (Figure 25.9)	-	Medium
DL 32	Belcamp Hall. The principal structure remains and is now under redevelopment. It is a protected structure but located outside of the study area. The eastern section of the demesne has recently been subject to residential development. Mature planting survives to the west of the demesne along with the derelict walled garden.	To the immediate W of onshore cable route (Figure 25.12)	-	Low
DL 33	Merton. The principal structure is present but modern agricultural buildings have been erected to the west. The northern and southern mature tree belts remain extant.	To the immediate W of onshore cable route (Figure 25.12)	-	Medium
DL 34	Cintra. The principal structure is present as Abbeyville Cottage on the first edition and is named as Cintra on the 1910 edition. It remains present today (CH08) and the small demesne is surrounded by a substantial stone wall to the east and south. There has been modern development in the western section of the demesne. The demesne is located within the Abbeyville ACA.	To the immediate W of onshore cable route (Figure 25.12)	-	High



### 25.3.8 National Museum of Ireland (NMI): Topographical Files

Information from the NMI topographical files listed two flint scrapers (1978:60-61) recovered from the townland of Balrothery. Seven flint objects (1978:13-19) and two dressed stones (no number) recovered from the townland of Courtlough. A flint blade (1957:5) was recovered from the townland of Coldwinters, bronze and lead objects (IA/189/86) from Saintdoolaghs, and a silver vessel (IA/33/85) from the townland of Grange.

### 25.3.9 Summary of Previous Archaeological Investigations

A review of the Excavations Bulletin (1970–2024) has revealed that 47 previous investigations have taken place within the study area around the onshore proposed development. These are summarised in Table 25.9 below and have been assigned EX numbers, which run numerically from north to south along the onshore cable route and tabulated in order of their Excavations Bulletin reference. The areas are shown on Figures 25.1 to 25.14.

The results of the archaeological testing within the proposed landfall site as part of this assessment are summarised below in Section 25.3.16.

**Table 25.9 Previous Archaeological Investigations within the study area**

EX No.	Bulletin Ref.	Licence No.	Townland	Description
EX42	1986:22	-	Grange	Excavation at Grange Abbey church (AH36) for conservation works to the church revealed heavy disturbance of the upper layers and fragmentary burials. Some evidence of 13th century activity at the site was also revealed, as well as burials prior to the construction of the existing church (Figure 25.13).
EX32	1990:031	-	Saintdoolaghs	Excavation at St Doolaghs church (AH30/BH27) during removal of tiled floor in the chancel and excavation of a drainage north of the vault. An early burial was revealed beneath the south wall of the chancel, predating the wall. A section of the enclosing ditch (AH30b) was also revealed north of the vault (Figure 25.12).
EX11	1995:053	95E0250	Courtough/ Rowans Little	Excavation of possible ring-ditch in advance of proposed slip road to Balbriggan Bypass revealed patches of burnt soil and ash centred round a bowl-shaped hollow (Figure 25.4).
EX06	1997:081	96E0325	Balrothery	Assessment of a proposed development on Balrothery Main Street revealed cultivation ridges (Figure 25.2).
EX41	1999:160	99E0321	Baldoyle	Monitoring of a 160m section of an M50 link road resulted in further excavation to the south of Grange Abbey (AH36). Excavation revealed a stone wall, possibly remains of the eastern precinct wall, as well as a stone-built 'water-house' and drain, all dating to the 17th century. It was also revealed that rubble from the demolition of Grange House (principal structure of DL27) had been used to infill a former pond. A hoard of 41 gold sovereigns was found within this rubble, ranging in date from 1817 to 1830 (George III and George IV) (Figure 25.13).
EX23	1999:909	99E0546	Lissenhall Great	No report available (Figure 25.8).
EX19	2000:0323	00E0953	Lissenhall Little	Archaeological testing in advance of the Airport–Balbriggan Northern Route Bypass Scheme, investigated a possible ring-ditch identified from aerial photography (AH23). No features of archaeological significance were revealed (Figure 25.8).
EX17	2000:0351	00E0953	Turvey	Test trenching to investigate a possible linear feature identified during a field inspection for the Airport–



EX No.	Bulletin Ref.	Licence No.	Townland	Description
				Balbriggan Northern Route Bypass Scheme revealed no features of archaeological significance (Figure 25.7).
EX05	2001:330	01E0255	Balrothery	Testing at a proposed development site on the Old Coach Road revealed a substantial medieval metal surface (Figure 25.2).
EX15	2001:344	99E0548 ext.	Coldwinters	Site 4 on the Airport–Balbriggan Northern Route Bypass Scheme (AH21). Excavation revealed substantial remains of a large circular ditched enclosure, enclosing three smaller ditches within which were six human burials. A sub-rectangular ditch running from the edge of the large enclosing ditch contained a single human burial within a slab-lined grave. Date not clear (Figure 25.7).
EX16	2001:345	01E1062	Coldwinters	Site 5 on the Airport–Balbriggan Northern Route Bypass Scheme. Excavation revealed a fulacht fia with a large number of associated stakeholes and a prehistoric pit. Likely to be part of a larger site (Figure 25.7).
EX21	2001:444	01E1074	Lissenhall Little	Site 2 on the Airport–Balbriggan Northern Route Bypass Scheme. Excavation of hearths and stakeholes forming remains of two Neolithic houses (AH24) revealed during monitoring (Figure 25.8).
EX31	2001:453	99E0470	Saintdoolaghs	Testing in the verge at the entrance to St Doolaghs church complex (AH30) in advance of the North Fringe Sewer Project. No archaeological significance (Figure 25.12).
EX03	2002:0472	02E1316	Balbriggan	Assessment of a proposed cemetery extension at St Peter and St Pauls Church revealed three fragmentary burials (Figure 25.2).
EX12	2002:0603	02E0686	Jordanstown	Fulacht fia (AH18) identified during topsoil removal for the Bord Gáis Éireann Pipeline to the West project (Section 6: Gormanston to Ballough) (Figure 25.4).
EX09	2003:477	03E0283	Courtough	Monitoring for M1 Business Park revealed a series of pits and post-holes, subsequently excavated under licence 03E1076 (below) (Figure 25.3).
EX10	2003:478	03E1076	Courtough	Excavation of a series of pits, post-pits and spreads of heat-shattered stones associated with a single phase of prehistoric activity (AH17) (Figure 25.3).
EX43/44	2003:485/ 2003:486	03E1496/ 03E1495	Grange/ Donaghmede	Testing of a large, proposed development north of Grange Road and east of Hole in the Wall Road (north and east of AH36) revealed a small burnt mound and the remains of the 18th-19th century Grange Lodge and associated outbuildings (Figure 25.13).
EX45	2004:0446	03E1535	Grange/ Donaghmede	Subsequent monitoring following works EX43/44, led to further testing and excavation of ten newly revealed sites within the proposed development area. Of these, six were complexes of three or more features, the remaining four were single or dual features (Figure 25.13).
EX35	2004:0642	04E0886	Santry/Belcamp Park/Balgriffin/ Baldoye	Monitoring of topsoil stripping for Dublin North Fringe Water Supply Scheme Contract 7 revealed nothing of archaeological significance (Figure 25.12).
EX27	2005:529	05E0725	Seatown East	Monitoring during groundworks associated with the conversion of a two-storey barn attached to the west side of Seatown Castle (AH28/BH17).

EX No.	Bulletin Ref.	Licence No.	Townland	Description
				Mid- to late 18th-century pottery was recovered, giving a secure date for the house on the west side of the castle. A glazed roof ridge tile may have come from the castle or the old hall, of which no trace was revealed. Limited excavation under the site of a concrete water tank against the north wall of the tower-house uncovered a rough stony surface. Fragments of pantile and lead window came from deposits over the stones possibly relate to the demolition of the hall and the upper floors of the tower-house (Figure 25.9).
EX25	2008:366	08D093; 08R312 (Broadmeadow River) and 08D092; 08R311 (Ward River)	Balheary Demesne	Non-disturbance assessment undertaken across the Broadmeadow River and the Ward River, as part of the proposed Metro North Project. Results indicated that Lissenhall Bridge (AH26/BH14), an adjacent culvert and Balheary Bridge (BH15) are one continuous structure, with several phases of construction between the 16th and 19th centuries. In addition, several riverine features of historic interest were documented, including: a weir location and associated walling (Feature 4), five sections of river revetment wall (Feature 5), and a single-arched bridge structure located 91m west of Balheary Bridge (Figure 25.8).
EX13	2008:386	08D42, 08R125	Corduff Common/ Coldwinters	Watercourse survey in advance of a proposed pipe-laying works for the Lissenhall–Jordanstown trunk water mains, downstream of Corduff Bridge (BH11). No archaeologically significant material was observed in the streambed or banks. The bridges and road wall retain 18th- to 19th-century construction features (Figure 25.7).
EX46	2008:417	08E0119	Grange/ Donaghmede	Testing for a proposed residential development at No. 25 Hole in the Wall Road revealed nothing of archaeological significance (Figure 25.13).
EX20	2008:474	08E0178	Lissenhall Little to Jordanstown	Monitoring for the proposed Lissenhall–Jordanstown trunk water mains project from the Lissenhall interchange of the M1 Motorway, along the R132 to the Jordanstown reservoir. Nothing of archaeological significance (Figures 25.4-8).
EX14	2008:498	08D41; 08R124	Lissenhall–Jordanstown	Watercourse survey in advance of a proposed pipe-laying works for the Lissenhall–Jordanstown trunk water mains, downstream of Daws Bridge (BH12). No archaeologically significant material was observed in the streambed or banks. The bridges and road wall retain 18th- to 19th-century construction features. A revetment wall recorded 23m downstream of the bridge on the north-east bank is probably 19th-century in date (Figure 25.7).
EX22	2009:346	09E0463	Lissenhall Little	Testing as part of the advance works on the proposed route of the Metro North light rail project (Testing Area 5) revealed a ring-ditch, linear feature and a cremation pit (Figure 25.8).
EX28	2011:223	C451; E4381	Malahide Demesne	Monitoring of excavations associated with the laying of a water main from Dublin Road to Back Road, through the demesne of Malahide Castle (DL11). Monitoring identified a 19th century stone culvert, stone walls and a surface probably all associated with garden features of the demesne (Figure 25.10).
EX29	2012:247	12E0185	Streamstown, Feltrim, Abbeyville, Kinsaley, Bohammer, St Doolagh's	Twelve test trenches were excavated at intervals along the R107 Malahide Road between St Doolagh's Nursing Home and Streamstown, on the route of a proposed new water main. Locations were determined by the contractor and excavation was monitored. The trench located directly east of St Doolagh's Church revealed a possible limestone-built structural feature (Figure 25.12).

EX No.	Bulletin Ref.	Licence No.	Townland	Description
EX26	2013:540	13E0370	Balheary Demesne	Testing to NW of Balheary Bridge (BH15) in advance of the proposed Swords Watermain Rehabilitation Project revealed nothing of archaeological significance (Figure 25.8).
EX38	2014:134	14E0009	Kinsaley	Testing and subsequent monitoring in advance of a proposed residential development on Chapel Road, immediately west of AH32/BH35 revealed a single possible medieval pit (Figure 25.11).
EX02	2014:210	14E0254	Balbriggan	Monitoring on the site of a new pumping station as part of the Balbriggan/ Skerries WWTS on Dublin Street. No archaeological significance (Figure 25.2).
EX30	2015:274	15E0329, 09R165	Saintdoolaghs	Targeted test excavation was carried out within the grounds of St Doolagh's church (AH30/BH27) by the Resurrecting Monuments community archaeology group. The excavation focused on a curvilinear feature identified by prior geophysical survey, representing the ecclesiastical enclosures ditch (AH30b). The ditch and remains of an internal bank were revealed (Figure 25.12).
EX18	2016:095	16E0047	Staffordstown Turvey	Archaeological testing for a proposed data centre site at Staffordstown Turvey, west of the R132, revealed nothing of archaeological significance (Figure 25.7).
EX04	2016:847	16E0140	Balrothery	Monitoring of SI works for Balbriggan Phase 2 WSN Upgrade. No archaeological significance (Figure 25.2).
EX07	2017:622	17E0175	Balrothery	Monitoring was undertaken for a graveyard extension at Balrothery church. Excavation of a wall foundation trench was supervised and revealed dumps of modern and early modern rubble and refuse. No archaeological significance (Figure 25.3).
EX40	2018:598	18E0523	Saintdoolaghs/ Snugborough	Testing in advance of a proposed upgrade to a road junction at Hole in the Wall Road/Moyne Road revealed nothing of archaeological significance (Figure 25.12).
EX08	2018:714	18E0576, 18R0198	Glebe South	Geophysical survey and test trenching in advance of the construction of sports facilities and associated car parking at Glebe Park. No archaeological significance (Figure 25.3).
EX37	2018:897	18E0096	Kinsaley	Monitoring during topsoil-stripping for a new housing development at Chapel Road revealed nothing of archaeological significance (Figure 25.11).
EX47	2019:732	19E0586	Grange/ Donaghmede	Testing of a site at the southern end of Hole in the Wall Road revealed nothing of archaeological significance (Figure 25.13).
EX24	2020:054	08R0117, 18R0196, 19E0757	Lissenhall Little/Balheary Demesne	Testing as part of the advance works on the proposed route of the Metro North light rail project (Testing Area 1) following geophysical surveys. Testing revealed an enclosure and associated features, as well as features associated with the former demesne landscape (DL05) (Figure 25.8).
EX36	2020:114	20E0054	Belcamp	Monitoring of groundworks for 400m of a transmission cable trench at Belcamp revealed nothing of archaeological significance (Figure 25.14).
EX39	2021:063	21E0114	Kinsaley	Testing of a site on Chapel Road to the east of AH32/BH35 revealed nothing of archaeological significance (Figure 25.11).

EX No.	Bulletin Ref.	Licence No.	Townland	Description
EX01	2021:318	21E0583	Bremore	Test trenching carried out at the proposed Bremore Regional Park revealed a possible enclosure of unknown date (Figure 25.1).
EX34	2021:475	21R0190, 21E0787	Belcamp, Balgriffin	Testing north of the R139, west of Northern Cross, following on from geophysical survey revealed nothing of archaeological significance (Figure 25.13).
EX33	2022:347	22E0135	Newtown	Testing on the west side of the R107 Malahide Road revealed nothing of archaeological significance (Figure 25.13).

### 25.3.10 Dublin City Industrial Heritage Record (DCIHR)

There are no records listed within the DCIHR within the study area of the onshore proposed development. The closest comprises Newtown Bridge, located c. 940m to the southwest.

### 25.3.11 Cartographic Analysis

#### 25.3.11.1 Down Survey Maps of the Baronies of Balrudderry, Coolock and Nethercross, c. 1655.

As the purpose of these maps was to survey forfeited lands there is no great detail depicted for much of the study area. The area of proposed landfall site is shown in the townland of ‘Bremore’. The castle (AH04) is illustrated at Bremore. Malahide Castle is also shown along with a simple depiction of its demesne (DL11/BH18). On the county map, structures possibly corresponding to Balrothery church (AH12/BH05) and tower houses AH13/BH05c and AH28/BH17 are discernible. Lissenhall Bridge (AH26/BH14) is also marked.

#### 25.3.12 John Rocque’s Map of the County of Dublin, 1760

This map shows the proposed landfall site within a rural and undeveloped coastal landscape. The site comprises an undeveloped pasture field bordered to the west by a tree-lined field boundary and to the east by the Irish Sea. There are no structures or features of archaeological potential indicated within the landfall site. Bremore Village is marked, and the castle (AH04) depicted. Newhaven is also marked to the north. The village of Balbriggan is represented by a cluster of houses to the north and south of the river. A large salt house, harbour and quay have also been constructed to the south.

The settlement of Balrothery (‘Balruddery’) is depicted and the church (AH12/BH05) marked. From here the onshore cable route follows a road broadly corresponding to the current R132 for some distance before passing through fields to the settlement of Ballough. At Ballough the windmill (AH20) is depicted. From Ballough the route again follows a road corresponding to the R132. At Corduff the settlement is shown in some detail, both Corduff Bridge (BH11) and Daws Bridge (BH12) are marked, the former named, and the latter simply marked ‘bridge’. The potential location of a castle is noted in the mapping to the southwest of Corduff Village (CH38), along with a mill site (CH39). Neither are listed as recorded monuments or shown on later maps.

At the mouth of the Broadmeadow River, Lissenhall Bridge (AH26/BH14) is depicted, as is Balheary Bridge (BH15), although neither is named. Lissenhall Little and demesne (DL04) are depicted to the west, named ‘Little Lissen Hall’. South of the river and turning east the onshore cable route follows roads broadly corresponding to the R125 and L2141 (Estuary Road), passing a house marked ‘Seatown’ (AH28/BH17). The onshore cable route follows the south bank of the river mouth (marked ‘The Strand’) before turning south and skirting the west side of Malahide Castle demesne (DL11) which is shown in some detail and named ‘Malahide Court’. Two small buildings possibly corresponding to the two gate lodges (BH18a and b) are visible. Settlement becomes denser south from Malahide although still interspersed with large areas of fields. Kinsaley is depicted, marked ‘Kinsale’ and the demesnes of Feltrim House (DL13), Abbeyville House (DL14, marked ‘Abbeywell’) and Emsworth (DL15, marked ‘Prospects’) are depicted. The ecclesiastical complex of St Doolaghs (AH30/BH27) is shown in some detail, with St Doolaghs well marked. The demesne of Belcamp Hutchinson (DL20) is depicted, marked simply ‘Belcamp’.

The final stretch of the onshore cable route falls at the edge of a map sheet and does not appear to be fully covered. To the east the demesne of Newgrove House (DL28) is shown, marked ‘New Park’.

#### *25.3.12.1 John Taylor’s Map of the Environs of Dublin 1816*

This map does not provide great detail and only covers the southern portion of the onshore cable route, some additional details are depicted however. At Seatown (AH28/BH17) ‘Castle Ruins’ are marked. The demesne of Malahide Castle (DL11) is shown in more detail, with the demesnes of La Mancha (DL10) and Auburn House (DL12, marked ‘Auburn’ and ‘Auburn Cottage’) now shown to the west. Further south Abbeyville House (DL14) is now marked ‘Abbeyville’ and Emsworth (DL15) is now ‘Annsworth’. Whilst no demesne is depicted as such, the house of St Doolaghs (DL16) is shown, marked ‘Bohomer’ and ‘Lime Hill’ demesne is depicted to the south (DL17), as is St Doolaghs Lodge/Wellfield House to the east (DL18/ BH31). The church and a well at St Doolaghs are also shown (AH30/BH27). Balgriffen is marked to the south and the demesnes of Belcamp Hutchinson (DL20), Belcamp (DL21) and Belcamp Park (DL22) are all depicted, all three marked simply as ‘Belcamp’, along a road partially corresponding to the R139. On the eastern section of the southern end of the onshore cable route the ruins of St Nicholas’s Church (AH32) are shown, marked ‘Ch.ru.’ and the church of St Marnocks (BH38) is also depicted. South of here, Drumnigh Cottage (DL23) and Snugborough Cottage (DL25) are now shown, although without demesnes depicted, marked as ‘Drumnigh Lo.’ And ‘Snugboro’ respectively. Newgrove House (DL28) is now marked ‘Newgrove’ and the demesnes of Cottage (DL26) and Grange House (DL27) are now shown, named ‘Annadown’ and ‘Grange’ respectively. Buildings marked ‘Eyrefield’ are marked at the location of DL29, Airfield Lodge.

#### *25.3.12.2 First Edition Ordnance Survey Map, 1843, scale 1:10,560*

This is the first accurate historic mapping coverage of the area containing the proposed development. The landfall site is located within agricultural fields, considerably more sub-divided than at present. There are no structures or features of archaeological potential shown within the footprint of the proposed landfall site. The surrounding landscape consists of enclosed agricultural fields; however, a dashed line of the then proposed railway line is included.

The village of Balbriggan and its harbour appear well developed to the south. Newhaven harbour (AH02/BH01) is not depicted to the north, apparently having fallen out of use by this time. The onshore cable route runs south from the landfall along a road corresponding to the R132 past Bremore Cottage (BH03), Seaview Cottage (DL01) and Bremore Castle and chapel (AH04/AH05). A ‘Thrashing Machine’ is marked north of the castle. The onshore cable route skirts Balbriggan north and west of Tankardville demesne (DL02), largely passing through fields before rejoining what is now the R132 south of the town. The two mills (AH07 and 08) are depicted, as is the Church of St Peter and St Paul (BH04).

From Balbriggan to Balrothery the onshore cable route remains within the now R132. At Balrothery it leaves this road and skirts the village through fields at its western edge before rejoining another road which also corresponds to the R132 from this point. The holy well (AH09) is marked and Balrothery church and graveyard (AH12/BH05) are shown, the mound (AH10) to the west is not.

The onshore cable route continues along what is now the R132 to Ballough. North of Ballough at the greenfield area either side of the road the Balrothery Union Workhouse (CH02) is depicted on the eastern side of the road. The settlement of Ballough is depicted as a cluster of houses (CH04), a chapel and police station (CH03), most of which are no longer extant. From Ballough to Corduff the onshore cable route again remains within the road corresponding to the R132, through Corduff where various structures are visible lining the road, including the cottages BH07 and BH08 as well as cottages CH05, CH06 and house CH07. South of Corduff the onshore cable route leaves the road and passes through fields to the west before rejoining the now R132 via a lane to the south of Corduff Bridge (BH11). After a short distance following the road the route the third greenfield area at Blakes Cross/Daws Bridge (BH12) lies within fields either side of the road. Aside from the two bridges, no other features of significance are marked within these two greenfield areas.

From here to the fourth greenfield area at the M1 motorway crossing the route remains within the now R132, crossing a bridge marked ‘Turvey, Br.’ adjacent to what is now Turvey Business Park. The M1 crossing greenfield area falls almost entirely within the demesne of Lissen Hall Little (DL04). A holy well (AH25) marked ‘Site of Sunday Well’ and a gate lodge are shown within the southern tip of the greenfield section, although this area has been heavily impacted by the modern road expansion.



The route continues past demesnes DL05 and DL06 (Balheary House and Meudon) and both Lissenhall Bridge (AH26/BH14) and Balheary Bridge (BH15) are shown, although only the former is named.

South of here the onshore cable route leaves the road corresponding to the R132 and loops back north and then east along lanes corresponding to the L2141 (Lissenhall/Estuary Road). This lane runs past ‘Seatown Castle’ (AH28/BH17), now shown in a layout similar to its current configuration, before apparently terminating to the east of the castle site. The onshore cable route then follows the river/estuary bank for c. 1km before turning south and then back east along roads corresponding to the current Estuary Road and R106 (Swords Road). The latter road is lined by demesnes DL07, DL08, DL09 and DL10 (Green Meadow, Gay Brook, Mill View and La Mancha) before reaching what is now the R107 (Dublin Road) and turning south to run between Auburn House demesne (DL12) and Malahide Castle demesne (DL11). The two gate lodges (BH18a and b) are both shown.

The onshore cable route follows the now R107 south to Kinsaley where the fifth greenfield area falls within the demesne of Abbeyville House (DL14) on the western side of the road. ‘Abbeyville Cottage’ is depicted immediately north of this area at the entrance to the demesne (CH08). At the southern end of the greenfield area the onshore cable route splits, continuing south along the now R107 with a branch going east along a road corresponding to the L2100 (Chapel Road). At the junction St Nicholas’s Church is depicted, with a National School also marked at the site (BH23). A row of terraced cottages is depicted on Chapel Road opposite the church, which remain extant (CH09). The onshore cable route to the east briefly leaves the road as depicted on this map, passing through fields and running south of a church and graveyard (AH32/BH35) before rejoining the road and continuing east to join a road south corresponding to the R124 (Drumnigh Road). A gate lodge (BH36) associated with Kinsaley Hall is not yet depicted on this map. At the junction with Drumnigh Road St Marnocks Church (BH38) is marked, the former smithy to the north (BH37) is not yet shown. A schoolhouse is also marked at this point, possibly associated with the church.

The eastern section of the onshore cable route continues south, largely following roads and lanes corresponding to the R124 and then the L2145 (Hole in the Wall Road) although with short sections passing through fields where the present-day road has been straightened.

At the point where the onshore cable route turns back west along the R139 (Clarehall Avenue), the National Monument of Grange Abbey (AH36) is marked, sitting within the demesne of Grange House (DL27). From this point to the point at which the onshore cable route rejoins the main route at the R107 (Malahide Road) it passes through the demesnes of ‘Cottage’ (DL26), Newgrove House (DL28) and Airfield Lodge (DL29).

Between this point and Kinsaley to the north, the main western section of the onshore cable route has followed the road corresponding to the R107 (Malahide Road) past demesnes DL15 to DL20 (Emsworth, St Doolaghs, Lime Hill House, St Doolaghs Lodge/Wellfield House, Sea View and Belcamp Hutchinson respectively). The gate lodge (BH26) to St Doolaghs (formerly Bohomer) is now marked. The ecclesiastical complex at St Doolaghs (AH30/BH27) is annotated in more detail with both wells marked and named, as well as the stone cross at the entrance (AH30g) and a national school building south of the church. North and south of the cross a large complex of buildings is depicted immediately west of the onshore cable route, which is no longer extant. Further south, the gate lodge (BH30) to Lime Hill House is not yet shown. Wellfield House (BH31) is shown in detail, marked ‘St Doolaghs Lodge’. South of BH31 a lane corresponding to the present-day Limekiln Lane is shown and a bridge is marked within the footprint of the onshore cable route at this point (CH10).

The final section of the onshore cable route from Malahide Road to Belcamp substation passes through an area of fields before joining a road marked ‘Belcamp Lane’ which mostly corresponds to the current R139 with the exception of a short deviation through fields where the current road was straightened. The short section linking to the Belcamp substation passes through the demesne of Belcamp (DL21), skirting the walled garden associated with the house (BH33).

### *25.3.12.3 Ordnance Survey Map, 1910, scale 1:2,500*

There are no major changes to note in the cartography of this map that relate to the proposed landfall site, with the exception of a well, marked on the field boundary within the ancillary area on the western side of the road, and the construction of the railway, previously marked as proposed. The trackway at the northern edge of the proposed landfall is carried over the railway by a bridge, depicted on this map (CH12).

To the north of Ballough, the Balrothery Union Workhouse (CH02) is shown in more detail, slightly expanded. A fever hospital and chapel are now also marked, and the site is labelled simply ‘Union Workhouse’.

The second and third greenfield areas at Corduff and Blakes Cross/Daws Bridge remain relatively unchanged, Daws Bridge (BH12) is now named as such.

The area required for the M1 motorway crossing is also largely unchanged with the exception that the gate lodge previously marked is now no longer labelled, although appears to remain. The well (AH25) is marked ‘Sunday Well’ and a bridge marked ‘Sunday Well Bridge’ is depicted to the south, within the onshore cable route although in an area heavily impacted by the widening of the modern road.

Lissenhall Bridge (AH26/BH14) remains labelled, and Balheary Bridge (BH15) is now also named as such. East of this, at the point where the onshore cable route joins Estuary Road, the second Lissenhall Bridge (BH16) is depicted and named, not having been shown previously.

The estuary itself is depicted in more detail, showing channels and Seatown House (AH28/BH17) now closely corresponds to its current configuration. The tower house element of the complex is now labelled separately as ‘Seatown Castle’. The lane corresponding to the current Estuary Road is now depicted continuing all the way along the river/estuary bank to the point where it turns south and widens before joining what is now the R106 (Swords Road).

The demesne of Green Meadow (DL07) is no longer shown. The demesnes of Malahide Castle and Aubern House (DL11 and DL12) are shown in greater detail. To the south of Feltrim House demesne (DL13) a small building complex named ‘Manningsmore Cottage’ is depicted with a smithy labelled adjacent to the onshore cable route on the eastern side of the road. One building remains extant today.

North of Kinsaley, the landscape again remains relatively unchanged, with the cottage (CH10) at the entrance to Abbeyville demesne (DL14) closely matching its current footprint and is now labelled ‘Cintra’. A road bridge (BH22) at this point is now depicted, named ‘Kinsaley Bridge’.

The L2100 (Chapel Road) now matches its current route, passing south of the ruins of St Nicholas’s Church (AH32/BH35, now marked as in ruins) and the gate lodge (BH36) associated with Kinsaley Hall is now marked. St Marnocks Church (BH38) is now named as such and the smithy to the north (BH37) is also now shown. Between this point and Drumnigh Cottage (DL23) a number of smaller named houses are now shown lining the road; ‘St Donagh’s’, ‘The Cottage’, ‘Banff’, ‘Dunkeld’ and ‘Merton’.

The roads corresponding to the R124 and L2145 which the onshore cable route follows now closely match their current routes. The National Monument at Grange Abbey (AH36) is shown in more detail and marked ‘in ruins’. The onshore cable route from here to the terminus at Belcamp remains relatively unchanged.

The western section of the onshore cable route from Kinsaley to the R139 also remains relatively unchanged with the exception of the removal of the buildings previously marked adjacent to the St Doolaghs ecclesiastical complex (AH30/BH27). The complex itself is shown in sharper detail, as is St Doolaghs Lodge/Wellfield House demesne (DL18) on the far side of the road at this point. The bridge at Limekiln Lane (CH10) is now named ‘St Doolaghs Bridge’.

### 25.3.13 Aerial Photographic Analysis

Inspection of the aerial photographic coverage of the proposed development held by the Ordnance Survey (1995–2013), Google Earth (2008–2022), and Bing Maps (2022–2023) has been carried out as part of this assessment.

The proposed landfall site has remained relatively unchanged since at least the mid-1990’s. Crop marks corresponding to former field boundaries are discernible on a number of images. No previously unknown features of archaeological significance were identified.

To the north of Ballough the footprint of the former Balrothery Union Workhouse can be discerned on a number of images, with apparent survival of small buildings. Former field boundaries are again visible, and the outline of a quarry marked on the first edition OS map is reflected in a sub-oval field boundary to the east.



The most significant changes to the area around the greenfield sites at Corduff and Blakes Cross are the construction of the M1 motorway to the west and the development of the industrial estate between the two areas during the early years of the 21st century. Cropmarks are again visible corresponding to former field boundaries and possible small watercourses.

At the M1 motorway crossing, cropmarks are visible in a number of images (notably Google Earth 2013, 2018, 2022) in the field immediately north of the proposed development on the west side of the motorway (CH37). The 2013 and 2018 coverage show a circular enclosure c. 56m north of the proposed development, which is truncated by the motorway to the east. These images also show two (possibly three) smaller concentric enclosures within the interior. A further enclosure (possible ring ditch), with a diameter of c. 12m is visible to the immediate north of the proposed M1 motorway crossing, with a possible annex to the north. The images also show a square or rectangular enclosure to the south of the main enclosure, which may extend into the proposed development area. The sites are captured within the designation of CH37.

At the terminus of the proposed development at Belcamp substation the most significant change is the construction of the Belcamp substation in 2015/16 and the demolition of Belcamp house (BH23) in 2001.

#### 25.3.14 Cultural Heritage (CH) sites

A detailed field inspection has been carried out as part of this assessment, as included in Appendix 25.1 of Volume 10. The field inspection, along with the analysis of the desktop resources (historic mapping, aerial photographs), has resulted in the identification of Cultural Heritage (CH) sites as detailed in Table 25.10 below and marked on Figures 25.1 to 25.14. These comprise areas of archaeological, architectural or cultural heritage significance but represent sites or structures that are not recorded in any existing archive (RMP/SMR/RPS/NIAH).

**Table 25.10 Previously Unrecorded Sites/ Structures of Cultural Heritage Merit within the study area**

CH No.	Name/Description	Location	Distance from onshore development area	Sensitivity of Receptor
CH01	Ruins of well visible on 25-inch map	Bremore, Balbriggan	0m – grid facility site (Figure 25.1)	Low
CH040	Sailors Grave/Bell Hill cairn. Cairn built on shoreline commemorating the crew of the Bell Hill, wrecked off the shore nearby in 1875. Only one sailor in the crew survived and six bodies were recovered and buried in Balrothery Cemetery. The remaining bodies were washed up on the coastline of the Isle of Man and Cumberland (Conservation Plan, Bremore Castle, 34). This small stone cairn to the south of Newhaven Harbour honours the men that lost their lives. This wreck was also visible during the 1950s and 1960 at low tide at Newhaven Point.	Bremore, Balbriggan	c. 12m E of landfall site (Figure 25.1)	Medium
CH13	Vernacular cottage marked on the first edition OS map. Single storey, in good condition with a pitched corrugated roof, replacement door and window furniture. Rendered in pebble-dash.	Castleland, Balbriggan	c. 23m W of onshore cable route (Figure 25.2)	Medium
CH14	Single storey, three bay vernacular stone-built cottage (renovated) with red brick reveals to windows and extended to rear. Marked on the historic maps.	Courtclough	To the immediate NW of onshore cable route (Figure 25.3)	Medium
CH15	Single storey, three bay vernacular stone-built cottage (renovated) with red brick reveals to windows and extended to rear. Marked on the historic maps and likely contemporary with CH14.	Courtclough	c. 5m SE of onshore cable route (Figure 25.3)	Medium
CH16	Two storey vernacular house, now derelict. Three bays, rendered with pitched slate roof and extension to the north.	Courtclough	c. 3m SE of onshore cable route (Figure 25.3)	Low

CH No.	Name/Description	Location	Distance from onshore development area	Sensitivity of Receptor
CH17	Single storey renovated vernacular cottage with adjacent derelict remains of a further vernacular building, now with a modern flat roof and used as a shed.	Jordanstown	c. 5m E of onshore cable route (Figure 25.4)	Medium
CH18	Two-storey, partially renovated masonry built vernacular house. Render removed and modern window furniture inserted. Pitched, slate roof with central redbrick chimney stack.	Jordanstown	c. 5m W of onshore cable route (Figure 25.5)	Medium
CH02	Site of Balrothery Union Workhouse. Two small, ruined structures exist with the site today, but the original structures have been demolished.	Oberstown	To the immediate E of onshore cable route (Figure 25.5)	Low
CH03	Early 20th century two storey, three bay house with a hipped slate roof and bay windows on the ground floor.	Ballough	c. 10m E of onshore cable route (Figure 25.5)	Medium
CH04	Sites of vernacular buildings associated with settlement of Ballough marked on historic OS maps	Ballough	0m - onshore cable route (Figure 25.5)	Low
CH19	Single storey vernacular cottage that is derelict but has been heavily modified. Replacement windows and roof. Marked within the historic OS maps.	Dunganstown	c. 5m E of onshore cable route (Figure 25.6)	Low
CH20	Single storey, but derelict range of vernacular outbuildings, Masonry built, but replacement roof. Marked within the historic OS maps.	Newtowncorduff	c. 3m W of onshore cable route (Figure 25.6)	Low
CH21	Single storey masonry-built cottage, recently renovated and within the grounds of a school. Redbrick window reveals and replacement wooden sash window furniture.	Corduff (Hackett)	c. 6m E of onshore cable route (Figure 25.6)	Medium
CH05	Fragmented ruins of a single storey vernacular cottage and adjacent, partially renovated, vernacular outbuilding. Marked within the historic OS maps.	Corduffhall	To the immediate W of onshore cable route (Figure 25.6)	Low
CH06	Derelict single storey vernacular cottage with replacement corrugated roof. The render has fallen away in places to reveal possible clay-wall construction. Window and door opens have been blocked. Marked within the historic maps.	Corduffhall	c. 2m W of onshore cable route (Figure 25.6)	Low
CH22	Derelict remains of single-storey dormer vernacular house. The roof has been removed and the windows blocked. Marked within the historic maps.	Corduffhall	To the immediate W of onshore cable route (Figure 25.6)	Low
CH07	Two storey L-shaped vernacular house/shop visible on 1910 OS map, now renovated. Adjacent to water pump BH09.	Corduff (Hackett)	To the immediate E of onshore cable route (Figure 25.6)	Medium
CH23	Site of post medieval structures marked at this location on the first edition OS map and 25-inch 1910 OS map and Rocque's map of 1760 (fronting onto the road). Possibly part of a medieval settlement.	Corduffhall	0m - onshore cable route (Figure 25.6)	Medium
CH38	Possible site of a castle, annotated on Roque's map of 1760 only. Site occupied by structures on the OS maps (now in ruins)	Corduffhall	To the immediate NW of onshore cable route (Figure 25.6)	High
CH39	Possible site of a mill, annotated as Corduff Mill on Rocque's map of 1760.	Corduffhall	c. 33m W of onshore cable route (Figure 25.6)	High

CH No.	Name/Description	Location	Distance from onshore development area	Sensitivity of Receptor
CH24	Single storey vernacular building with replacement corrugated roof and adjacent single storey dormer building.	Turvey	c. 3m W of onshore cable route (Figure 25.7)	Low
CH25	Group of six early 20th century single storey cottages (semi-detached), all of which are inhabited and in good condition.	Streamstown	To the immediate W of onshore cable route (Figure 25.11)	Medium
CH26	Derelict single storey vernacular outbuilding, marked within the historic OS mapping.	Kinsaley	c. 8m E of onshore cable route (Figure 25.11)	Low
CH08	Cintra, large house marked within the historic maps and contained within DL34. The demesne is surrounded by a tall masonry wall. The house has seen some modern extensions. Located with Abbeyville ACA.	Abbeyville	c. 10m W of onshore cable route (Figure 25.11)	Medium
CH27	Section of stone demesne wall associated with DL14. Much of the wall to the west has been removed. This section comprises random rubble masonry.	Abbeyville	0m - onshore cable route (Figure 25.11)	Medium
CH09	Terrace of four, single storey cottages, marked within the historic OS maps. Pitched slate roofs, exposed coursed masonry and red brick reveals around the windows and doors. The structures are in good condition and inhabited.	Kinsaley	To the immediate S of onshore cable route (Figure 25.11)	Medium
CH28	Two-storey vernacular house, marked on the 1910 OS map. Seven bays with pitched slate roof and red brick chimney stacks to both gables. Rendered with replacement window furniture and modern porch to western elevation.	Kinsaley	c. 8m E of onshore cable route (Figure 25.11)	Medium
CH29	Single storey brick cottage with hipped, slate roof and central chimney stack (rendered). Originally six-bays but additional modern windows inserted. Main elevation to the east and marked on the 1910 OS map. Within DL18 and likely to represent an estate workers cottage.	Saintdoolaghs	To the immediate E of onshore cable route (Figure 25.12)	Medium
CH30	Single storey house with dormer level. Marked on the 1910 OS map, originally as two buildings. Steeply pitched slate roof, renders and extended.	Saintdoolaghs	c. 6m W of onshore cable route (Figure 25.12)	Medium
CH10	St Doolaghs Bridge, three-arched stone bridge marked on historic OS maps. Widened to the east as part of road widening.	Saintdoolaghs	0m - onshore cable route (Figure 25.12)	Medium
CH11	Originally four terraced structures marked on the 1910 OS map. Today the large, two storey vernacular building functions as a pub and shop. It is six bays and whilst it retains its vernacular form, it has been extensively modified. Abutting two single storey cottages (now one shop), each original three bays with pitched slate roofs and red brick chimney stacks.	Belcamp	To the immediate E of onshore cable route (Figure 25.12)	Low
CH31	Two storey, three bay vernacular house marked within the historic maps. Pitched slate roof and modern window furniture – extended to east. Oval fanlight above the main entrance to western elevation.	Portmarnock	To the immediate E of onshore cable route (Figure 25.11)	Medium
CH32	Terrace of four single storey redbrick cottages with decorative Portmarnock Brick detailing and ridge tiles. Arts and Craft style but now subject to some	Portmarnock	To the immediate E of onshore cable route (Figure 25.11)	Medium

CH No.	Name/Description	Location	Distance from onshore development area	Sensitivity of Receptor
	modern modifications and modern door and window furniture.			
CH33	St. Donagh's. Marked on the 1910 OS map. Two storey Arts and Crafts style house, extended significantly to the west.	Portmarnock	c. 40m W of onshore cable route (Figure 25.11)	Medium
CH34	St. Johns. Two storey, three bay house marked on the 1910 OS map with redbrick detail and pedimented gable to the main elevation.	Portmarnock	c. 27m W of onshore cable route (Figure 25.11)	Medium
CH35	The Cottage. Single storey Arts and Crafts house, marked on the 1910 OS map with Portmarnock Brick detailing and a hipped slate roof. Renovated with replacement window and door furniture and extended to the north.	Portmarnock	c. 5m W of onshore cable route (Figure 25.11)	Medium
CH36	Dunkeld. Two storey red brick house with decorative Portmarnock Brick detailing. Hipped slate roof and tall redbrick chimney stacks. Replacement wooden sash windows and renovated.	Portmarnock	c. 12m E of onshore cable route (Figure 25.11)	Medium
CH12	Railway bridge marked on 1910 OS map. Span replaced with replacement parapet walls.	Bremore	0m – access to landfall site (Figure 25.1)	Low
CH37	This area comprises three anomalies of archaeological potential visible within Google Earth coverage dating to 2013, 2022 and 2018. Circular enclosure located c. 56m to the north (containing concentric element) and possible square enclosure extending to the proposed development with potential ring ditch to the immediate north.	Lissenhall Little	0m - onshore cable route (Figure 25.8)	High

### 25.3.15 Areas of Archaeological Potential (AAPs)

A number of areas of archaeological potential have been identified during the course of this assessment through the analysis of historic mapping, aerial photographs and field inspections. These are detailed in Table 25.11 and marked on Figures 25.1 to 25.14.

Watercourse designations are included in the below table where they are deemed to be relatively undisturbed natural watercourses and as such possess archaeological potential. The following watercourses are crossed by the onshore cable route within existing fully developed carriageways, by means of a modern culvert, which has removed any archaeological potential that may previously have existed: WX01, WX03, WX04, WX05, WX06, WX07, WX08, WX13, WX14, WX15, WX16, WX17, WX18, WX19, WX21, WX23 A-C and WX24 A-C. Refer to section 22.3 of Chapter 22 Water for details on the watercourse crossings.

**Table 25.11 Areas of Archaeological Potential (AAP) within the study area**

AAP No.	Description	Location	Distance from onshore development area	Baseline Rating
AAP01	Greenfield within a coastal margin and containing a number of areas of archaeological potential identified during geophysical survey and archaeological testing.	Bremore	0m – landfall and grid facility (Figure 25.1)	High
AAP02	Watercourse (WX02: Bracken River) which also forms a townland boundary. Crossed by a modern road bridge.	Stephenstown /Balbriggan	0m – proposed onshore cable route (Figure 25.2)	Medium
AAP03	Watercourse (WX09: Oberstown Stream).	Oberstown	0m – proposed onshore cable route	Medium

AAP No.	Description	Location	Distance from onshore development area	Baseline Rating
			(Figure 25.5)	
AAP04	Watercourse, (WX10: Aldrumman Stream), which also formed a townland boundary.	Oberstown/ Ballough	0m – proposed onshore cable route (Figure 25.5)	Medium
AAP05	Watercourse (WX11: Ballough Stream). The current watercourse is a relatively modern channel, but former watercourses are marked to the west within the historic OS map. Watercourse may have been associated with a mill, marked further to the north on Rocque's map of 1760.	Corduffhall	0m – proposed onshore cable route (Figure 25.6)	Medium
AAP06	Watercourse (WX12: Deanestown Stream), which forms the townland boundary.	Coldwinters/ Turvey	0m – proposed onshore cable route (Figure 25.7)	Medium
AAP07	Watercourse (WX13: Ballyboghil Stream).	Turvey	0m – proposed onshore cable route (Figure 25.7)	Medium
AAP08	Estuarine/coastal margin and watercourses (WX18: Seapoint Stream and WX19: Greenfields Stream).	Seatown West, Greenfields, Seatown East, Yellow Walls	0m – proposed onshore cable route (Figure 25.9)	Medium
AAP09	Watercourse (WX20: Gaybrook Stream), which also forms a townland boundary.	Yellow Walls	0m – proposed onshore cable route (Figure 25.10)	Medium
AAP10	Watercourse (WX22: Sluice Stream), which also forms the townland boundary	Abbeyville/ Kinsaley	0m – proposed onshore cable route (Figure 25.11)	Medium
AAP11	River Mayne (WX25: Mayne Stream).	Belcamp	0m – proposed onshore cable route (Figure 25.14)	Medium

### 25.3.16 Townland Boundaries

The townland is an Irish land unit of considerable longevity as many of the units are likely to correspond to much earlier land divisions. However, the term townland was not used to denote a unit of land until the Civil Survey of 1654. It bears no relation to the modern word 'town' but like the Irish word *baile* refers to a place. It is possible that the word is derived from the Old English *tun land* and meant 'the land forming an estate or manor' (Culleton 1999, 174).

Gaelic land ownership required a clear definition of the territories held by each sept and a need for strong, permanent fences around their territories. It is possible that boundaries following ridge tops, streams or bog are more likely to be older in date than those composed of straight lines (*ibid.* 179).

The vast majority of townlands are referred to in the 17th century, when land documentation records begin. Many of the townlands are mapped within the Down Survey of the 1650s, so called as all measurements were carefully 'laid downe' on paper at a scale of forty perches to one inch. Therefore, most are in the context of pre-17th century landscape organisation (McErlean 1983, 315).

In the 19th century, some demesnes, deer parks or large farms were given townland status during the Ordnance Survey and some imprecise townland boundaries in areas such as bogs or lakes, were given more precise definition (*ibid.*). Larger tracks of land were divided into a number of townlands, and named Upper, Middle or Lower, as well as Beg and More (small and large) and north, east, south and west (Culleton 1999, 179). By the time the first Ordnance Survey had been completed a total of 62,000 townlands were recorded in Ireland.



The proposed development will traverse 56 townlands. Some of the boundaries follow natural watercourses, but many were defined properly in the 19th century and are marked by banks and/or ditches and hedges. The road network followed by the onshore cable route has already impacted upon the landscape and in some circumstances the townland boundaries are no longer extant. In other instances the roads themselves form the townland boundaries, meaning that where the onshore cable route runs along a boundary within the road it effectively straddles both townlands.

### 25.3.17 Results of Geophysical Survey

Geophysical surveys have been carried out across the proposed landfall site and grid facility site, including works in 2020 (for Fingal County Council) and 2022 (Dowling 2022, Licence No. 22R0244, Appendix 25.2). The results of both surveys are summarised below with the relevant field numbers shown in Image 25.1.



**Image 25.1 Geophysical survey field references**

Fields 2 and 3 of the onshore development area are in the ownership of Fingal County Council and were surveyed during a wider geophysical survey that was carried out in 2020. These fields were referred to as M1 and M4 respectively in the report (Nicholls and Russell 2020, Licence No. 20R0032). A single potential archaeological response was identified in Field 2 M1 (1), which was interpreted as a potential *fulacht fia* or the site of a former building. The interpretation was cautious as limestone outcropping and modern refuse was also noted within the general area (Appendix 25.3, Figures 7 and 8).

Three potential anomalies were identified in Field 3 / M4 (11, 12, 13). These comprised a mixture of poorly defined and faint linear trends (weakly magnetic), with a probable soil morphological or geological origin expected.

During the 2022 survey (Dowling 2022, Licence 22R0244, Appendix 25.2) Field 1 to the north of Fields 2 and 3; Field 4 to the west of the railway line and Field 5 to the west of the R132 were assessed.

Features of potential archaeological significance were revealed in Field 1 and included two possible ring-ditches/structures [1 and 4], as well as a large and varied array of small 'ditch' and 'pit-type' features [2-3; 7-9], many of which were thought to contain burnt/fired material and be associated with 'industrial-type' activity. The remains of a large potential disturbed burnt spread [5 and 6] was also recorded in this field.

There was also evidence suggestive of medieval farming in the form of widely spaced plough trends suggestive of medieval farming.

Field 4 contains two enclosures [1 and 5]. Both enclosures seem to be defined by ditches that vary from 21m to 35m in diameter. Enclosure [1] appears to have a southeast-facing entrance and displays evidence for internal features. There are also hints in the dataset of potentially associated field systems [3, 4 and 6] in the broader hinterland of both enclosures. A large zone of magnetic variability [7] may also be of archaeological interest.

Near the northern limit of Field 5, the partial outline of a possible enclosure/field system [1] was identified, although interpretation was noted as cautious as the recorded anomalies were partially ‘masked’ or ‘hidden’ by background geological response. Nevertheless, the potential remains of what may be associated field system/s [2 and 3] were also mapped in the immediate vicinity of [1], while a range of other possible ‘ditch’ and ‘pit-type’ features [4-7] were recorded elsewhere throughout the survey area.

#### 25.3.18 Results of Archaeological Testing

A programme of archaeological test trenching was carried out within the proposed landfall site and grid facility site to inform this assessment in March 2023 (Whitaker 2023, Licence Ref.: 23E0149). The report is presented in full in Appendix 25.3 of Volume 10. The results are summarised below.

The testing was carried out following two programmes of geophysical survey, undertaken in 2020 (Nicholls and Russell 2020, Licence no. 20R0032) and 2022 (Dowling 2022, Licence no. 22R0244). Multiple potential archaeological features were identified across the fields that form the proposed landfall and grid facility sites. The placement of the test trenches was designed to assess the potential archaeological resource in a manner that was as least invasive as possible.

The test trenching confirmed that the majority of the potential archaeological anomalies recorded during the geophysical surveys were archaeological in nature (AA1-11). Four trenches, T10, T11, T15 and T20, were devoid of archaeological material with the potential archaeological features confirmed to be agricultural field drains. The 11 identified archaeological areas, all of which possess high sensitivity, comprise the following.

- AA1 Enclosure
- AA2 Burnt mound activity
- AA3 Field system
- AA4 Burnt mound activity
- AA5 Enclosure
- AA6 Burnt mound activity
- AA7 Burnt mound activity
- AA8 Burnt mound activity
- AA9 Burnt mound activity
- AA10 Burnt mound activity; and
- AA11 Kiln.

#### 25.3.19 Onshore Cultural Heritage Assets within the 60km study area of the Array area

A review of all the resources detailed in section 25.2.4 and 25.2.5, which includes all recorded archaeological, architectural, and cultural heritage sites (within the Republic of Ireland and Northern Ireland), has been carried out, along with the analysis of historic mapping coverage. This has resulted in the identification of 63 heritage sites that have a direct association with the coast, or possess international significance as detailed in Tables 25.12 and 25.13. The location of the sites is shown on Figures 25.15 and Figures 25.15a/b and they are designated with a Cultural Heritage View Point (CHVP) number.



The sites are located in areas where the Zone of Theoretical Visibility (ZTV) mapping (Figures 29.5a/b) indicates that there may be visibility between the CHVP and the WTGs. The archaeological, architectural, and cultural heritage sites or structures within any portions of the landscape, where the ZTV mapping indicates that there will be no visibility, have been screened out.

**Table 25.12 Cultural Heritage View Points (CHVP) within the study area for the WTGs (Republic of Ireland)**

CHVP No.	Reference	Location	Classification	Distance from array area	Status	Sensitivity of Receptor
CHVP01	RMP DU002-001-005 PO No. 27/1976) RPS 3	Bremore, Co. Dublin	A group of five Megalithic Passage Tombs	17km	RMP, PO, RPS	Very High
CHVP02	RPS 90745-47, NIAH 14402101-3	Mornington, Drogheda, Co. Meath	Drogheda East and West Lighthouse complex	17km	RPS, NIAH	High
CHVP03	RMP ME021-003-4, RPS 90744, 90741, 09743	Mornington, Drogheda, Co. Meath	Lady's Finger, Maiden Tower and Boat House	17.2km	RMP, RPS	High
CHVP04	N/a	Clogherhead, Co. Louth	Ruined watch house	16.7km	None	Medium
CHVP05	NIAH 13902209	Clogherhead, Co. Louth	Oriel Harbour	16.8km	NIAH	Medium
CHVP06	RMP LH015-015001, National Mon. 579, PO 2/1971	Annagassan, Co. Louth	Cliff-edge fort	28.6km	RMP, Nat. Mon., PO	Very High
CHVP07	RMP LH015-038	Linns, Annagassan, Co. Louth	Fortification (Viking settlement)	29.7km	RMP	High
CHVP08	RPS Lhs012-014, NIAH 13901224	Haggardstown, Blackrock, Co. Louth	Boat House	35km	RPS, NIAH	High
CHVP09	RPS D257	Soldier's Point, Dundalk, Co. Louth	Coastguard Cottages	38.3km	RPS	High
CHVP10	RPS Lhs008-014, NIAH 13900808	Mountbagnall, Co. Louth	Giles Quay	32.2km	RPS, NIAH	High
CHVP11	RMP LH008-085	Mountbagnall, Co. Louth	Promontory Fort	31.8km	RMP	High
CHVP12	RMP LH009-017	Templetown, Co. Louth	Earthwork (possible Promontory Fort)	28.8km	RMP	High
CHVP13	RPS Lhs009-043-4 NIAH 13831043-4	Greenore, Co. Louth	Lighthouse and keeper's cottage	34.1km	RPS, NIAH	High
CHVP56	RMP LH005-042002, National Mon. 249 RPS Lhs005-006	Carlingford, Co. Louth	Carlingford Castle	36.3km	Nat. Mon, RMP, RPS	Very High

CHVP No.	Reference	Location	Classification	Distance from array area	Status	Sensitivity of Receptor
CHVP14	RPS Lhs005-051 NIAH 13825044	Carlingford, Co. Louth	Carlingford Harbour	36.3km	RPS, NIAH	High
CHVP15	N/a	Bremore, Co. Dublin	Memorial cairn	16.7km	N/a	Medium
CHVP16	RMP DU002-004, RPS 17 and 18 NIAH 11305009- 10	Balbriggan, Co. Dublin	Martello Tower and Boat House	16.4km	RMP, RPS, NIAH	High
CHVP17	RPS 37 NIAH 11305017- 18	Balbriggan, Co. Dublin	Balbriggan Harbour and Lighthouse	15.5km	RPS, NIAH	High
CHVP34	RPS 94 ACA	Ardgillan, Co. Dublin	Ardgillan Castle and demesne	14.7km	RPS, ACA	High
CHVP18	RMP DU005-018, RPS 189	Red Island, Skerries, Co. Dublin	Martello Tower	11.5km	RMP, RPS	High
CHVP57	RPS 183, NIAH 11311001	Red Island, Skerries, Co. Dublin	Skerries Harbour	11.5km	RPS, NIAH	High
CHVP58	RMP DU005-033, DU005-116, RPS 774, NIAH 11311040	Shenick's Island, Skerries, Co. Dublin	Martello Tower and promontory fort	11.1km	RMP, RPS, NIAH	High
CHVP59	RPS 772	Rockabill Island, Co. Dublin	Lighthouse	5.3km	RPS	High
CHVP19	RPS 889 NIAH 11318007	Loughshinny, Co. Dublin	Loughshinny Harbour	12.8km	RPS, NIAH	High
CHVP20	RMP DU008- 006001-011, PO 13/1977 RPS 252, 253	Drumanagh, Co. Dublin	Promontory Fort and Martello Tower	13.1km	RMP, PO, RPS	Very High
CHVP21	RMP DU008-090	Rush, Co. Dublin	Promontory Fort	14.1km	RMP	High
CHVP22	RPS 891, 892 NIAH 11324013	Rush, Co. Dublin	Rush Harbour	14.8km	RPS, NIAH	High
CHVP23	RMP DU008-015, NIAH 11324023, RPS 265a	Rush, Co. Dublin	Martello Tower	14.8km	RMP, RPS, NIAH	High
CHVP24	RPS 893	Rush, Co. Dublin	Rogerstown Pier	18.9km	RPS	High
CHVP25	RMP DU012-010, RPS 542	Quay, Co. Dublin	Martello Tower	18.7km	RMP, RPS	High
CHVP26	RMP DU012-008, RPS 543, NIAH 11337001	Balcarrick, Co. Dublin	Martello Tower	20.7km	RMP, RPS, NIAH	High
CHVP44	RMP DU009- 001013	Lambay Island, Co. Dublin	Promontory Fort	15.8km	RMP	High
CHVP45	RPS 776	Lambay Island, Co. Dublin	Lambay Harbour	16.4km	RPS	High

CHVP No.	Reference	Location	Classification	Distance from array area	Status	Sensitivity of Receptor
CHVP27	RMP DU012-035, RPS 421, NIAH 11344040	Robswall, Malahide, Co. Dublin	Martello Tower	24.2km	RMP, RPS, NIAH	High
CHVP28	RMP DU012-040, RPS 476, NIAH 11345002	Carrickhill, Malahide, Co. Dublin	Martello Tower	25km	RMP, RPS, NIAH	High
CHVP43	RMP DU015-016, 133 RPS 589, NIAH 11359042	Ireland's Eye, Co. Dublin	Martello Tower and Promontory Fort	25.9km	RMP, RPS, NIAH	High
CHVP29	RPS 562, 954, 595a, 595b, 565, NIAH 11359041, 034	Howth, Co. Dublin	Howth Harbour and Lighthouse	27.3km	RPS, NIAH	High
CHVP30	RMP DU016-002002, RPS 570, NIAH 11359033	Howth, Co. Dublin	Martello Tower	27.8km	RMP, RPS, NIAH	High
CHVP31	RPS 587 NIAH 11367007	Howth, Co. Dublin	Baily Lighthouse	30.2km	RPS, NIAH	High
CHVP33	Conservation Area	At Ann's Park, Dublin City	Eastern section of St Ann's demesne landscape	32.4km	CA	Medium
CHVP32	NIAH 50030344	Bull Wall, Dublin City	Coastguard Station	33.2km	NIAH	Medium
CHVP35	RMP DU019-029002, RPS 6798 and 7553, Conservation Area	Poolbeg, Dublin City	Great South Wall and Poolbeg Lighthouse	35km	RMP, RPS, CA	High
CHVP36	RMP DU023-002, RPS 25, ACA	Intake, Co. Dublin	Martello Tower	39.6km	RMP, RPS, ACA	High
CHVP37	N/a	Blackrock, Co. Dublin	Sea Baths	39.6km	N/a	Medium
CHVP38	RMP DU023-010, RPS 358	Seapoint, Co. Dublin	Martello Tower	39.6km	RMP, RPS	Medium
CHVP39	RPS 127, 307 Proposed ACA	Dun Laoghaire, Co. Dublin	Dun Laoghaire Harbour	38.2km	RPS, Proposed ACA	High
CHVP40	RMP DU023-022, RPS 1402	Bullock, Co. Dublin	Martello Tower	39.5km	RMP, RPS	High
CHVP41	RPS 1898	Dalkey, Co. Dublin	Colliemore Harbour	40.1km	RPS	High
CHVP42	RMP DU023-029009, RPS 1591	Dalkey Island, Co. Dublin	Martello Tower	40.2km	RMP, RPS	High
CHVP60	RMP DU023-029003, National Mon. 33	Dalkey Island, Co. Dublin	Church	40.2km	RMP, Nat. Mon.	Very High

CHVP No.	Reference	Location	Classification	Distance from array area	Status	Sensitivity of Receptor
CHVP46	RMP DU023-072, RPS 1619	Dalkey Hill, Co. Dublin	Signal Tower	40.9km	RMP, RPS	High
CHVP47	N/a	Bray, Co. Wicklow	Bray Harbour	47km	N/a	Medium
CHVP55	UNESCO World Heritage Site: Brú na Bóinne	Dowth, Co. Meath	Prehistoric landscape. VP from eastern passage tomb at Dowth (RMP ME020-017)	30.5km	RMP, UNESCO WHS	Very High

**Table 25.13 Cultural Heritage View Points (CHVP) within the study area for the WTGs (Northern Ireland)**

CHVP No.	Reference	Location	Classification	Distance from offshore turbines	Status	Sensitivity of Receptor
CHVP61	Scheduled Mon, DOW057:010, LB HB16/04/057 (Record Only)	Carlingford Lough, Co. Down	Artillery Fort	31.9km	Scheduled Mon.	High
CHVP62	IHR 03642	Carlingford Lough, Co. Down	Haulbowline Lighthouse	31.9km	IHR	Medium
CHVP48	LB HB16/04/014 C (Grade B2), LB HB16/04/013 A (Grade B2). LB HB16/04/021 (Grade B2)	Greencastle Point, Co. Down	Boat House, Coastguard House, Pier	34.2km	LB	High
CHVP49	IHR 03641:002	Cranfield, Co. Down	Lightkeeper's House	31.9km	IHR	Medium
CHVP63	DF 00385	Cranfield, Co. Down	Coastwatching Station (World War II)	33km	DH	Medium
CHVP50	LB HB16/03/008 C (Grade B2), IHR 03630:001	Kilkeel, Co. Down	Coastguard House and Harbour	35.3km	LB, IHR	High
CHVP51	IHR 03631	Maghereagh, Co. Down	Coastguard Station	36.1km	IHR	Medium
CHVP52	LB HB16/01/070 (Grade 2B)	Annalong, Co. Down	Harbour	39.8km	LB	High
CHVP53	LB HB18/10/093 (Grade B1), IHR 03461	Clanmaghery, Co. Down	Coastguard Station	55.8km	LB	High
CHVP54	LB HB18/10/048 (Grade B1), IHR 03481	Killough, Co. Down	Lighthouse	54.6km	LB, IHR	High

## 25.4 Characteristics of the Proposed Development

The proposed development is described in detail in the Onshore Description Chapter and Offshore Description Chapter. The main onshore and offshore elements of the development that are relevant to the assessment of potential impacts on the archaeological, architectural and cultural heritage resource will comprise of the following:

### *Landfall site*

- Construction of two 220kV High Voltage Alternating Current (HVAC) offshore (subsea) export cables from the High Water Mark (HWM) to the Transition Joint Bays (TJB)
- Construction of two TJBs
- Construction of two 220kV HVAC underground onshore export cables connecting the TJBs to the compensation substation within the grid facility
- No impacts upon the archaeological, architectural, or cultural heritage resource, arising from the operation or decommissioning of the landfall site, are anticipated.

### *Grid Facility*

- Construction of the Grid facility comprising the compensation substation and Bremore substation
- The construction of the connection of the two 220kV HVAC underground export cables (as described above) to the compensation substation
- The construction of a short (less than 100m) length of cable connecting the compensation substation to Bremore substation
- No impacts upon the archaeological, architectural, or cultural heritage resource, arising from the operation or decommissioning of the grid facility, are anticipated.

### *Onshore cable route*

- Construction of approximately 33-35km of double 220kV HVAC underground HVAC circuit, two earthing conductors plus two fibre optic cables and associated joint bays. Each circuit comprises 3 No. core cables
- Construction of a connection to the existing substation and planned substation expansion project at Belcamp, Swords, Co. Dublin; and
- Construction of supporting infrastructure and ancillary works
- No impacts upon the archaeological, architectural, or cultural heritage resource, arising from the operation or decommissioning of the onshore cable route, are anticipated
- Where possible, the onshore cable will be laid in the public road. The onshore development area will generally be limited to the width of the public road but in some instances will encompass off-road sections in private land where it is technically not feasible to maintain the route entirely within the road.

### *Offshore*

- The construction phase of the offshore infrastructure will consist of constructing the WTGs and OSP within the array area as well as the laying of the offshore cables including the inter-array cables and the offshore export cables within the offshore export cable corridor (ECC) from the OSP up to the HWM just south of Bremore Point. The WTGs will be erected from ships with cranes. At the landfall site the two offshore export cables will come ashore and will be connected to the onshore export cables at the transition joint bays. The cables will be installed at the landfall by HDD. The proposed development will introduce a number of offshore lights in the nighttime sea view during the construction phase. At nighttime, navigational and aviation lighting is likely to be visible in reasonably clear conditions.

- During the operational phase, effects will relate to the long-term presence of the proposed WTGs and OSP within the array area, but with no impacts arising from the offshore cables. Low level of sea traffic will be associated with maintenance activities. There are two project options included in the planning application: Project Option 1 (49 WTGs at c. 290m tip height) and Project Option 2 (35 WTGs at c. 316m tip height).
- It is anticipated that any offshore decommissioning process will involve similar activities to the construction process but that these will be undertaken in reverse, with removal of above surface structures initially (blades, nacelle, turbine, towers, and transition piece) followed by removal of foundations and associated subsurface infrastructure. It may be determined that the removal of foundations, pilings, scour protection and inter-array / offshore export cabling may cause greater environmental impacts than leaving in-situ and that if safe to do so, then certain infrastructure may be cut at or just below the seabed with cabling left buried. Refer to Section 6.11 of the Offshore Description Chapter and the Rehabilitation Schedule (Appendix 6.2 of Volume 8) for further information on decommissioning.

## 25.5 Potential Effects

### 25.5.1 Do-Nothing Scenario

If the proposed development were not to proceed, there would be no effects upon the archaeological, architectural, and cultural heritage resource.

### 25.5.2 Construction Phase

#### 25.5.2.1 Landfall Site

Construction within the landfall site will not result in any direct construction impacts on recorded archaeological or architectural sites (AH/BH) as any such sites are located outside of the onshore development area (Figure 25.1).

This area has been designated as AAP1 due to the proximity of the coast. The archaeological potential of the landfall site was proven during geophysical survey and archaeological testing carried out to inform this assessment. Seven areas of archaeological significance have been identified within the landfall site comprising an enclosure (AA5), five areas of burnt mound activity (AA6, 7, 8, 9 and 10) and one kiln (AA11). It is possible that ground disturbances associated with the construction of the onshore development area will result in direct, negative impacts on the archaeological remains, as detailed in Table 25.14. Impacts of significant significance or higher are considered as significant in EIAR terms. The scenario with the greatest potential impact means that it is possible that all seven archaeological sites will be affected. Alternatively, all or some of the sites, may be preserved in-situ.

**Table 25.14 Potential Impacts on AA sites within the landfall site**

Ref.:	Description	Distance from proposed development	Sensitivity of Receptor	Impact Type	Magnitude of Impact	Significance of Effect
AA5	Enclosure	0m	High	Direct, negative, permanent	Very high	Very Significant
AA6	Burnt mound activity	0m	High	Direct, negative, permanent	Very high	Very Significant
AA7	Burnt mound activity	0m	High	Direct, negative, permanent	Very high	Very Significant
AA8	Burnt mound activity	0m	High	Direct, negative, permanent	Very high	Very Significant
AA9	Burnt mound activity	0m	High	Direct, negative, permanent	Very high	Very Significant
AA10	Burnt mound activity	0m	High	Direct, negative, permanent	Very high	Very Significant
AA11	Kiln	0m	High	Direct, negative, permanent	Very high	Very Significant

It remains possible that ground works associated with construction at the landfall site may have direct, negative and permanent impacts upon small archaeological sites that may survive beneath the current ground level and outside of the footprint of the excavated test trenches. The magnitude of impact may be very high and effects may range from moderate to profound negative in significance, based on the nature and extent of any remains that may be present.

#### 25.5.2.2 Grid Facility

Construction within the grid facility site will not result in any construction impacts on recorded archaeological or architectural sites (AH/BH) as any such sites are located outside of the onshore development area (Figure 25.1).

The grid facility site has been designated as AAP1 due to the proximity of the coast. The archaeological potential of the site was proven during geophysical survey and archaeological testing carried out to inform this assessment. Four areas of archaeological significance have been identified comprising an enclosure (AA1), two areas of burnt mound activity (AA2, 4) and one field system (AA3). Due to the construction of the grid facility, it is likely that ground disturbances associated with the construction of the proposed development will result in direct, negative impacts on the archaeological remains, as detailed in Table 25.15. Impacts of significant significance or higher are considered as significant in EIAR terms.

One CH site (CH01) is also located within this area, which comprises the ruined remains of a post medieval well (Figure 12.1).

**Table 25.15 Potential Impacts on AA/CH sites within the grid facility site**

Ref.:	Description	Distance from proposed development	Sensitivity of Receptor	Impact Type	Magnitude of Impact	Significance of Effect
AA1	Enclosure	0m	High	Direct, negative, permanent	Very high	Very Significant
AA2	Burnt mound activity	0m	High	Direct, negative, permanent	Very high	Very Significant
AA3	Field system	0m	High	Direct, negative, permanent	Very high	Very Significant
AA4	Burnt mound activity	0m	High	Direct, negative, permanent	Very high	Very Significant
CH01	Ruined well	0m	Low	Direct, negative, permanent	Very high	Moderate

It remains possible that ground works associated with the construction of the grid facility may have direct, negative, and permanent impacts upon small archaeological sites that may survive beneath the current ground level and outside of the footprint of the excavated test trenches. The magnitude of impact may be very high and effects may range from moderate to profound negative in significance, based on the nature and extent of any remains that may be present.

#### 25.5.2.3 Onshore cable route

Table 25.16 details the potential effects upon the archaeological, architectural, and cultural heritage resource, that may arise from the construction of the onshore cable route. Sites or structures from within the onshore study area that are not included in Table 25.16 will not be affected by construction and as such neutral effects are predicted. This is due to the fact that the majority of the onshore cable route will be laid within the existing road network. Impacts of significant significance or higher are considered as significant in EIAR terms.



**Table 25.16 Potential Impacts arising from the construction of the onshore cable route**

Ref.	Description	Distance from proposed development	Sensitivity of Receptor	Impact Type	Magnitude of Impact	Significance of Effect
AAP02	Watercourse (WX02: Bracken River) and townland boundary.	0m	Medium	None (In-road open cut or Inline HDD proposed)	N/a	N/a
AAP03	Watercourse (WX09: Oberstown Stream).	0m	Medium	None (In-road open cut, Inline HDD or offline HDD proposed)	N/a	N/a
AAP04	Watercourse (WX10: Aldrumman Stream) and townland boundary.	0m	Medium	Direct, negative, permanent (if offline open cut is required). None if inline HDD is required.	High	Significant
CH04	Site of structures associated with Ballough	0m	Low	Direct, negative, permanent	High	Slight
BH06	Milestone (not located during field inspection)	0m	High	Direct, negative, permanent	Very high	Very Significant
BH10	Milestone	0m	High	Direct, negative, permanent	Very high	Very Significant
CH23	Site of post medieval structures	0m	Medium	Direct, negative, permanent	Very high	Significant
AAP05	Watercourse (WX11: Ballough Stream)	0m	Medium	None (Offline HDD proposed)	N/a	N/a
AAP06	Watercourse (WX12: Deanestown Stream) and townland boundary.	0m	Medium	None (Inline HDD or offline HDD proposed)	N/a	N/a
AAP07	Watercourse (WX13: Ballyboghil Stream)	0m	Medium	Direct, negative, permanent (if offline open cut is required). None if inline or offline HDD is required.	High	Significant
BH12	Daws Bridge	0m	High	Direct, negative, permanent (if inline HDD is required) None if offline HDD is required.	Very high	Very Significant
CH37	Three anomalies of archaeological potential (Google Earth)	0m	High	Direct, negative, permanent	High	Significant
AH25	Holy well (site of)	0m	High	Direct, negative, permanent	Very high	Very Significant
AAP08	Estuarine/coastal margin and watercourses (WX18: Seapoint Stream and WX19: Greenfields Stream)	0m	Medium	Direct, negative, permanent	High	Significant

Ref.	Description	Distance from proposed development	Sensitivity of Receptor	Impact Type	Magnitude of Impact	Significance of Effect
AAP09	Watercourse (WX20: Gaybrook Stream)	0m	Medium	Direct, negative, permanent (if offline open cut is required). None if inline HDD or in-road open cut is required.	High	Significant
AAP10	Watercourse (WX22: Sluice Stream)	0m	Medium	Direct, negative, permanent (if offline open cut is required). None if offline HDD or in-road open cut is required.	High	Significant
BH19	Milestone	0m	High	Direct, negative, permanent	Very high	Very Significant
DL14/ Abbey-ville ACA	Designed landscape associated with Abbeyville	0m	High	Direct, negative, permanent (if offline option is required).	High	Significant
BH21	Milestone	0m	High	Direct, negative, permanent (if online option is required)	Very high	Very Significant
BH22	Bridge	0m	High	Direct, negative, permanent (if online option is required)	Very high	Very Significant
AH30d	Ecclesiastical enclosure at Saint Doolaghs	0m	High	Direct, negative, permanent (if Malahide Rd option is required)	High	Significant
AH30g	Cross at Saint Doolaghs	0m	High	Direct, negative, permanent (if Malahide Rd option is required)	Very high	Profound
CH10	Bridge	0m	Medium	Direct, negative, permanent (if Malahide Rd option is required)	High	Moderate
AAP11	River Mayne (WX25: Mayne Stream)	0m	Medium	Direct, negative, permanent (if offline open cut is required). None if in-road open cut is required.	High	Significant
BH33	Belcamp House (surviving walled garden)	0m	High	Direct, negative, permanent	High	Significant

Potential direct impacts are possible in relation to BH12 (Daws Bridge) and BH22 (Road bridge north of Kinsaley) based on the fact that excavations within the bridge structure may lead to impacts on the structure itself (BH22), or carrying out HDD beneath, may affect the foundations (BH12). Potential impacts are assessed with consideration of these facts.

It remains possible that ground works associated with the laying of the onshore cable within greenfield areas that have not been designated within any obvious archaeological potential, may still have direct, negative, and permanent impacts upon archaeological sites that may survive beneath the current ground level. The magnitude of impact may be very high and effects may range from moderate to profound negative in significance, based on the nature and extent of any remains that may be present.

With the exception of potential impacts at AH25, AH30d and AH30g, no recorded monuments will be directly impacted by the construction of the onshore cable route. The route will travel through a number of Zones of Notification associated with the monuments. Whilst these zones do not define the extent of archaeological remains, they represent an area in proximity to the RMP that requires two months notification to be issued to the NMS (under Section 12 of the National Monuments Act) if works are proposed within that area. It is possible that features associated with the monuments extend into the roads, where extensive works have not already occurred. No impacts are predicted in relation to the zones associated with AH26 and AH12 due to the level of developed road infrastructure.

Where the onshore cable route passes through the zones associated with AH28 (within AAP08) and AH32, there remains some potential that excavation works may have direct, negative, and permanent impacts upon archaeological sites that may survive beneath the current road level. The magnitude of impact may be very high, and effects may range from moderate to profound negative in significance, based on the nature and extent of any remains that may be present.

#### **25.5.2.4 Offshore Infrastructure (WTGs and OSP)**

During construction of either Project Option 1 or Project Option 2, indirect impacts will commence on the setting of the 63 archaeological, architectural, and cultural heritage sites identified within the 60km offshore study area. Construction impacts will be no greater than the operational impacts detailed below in Table 25.17. The operational impacts represent the greatest extent of potential visual intrusion on the assessed cultural heritage resource.

### **25.5.3 Operational Phase**

#### **25.5.3.1 Landfall Site**

No impacts are predicted upon the archaeological, architectural, or cultural heritage resource during the operation of the development within the landfall site, as there will be no surface expression with regards to the infrastructure that may impact the setting of the archaeological, architectural, and cultural heritage resource.

#### **25.5.3.2 Grid Facility**

No impacts are predicted upon the archaeological, architectural, or cultural heritage resource during the operation of the Grid Facility as there are no archaeological, architectural, and cultural heritage sites located within vicinity of the development that may have their settings impacted upon by the operation of the facility. The closest is AH01 (site of an enclosure), located c. 244m to the north and BH03 (Bremore Cottage), located c 775m to the southeast.

#### **25.5.3.3 Onshore cable route**

No impacts are predicted upon the archaeological, architectural, or cultural heritage resource during the operation of the onshore cable, as there will be no surface expression with regards to the infrastructure that may impact the setting of the archaeological, architectural and cultural heritage resource.

#### **25.5.3.4 Offshore Infrastructure (WTGs and OSP)**

A total of 63 archaeological, architectural, and cultural heritage sites have been identified within the 60km study area, where it interacts with the Republic of Ireland and Northern Ireland. Figures 29.5a (ZTV for Project Option 1) and 29.5 b (ZTV of Project Option 2), as produced in Volume 5, Chapter 29: Seascape, Landscape and Visual (hereafter referred to as the 'Seascape, Landscape and Visual Chapter') have been utilised to identify the locations inland where there may be visibility between the sites and the offshore turbines (Project Option 1 maximum tip height of 290m and Project Option 2, maximum tip height of 316m). The assessment of potential negative impacts on the setting of the 63 archaeological, architectural, or cultural heritage sites has been carried out by reviewing the photomontages presented in the Seascape, Landscape and Visual Chapter and additional wireframe modelling (Macroworks). The results of the assessment for 62 of the sites are presented in Table 25.17. The assessment of CHVP59 (Rockabill lighthouse) is dealt with separately below Table 25.17 due to its offshore location and proximity with the array area. Impacts of significant significance or higher are considered as significant in EIAR terms.

“Setting” with regards to archaeological, architectural, and cultural heritage site/structures, can be defined as follows (Xi’an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas (ICOMOS 2005, 2):

*The setting of a heritage structure, site or area is defined as the immediate and extended environment that is part of, or contributes to, its significance and distinctive character.*

**Table 25.17 Potential Impacts arising from the operation of the WTGs and OSP**

Ref.:	Description	Distance from Array	Sensitivity of Receptor	Array Layout	Impact Type	Magnitude of Impact	Significance of Effect
CHVP01	A group of five Megalithic Passage Tombs	17km	Very High	Project Option 1	Indirect, negative, long term	Low	Moderate
				Project Option 2	Indirect, negative, long term	Low	Moderate
CHVP02	Drogheda East and West Lighthouse complex	17km	High	Project Option 1	Indirect, negative, long term	Low	Slight
				Project Option 2	Indirect, negative, long term	Low	Slight
CHVP03	Lady’s Finger, Maiden Tower and Boat House	17.2km	High	Project Option 1	Indirect, negative, long term	Low	Slight
				Project Option 2	Indirect, negative, long term	Low	Slight
CHVP04	Ruined watch house	16.7km	Medium	Project Option 1	Indirect, negative, long term	Low	Slight
				Project Option 2	Indirect, negative, long term	Low	Slight
CHVP05	Oriel Harbour	16.8km	Medium	Project Option 1	Indirect, negative, long term	Low	Slight
				Project Option 2	Indirect, negative, long term	Low	Slight
CHVP06	Cliff-edge fort	28.6km	Very High	Project Option 1	Indirect, negative, long term	Very low	Slight
				Project Option 2	Indirect, negative, long term	Very low	Slight
CHVP07	Fortification (Viking settlement)	29.7km	High	Project Option 1	Neutral	N/a	N/a
				Project Option 2	Neutral	N/a	N/a
CHVP08	Boat House	35km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant

Ref.:	Description	Distance from Array	Sensitivity of Receptor	Array Layout	Impact Type	Magnitude of Impact	Significance of Effect
CHVP09	Coastguard Cottages	38.3km	High	Project Option 1	Neutral	N/a	N/a
				Project Option 2	Neutral	N/a	N/a
CHVP10	Giles Quay	32.2km	High	Project Option 1	Indirect, negative, long term	Low	Slight
				Project Option 2	Indirect, negative, long term	Low	Slight
CHVP11	Promontory Fort	31.8km	High	Project Option 1	Indirect, negative, long term	Low	Slight
				Project Option 2	Indirect, negative, long term	Low	Slight
CHVP12	Earthwork (possible Promontory Fort)	28.8km	High	Project Option 1	Indirect, negative, long term	Low	Slight
				Project Option 2	Indirect, negative, long term	Low	Slight
CHVP13	Lighthouse and keeper's cottage	34.1km	High	Project Option 1	Neutral	N/a	N/a
				Project Option 2	Neutral	N/a	N/a
CHVP56	Carlingford Castle	36.3km	Very High	Project Option 1	Neutral	N/a	N/a
				Project Option 2	Neutral	N/a	N/a
CHVP14	Carlingford Harbour	36.3km	High	Project Option 1	Neutral	N/a	N/a
				Project Option 2	Neutral	N/a	N/a
CHVP15	Memorial cairn	16.7km	Medium	Project Option 1	Indirect, negative, long term	Low	Slight
				Project Option 2	Indirect, negative, long term	Low	Slight
CHVP16	Martello Tower and Boat House	16.4km	High	Project Option 1	Indirect, negative, long term	Low	Slight
				Project Option 2	Indirect, negative, long term	Low	Slight
CHVP17	Balbriggan Harbour and Lighthouse	15.5km	High	Project Option 1	Indirect, negative, long term	Low	Slight
				Project Option 2	Indirect, negative, long term	Low	Slight

Ref.:	Description	Distance from Array	Sensitivity of Receptor	Array Layout	Impact Type	Magnitude of Impact	Significance of Effect
CHVP34	Ardgillan Castle and demesne	14.7km	High	Project Option 1	Indirect, negative, long term	Medium	Moderate
				Project Option 2	Indirect, negative, long term	Medium	Moderate
CHVP18	Martello Tower	11.5km	High	Project Option 1	Indirect, negative, long term	Medium	Moderate
				Project Option 2	Indirect, negative, long term	Medium	Moderate
CHVP57	Skerries Harbour	11.5km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Low	Slight
CHVP58	Martello Tower and promontory fort	11.1km	High	Project Option 1	Indirect, negative, long term	Medium	Moderate
				Project Option 2	Indirect, negative, long term	Medium	Moderate
CHVP19	Loughshinny Harbour	12.8km	High	Project Option 1	Indirect, negative, long term	Medium	Moderate
				Project Option 2	Indirect, negative, long term	Medium	Moderate
CHVP20	Promontory Fort and Martello Tower	13.1km	Very High	Project Option 1	Indirect, negative, long term	Low	Moderate
				Project Option 2	Indirect, negative, long term	Low	Moderate
CHVP21	Promontory Fort	14.1km	High	Project Option 1	Indirect, negative, long term	Low	Slight
				Project Option 2	Indirect, negative, long term	Low	Slight
CHVP22	Rush Harbour	14.8km	High	Project Option 1	Indirect, negative, long term	Medium	Moderate
				Project Option 2	Indirect, negative, long term	Medium	Moderate
CHVP23	Martello Tower	14.8km	High	Project Option 1	Indirect, negative, long term	Medium	Moderate
				Project Option 2	Indirect, negative, long term	Medium	Moderate

Ref.:	Description	Distance from Array	Sensitivity of Receptor	Array Layout	Impact Type	Magnitude of Impact	Significance of Effect
CHVP24	Rogerstown Pier	18.9km	High	Project Option 1	Neutral	N/a	N/a
				Project Option 2	Neutral	N/a	N/a
CHVP25	Martello Tower	18.7km	High	Project Option 1	Indirect, negative, long term	Low	Slight
				Project Option 2	Indirect, negative, long term	Low	Slight
CHVP26	Martello Tower	20.7km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP44	Promontory Fort	15.8km	High	Project Option 1	Indirect, negative, long term	Medium	Moderate
				Project Option 2	Indirect, negative, long term	Medium	Moderate
CHVP45	Lambay Harbour	16.4km	High	Project Option 1	Indirect, negative, long term	Low	Slight
				Project Option 2	Indirect, negative, long term	Low	Slight
CHVP27	Martello Tower	24.2km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP28	Martello Tower	25km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP43	Martello Tower and Promontory Fort	25.9km	High	Project Option 1	Indirect, negative, long term	Low	Slight
				Project Option 2	Indirect, negative, long term	Low	Slight
CHVP29	Howth Harbour and Lighthouse	27.3km	High	Project Option 1	Indirect, negative, long term	Low	Slight
				Project Option 2	Indirect, negative, long term	Low	Slight



Ref.:	Description	Distance from Array	Sensitivity of Receptor	Array Layout	Impact Type	Magnitude of Impact	Significance of Effect
CHVP30	Martello Tower	27.8km	High	Project Option 1	Indirect, negative, long term	Low	Slight
				Project Option 2	Indirect, negative, long term	Low	Slight
CHVP31	Baily Lighthouse	30.2km	High	Project Option 1	Neutral	N/a	N/a
				Project Option 2	Neutral	N/a	N/a
CHVP33	Eastern section of St Ann's demesne landscape	32.4km	Medium	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP32	Coastguard Station	33.2km	Medium	Project Option 1	Neutral	N/a	N/a
				Project Option 2	Neutral	N/a	N/a
CHVP35	Great South Wall and Poolbeg Lighthouse	35km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP36	Martello Tower	39.6km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP37	Sea Baths	39.6km	Medium	Project Option 1	Indirect, negative, long term	Very low	Imperceptible
				Project Option 2	Indirect, negative, long term	Very low	Imperceptible
CHVP38	Martello Tower	39.6km	Medium	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP39	Dun Laoghaire Harbour	38.2km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP40	Martello Tower	39.5km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant

Ref.:	Description	Distance from Array	Sensitivity of Receptor	Array Layout	Impact Type	Magnitude of Impact	Significance of Effect
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP41	Colliemore Harbour	40.1km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP42	Martello Tower	40.2km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP60	Church	40.2km	Very High	Project Option 1	Indirect, negative, long term	Very low	Slight
				Project Option 2	Indirect, negative, long term	Very low	Slight
CHVP46	Signal Tower	40.9km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP47	Bray Harbour	47km	Medium	Project Option 1	Indirect, negative, long term	Very low	Imperceptible
				Project Option 2	Indirect, negative, long term	Very low	Imperceptible
CHVP55	UNESCO World Hertiage Site: Brú na Bóinne VP from eastern passage tomb at Dowth (RMP ME020-017)	30.5km	Very High	Project Option 1	Neutral	N/a	N/a
				Project Option 2	Neutral	N/a	N/a
CHVP61	Artillery Fort	31.9km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP62	Haulbowline Lighthouse	31.9km	Medium	Project Option 1	Indirect, negative, long term	Very low	Imperceptible
				Project Option 2	Indirect, negative, long term	Very low	Imperceptible

Ref.:	Description	Distance from Array	Sensitivity of Receptor	Array Layout	Impact Type	Magnitude of Impact	Significance of Effect
CHVP48	Boat House, Coastguard House, Pier	34.2km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP49	Lightkeeper's House	31.9km	Medium	Project Option 1	Indirect, negative, long term	Very low	Imperceptible
				Project Option 2	Indirect, negative, long term	Very low	Imperceptible
CHVP63	Coastwatching Station (World War II)	33km	Medium	Project Option 1	Indirect, negative, long term	Very low	Imperceptible
				Project Option 2	Indirect, negative, long term	Very low	Imperceptible
CHVP50	Coastguard House and Harbour	35.3km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP51	Coastguard Station	36.1km	Medium	Project Option 1	Indirect, negative, long term	Very low	Imperceptible
				Project Option 2	Indirect, negative, long term	Very low	Imperceptible
CHVP52	Harbour	39.8km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP53	Coastguard Station	55.8km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant
CHVP54	Lighthouse	54.6km	High	Project Option 1	Indirect, negative, long term	Very low	Not significant
				Project Option 2	Indirect, negative, long term	Very low	Not significant

With regards to the predicted impacts on the above 62 cultural heritage sites, there is very little difference in effects between Project Options 1 or 2 of the proposed layouts. The only site where a difference has been identified is at CHVP57 Skerries Harbour, where Project Option 1 will result is a slightly lesser impact than Option 2 as it will be less visible.

The significance of effects at nine sites will be neutral. Where indirect negative impacts have been identified, the significance of effect is imperceptible at six sites; not significant at a further 19 sites; slight at 19 sites and moderate at nine sites.

**CHVP59 Rockabill Lighthouse**

Rockabill Lighthouse, which is a protected structure, is unique in terms of this assessment, as the structure occupies a small island c. 6.4km off the coast of mainland Ireland.

The structure is located c. 5.3km southeast of the proposed array area and as such, represents the closest cultural heritage structure to the proposed offshore infrastructure. The building is not manned and not regularly accessible in terms of public access. Due to its landmark nature and location, it is a popular focus for landscape photography.

As the structure possesses an offshore location, the assessment of potential impacts upon the setting requires assessment from the mainland and in closer proximity to the structure.

Photomontages produced for the Seascape, Landscape and Visual Chapter, VP25 illustrate Rockabill Lighthouse in the background, when viewed from Loughshinny from the southwest, with the proposed offshore infrastructure visible either side of the structure and extending along the horizon. Due to its distance offshore, weather conditions dictate how visible the structure is to the coastline. VP25 represents a clear view in good conditions.

When viewed at closer proximity, the proposed offshore infrastructure will be visible behind Rockabill Lighthouse when approached from the west and southwest. However, immediate views from the south, southeast, east, northeast, north and northwest will remain unaffected by the offshore infrastructure. Given the setting of the structure is the marine environment, these are important points to note. Therefore, whilst the change to the structure will be noticeable, the integrity of the site will not be compromised.

When the above analysis is taken into consideration, it is determined that Project Option 1 and Project Option 2 will result in indirect, negative, long-term impacts that are considered medium in magnitude. The receptor sensitivity of the lighthouse is high, and this will result in a moderate negative significance of effect (see Table 25.18), which is not considered significant in EIA terms.

**Table 25.18 Potential Impacts on Rockabill Lighthouse arising from the operation of the WTGs and OSP**

Ref.:	Description	Distance from Array	Sensitivity of Receptor	Array Layout	Impact Type	Magnitude of Impact	Significance of Effect
CHVP59	Rockabill Lighthouse	5.3km	High	Project Option 1	Indirect, negative, long term	Medium	Moderate
				Project Option 2	Indirect, negative, long term	Medium	Moderate

**25.5.4 Decommissioning**

No impacts are predicted upon the archaeological, architectural, and cultural heritage resource as a result of the decommissioning of the onshore development. This is due to the fact that no new excavations (ground disturbances) will be introduced in order to decommission onshore infrastructure.

The decommissioning of the offshore infrastructure will remove indirect negative impacts on the setting of coastal archaeological, architectural, and cultural heritage sites (described in Tables 25.17 and 25.18).

## 25.6 Mitigation and Monitoring Measures

### 25.6.1 Construction Phase

#### 25.6.1.1 Landfall Site

It is acknowledged that the preservation in-situ of archaeological remains is the preferred method in which to conserve the archaeological resource. To that end, every effort will be made during detailed design to avoid directly effecting the identified archaeological areas within the landfall site (AA5, 6, 7, 8, 9, 10, 11).

Following detailed design, a further programme of archaeological test trenching will be carried out within the refined development footprint with the aim of identifying any smaller archaeological remains that may survive within the onshore development area, which were not identified during geophysical survey or the first phase of archaeological testing.

If it is not possible to avoid direct impacts on the archaeological resource, the archaeological remains will be preserved by record prior to the commencement of construction. This will be carried out under licence, as issued by the National Monuments Service of the DoHLGH. Full provision, within the programme of works, will be made for the resolution of any archaeological remains, both on site and during the post excavation process.

#### 25.6.1.2 Grid Facility

It is acknowledged that the preservation in-situ of archaeological remains is the preferred method in which to conserve the archaeological resource. The location of the grid facility includes the identified archaeological areas AA1, 2, 3, 4 and CH01 but potential impacts on these sites could not be avoided by the footprint of the required infrastructure.

A further programme of archaeological test trenching will be carried out within the refined development footprint with the aim of identifying smaller archaeological remains that may survive within the development area, which were not identified during geophysical survey or the first phase of archaeological testing.

If it is not possible to avoid direct impacts on the archaeological resource, the archaeological remains will be preserved by record prior to the commencement of construction. This will be carried out under licence, as issued by the National Monuments Service of the DoHLGH. Full provision, within the programme of works, will be made for the resolution of any archaeological remains, both on site and during the post excavation process.

#### 25.6.1.3 Onshore cable route

Table 25.19 details the mitigation measures that will be carried out prior to construction in order to reduce or remove potential impacts.

**Table 25.19 Mitigation measures as part of the proposed onshore cable route**

Ref.:	Description	Mitigation
AAP04	Watercourse and townland boundary.	Should the construction of the cable impact on the channel or banks of the watercourse (if offline open cut is required), an archaeological wade survey will be carried out in advance. This will be carried out under licence as issued by the DoHLGH.
CH04	Site of structures associated with Ballough	Should the onshore cable route be laid through CH04, the excavation of the trench will be subject to archaeological monitoring, carried out by a suitably qualified archaeologist contracted by the developer, under licence, as issued by the DoHLGH.
BH06	Milestone (not located during field inspection)	It is possible that this small item of roadside furniture has been removed. Further inspection, including the removal of vegetation, will be carried out. If the milestone is located, it will be hoarded off and protected during construction works in order to preserve the feature in-situ.
BH10	Milestone	The milestone will be hoarded off and protected during construction works in order to preserve the feature in-situ.

Ref.:	Description	Mitigation
CH23	Site of post medieval structures	This is a greenfield area, which will be subject to a programme of geophysical survey and archaeological testing prior to the commencement of construction. This will be carried out under licence as issued by the DoHLGH.
AAP07	Watercourse	Should the construction of the cable impact on the channel or banks of the watercourse (if offline open cut is required), an archaeological wade survey will be carried out in advance. This will be carried out under licence as issued by the DoHLGH.
BH12	Daws Bridge	Should inline HDD be required to lay the cable beneath Daws Bridge, detailed design will be subject to assessment and supervision of a Grade 1 Conservation Architect. Archaeological monitoring may be also required for the works. Any archaeological works will be carried out under licence as issued by the DoHLGH.
CH37	Three anomalies of archaeological potential (Google Earth)	This is a greenfield area, which will be subject to a programme of geophysical survey and archaeological testing prior to the commencement of construction. This will be carried out under licence as issued by the DoHLGH.
AH25	Holy well (site of)	This monument appears to have been removed in the past due to the construction of the existing road network; however, all excavation works within proximity of the site will be subject to archaeological monitoring, under licence as issued by the DoHLGH.
AAP08	Estuarine/coastal margin	The excavation of the trench through AAP08 will be subject to archaeological monitoring, under licence, as issued by the DoHLGH.
AAP09	Watercourse	Should the construction of the cable impact on the channel or banks of the watercourse (if offline open cut is required), an archaeological wade survey will be carried out in advance. This will be carried out under licence as issued by the DoHLGH.
AAP10	Watercourse	Should the construction of the cable impact on the channel or banks of the watercourse (if offline open cut is required), an archaeological wade survey will be carried out in advance. This will be carried out under licence as issued by the DoHLGH.
BH19	Milestone	The milestone will be hoarded off and protected during construction works in order to preserve the feature in-situ.
DL14/ Abbey- ville ACA	Designed landscape associated with Abbeyville	This is a greenfield area, which will be subject to a programme of geophysical survey and archaeological testing prior to the commencement of construction. This will be carried out under licence as issued by the DoHLGH.
BH21	Milestone	The milestone will be hoarded off and protected during construction works in order to preserve the feature in-situ.
BH22	Bridge	Should the onshore cable route cross this bridge, detailed design will be subject to assessment and supervision of a Grade 1 Conservation Architect. Archaeological monitoring may be required for the works. Any archaeological works will be carried out under licence as issued by the DoHLGH.
AH30d	Ecclesiastical enclosure at Saint Doolaghs	The excavation of 130m of the cable trench through the road to the east of Saint Doolagh's ecclesiastical site will be subject to archaeological monitoring, under licence as issued by the DoHLGH.
AH30g	Cross at Saint Doolaghs	The cross will be hoarded off and protected during construction works in order to preserve the feature in-situ.
CH10	Bridge	All excavation works across the bridge will be subject to archaeological monitoring under licence, as issued by the DoHLGH.
AAP11	River Mayne	Should the construction of the cable impact on the channel or banks of the watercourse (if offline open cut is required), an archaeological wade survey will be carried out in advance. This will be carried out under licence as issued by the DoHLGH.
BH33	Belcamp House (surviving walled garden)	All excavation works adjacent to the wall will be subject to archaeological monitoring under licence, as issued by the DoHLGH.

All greenfield areas that are required for the construction of the onshore cable route, will be subject to a programme of geophysical survey, followed by a programme of archaeological testing, prior to the commencement of construction in any one area. These programmes of investigation will be carried out under licence from the DoHLGH. Dependant on the results of the assessments in these area, further mitigation may be required, such as preservation in-situ or by record. Any further mitigation will require the agreement of the National Monuments Service of the DoHLGH.



All excavation works within the zones of notification for AH28 and AH32 will be subject to archaeological monitoring under licence, as issued by the DoHLGH.

A draft Cultural Heritage Mitigation Strategy detailing the required mitigation measures (including definitions of same) has been appended to this EIAR (Appendix 25.4). This document will remain a live document and will require updating by the relevant heritage contractors during the course of the project at pre-construction and construction stages.

### 25.6.2 Operational Phase

No mitigation is required for the operational phase of the onshore proposed development.

Whilst some indirect negative effects will occur upon the setting of identified coastal archaeological, architectural, and cultural heritage sites (Table 25.17), including CHPV59 Rockabill Lighthouse, it is not possible to mitigate impacts due to the visible nature of the turbines (tip heights of 290m-316m) within the seascape. Regardless, no likely significant effects will arise.

### 25.6.3 Decommissioning

No mitigation is required for the decommissioning phase of the proposed development.

## 25.7 Residual Effects

This section illustrates the residual effects of the proposed development once mitigation has been applied.

### 25.7.1 Construction Phase

Table 25.20 details the predicted effect following the application of mitigation in relation to the potential construction phase impacts. There are no likely significant effects arising from the construction phase on archaeology, architectural and cultural heritage as a result of the proposed development.

**Table 25.20 Summary of Construction Residual Effects**

Ref.	Potential Effect (Pre-Mitigation)	Predicted Effect (Post-Mitigation)
AA1-11	Very Significant negative	Slight negative
CH01	Moderate negative	Neutral
AAP04	Significant negative	Slight negative
CH04	Slight negative	Slight negative
BH06	Very Significant negative	Neutral
BH10	Very Significant negative	Neutral
CH23	Significant negative	Neutral
AAP07	Significant negative	Slight negative
BH12	Very Significant negative	Slight negative
CH37	Significant negative	Slight negative
AH25	Very Significant negative	Slight negative
AAP08	Significant negative	Slight negative
AAP09	Significant negative	Slight negative
AAP10	Significant negative	Slight negative
BH19	Very Significant negative	Neutral

Ref.	Potential Effect (Pre-Mitigation)	Predicted Effect (Post-Mitigation)
DL14/ Abbeyville ACA	Significant negative	Neutral
BH21	Very Significant negative	Neutral
BH22	Very Significant negative	Slight negative
AH30d	Significant negative	Slight negative
AH30g	Profound negative	Neutral
CH10	Moderate negative	Neutral
AAP11	Significant negative	Slight negative
BH33	Significant negative	Slight negative
Potential archaeological remains located within greenfield areas	Moderate to Profound negative	Slight negative
Potential archaeological remains located within zones associated with AH28 and AH32	Moderate to Profound negative	Slight negative

### 25.7.2 Operational Phase

No potential effects have been identified as part of the operation phase of the onshore proposed development and as such no residual effected are predicted.

As part of the operation of the offshore turbines (the presence of the turbines within the seascape), 63 CHVP sites will be subject to indirect impacts on their settings. Where indirect negative impacts have been identified the significance of effect is imperceptible at six sites; not significant at a further 19 sites; slight at 19 sites and moderate at ten sites. It is not possible to mitigate these impacts due to the visual scale of the turbines and as such the residual impacts will be the same as the predicted impacts laid out in Table 25.17.

### 25.7.3 Decommissioning

No potential effects have been identified as part of the decommissioning phase and as such no residual effected are predicted.

## 25.8 Transboundary Effects

There is a potential for Transboundary effects arising from visual impacts on the setting of archaeological, architectural, and cultural heritage sites within County Down in Northern Ireland. This will occur where the proposed offshore turbines are visible from the County Down coastline within the overall 60km study area (Figure 25.15a/b). Ten sites or structures (as detailed in Table 25.13) have been assessed but in all cases the predicted significance of effect is imperceptible or not significant (Table 25.17). Consequently, there are no predicted significant transboundary effects.

## 25.9 Cumulative Effects

A long list of “other projects” which were deemed to be potentially relevant to be included in the cumulative impact assessment was compiled (see Volume 6, Chapter 38: Cumulative and Inter-related Effects (hereafter referred to as the ‘Cumulative and Interrelated Effects Chapter’)). A screening exercise of the “long list” was carried out to determine whether each of project has the potential to give rise to likely significant cumulative effects from an archaeological, architectural, and cultural heritage assets perspective with the proposed development. Many of the other projects were screened out for a number of reasons including the location, scale and nature of the project. Those projects which were “screened in” were carried forward for assessment. The results of the assessment are presented in the Cumulative and Interrelated Effects chapter.

The assessment concluded that there are no likely significant direct or indirect cumulative effects predicted as a result of the proposed development on archaeological, architectural and cultural heritage assets, or on the potential to cause a significant effect during the construction, operation or decommissioning phases of the proposed development.

## 25.10 References

- Baker, C. 2010. *Antiquities of Old Fingal*. Wordwell. Dublin.
- Bennett, I. (ed.) 1987–2010. *Excavations: Summary Accounts of Archaeological Excavations in Ireland*. Bray. Wordwell Ltd.
- Byrne, F. J. 1973. *Irish Kings and High Kings*. Dublin. Four Courts Press.
- Carroll, J. 2008. *Archaeological Excavations at Rosepark, Balrothery, Co. Dublin. Balrothery Excavations Vol. 1*. Environmental Publications. Dublin.
- Carroll, J., Ryan, F & Wiggins, K. 2008. *Archaeological Excavations at Glebe South and Darcystown, Balrothery, Co. Dublin. Balrothery Excavations Vol. 2*. Environmental Publications. Dublin.
- Chartered Institute for Archaeologists 2020a. Standards & Guidance for Field Evaluation.
- Chartered Institute for Archaeologists 2020b. Standards & Guidance for Archaeological Excavation.
- Chartered Institute for Archaeologists 2020c. Standards & Guidance for an Archaeological Watching Brief (Monitoring).
- Conservation Plan – Bremore Castle. Fingal County Council.
- Culleton, E. 1999. *Celtic and early Christian Wexford*, Dublin: Four courts Press
- Stevens Curl, J. 1997. *Encyclopaedia of Architectural Terms*. Donhead Publishing.
- Department of Arts, Heritage, Gaeltacht and the Islands. 1999a. *Framework and Principles for the Protection of the Archaeological Heritage*. Government Publications Office, Dublin.
- Department of Arts, Heritage, Gaeltacht and the Islands. 1999b. *Policy and Guidelines on Archaeological Excavation*. Government Publications Office, Dublin.
- Dowd, M. and Carden, R.F. 2016. First evidence of a Late Upper Palaeolithic human presence in Ireland. *Quaternary Science Reviews* **139**, 158-163.
- Dowling, G. 2002. Geophysical Survey Report, Bremore, Co Dublin. Licence 22R0244.
- Dublin City Development Plan 2022-2028
- Dun Laoghaire Rathdown Development Plan 2022-2028
- Environmental Protection Agency. 2002. *Advice Notes on Current Practice (in the preparation of Environmental Impact Statements)*
- Environmental Protection Agency. 2015. *Draft Guidelines on the information to be contained in Environmental Impact Statements*.
- Environmental Protection Agency. 2022. *Draft Guidelines on the Information to be Contained in Environmental Impact Statements*. Government Publications Office, Dublin.
- Fingal County Development Plan 2023–2029.
- Hawkes, A. 2018. *The Archaeology of Prehistoric Burnt Mounds in Ireland*. Oxford. Archaeopress.
- Healy, P. 1975. *Third report on monuments and sites of archaeological interest in county Dublin*. An Foras Forbartha, Dublin.

- Kyle, J. 2009. *Archaeological Monitoring for the Lissenhall-Jordanstown Trunk Water Main Scheme. Licence 08E0178*. Unpublished report submitted to the National Monuments Service, Department of Arts, Heritage and the Gaeltacht.
- Louth County Development Plan 2021-2027
- McErlean, T. 1983. The Irish townland system of landscape organisation. In Reeves-Smyth, T. Hamond, F. *Landscape Archaeology in Ireland*. BAR British Series 116. pp. 315–39.
- McQuade, M. 2008. Gone Fishin’. *Archaeology Ireland*, 22 (1). pp. 8–11.
- Meath County Development Plan 2021-2027
- Moore, F., Brady, K., Kelleher, C., Condit, T., McNeary, R., Murphy, M. and Devane, C. 2008. ‘Introduction to the Coastal Archaeology and History of Counties Louth, Meath, Dublin and Wicklow’. In: *Shipwreck Inventory of Ireland: Louth, Meath, Dublin and Wicklow*. The Stationary Office, pp. 11-48.
- National Monuments Service, Department of Housing, Local Government and Heritage. *Sites and Monuments Record*, County Dublin.
- National Museum of Ireland. *Topographical Files*, County Dublin.
- Nicholls, J. & Russell, I 2020. Geophysical Survey Report, Proposed Bremore Park Development, Bremore & Tankardstown Townlands, North County Dublin.
- O’Carroll, F. 2009. ‘Bremore, Co. Dublin, the field by the Castle’ in Baker, C. (ed.) *Axes, Warriors and Windmills: Recent Archaeological Discoveries in North Fingal (75 - 88)*. Fingal County Council.
- O’Keeffe, P. and Simington, T. 1991. *Irish stone bridges: history and heritage*. Dublin. Irish Academic Press.
- O’Sullivan, A., McCormick, F., Kerr, T.R., Harney, L. 2014. *Early Medieval Ireland, AD 400-1100: The Evidence from Archaeological Excavations*. Dublin. Royal Irish Academy.
- Reilly, F. 2013. *Archaeological excavation final report, Lissenhall Little Site 2, Northern Motorway Lissenhall-Balbriggan By-Pass (Licence no. 01E1074)*. Unpublished report. National Monuments Service, Department of Arts, Heritage and the Gaeltacht.
- Stout, M. 1997. *The Irish Ringfort*. Dublin. Four Courts Press.
- Stout, G. and Stout, M. 1997. Early Landscapes: from Prehistory to Plantation. In F.H.A. Aalen et al. (eds), *Atlas of the Irish Rural Landscape*. Cork. Cork University Press.
- Waddell, J. 2022. *The Prehistoric Archaeology of Ireland (New Edition)*. Dublin. Wordwell Ltd.
- Whitaker, J. 2023. *Archaeological Assessment at Bremore, County Dublin (Licence no. 23E0149)*. Unpublished client report. Irish Archaeological Consultancy.

Wicklow County Development Plan 2022-2028

## **CARTOGRAPHIC SOURCES**

John Rocque’s *Map of the County of Dublin*, 1760

John Taylor’s *Map of the Environs of Dublin*, 1816

Ordnance Survey maps of County Dublin, 1843, 1871, and 1909

William Petty, Down Survey Map of the Baronies of Balrudderry, Coolock and Nethercross, c. 1655.

## **ELECTRONIC SOURCES**

[www.excavations.ie](http://www.excavations.ie) – Summary of archaeological excavation from 1970–2024.

[www.archaeology.ie](http://www.archaeology.ie) – DoHLGH website listing all SMR/RMP sites, National Monuments, sites with Preservation Orders

<https://dfcgis.maps.arcgis.com/apps/webappviewer/index.html?id=6887ca0873b446e39d2f82c80c8a9337> – Department for Communities (Historic Environment Map Viewer) – listing all recorded archaeological, architectural, industrial and defence heritage sites in Northern Ireland.

[www.heritagemaps.ie](http://www.heritagemaps.ie) – The Heritage Council web-based spatial data viewer which focuses on the built, cultural and natural heritage.

[www.geohive.ie](http://www.geohive.ie) – Ordnance Survey Ireland National Townland and Historical Map Viewer (including Aerial imagery 1995, 2000, 2005, 2013)

[www.googleearth.com](http://www.googleearth.com) – Satellite imagery (2005–2022).

[www.apple.com/maps/](http://www.apple.com/maps/) - Satellite imagery (2018)

[www.booksulster.com/library/plnm/placenamesC.php](http://www.booksulster.com/library/plnm/placenamesC.php) - Contains the text from Irish Local Names Explained by P.W Joyce (1870).

[www.logainm.ie](http://www.logainm.ie) – Placenames Database of Ireland, developed by Fiontar (DCU) and The Placenames Branch (DoAHG).