

where:

Lp1 = sound pressure level at location 1

Lp2 = sound pressure level at location 2

R1 = distance from source to location 1

R2 = distance from source to location 2

and where:

Aatm = Attenuation due to air absorption

Agr = Attenuation due to ground absorption

Abr = Attenuation provided by a barrier

Amis = Attenuation provided by miscellaneous other effects

In the calculations attenuation by Aatm, Agr and Amis is taken as 3dB(A) where distances are more than 200m from a source and as zero within 200m - amelioration by barriers is not accounted for.

Table 11-20 presents the noise levels predicted from decommissioning activity at varying distances.

The maximum decommissioning noise levels associated with the Proposed Development are listed in Table 11-20. At receptor locations further away, noise levels will be less than that predicted.

Table 11-20 Predicted Decommissioning Noise Levels

Activity taken as 100% per hour	Distance of Activity	L <sub>Aeq,1hr</sub> dB range
Tracked excavator removing topsoil and subsoil	400m to R43	44-51 dBA
Rock breaker and excavator loading	400m to R43	46-53 dBA
Trenching tracked excavator 14t, pneumatic breaker, vibratory roller 71t, tractor	At varying distances along route: 15m 20m 40m 80m	64.5–67.5 dBA 62-65 dBA 56-59 dBA 49.9-52.9 dBA
Excavator loading / tipping, excavator and Vibratory roller	400m to R43	44-51 dBA

#### Decommissioning Traffic

The removal of turbines from the Site will generate low level traffic noise as the vehicles carrying the turbines will move slowly along the local roads where impact is expected to be greatest.

### 11.11.5 Assessment of Decommissioning Noise

The maximum noise levels will persist for no more than 10 hours at any receptor. All predicted noise levels are well within NRA guidelines given as acceptable and are considered slight. Decommissioning noise is a temporary activity. All activity is predicted without additional mufflers, or without topographic screening.

Ground vibration from any rock breaking will be below the threshold of sensitivity to humans of 0.2mm/s peak particle velocity at all receptors<sup>23</sup>. The effects of noise and vibration from onsite construction activities are therefore considered not significant.

### 11.11.6 Description of Effects - Decommissioning

The criteria for description of effects for all decommissioning noise activity and the potential worst-case effects, at the nearest receptors is given below.

Table 11-21 Description of Effects – Decommissioning

Quality	Significance	Duration
Negative	Not Significant	Temporary

<sup>23</sup> Wiss, J. F., and Parmelee, R. A. (1974) Human Perception of Transient Vibrations, "Journal of Structural Division", ASCE, Vol 100, No. S74, PP. 773-787



### 11.11.7 Summary of Effects

Table 11-22 summarises the effects as a consequence of the continued operation of the Proposed Development.

Table 11-22 Description of Effects

Phase	Quality	Significance	Duration
Operational Noise	Negative	Not Significant	Long Term
Decommissioning Noise	Negative	Not Significant	Temporary

### 11.12 Cumulative Effects

The Proposed Development consists of 11 turbines, with turbine T12 permitted under a separate planning permission (Planning Permission 20080335). In undertaking the above assessment, all operational noise level measurements and predicted noise impacts have taken into consideration all 12 wind turbines and have thus demonstrated compliance when considering cumulative impacts.

Paragraph 5.1.4 of the IOA Good Practice Guide states, "During scoping of a new wind farm development consideration should be given to cumulative noise impacts from any other wind farms in the locality. If the Proposed Development produces noise levels within 10 dB of any existing wind farm/s at the same receptor location, then a cumulative noise impact assessment is necessary."

Typically, this equates to a wind farm being located within 2km of the Proposed Development. Appendix 11-10 presents wind farms which have been considered, including their separation distances from the centre of the Proposed Development. The nearest potential cumulative wind turbine is located over 2.7km from the Proposed Development, thus a cumulative noise impact assessment would not be deemed necessary for the wind farms as listed in Appendix 11-10.

### 11.13 Statement of Significance

This Chapter has assessed the significance of the potential effects of the Proposed Development during its construction, operational and decommissioning phases.

The effects of noise from the continued operation of the Proposed Development have been assessed using DoEHLG 2006 Guidelines with the methodology described in ETSU-R-97 and the IOA Good Practice Guide. Noise levels during operation of the Proposed Development have been measured using the best practice techniques.

Measured noise levels have been compared with the noise limits as set both within Condition 8 as originally recommended by Wexford County Council in 2005 (Planning Permission 20044702) and those set under current guidelines. Condition 8 of Wexford County Council Planning Permission 20044702 has been demonstrated to be compliant at all four noise measurement locations. DoEHLG 2006 Guidelines with the methodology described in ETSU-R-97 and the IOA Good Practice Guide (i.e. background +5dB) has been demonstrated to be compliant at all receptor locations around the Proposed Development. Additional noise level monitoring at three further receptor locations, specifically considering AM concluded that with the inclusion of the applicable AM penalties to the measured overall noise levels from Castledockrell Wind Farm,

compliance with the DoEHLG 2006 Guidelines with the methodology described in ETSU-R-97 and the IOA Good Practice Guide (i.e. background +5dB) was still demonstrated.

The noise levels measured at the nearest receptors are orders of magnitude below the level at which risk of hearing damage, or indeed negative health effects are possible.

Noise during decommissioning of the Proposed Development will continue to be managed to comply with best practice, legislation and guidelines current at that time so that effects are not significant.



## 12. **ARCHAEOLOGY AND CULTURAL HERITAGE**

### 12.1 **Introduction**

This archaeological, architectural, and cultural heritage chapter was prepared by Tobar Archaeological Services Ltd. It presents the results of an archaeological, architectural and cultural heritage impact assessment for the Proposed Development which comprises the Extension of life to the existing Castledockrell Wind Farm, Co. Wexford. Planning permission is being sought for the continued operation of 11 no. of the 12 no. turbines which make up the existing Castledockrell Wind Farm as permitted under 3 no. planning applications, as detailed fully in Chapter 1, Section 1.1.3.

The purpose of this chapter is to assess the potential direct and indirect effects of the Proposed Development on the surrounding archaeological, architectural and cultural heritage landscape. The assessment is based on both a desktop review of the available cultural heritage and archaeological data and a programme of field walking of the Proposed Development site. The report amalgamates desk-based research and the results of field walking to identify areas of archaeological/architectural/ cultural significance or potential, likely to be affected either directly or indirectly by the Proposed Development. An assessment of potential effects, including cumulative effects, is presented, and mitigation measures are recommended where appropriate. The visual effect of the Proposed Development on any newly discovered monuments/sites of significance as well as known recorded monuments is also assessed.

#### 12.1.1 **Proposed Development**

A detailed project description is provided in Chapter 4 of the Environmental Impact Assessment Report (EIAR).

#### 12.1.2 **Statement of Authority**

This chapter of the EIAR has been prepared by Miriam Carroll of Tobar Archaeological Services Ltd. Miriam graduated from University College Cork in 1998 with a Masters degree in Methods and Techniques in Irish Archaeology. She is licensed by the Department of Housing, Local Government and Heritage (HLGH) to carry out excavations and is a member of the Institute of Archaeologists of Ireland (IAI). Miriam Carroll has been working in the field of archaeology since 1994 and has undertaken numerous projects for both the private and public sectors including excavations, site assessments (EIAR) and surveys. Miriam Carroll is a directors of Tobar Archaeological Services Ltd which has been in operation for over 20 years.

#### 12.1.3 **Legislation and Guidelines**

The chapter has been prepared in compliance with all relevant Environmental Impact Assessment (EIA) legislation and guidance (see Chapter 1: Introduction for relevant guidance and legislation).

##### 12.1.3.1 **Current Legislation**

Archaeological monuments are safeguarded through national and international policy, which is designed to secure the protection of the cultural heritage resource. This is undertaken in accordance with the provisions of the European Convention on the Protection of the Archaeological Heritage (Valletta Convention). This was ratified by Ireland in 1997.



Both the National Monuments Acts 1930 to 2004 and relevant provisions of the Cultural Institutions Act 1997 are the primary means of ensuring protection of archaeological monuments, the latter of which includes all man-made structures of whatever form or date. There are a number of provisions under the National Monuments Acts which ensure protection of the archaeological resource. These include the Register of Historic Monuments (1997 Act) which means that any interference to a monument is illegal under that Act. All registered monuments are included on the Record of Monuments and Places (RMP).

The RMP was established under Section 12 (1) of the National Monuments (Amendment) Act 1994 and consists of a list of known archaeological monuments and accompanying maps. The RMP affords some protection to the monuments entered therein. Section 12 (3) of the 1994 Amendment Act states that any person proposing to carry out work at or in relation to a recorded monument must give notice in writing to the Minister (Environment, Heritage and Local Government) and shall not commence the work for a period of two months after having given the notice. All proposed works, therefore, within or around any archaeological monument are subject to statutory protection and legislation (National Monuments Acts 1930-2004).

The term 'national monument' as defined in Section 2 of the National Monuments Act 1930 means a monument *'the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto'*. National monuments in State care include those which are in the ownership or guardianship of the Minister for Arts, Heritage and the Gaeltacht. Section 5 of the National Monuments Act (1930) allows owners of other national monuments to appoint the Minister for the Arts, Heritage and the Gaeltacht or the relevant local authority as guardian of such monuments, subject to their consent. This means in effect that while the property of such a monument remains vested in the owner, its maintenance and upkeep are the responsibility of the State. Some monuments are also protected by Preservation Orders and are also regarded as National Monuments. National Monuments also includes (but not so as to limit, extend or otherwise influence the construction of the foregoing general definition) every monument in Saorstát Éireann to which the Ancient Monuments Protection Act, 1882, applied immediately before the passing of this Act, and the said expression shall be construed as including, in addition to the monument itself, the site of the monument and the means of access thereto and also such portion of land adjoining such site as may be required to fence, cover in, or otherwise preserve from injury the monument or to preserve the amenities thereof.

Under the Heritage Act (1995) architectural heritage is defined to include *'all structures, buildings, traditional and designed, and groups of buildings including street-scapes and urban vistas, which are of historical, archaeological, artistic, engineering, scientific, social or technical interest, together with their setting, attendant grounds, fixtures, fittings and contents...'*. A heritage building is also defined to include *'any building, or part thereof, which is of significance because of its intrinsic architectural or artistic quality or its setting or because of its association with the commercial, cultural, economic, industrial, military, political, social or religious history of the place where it is situated or of the country or generally'*.

### 12.1.3.1.1 Granada Convention

The Council of Europe, in Article 2 of the 1985 Convention for the Protection of the Architectural Heritage of Europe (Granada Convention), states that *'for the purpose of precise identification of the monuments, groups of structures and sites to be protected, each member State will undertake to maintain inventories of that architectural heritage'*. The Granada Convention emphasises the importance of inventories in underpinning conservation policies.

The National Inventory of Architectural Heritage (NIAH) was established in 1990 to fulfil Ireland's obligations under the Granada Convention, through the establishment and maintenance of a central record, documenting and evaluating the architectural heritage of Ireland. Article 1 of the Granada Convention establishes the parameters of this work by defining 'architectural heritage' under three broad categories of Monument, Groups of Buildings, and Sites:



- **Monument:** all buildings and structures of conspicuous historical, archaeological, artistic, scientific, social or technical interest, including their fixtures and fittings;
- **Group of buildings:** homogeneous groups of urban or rural buildings conspicuous for their historical, archaeological, artistic, scientific, social or technical interest, which are sufficiently coherent to form topographically definable units;
- **Sites:** the combined works of man and nature, being areas which are partially built upon and sufficiently distinctive and homogenous to be topographically definable, and are of conspicuous historical, archaeological, artistic, scientific, social or technical interest.

The Council of Europe's definition of architectural heritage allows for the inclusion of structures, groups of structures and sites which are considered to be of significance in their own right, or which are of significance in their local context and environment. The NIAH believes it is important to consider the architectural heritage as encompassing a wide variety of structures and sites as diverse as post boxes, grand country houses, mill complexes and vernacular farmhouses.

## 12.1.4 Wexford County Development Plan 2022-2028

The Wexford County Development Plan 2022-2028 outlines a number of policies and objectives relating to archaeology and built heritage as follows:

### 12.1.4.1 Archaeological Heritage

- **Objective AH01** To conserve and protect archaeological sites, monuments (including their settings), underwater archaeology and objects including those listed or scheduled for inclusion on the Record of Monuments and Places and/or the Register of Historic Monuments or newly discovered sub-surface archaeological remains.
- **Objective AH02** To recognise the importance of monuments and sites and protect the character and integrity of these monuments and sites where appropriate. The Council will consult the National Monuments Service where a development is proposed that may impact on an archaeological monument and/or site.
- **Objective AH03** To protect the heritage of groups of important archaeological sites and monuments, inclusive of their contextual setting and interpretation, in the operation of development management.
- **Objective AH04** To fully consider the protection of archaeological heritage when undertaking, approving or authorising development. In considering such protection the Council will have regard to the advice and recommendations of the National Monuments Service and the principles set out in Framework and Principles for the Protection of the Archaeological Heritage (Department of Arts, Heritage, Gaeltacht and the Islands, 1999).
- **Objective AH05** To require an archaeological assessment and/or investigation by qualified persons for development that may, due to its size, location or nature, have a significant effect upon archaeological heritage and to take appropriate measures to safeguard this archaeological heritage. In all such cases the Planning Authority shall consult with the National Monuments Service in the Department of Culture, Heritage and the Gaeltacht.
- **Objective AH06** To promote a presumption in favour of preservation in-situ of archaeological remains and settings when dealing with proposals for development that would impact upon archaeological sites and/or features. Where preservation in-situ is not possible the Council will consider preservation by record in appropriate circumstances.
- **Objective AH07** To protect historic and archaeological landscapes, including battlefields, and promote access to such sites provided that this does not threaten the feature.



**Objective AH08** To include archaeological landscapes, battlefields and historic landscapes as part of the updated Landscape Character Assessment of the County to be prepared following the publication of a National Landscape Character Assessment.

- **Objective AH09** To protect historic urban defences (both upstanding and buried) and associated features and safeguard them from inappropriate development in accordance with National Policy on Town Defences (Department of Environment, Heritage and Local Government, 2008).
- **Objective AH10** To identify appropriate archaeological sites in the county to which public access could be provided, and work to secure public access and the provision of signage and interpretation panels where appropriate in consultation with the landowner and the National Monument Service, subject to normal planning and environmental criteria and the development management standards contained in Volume 2.
- **Objective AH11** To retain existing street layouts, historic building lines and traditional plot widths which derive from medieval or earlier origin.
- **Objective AH12** To protect historical burial grounds within County Wexford and encourage their maintenance in accordance with best practice conservation principles.
- **Objective AH13** To have regard to the Historic Battlefield sites as listed in Table 13.6 (and those which are not listed thereon but that are, or become, known) and when assessing planning applications in the vicinity of a Historic Battlefield ensure there is no harm to the physical character or setting of these sites. Where development is proposed within the identified battlefields, archaeological assessment and recording may be required.

#### 12.1.4.2 Built Heritage

- **Objective BH01** To protect the architectural heritage of County Wexford and to include structures considered to be of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest in the Record of Protected Structures.
- **Objective BH02** To support targeted investment in the built heritage of our region including the Built Heritage Investment Scheme and Historic Structures Fund to assist owners to maintain our built heritage assets.
- **Objective BH03** To promote the development of heritage-led regeneration and engage in and promote initiatives to revitalise the historic cores of our towns and villages together with local communities, heritage property owners and other stakeholders.
- **Objective BH04** To consider, in the preparation of future local area plans, a Town first approach to the revitalisation of historic urban centres, which focuses on the repair and upgrade of existing historic buildings and their adaptation to new uses with regard to their architectural character and significance.
- **Objective BH05** To protect our Architectural Heritage in the form of the Record of Protected Structures (RPS) and identify important groups of buildings/localities suitable for designation as Architectural Conservation Areas (ACAs). Wexford County Council will also endeavour to undertake monitoring and review of the RPS and ACAs which may result in recommendations for additions or deletions and enlist measures to prevent dereliction and to support re-use of built heritage.
- **Objective BH06** To protect the curtilage of Protected Structures or proposed Protected Structures from any works which would cause loss of, or damage to, the special character of the structure and loss of or damage to, any structures of heritage value within the curtilage or attendant grounds of the structure.



- **Objective BH07** To ensure development within the curtilage of a Protected Structure is compatible with its character. This does not preclude putting forward innovative contemporary designs that respect the context of the Protected Structure.
- **Objective BH08** To promote the retention of any original or early building fabric including for example timber sash windows, stonework, brickwork, joinery, ironmongery, traditional mortars, render and decorative or weather finishes and slate and vernacular architectural details (whether relating to a Protected Structure or not). Likewise, the Council will encourage the re-instatement of historically correct traditional features and retention of original ridge heights as appropriate.
- **Objective BH09** To protect, maintain and enhance the established character and setting of vernacular buildings which are worthy of protection or have architectural heritage value, farmyards and settlements where they make a positive contribution to the built heritage and encourage the re-use and sensitive refurbishment of vernacular buildings using appropriate design and materials and having regard to best practice conservation guidelines.
- **Objective BH10** To ensure that applications in relation to Protected Structures include an Architectural Heritage Impact Assessment report where it is considered the proposed development entails extensive or complex works with a potential to have an impact on the architectural heritage. This report should assess the implications of the development on the character of the structure and the area in which it is located. This should be prepared by a suitably qualified person competent to make a qualitative assessment of the potential impact of works on the character and special interest of the Protected Structure and in accordance with the Architectural Heritage Protection- Guidelines for Planning Authorities (DAHG, 2011) and any subsequent guidelines.
- **Objective BH11** To ensure that all applications for Protected Structures are assessed taking into consideration the advice contained in Architectural Heritage Protection Guidelines for Planning Authorities (DAHG, 2011) and any subsequent guidelines.
- **Objective BH12** To encourage the repair and retention of traditional timber, rendered and/or tiled shop fronts and pub fronts, including those which may not be Protected Structures. There will be a general presumption against the replacement of original shopfronts with emphasis on retention and reinstatement of traditional proportions and details.
- **Objective BH13** To facilitate the retention of older buildings, the Planning Authority will give consideration to the relaxation of car parking and other development management requirements in appropriate circumstances.
- **Objective BH14** To ensure that elements of the architectural heritage of the county, such as historic gardens and historic designed landscapes, stone or brick walls, ditches and street furniture that make a positive contribution to the built heritage, are retained.
- **Objective BH15** To encourage improvements to energy efficiency in traditional buildings while maintaining the architectural character and significance in line with the Heritage Protection Guidelines for Planning Authorities (Department of Arts, Heritage and the Gaeltacht, 2011) and the Advice Series Guide on Energy Efficiency in Traditional Buildings (Department of Environment, Heritage and Local Government) and any future guidelines and advice.
- **Objective BH16** To protect and manage trees in the curtilage of a Protected Structure or in close vicinity that contribute to its special character and setting.
- **Objective BH17** To support economic development of large country houses in their role as tourist attractions and other commercial uses to ensure their continued survival.
- **Objective BH18** In the event of catastrophic accidental fire damage the rebuilding of a Protected Structure will not be required. Support and advice will be provided in assisting the repair of damaged Protected Structures to achieve a balance between new works and the remaining original features.



### 12.1.5 **Statutory Consultations**

Scoping letters were issued to all consultees in August 2023; details regarding scoping and consultation are provided in Chapter 2 of this EIAR. Included in the list of consultees was the Department of Housing, Local Government and Heritage, which includes the National Monuments Service.

No specific comments were received from the Development Applications Unit (DAU) of the Department of Housing, Local Government and Heritage or the National Monuments Service. Copies of all scoping responses are presented in Appendix 2-1 of this EIAR.

### 12.1.6 **Location and Topography**

The existing Castledockrell Wind Farm is located 8.1km west of Ferns and 6.5km south of Bunclody, Co. Wexford, in the townlands of Kilcullen, Ballynelahillan, Carranroe, Tomatee, Knockduff and Sroughmore. The existing wind farm is based within agricultural lands, which is split between pastoral land and arable land. The approximate grid reference location for the centre of the site is ITM E 516272, N 670500.



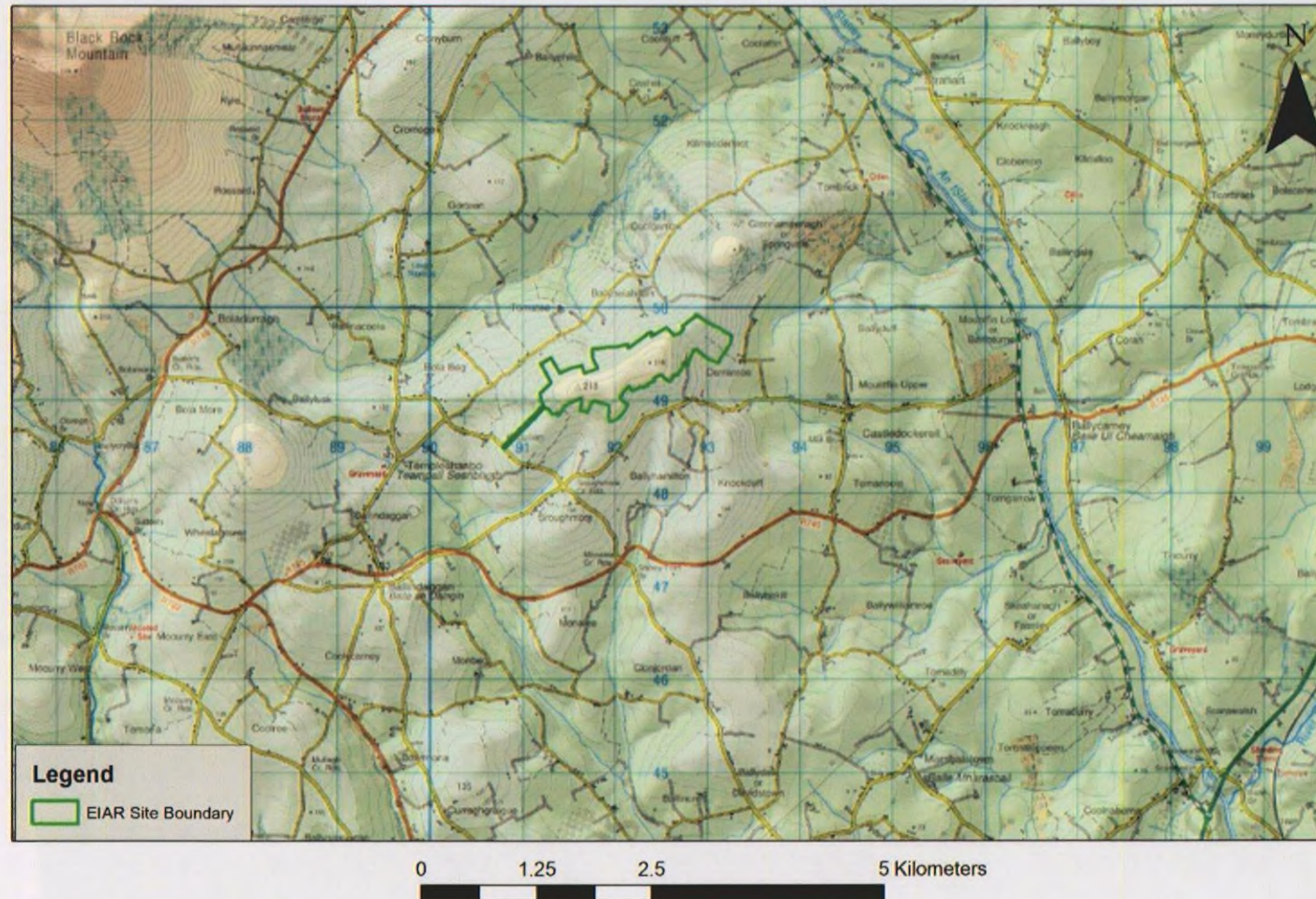


Figure 12-1: Site location map.



## 12.2 Assessment Methodology

The assessment of the archaeology, architecture and cultural heritage of the Proposed Development included GIS mapping and desk-based research followed by field inspection. A desk-based study of the Proposed Development Site was initially undertaken in order to assess the archaeological, architectural and cultural heritage potential of the area and to identify constraints or features of archaeological/cultural heritage significance within or near to the Proposed Development Site. For the purposes of this assessment the Proposed Development Site relates to the primary study area for the EIAR, as delineated by the EIAR Site Boundary shown in green.

### 12.2.1 Geographical Information Systems

A Geographic Information System (GIS) is a computer database which captures, stores, analyses, manages and presents data that is linked to location. GIS includes mapping software and its application with remote sensing, land surveying, aerial photography, mathematics, photogrammetry, geography and tools that can be implemented with GIS software. An industry-standard GIS system was used to manage the datasets relevant to the archaeological and architectural heritage assessment and for the creation of all the maps in this section of the report. This involved the overlaying of the relevant archaeological and architectural datasets on georeferenced aerial photographs and road maps (ESRI), where available. The integration of this spatial information allows for the accurate measurement of distances of a proposed development from archaeological and cultural heritage sites and the extraction of information on 'monument types' from the datasets. Areas of archaeological or architectural sensitivity may then be highlighted in order to mitigate the potential negative effects of a development on archaeological, architectural and cultural heritage.

### 12.2.2 Desktop Assessment

The following sources were consulted as part of the desktop assessment for the Proposed Development:

- The Record of Monuments and Places (RMP)
- The Sites and Monuments Record (SMR)
- National Monuments in State Care County Wexford
- The Topographical Files of the National Museum of Ireland on [www.heritagemaps.ie](http://www.heritagemaps.ie)
- First edition Ordnance Survey maps (Tailte Eireann)
- Second edition Ordnance Survey maps (Tailte Eireann)
- Third edition Ordnance Survey Map (Record of Monuments and Places)
- Down Survey maps ([www.downsurvey.tcd.ie](http://www.downsurvey.tcd.ie))
- Aerial photographs (copyright of Tailte Eireann)
- Excavations Database
- National Inventory of Architectural Heritage (NIAH)
- Record of Protected Structures (County Development Plan)
- Report on Archaeological Monitoring – Castledockrell Wind Farm, Co. Wexford

#### 12.2.2.1 Record of Monuments and Places, Sites and Monuments Record and National Monuments

A primary cartographic source and base-line data for the assessment was the consultation of the Sites and Monuments Record (SMR) and Record of Monuments and Places (RMP) for County Wexford. All known recorded archaeological monuments are indicated on 6-inch Ordnance Survey (OS) maps and are listed in these records. The SMR/RMP is not a complete record of all monuments as newly discovered sites may not appear in the list or accompanying maps. In conjunction with the consultation



of the SMR and RMP the electronic database of recorded monuments and SMRs which may be accessed at <https://heritagedata.maps.arcgis.com>.

A review of all National Monuments in State Care and those subject to Preservation Orders was undertaken as part of the assessment in order to ascertain any potential effects on their setting as a result of the Proposed Development.

#### 12.2.2.2 Cartographic Sources and Aerial Photography

The 1st (1840s) and 2nd (1900s) edition OS maps for the area were consulted, where available, as was Tailte Eireann aerial photography.

#### 12.2.2.3 Topographical Files - National Museum of Ireland

Details relating to finds of archaeological material and monuments in numerous townlands in the country are contained in the topographical files held in the National Museum of Ireland. In order to establish if any new or previously unrecorded finds had been recovered from within the EIAR Site Boundary or its surroundings these files were consulted on [www.heritagemaps.ie](http://www.heritagemaps.ie).

#### 12.2.2.4 Archaeological Inventory Series

Further information on archaeological sites may be obtained in the published County Archaeological Inventory series prepared by the Department of Housing, Local Government and Heritage. The archaeological inventories present summarised information on sites listed in the SMR/RMP and include detail such as the size and location of particular monuments as well as any associated folklore or local information pertaining to each site. The inventories, however, do not account for all sites or items of cultural heritage interest which are undiscovered at the time of their publication. Many sites have been discovered since the publication of the Inventory Series which have now been added to the Sites and Monuments Record.

#### 12.2.2.5 Record of Protected Structures

The Record of Protected Structures for County Wexford was consulted for the schedule of buildings and items of cultural, historical or archaeological interest which may be affected by the Proposed Development. The County Development Plan also outlines policies and objectives relating to the protection of the archaeological, historical and architectural heritage landscape. The dataset for the Wexford RPS was downloaded on to the base mapping for the Proposed Development in order to assist with assessment of effects.

#### 12.2.2.6 Excavations Database

The Excavations Database is an annual account of all excavations carried out under license. The database is available online at [www.excavations.ie](http://www.excavations.ie) and includes excavations from 1985 to 2024. This database was consulted as part of the desktop research for this assessment to establish if any archaeological excavations had been carried out within, or near to, the Proposed Development site.

#### 12.2.2.7 National Inventory of Architectural Heritage

The National Inventory of Architectural Heritage (NIAH) lists some of the architecturally significant buildings and items of cultural heritage and is compiled on a county-by-county basis by the Department of Housing, Local Government and Heritage. The NIAH database was consulted for all townlands within and adjacent to the Proposed Development Site. The NIAH survey for Wexford has been published and was downloaded on to the base mapping for the Proposed Development ([www.buildingsofireland.ie](http://www.buildingsofireland.ie)). The NIAH is a state initiative under the administration of the Department



of Housing, Local Government and Heritage and established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999.

The purpose of the NIAH is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. NIAH surveys provide the basis for the recommendations of the Minister for Housing, Local Government and Heritage to the planning authorities for the inclusion of particular structures in their Record of Protected Structures (RPS). The published surveys are a source of information on the selected structures for relevant planning authorities. They are also a research and educational resource. It is hoped that the work of the NIAH will increase public awareness and appreciation of Ireland's architectural heritage.

### 12.2.3 Field Inspection

A visual inspection of the Proposed Development site was carried out in December 2023 by Tobar Archaeological Services Ltd. The inspection included a photographic record of the existing wind farm which is included in Appendix 12-1.

#### 12.2.3.1 Limitations Associated with Fieldwork

No limitations to fieldwork were encountered.

### 12.2.4 Assessment of Likely Significant Effects

The likely effects on the existing archaeological, architectural and cultural heritage environment are assessed using the criteria as set out in the *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports* (EPA, May 2022). Further details regarding these guidelines and the classification of impacts as set out in this EIAR are provided in Section 1.7 in Chapter 1.

The following terminology is used when describing the likely effects of the Proposed Development from a Cultural Heritage perspective.

#### 12.2.4.1 Types of Effect

The following types of effect have been considered throughout this EIAR:

- Direct effects arise where an archaeological heritage feature or site is physically located within the footprint of the development whereby the removal of part, or all of the feature or site is thus required.
- Indirect effects may arise as a result of subsurface works undertaken outside the footprint of the development, secondary environmental change such as a reduction in water levels and visual effects.
- Cumulative effects arise when the addition of many effects create a larger, more significant effect.
- Residual effects are the degree of environmental changes that will occur after the proposed mitigation measures have been implemented.

##### 12.2.4.1.1 Magnitude of Effects (Significance)

The impact assessment throughout the EIAR has been classified under the following magnitudes:

- Profound: Applies where mitigation would be unlikely to remove adverse effects. Reserved for adverse, negative effects only. An effect which obliterates sensitive



characteristics. These effects arise where an archaeological site is completely and irreversibly destroyed.

- **Very Significant:** An effect which by its character, magnitude, duration or intensity significantly alters most of the sensitive aspect of the environment.
- **Significant:** An effect which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment. An effect 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 site.
- **Moderate:** An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends. A moderate effect arises where a change to an archaeological site is proposed which though noticeable, is not such that the integrity of the site is compromised and which is reversible. This arises where an archaeological site can be incorporated into a modern day development without damage and that all procedures used to facilitate this are reversible.
- **Slight:** An effect which causes noticeable changes in the character of the environment without affecting its sensitivities. A slight effect would not directly impact or affect an archaeological site.
- **Not Significant:** An effect which causes noticeable changes in the character of the environment but without significant consequences.
- **Imperceptible:** An effect on an archaeological site capable of measurement but without significant consequences.

## 12.2.5

### Methodology for the assessment of effects on visual setting (indirect effects)

A standardised approach was utilised for the assessment of effects on visual setting (indirect effects) according to types of monuments and cultural heritage assets which may have varying degrees of sensitivity. This assessment does not include visits to each and every site as this is considered to be beyond the scope of the EIAR as they are mainly located on private lands.

The assessment of effects on visual setting was undertaken using both the Zone of Theoretical Visibility (ZTV) map in the Landscape and Visual Impact Assessment (LVIA), as presented in Chapter 13 of this EIAR. As detailed in Section 13.1.3 in Chapter 13 of the EIAR, the tall, vertical nature of the proposed turbines make them the most prominent elements of the Proposed Development from a landscape and visual perspective and have the most potential to give rise to significant landscape and visual effects.

While direct physical effects to a site or monument can easily be assessed in quantitative terms, the assessment of effects on setting can be subjective and as such is a matter of qualitative, professional judgement and experience. The distances below used in the assessment of effects on setting are regarded as appropriate and are based on professional judgement.

Table 12-1: Cultural Heritage Assets considered according to sensitivity in the baseline environment.

Cultural Heritage Asset	Distance Considered
UNESCO World Heritage Site (including tentative sites) – <b>if relevant</b>	20km
National Monuments (State Ownership and Preservation Order Sites)	10km
Recorded Monuments, RPS	2km
NIAH structures	2km



Undesignated sites, if relevant	500m from Proposed Development
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## 12.3 Existing Environment

### 12.3.1 Archaeological Heritage

Archaeological heritage includes World Heritage Sites, National Monuments, sites which are subject to a Preservation Order, sites listed in the RMP/SMR and newly discovered archaeological sites. Each of these are addressed in the following sections.

#### 12.3.1.1 UNESCO World Heritage Sites and those on Tentative List

Ireland's Tentative list of World Heritage sites was consulted for those sites that may occur within the 20km study area from the nearest turbine, and none were identified.

#### 12.3.1.2 National Monuments (State Care and those with Preservation Orders)

National Monuments are those recorded monuments which are in the ownership / guardianship of the Minister for Housing, Local Government and Heritage. They are frequently referred to as being in 'State Care'. Those with Preservation Orders (also National Monuments) are also included. An assessment of all National Monuments within 10km of the existing turbines was undertaken to ascertain any potential effects on their visual setting (See Section 12.2.5 for methodology of assessment).

No National Monuments are located within the Proposed Development site and none are located within close proximity to same. Four National Monuments in State Care, one of which is also subject to a Preservation Order (PO 3/1968), are located within 10km of the existing turbines. Three of the monuments are located at Ferns over 8km to the east.

Table 12-2: National Monuments within 10km of the existing turbines.

NM/PO NO.	SMR No.	ITM E	ITM N	DESCRIPTION	Townland	WTG ID	DISTANCE (M)
521/3/1968	WX01 5-003001	701684	649892	Castle - Anglo-Norman masonry castle - Ferns Castle	CASTLELAND (Scarawalsh By.)	T12	8688
665	WX01 5-023001	701354	647390	Church	CLONE	T12	8700
133	WX01 5-003004	702200	649760	Religious house - Augustinian canons - Ferns Abbey	FERNS DEMESNE	T12	9203
133	WX01 5-	702274	650031	Church	FERNS UPPER	T12	9280



NM/PO NO.	SMR No.	ITM E	ITM N	DESCRIPTION	Townland	WTG ID	DISTANC E (M)
	003005						

The monuments are described on the Historic Environment Viewer (HEV) as follows:

**WX015-003001- : Castle - Anglo-Norman masonry castle : CASTLELAND (Scarawalsh By.)**

*Description:* Situated on top of a low hill, but with wide views across north Co. Wexford. The castle was built on the site of a possible ringwork castle (WX015-003007-) in the early thirteenth century, probably in 1224-26 by William Marshall the younger who was in Ireland at the time as Justiciar, the principal government officer. The castle was captured by Irish forces in 1315-16, 1331 and in 1357-8 but it fell finally to the Kavanaghs in 1360, who held it for two centuries. They surrendered it to the royal authority in 1543, and in 1583 it was part of a grant to Sir Thomas Masterson. The Mastersons appear to have held the castle throughout the 1640's, but in 1649 they surrendered it to the Cromwellian general Coote. It has been virtually abandoned since then until it was conserved by the OPW. (Hore 1910)

Only the SW and NE walls of a large keep (int. dims. c. 27.5m NW-SE; c. 18.5m NE-SW) with two drum towers remain. It was excavated by P. D. Sweetman (1979) who recovered the rock-cut fosse (With of top 5m; D 3.5m) with an entrance causeway at the S side and evidence of the curtain wall, a possible second entrance and a possible outer fosse on the E side. The walls at SE and SW may have been built on an earthen bank of a ringwork castle (WX015-003007-). Further evidence of the fosse was found (03E1813) on the NW side (McLoughlin 2006a), but excavation c. 20m to the SE (01E1182) failed to produce any related material (Tierney 2003). The keep has 3 storeys, but is lacking a cross-wall. There are cross-loops on the ground floor but there are larger trefoil windows on the upper floors. The SE tower contains a chapel with a groin-vaulted roof at the first floor. The castle is a National monument. (Stalley 1971, 26, pl. II; Adams 1904, 177-81; Harbison 1970, 247-8; Bradley and King 1990, 52-3)

This is a National Monument in state guardianship: No. 521.

**WX015-023001- : Church : CLONE**

*Description:* Situated on a slight knoll on a gentle N-facing slope, with a S-N section of a small stream in its valley c. 50m to the E, and c. 700m from where the stream joins the NE-SW River Bann. This is the site of an early monastery and the Romanesque parish church of Clone within a D-shaped graveyard (dims. c. 40m E-W; c. 30m N-S) defined by masonry walls that were built with stones taken from the church (Anon 1889, 9). The name is derived from Cluain – a meadow, but no saint is identified with it. According to a Visitation by Thomas Ram, the Protestant bishop of Ferns, in 1615 David Browne was the old priest, John Lacy the curate, and the church and chancel were in repair (Hore 1900-11, vol. 6, 266, 273).

There is local knowledge of lintelled graves being found S of the graveyard in ploughing. The W gable and the W part of the S wall of what was probably a single-cell church survive to the roof level; elsewhere rebuilt walls (H c. 1.5m) define the structure (ext. dims 16.95m E-W; 8.3m N-S), but the original E wall was never visible. During the summer of 2018 a drone-mounted camera operated by Dinny Kinsella enabled Barry Lacey to record part of the ecclesiastical enclosure (WX015-023013-) (diam. c. 180m NW-SE) as the cropmark of two parallel fosse features extending from the stream E of the graveyard, curving S and joining the curve of the road SW of the graveyard. The road and a curving field boundary further N complete three quarters of a circle backing onto the valley of the stream.

The lintelled W doorway of the church is battered (H 2.2m; With 0.85-0.95m) and there is an elaborate architrave projecting externally (With 2m) with chevrons on the outer moulding. The doorway may have been round-headed originally or had a tympanum that fitted under a relieving arch over the lintel (Du Noyer sketch, 1868). Seven heads and a stone with dogtooth decoration adorn the outer face of the



*W wall over the doorway only since repairs conducted in 1956 (Shine et al 2020, 25-6). A collapse of much of the outer face at the W end of the S wall occurred in March 2016 but is being repaired since 2018.*

*Two cross-slabs, a sundial and two bullaun stones were in the graveyard. A third cross-slab (WX015-024—) that was on a mound c. 40m to the SE of church was moved to the graveyard, but it has not been seen for some years. The sundial and one of the graveyard cross-slabs have been moved to an OPW store at Tintern abbey (ME045-027001-) for safe-keeping. Just S of the doorway is a cross-slab (H 0.33m; Wth 0.2m; T 0.5m) that has been cut back but had a Maltese cross. At the SW angle of the church was a cross-slab (H 0.58m; Wth 0.5m; T 0.1m) with a Maltese cross in a circle that is now in Tintern. Just N of the doorway is a bullaun stone (dims. 0.85m x 0.46m; H 0.2m) with a single basin (diam. 0.33m; D 0.17m) and just NW of the church is a fragment of another bullaun stone (dims. 0.7m x 0.5m; T 0.15m) with portion of a single basin (diam. 0.25m). The sundial (H 1.18m; Wth of shaft 0.29m; T 0.11m) has a semicircular head (diam. 0.5m) and was at one time with the cross-slab outside the graveyard (WX015-024—) (Ffrench 1895, 407) but it is now at Tintern. A socket for the sundial (Kinahan 1883-4, 39) is now missing.*

*All the decorated stones of the church building are in a green stone. The embrasure of a Romanesque window, probably from this church, is now at St Peter's church (WX015-003005-) in Ferns, and a face corbel from the church is now at St Mogue's Well (WX015-003002-) in Ferns. (Kinahan 1883-4; Hore 1900-11, vol. 6, 584-8)*

*About 5m W of the church doorway a grave-marker (WX015-023014-) (dims 0.54m x 0.18m) with a rough point on top (H 0.82m) has a lightly pecked curvilinear design on its E face occupying most of the stone. It consists of at least four arcs of closely-spaced lines curving up one side of the stone, around the top and down the other side in an oval pattern that is not closed visibly above the ground. It is undoubtedly prehistoric, and most resembles passage tomb art.*

*Archaeological testing (00E0571) c. 150m to the NW of the church produced no archaeological material (Gregory 2002) and testing (02E0410) c. 100m to the NW had a similar result (McLoughlin 2006), but testing (06E0287) c. 100m to the NE on the other side of the stream produced evidence of a burnt mound (WX015-023009-) and other features (WX015-023010-) (McLoughlin 2009). On the SW side of the stream and c. 50m to the NW of the church isolated features, including two ditches (Wth 1.3m; 2.3m), burnt spreads, and pits with charcoal and slag were recorded (McLoughlin 2006a, 6-7). The larger ditch could relate to the outer ecclesiastical enclosure (WX015-023013-).*

*This is a National Monument in state ownership: No. 665.*

#### **WX015-003004 : Religious house - Augustinian canons : FERNES DEMESNE**

*Description: Situated towards the bottom of an E-facing slope, and c. 50m S of the chapter house of Ferns cathedral (WX015-003003-). Dermot Mc Murrough founded St Mary's Abbey for Augustinian canons c. 1158-62, although it may have been earlier (O'Keefe 1997, 63). It was burned in 1159 or 1166, but Dermot rebuilt it and he was buried there in 1171. The abbey was plundered and burnt again by Irish forces during the Bruce wars (c. 1317). The position of abbot was hotly disputed in the mid-15th century. William Doyle was the last abbot at its suppression in 1538 when it was described as a church and belfry, dormitory, chapter-house, hall and other buildings with c. 600 acres and other interests. In 1583 it was granted to Thomas Masterson. (Gwynne and Hadcock, 1970, 175-6)*

*The N wall of the nave (ext. dims 16.4m E-W; c. 9m N-S) and chancel (ext. dims 6.35m E-W; 6.67m N-S) survive to the full height (c. 5m) with the foundations of the other walls. A round tower with a square base (Barrow 1979, 196) is attached to the W wall of the nave. It is entered from the nave and a newel stairs rises to a doorway overhead probably leading to a gallery. Above the roof level the tower is round and divided into two levels, the upper with four square lights (Anon. 1864-8, 132). A sacristy with a room overhead beneath an E-W barrel-vault is attached to the N of the chancel. There is ribbed vaulting in the chancel and round-headed recesses in the chancel and the sacristy. The original entrance was probably at the W where the base of a column with two orders is visible at the angle of the nave and tower. Two crude cross-bases are now within the nave. There is no evidence of an enclosure or burial but evidence of the cloister garth (dims c. 21.6m E-W; c. 19.75m N-S) was uncovered in the 19th century attached to the S (Anon. 1909-10, 4-5).*



*A geophysical survey (15R052) comprising magnetic gradiometry and limited electrical resistance in an area of about 4 ha (c. 10 acres) around the remains produced evidence of the cloister and a field system (ME015-003034) (Dowling 2015, 10). The abbey is built over the inner of two ditches recorded in the survey that form an ecclesiastical enclosure (wx015-003031-) around the early monastery (WX015-003002) (ibid. 9). Just SE of the abbey the same survey recorded evidence of an enclosure (WX015-003032-) around a masonry structure (WX015-003033).*

*This is a National Monument in state ownership: No. 133.*

**WX015-003005 : Church : FERNS UPPER**

*Description: St Peter's church might be the parish church of Ferns and it is at the N edge of a small D-shaped graveyard (dims. c. 30m E-W; c. 25m N-S) defined by masonry walls. It is situated on a slight bluff overlooking a NW-SE stream c. 100m to the SW with the Cathedral (WX015-003002-) c. 250m to the SW. This is a nave (int. dims. 10.8m E-W; 7.15m N-S) and chancel (int. dims. 6.1m E-W; 5.6m N-S) church that is complete except for the W wall and portions of other walls of the nave. Investigations at the time of its conservation uncovered the original W wall showing that the nave was longer (int. dim. c. 14.6m) (Anon. 1910-1, 5-6). The church has a plain rounded chancel arch (With 5m) and two lancet windows at the E end of the chancel. There are small niches in the N, E and S chancel walls. A lancet window in the S wall of chancel has a round-headed embrasure in a green stone decorated with chevrons, probably taken from Clone church (WX015-023001-) c. 2.7km to the SSW. (Harbison 1975, 247)*

*This is a National Monument in state ownership: No. 133.*



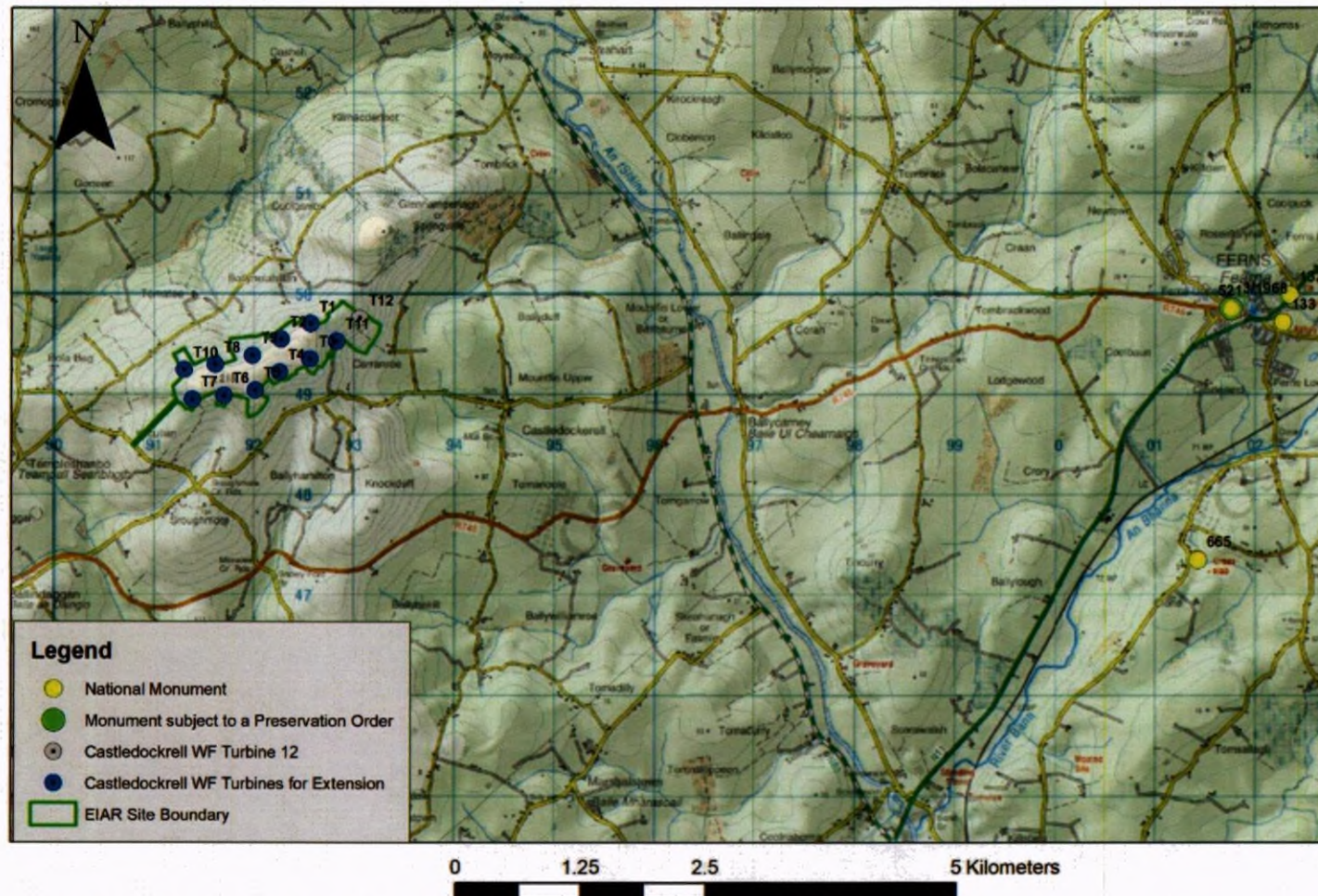


Figure 122 National Monuments and those subject to a Preservation Order within 10km of the existing turbines



### 12.3.1.3 Recorded Monuments within the Wind Farm

No recorded monuments are located within the existing Wind Farm site or within the EIAR Site Boundary.

### 12.3.1.4 Recorded Monuments within 2km of Turbines

Thirteen recorded monuments are located within 2km of the nearest turbines. This comprises a relatively low density of monuments within the surrounding landscape (within 2km) of the existing turbines. The monuments are listed in Table 12-3 and shown on Figure 12-3. The closest monuments to the existing turbines comprise a ringfort in Carranroe townland c. 354m to the south-east of T12 which does not have any above-ground remains and two redundant records c. 746m and 760m, respectively, from T5. Records classed as 'Redundant record' are those that fulfil one or more of the following criteria:

- (1) a record identifying a location where, according to documentary sources (e.g., published reference, cartographic sources) or personal communication, a monument might have existed, but which, on inspection, was found not to be an archaeological monument (e.g. a natural feature);
- (2) a record classified using a term which is now obsolete (e.g. ecclesiastical remains);
- (3) a record created in error, a duplicate record or one which has no supporting evidence recorded on file or in the database;
- (4) an archaeological object (i.e. an artefact), e.g. a quernstone;
- (5) a record entered as a 'Shipwreck'. Shipwrecks are recorded in a separate database.

Table 12-3: SMRs within 2km of the existing turbines.

SMR NO.	ITM E	ITM N	DESCRIPTION	Townland	WTG ID	DISTANCE (M)
WX014-042- -	693293	649613	Ringfort - rath	CARRANROE	T12	354
WX014-013- -	692050	648345	Redundant record	SROUGHMORE	T5	746
WX014-014- -	692225	648375	Redundant record	BALLYHAMILTON	T5	760
WX014-015- -	693560	648365	Ringfort - rath	TOMANOOLE, KNOCKDUFF (Scarawalsh By., Ballindaggan ED)	T11	1446
WX014-009- -	694442	649698	Ringfort - rath	BALLYDUFF (Scarawalsh By., Castledockrell ED)	T12	1449
WX014-002- -	693140	651496	Designed landscape - tree-ring	KILMACDERMOT	T12	1695



SMR NO.	ITM E	ITM N	DESCRIPTION	Townland	WTG ID	DISTANCE (M)
WX014-011002-	689554	648340	Ritual site - holy well	BOLA BEG	T7	1881
WX014-011005-	689554	648340	Bullaun stone	BOLA BEG	T7	1881
WX014-011003-	689480	648460	Graveyard	BOLA BEG	T7	1914
WX014-011004-	689480	648460	Ecclesiastical enclosure	BOLA BEG	T7	1914
WX014-011001-	689474	648460	Church	BOLA BEG	T7	1920
WX014-011006-	689474	648460	Bullaun stone	BOLA BEG	T7	1920
WX014-012- -	689455	648320	Burial ground	BALLINDAGG AN	T7	1981

#### 12.3.1.4.1 **The Early Medieval Period**

Three monuments within 2km of the existing turbines date to the early medieval period and comprise ringforts. Ringforts are a roughly circular or oval area surrounded by an earthen bank with an external fosse. Some examples have two (bivallate) or three (trivallate) banks and fosses, but these are less common and have been equated with higher status sites belonging to upper grades of society. They functioned as residences and/or farmsteads and broadly date from 500 to 1000 AD.

The ringforts are located between 354m and 1.4km from the nearest existing turbine.

#### 12.3.1.4.2 **Sites with religious or ritual association**

Seven monuments with religious associations are located within 2km of the existing turbines and comprise two bullaun stones, a church, graveyard, burial ground, ecclesiastical enclosure and holy well. The ecclesiastical enclosure, church, graveyard, holy well and bullaun stones are all located in association with each other at Bola Beg townland, c. 1.8km from the nearest turbine, T7. They can be of any date from c. 500 AD onwards.

Holy wells comprise a well or spring, though in some unusual cases a natural rock basin, which usually bears a saint's name and is often reputed to possess miraculous healing properties. They may have their origins in prehistory but are associated with devotions from the medieval period (5th-16th centuries AD) onwards. Holy trees are often found in association with holy wells. They comprise a named tree or bush, sometimes associated with a particular saint, often considered to have miraculous properties. They are generally found in close proximity to holy wells and formed part of the associated patterns or rounds performed on certain days. They are known in Irish as 'bile', which translates as sacred tree, sometimes corrupted into the English words 'bell' or 'bellow'.

Ecclesiastical enclosures comprise a large oval or roughly circular area, usually over 50m in diameter, defined by a bank/banks and external fosse/fosses or drystone wall/walls, enclosing an early medieval



church or monastery and its associated areas of domestic and industrial activity. They date to the early medieval period (5th-12th centuries AD).

The term 'bullaun' (from the Irish word 'bullán', which means a round hollow in a stone, or a bowl) is applied to boulders of stone or bedrock with hemispherical hollows or basin-like depressions, which may have functioned as mortars. They are frequently associated with ecclesiastical sites and holy wells and so may have been used for religious purposes. Other examples which do not appear to have ecclesiastical associations can be found in bedrock or outcrop in upland contexts, often under blanket bog, and are known as bedrock mortars. They date from the prehistoric period to the early medieval period (5th-12th centuries AD).





Figure 12.3: Recorded monuments within 2km of the existing turbines.



### 12.3.15 Excavations Database

The Proposed Development site is located within the townlands of Kilcullen, Ballynelahillan, Carranroe, Tomatee, Knockduff and Sroughmore. The database of excavations carried out in Ireland contains details regarding licensed excavations undertaken between 1985 and 2024. No entries were returned for the townlands within which the Proposed Development is located.

### 12.3.16 Previous Archaeological Work Carried out on the Wind Farm Site

Archaeological monitoring of topsoil removal associated with the construction stage of the existing wind farm was carried out in 2010 and 2011 (M. Hurley unpublished report). The monitoring was undertaken in compliance with condition no. 6 of the An Bord Pleanála grant of planning permission (Ref. 26.211725). No archaeological finds or features were uncovered on the wind farm site during the archaeological monitoring.

### 12.3.17 Topographical Files

The topographical files of the National Museum of Ireland as available on [www.heritagemaps.ie](http://www.heritagemaps.ie) was consulted for finds spots on or within the immediate vicinity of the Proposed Development. No finds are registered within the site. The nearest find spot comprises a flint arrowhead which was found c. 2.1km to the south-east.

*National Museum Point: Flint Arrowhead (hollow based)*

*Name 1982:13*

*Object Type Flint Arrowhead (hollow based)*

### 12.3.18 Cartographic Evidence

#### 12.3.18.1 1<sup>st</sup> and 2<sup>nd</sup> Edition OS maps

The Ordnance Survey came to Ireland in 1824 in order to carry-out a precise admeasurement of the country's 60,000 or so townlands as a preliminary to the larger task of reforming Ireland's local taxation system. The townland boundaries were demarcated by a Boundary Commission, and the Ordnance Survey had the task of measuring them. In addition to boundaries the maps are truly topographical in content. Drawn at the large scale of six inches-to-one-mile (1:10,560) it was important to mark all buildings, roads, streams, placenames, etc, that were required for valuation purposes. Ultimately the maps were used as a basis for the rateable valuation of land and buildings in what became known as Griffith's Valuation. Working from north to south, the survey began in Antrim and Derry in 1829 and was completed in Kerry in 1842. It was published as thirty-two county maps between 1832 and 1846, the number of sheets per county varied from 153 for County Cork to 28 for Dublin, each of the 1,994 sheets in the series depicting an area 21,000 by 32,000 feet on the ground. Each county was projected on a different central meridian and so the maps of adjacent counties do not fit neatly together at the edges. Map content stops at the county lines.

#### **The First Edition (6 inch Historic OS)**

The early Ordnance Survey maps are an unrivalled source for the period immediately before the Great Irish Famine (1847-50) when the population was at the highest level ever recorded. The first edition OS map for the Proposed Development site depicts it as largely comprising agricultural land divided into



fields (Figure 12-4). A quarry is shown south of T8 and a small settlement is shown south of T11. No other features of note are depicted.

**The Second Edition (25 inch Historic OS)**

The 25 inch OS map also indicates the quarry which is now named as *Quarries (disused)* (Figure 12-5). The settlement south of T11 is also still extant. No other features of note are shown.



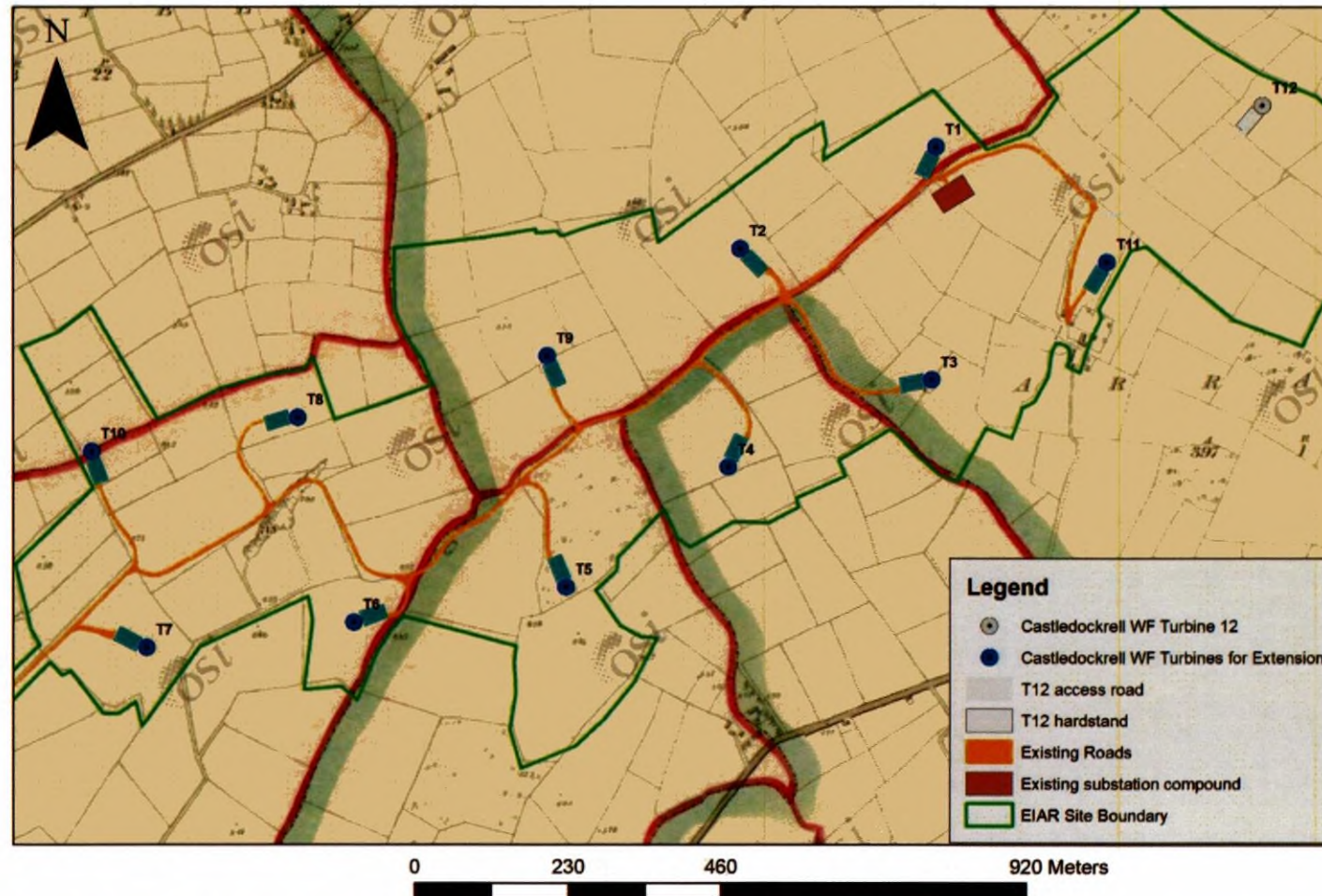


Figure 12-4: Existing Wind Farm site on first edition OS background.