



CONSULTANTS IN ENGINEERING,  
ENVIRONMENTAL SCIENCE &  
PLANNING

# ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED BARNADIVANE WIND FARM & SUBSTATION, CO. CORK

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VOLUME 2 – MAIN EIAR  
CHAPTER 12 – CULTURAL HERITAGE

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**Prepared for:**

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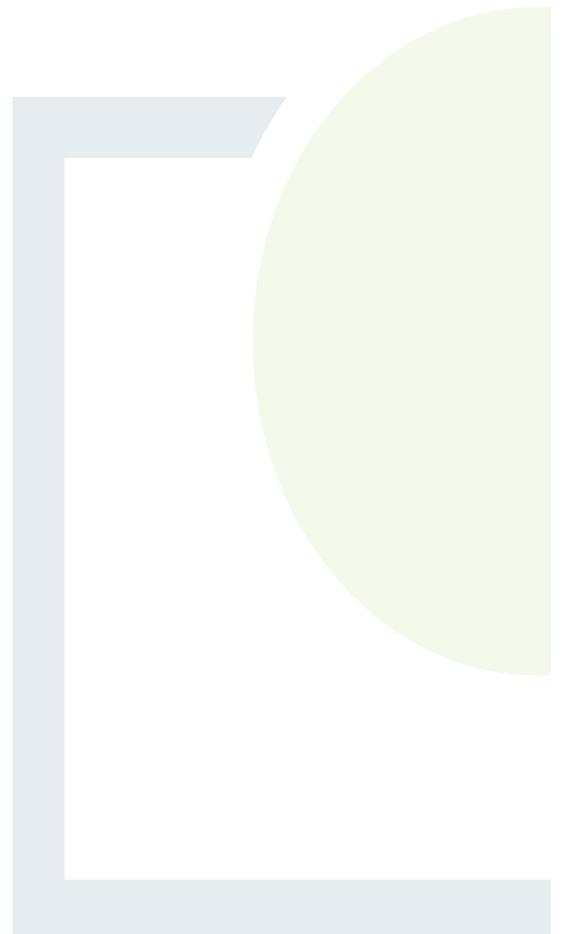
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# TABLE OF CONTENTS

12.	CULTURAL HERITAGE.....	1
12.1	Introduction.....	1
12.1.1	Scope of Work.....	1
12.1.2	Proposed Development and Previous Planning History.....	1
12.1.3	Project Team and Qualifications.....	2
12.1.4	Site Location and topography.....	3
12.2	Methodology.....	5
12.2.1	Statutory context.....	5
12.2.2	Geographical Information Systems.....	12
12.2.3	Methodology for the assessment of impacts on visual setting (indirect effects).....	12
12.2.4	Desktop Assessment.....	13
12.2.5	Field Inspection.....	15
12.3	Receiving Environment.....	15
12.3.1	Archaeological Heritage.....	15
12.3.2	Architectural and Cultural Heritage.....	45
12.4	Potential Impacts.....	53
12.4.1	Do Nothing Impact.....	53
12.4.2	Construction Phase Potential Impacts (Direct Impacts).....	53
12.4.3	Operational Phase Potential Impacts (Indirect).....	55
12.5	Cumulative Effects.....	58
12.5.1	Cumulative Impacts (Direct Impacts).....	58
12.5.2	Cumulative Impacts on Setting (Indirect Impacts).....	59
12.6	Conclusion.....	60
12.7	Bibliography.....	60

## LIST OF FIGURES

	<u>Page</u>
Figure 12-1: Site location map.....	4
Figure 12-2: National Monuments and those subject to a Preservation Order within 10km of the nearest proposed turbine and the Proposed Substation.....	16
Figure 12-3: Viewshed analysis from National Monument 233 showing no theoretical visibility of proposed turbines. ....	20
Figure 12-4: Viewshed analysis from Kinneigh Round Tower (Nat. Mon. No. 618).....	22
Figure 12-5: SMRs within 5km of the nearest proposed turbine. ....	38
Figure 12-6: SMRs in the vicinity of the Proposed Development.....	39
Figure 12-7: Protected Structures within 5km of the nearest proposed turbine and in the vicinity of the Proposed Substation. ....	48
Figure 12-8: NIAH structures and historic gardens within 5km of the nearest proposed turbine and in the vicinity of the Proposed Substation. ....	49
Figure 12-9: Proposed Development on 1st edition OS background, showing townland boundary in vicinity of T3.....	51
Figure 12-10: Southern end of Proposed Development site on 1st ed OS background showing lime kiln adjacent to T6.....	52

## LIST OF TABLES

Table 12-1: Cultural heritage assets considered and distance from nearest proposed turbine. ....	13
Table 12-2: National Monuments and those subject to a Preservation Order within 10km of the nearest proposed turbine.....	16
Table 12-3: Recorded monuments within 5km of the nearest proposed turbine.....	23
Table 12-4: RPS structures within 5km of the nearest proposed turbine.....	45
Table 12-5: NIAH structures within 5km of the nearest proposed turbine. ....	46

## LIST OF PLATES

Plate 12-1: Cahervagliar ringfort (Nat. Mon. No. 233). Photo courtesy of the National Monuments Service. ....	17
Plate 12-2: Kinneigh Round Tower (Nat. Mon. No. 618). Photo courtesy of Amanda Clarke 2016-2022 <a href="https://holywellscorkandkerry.com/">https://holywellscorkandkerry.com/</a> .....	18
Plate 12-3: Ringfort CO083-078--- looking SW.....	41



## 12. CULTURAL HERITAGE

### 12.1 Introduction

#### 12.1.1 Scope of Work

This chapter presents the results of an archaeological and cultural heritage impact assessment of the Proposed Development.. A detailed description of the Proposed Development assessed in the EIAR is contained in Chapter 2. For the purposes of this assessment the Proposed Development boundary comprises the redline boundary.

The purpose of this report is to assess the potential impacts of the Proposed Development on the surrounding archaeological, architectural and cultural heritage landscape and any features of archaeological note within the Proposed Development Site. The assessment is based on both a desktop review of the available cultural heritage and archaeological data and a comprehensive 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 heritage significance or potential, likely to be impacted by the Proposed Development. An assessment of potential impacts is presented and a number of mitigatory measures are recommended where appropriate. The visual impact of the Proposed Development on newly discovered monuments/sites of significance as well as known archaeological and cultural heritage constraints is also assessed. The Zone of Theoretical Visibility (ZTV) Map (Refer to Chapter 8, Landscape) was also reviewed. The visual effects in this chapter are addressed with respect to the archaeological and cultural heritage resource only and Chapter 8 (Landscape and Visuals) addresses a general assessment of visual effects across a 20km radius Study Area.

#### 12.1.2 Proposed Development and Previous Planning History

The Proposed Development comprises the construction of 6 no. turbines, substation and ancillary infrastructure. The key elements of the Proposed Project as described in Chapter 2 are referred to as follows throughout this chapter:

- The Proposed Wind Farm;
- The Proposed Substation;
- The Alternative Grid Connection Route (consented) (also referred to in this EIAR as the 'AGCR');
- The Turbine Delivery Route (consented) (also referred to in this EIAR as 'the TDR').

It will involve ground disturbance in the form of topsoil removal to facilitate road construction and the construction of a substation and turbine bases & hardstands. A number of existing site roads/tracks are present within the Proposed Development site, some of which will be utilised.

#### ***Current Application and Previous Permissions***

The Proposed Development includes the wind turbines, internal access tracks, hard standings, one permanent meteorological mast, onsite substation, internal electrical and communications cabling, temporary construction compound, drainage infrastructure, one borrow pit and all associated works related to the construction of the Proposed Wind Farm and Proposed Substation. A detailed description of the Proposed Development assessed in the EIAR is contained in Chapter 2.



### ***Access Tracks/Internal Site Roads***

Access to the proposed turbines will be via the proposed internal site track network. The proposed internal site track layout will permit access for vehicles during the construction phase, for maintenance during the operation phase, and for vehicles to decommission the turbines at the end of the life of the Proposed Development. Approximately 1.97km of new site access tracks are proposed at the development site. All access tracks will be a minimum of 5m wide along straight sections but wider at bends as required.

### ***Turbine Delivery and Construction Haul Route***

Large components associated with the wind farm construction will be transported to the Site via the identified TDR. The turbines will be delivered via the N22 Cork-Killarney road, as far as the junction with the R585 at Inchirahilly. From here, the route will follow the R585 road (Crookstown-Bantry) as far as the junction with the local road L6008, at Bengour West. From here it will follow the local road network through Lackareagh, as far as the proposed entrance to the site.

### ***Borrow Pit***

The proposed borrow pit will be a local source of material for the construction of access tracks, hardstandings and turbine foundations.

### ***Turbines and hardstands***

It is proposed that 6 no. turbines will be constructed on the development site. A hardstanding area of approximately 45m x 35m will be built beside each turbine. This area will accommodate a main crane and an assist crane during the assembly of the turbine, as well as during occasional maintenance during the operation of the Proposed Wind Farm.

### ***Permanent Meteorological Mast***

A 90 m permanent meteorological mast will also be erected to monitor wind speeds and meteorological conditions during the operation of the Proposed Wind Farm.

### ***Substation***

A new permanent onsite electricity substation will be constructed within the Proposed Development site. The Proposed Substation compound will cover an area of approximately 108m x 86m on plan including a buffer area to the perimeter.

#### **12.1.3 Project Team and Qualifications**

Miriam Carroll and Annette Quinn are the directors of Tobar Archaeological Services, and both graduated from University College Cork in 1998 with a Master's degree in Methods and Techniques in Irish Archaeology. Both directors are licensed by the DHLGH to carry out excavations and are members of the Institute of Archaeologists of Ireland. Annette Quinn and Miriam Carroll have been working in the field of archaeology since 1994 and have undertaken numerous projects for both the private and public sectors including excavations, site assessments (EIAR) and surveys.



#### 12.1.4 Site Location and topography

The Proposed Development is located in the townlands of Lackareagh, Garranereagh and Barnadivane (Kneeves), near Teerelton, Co. Cork. The Proposed Development site ranges in elevation from 180m on the southern boundary to 270m at the north. The land to the south slopes downwards towards the River Bride and low-lying rolling farmland. To the north, the land slopes to the River Lee, which lies at approximately 70m OD. The site of the Proposed Development is currently used for agricultural grazing. The field boundaries are defined both by the hedgerows and by sod and stone banks.

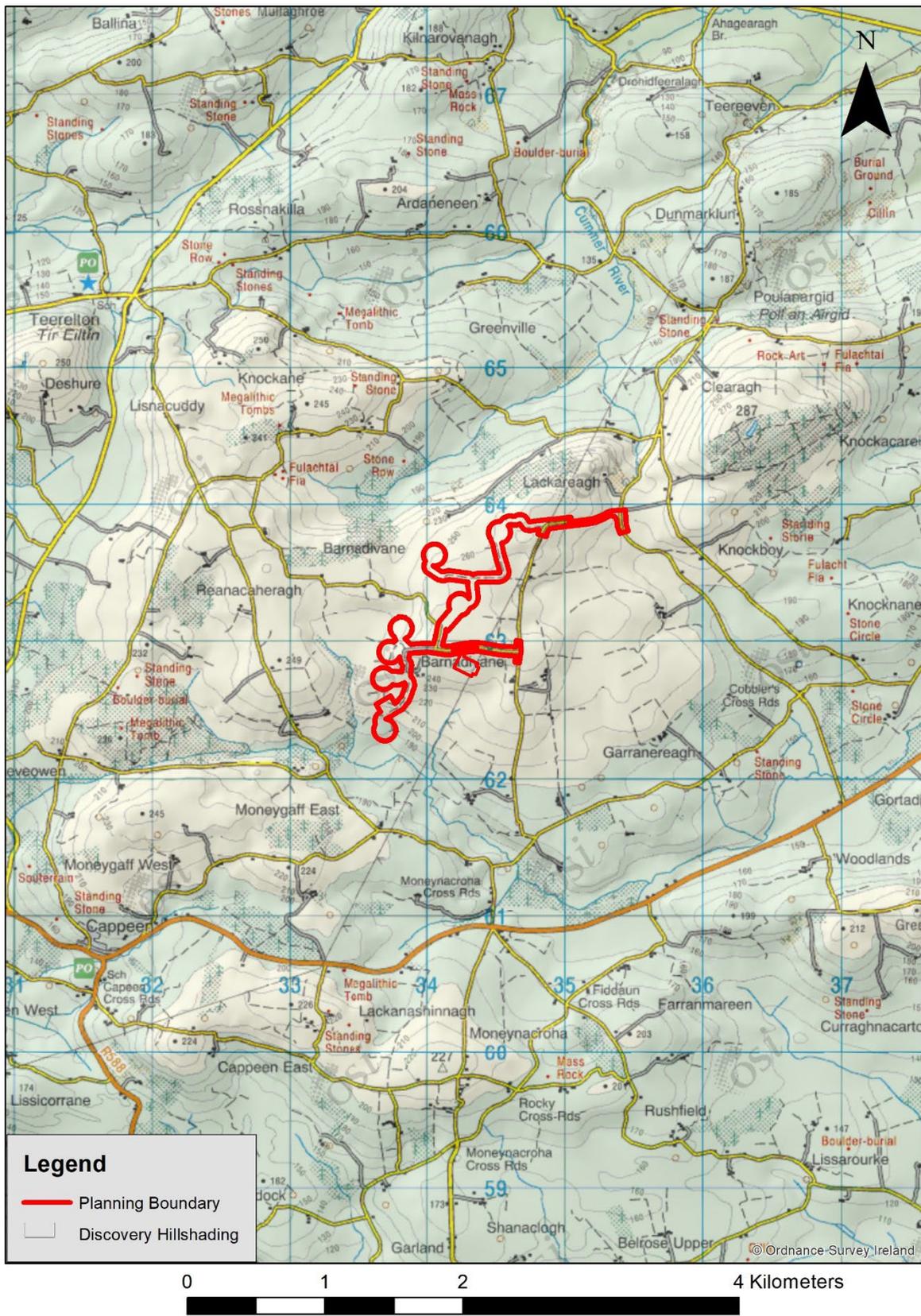


Figure 12-1: Site location map.



## 12.2 Methodology

The assessment of the archaeology, architecture and cultural heritage of the Proposed Development site included desk-based research as well as extensive field walking. A desk-based study of the Proposed Development site was undertaken in order to assess the archaeological, architectural and cultural heritage potential of the area and to identify features of archaeological/architectural/cultural heritage significance within or near to the Proposed Development site. Field walking of the study area was undertaken in July 2014 and again in November 2022 to determine if previously unrecorded archaeological/architectural or cultural heritage features were located in the area of the Proposed Development site and to assess any potential impacts on known or previously unrecorded sites or monuments. The Proposed Development site, monument types and distances from proposed infrastructure considered are outlined in Section 12.2.3 below.

### 12.2.1 Statutory context

#### *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 Record of Monuments and Places (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 Record of Monuments and Places 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).

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’.



## 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 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.

### 12.2.1.1 Policies of the Cork County Development Plan 2022

#### 12.2.1.1.1 Archaeological Heritage

The Cork County Development Plan 2022 came into effect on 6th June 2022. It outlines a number of objectives relating to archaeology as follows.

#### *HE 16-2: Protection of Archaeological Sites and Monuments*

*Secure the preservation (i.e. preservation in situ or in exceptional cases preservation by record) of all archaeological monuments and their setting included in the Sites and Monuments Record (SMR) (see [www.archaeology.ie](http://www.archaeology.ie)) and the Record of Monuments and Places (RMP) and of sites, features and objects of archaeological and historical interest generally. In securing such preservation, the planning authority will have regard to the advice and recommendations of the Development Applications Unit of the Department of Housing, Local Government and Heritage as outlined in the Frameworks and Principles for the Protection of the Archaeological Heritage policy document or any changes to the policy within the lifetime of the Plan.*



### *HE 16-3: Underwater Archaeology*

*Protect and preserve the archaeological value of underwater archaeological sites and associated underwater and terrestrial features. In assessing proposals for development, the development will take account of the potential underwater archaeology of rivers, lakes, wetlands, intertidal and sub-tidal environments through appropriate archaeological assessment by a suitably qualified archaeologist.*

### *HE 16-4: Zones of Archaeological Potential in Historic Towns and Settlements*

*Proposed development works in Historic Towns and settlements, Zones of Archaeological Potential, Zones of Notification and the general historic environs in proximity to the zones, should take cognisance of the impact potential of the works, and all appropriate archaeological assessments employed to identify and mitigate the potential impacts.*

### *HE 16-5: Zones of Archaeological Potential*

*Protect the Zones of Archaeological Potential (ZAPs) located within historic towns, urban areas and around archaeological monuments generally. Any development within the ZAPs will need to take cognisance of the upstanding and potential for subsurface archaeology, through appropriate archaeological assessment.*

### *HE 16-6: Industrial and Post Medieval Archaeology*

*Protect and preserve industrial and post-medieval archaeology and long-term management of heritage features such as mills, limekilns, forges, bridges, piers and harbours, water-related engineering works and buildings, penal chapels, dwellings, walls and boundaries, farm buildings, estate features, military and coastal installations. There is a general presumption for retention of these structures and features. Proposals for appropriate redevelopment including conversion should be subject to an appropriate assessment and record by a suitably qualified specialist/s.*

### *HE 16-7: Battlefield, Ambush and Siege Sites and Defensive Archaeology*

*Protect and preserve the defensive archaeological record of County Cork including strategic battlefield, ambush and siege sites, and coastal fortifications and their associated landscape due to their historical and cultural value. Any development within or adjoining these areas shall undertake a historic assessment by a suitably qualified specialist to ensure development does not negatively impact on this historic landscape.*

### *HE 16-8: Burial Places*

*Protect all historical burial places and their setting in County Cork and encourage their maintenance and care in accordance with appropriate conservation principles.*

### *HE 16-9: Archaeology and Infrastructure Schemes*

*All large scale planning applications (i.e. development of lands on 0.5 ha or more in area or 1km or more in length) and Infrastructure schemes and proposed roadworks are subjected to an archaeological assessment as part of the planning application process which should comply with the Department of Arts, Heritage and the Gaeltacht's codes of practice. It is recommended that the assessment is carried out following pre planning consultation with the County Archaeologist, by an appropriately experienced archaeologist to guide the design and layout of the proposed scheme/development, safeguarding the archaeological heritage in line with Development Management Guidelines.*



#### *HE 16-10: Management of Monuments within Development Sites*

*Where archaeological sites are accommodated within a development it shall be appropriately conservation/ protection with provision for a suitable buffer zone and long-term management plan put in place all to be agreed in advance with the County Archaeologist.*

#### *HE 16-11: Archaeological Landscapes*

*To protect archaeological landscapes and their setting where the number and extent of archaeological monuments are significant and as a collective are considered an important archaeological landscape of heritage value.*

#### *HE 16-12: Raising Archaeological Awareness*

*As part of the Heritage Plan it is an objective to develop a management plan, if resources allow, for the archaeology of County Cork, which could include an evaluation of the Historic Character Assessment of Cork County helping to identify areas for tourism potential, and strategic research while also promoting best practice in archaeology and encouraging the interpretation, publication and dissemination of archaeological findings from the development application process.*

#### *HE 16-13: Undiscovered Archaeological Sites*

*To protect and preserve previously unrecorded archaeological sites within County Cork as part of any development proposals. The Council will require preservation in situ to protect archaeological monuments discovered. Preservation by record will only be considered in exceptional circumstances.*

#### **12.2.1.1.2 Built Heritage**

The CDP 2022 also outlines objectives relating to built heritage such as Protected Structures and those listed in the NIAH.

#### *HE 16-14: Record of Protected Structures*

*a) The identification of structures for inclusion in the Record will be based on criteria set out in the Architectural Heritage Protection Guidelines for Planning Authorities (2011).*

*b) Extend the Record of Protected Structures in order to provide a comprehensive schedule for the protection of structures of special importance in the County during the lifetime of the Plan as resources allow.*

*c) Seek the protection of all structures within the County, which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. In accordance with this objective, a Record of Protected Structures has been established and is set out in Volume Two Heritage and Amenity, Chapter 1 Record of Protected Structures.*

*d) Ensure the protection of all structures (or parts of structures) contained in the Record of Protected Structures.*

*e) Protect the curtilage and attendant grounds of all structures included in the Record of Protected Structures.*

*f) Ensure that development proposals are appropriate in terms of architectural treatment, character, scale and form to the existing protected structure and not detrimental to the special character and integrity of the protected structure and its setting.*



*g) Ensure high quality architectural design of all new developments relating to or which may impact on structures (and their settings) included in the Record of Protected Structures.*

*h) Promote and ensure best conservation practice through the use of specialist conservation professionals and craft persons.*

*i) In the event of a planning application being granted for development within the curtilage of a protected structure, that the repair of a protected structure is prioritised in the first instance i.e. the proposed works to the protected structure should occur, where appropriate, in the first phase of the development to prevent endangerment, abandonment and dereliction of the structure.*

#### *HE 16-15: Protection of Structures on the NIAH*

*Protect where possible all structures which are included in the NIAH for County Cork, that are not currently included in the Record of Protected Structures, from adverse impacts as part of the development management functions of the County.*

#### *HE 16-16: Protection of Non- Structural Elements of Built Heritage*

*Protect non-structural elements of the built heritage. These can include designed gardens/garden features, masonry walls, railings, follies, gates, bridges, shopfronts and street furniture. The Council will promote awareness and best practice in relation to these elements.*

#### *HE 16-17: Areas of Special Planning Control*

*Establish areas of special planning control within Architectural Conservation Areas where appropriate. These areas will include a scheme setting out objectives for the conservation and enhancement of the special character of the area, and will be based on an Architectural Appraisal of each town.*

#### *HE 16-18: Architectural Conservation Areas*

*Conserve and enhance the special character of the Architectural Conservation Areas included in this Plan. The special character of an area includes its traditional building stock, material finishes, spaces, streetscape, shopfronts, landscape and setting. This will be achieved by;*

*(a) Protecting all buildings, structures, groups of structures, sites, landscapes and all other features considered to be intrinsic elements to the special character of the ACA from demolition and nonsympathetic alterations.*

*(b) Promoting appropriate and sensitive reuse and rehabilitation of buildings and sites within the ACA and securing appropriate infill development.*

*(c) Ensure new development within or adjacent to an ACA respects the established character of the area and contributes positively in terms of design, scale, setting and material finishes to the ACA.*

*(d) Protect structures from demolition and non sympathetic alterations.*

*(e) Promoting high quality architectural design within ACAs.*

*(f) Seek the repair and re-use of traditional shopfronts and where appropriate, encourage new shopfronts of a high quality architectural design.*



*(g) Ensure all new signage, lighting advertising and utilities to buildings within ACAs are designed, constructed and located in such a manner they do not detract from the character of the ACA.*

*(h) Protect and enhance the character and quality of the public realm within ACAs. All projects which involve works within the public realm of an ACA shall undertake a character assessment of the said area which will inform a sensitive and appropriate approach to any proposed project in terms of design and material specifications. All projects shall provide for the use of suitably qualified conservation architects/ designers.*

*(i) Protect and enhance the character of the ACA and the open spaces contained therein. This shall be achieved through the careful and considered strategic management of all signage, lighting, utilities, art works/pieces/paintings, facilities etc to protect the integrity and quality of the structures and spaces within each ACA.*

*(j) Ensure the protection and reuse of historic street finishes, furniture and features which contribute to the character of the ACA.*

#### *HE 16-19: Vernacular Heritage*

*a) Protect, maintain and enhance the established character, forms, features and setting of vernacular buildings, farmyards and settlements and the contribution they make to our architectural, archaeological, historical, social and cultural heritage and to local character and sense of place.*

*b) Cork County Council encourages best conservation practice in the renovation and maintenance of vernacular buildings including thatched structures through the use of specialist conservation professionals and craft persons. Development proposals shall be accompanied by appropriate documentation compiled by experienced conservation consultant.*

*c) There will generally be a presumption in favour of the retention of vernacular buildings and encouragement of the retention and re-use of vernacular buildings subject to normal planning considerations, while ensuring that the re-use is compatible with environmental and heritage protection.*

#### *HE 16-20: Historic Landscapes*

*a) Recognise the contribution and importance of historic landscapes and their contribution to the appearance of the countryside, their significance as archaeological, architectural, historical and ecological resources.*

*b) Protect the archaeological, architectural, historic and cultural element of the historic/heritage landscapes of the County of Cork.*

*c) All new development within historic landscapes should be assessed in accordance with and giving due regard to Cork County Councils 'Guidance Notes for the Appraisal of Historic Gardens, Demesnes, Estates and their Settings' or any other relevant guidance notes or documents issued during the lifetime of the Plan.*

#### **12.2.1.1.3 Cultural Heritage**

##### *HE 16-23: Cultural Heritage*

*Protect and promote the cultural heritage of County Cork as an important economic asset and for its intrinsic value to identity of place and the well being of people within the County.*



#### *HE 16-24: Naming of New Developments*

*Promote and preserve local place names, local heritage and the Irish language by ensuring the use of local place names or geographical or cultural names which reflect the history and landscape of their setting in the naming of new residential and other developments. Such an approach will be a requirement of planning permissions for new developments.*

*HE 16-25: Gaeltacht Areas Protect the linguistic and cultural heritage of the Gaeltacht areas of Cork by: a) Encouraging development within the Gaeltacht and in the Gaeltacht Service Town of Macroom, which promotes, facilitates or complements the cultural heritage, including Irish language use;*

*b) Encouraging development within the Gaeltacht and the Gaeltacht Service Town of Macroom, which provides employment or social facilities, especially, but not exclusively, where these are of relevance to local young people;*

*c) Resisting development within the Gaeltacht, which would be likely to erode the cultural heritage (including the community use of Irish language), unless there are over-riding benefits for the long-term sustainability of the local community or for the proper planning and sustainable development of a wider area;*

*d) Ensuring that where the County Council erects signs within the Gaeltacht, these have Irish as their primary language, unless there are positive and over-riding reasons for doing otherwise;*

*e) Discouraging the exhibition of advertisements within the Gaeltacht which do not use Irish as their primary language;*

*f) Consider the requirement for the use of demanding linguistic impact analyses with planning applications for particular major developments. These would be cases where the potential impact of the development on the use of Irish as the community language is not immediately apparent and pivotal in the determination of the application.*

*g) Facilitate the preparation and implementation of local Gaeltacht Plans, Programmes and Initiatives, including Language Plans and Conservation Plans such as the Múscraí Heritage Plan, in the interests of the proper planning and sustainable development of Cork's Gaeltachts, provided that such plans are in keeping with Council policy.*

*h) Encourage the use of the Irish language, not just in Gaeltacht areas but throughout the County, particularly with regard to service provision, planning and development and Council initiatives/activities.*

*i) The use of the Irish language is promoted in the design of developments e.g. business advertising, recreational and community facilities are clearly identified and provided and shop-front signage should be in the Irish language;*

*j) The Plan encourages collaboration between Gaeltacht stakeholders, Gaeltacht communities and State agencies in the future planning and development projects to ensure the protection and promotion of the Irish language as the community language.*



### 12.2.2 Geographical Information Systems

GIS is a computer database which captures, stores, analyses, manages and presents data that is linked to location. GIS is Geographic Information Systems which 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. A Geographic Information System (GIS) 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.

ArcGIS online viewshed analysis was also used to assess effects on setting of archaeological monuments. The Viewshed tool uses the Esri Elevation Analysis service to determine which areas are visible from specified observer points (the observer points being the monuments). Visibility settings are used to set the height of the observer (1.75m standard), the height of the observed features (131m maximum turbine tip height), and the maximum viewing distance of the observer. This tool was utilised to ascertain the potential/theoretical visual effects on Cultural Heritage Assets. The results show the worse-case scenario since the model does not take trees or vegetation into consideration.

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

A standardised approach was utilised for the assessment of impacts of visual setting (indirect effects) according to types of monuments and cultural heritage assets which may have varying degrees of sensitivity. This assessment includes visits to cultural heritage assets within the Proposed Development site only as other assets outside the Proposed Development site do not have public access.

The assessment of impacts 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 8 of this EIAR, and also viewshed analysis from specific cultural heritage assets (viewshed analysis is described in Section 12.2.2 above). The viewshed analysis used in the assessment of potential impacts on the visual setting of cultural heritage assets in the wider landscape of 10km considers the effects of the proposed turbines only. Other lower visibility infrastructure such as roads, sub-station etc. are not included in the viewshed analysis. All other infrastructure (proposed roads, sub-station, compounds etc) are assessed without the use of viewshed analysis.

While direct physical impacts to a site or monument can easily be assessed in quantitative terms, the assessment of impacts 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 impacts on setting are regarded as appropriate and are based on professional judgement.

The cultural heritage assets considered and the distance from the nearest proposed turbine considered is detailed in Table 1. The study area considered in this chapter consists of all the lands and proposed infrastructure within the Proposed Development boundary and the following cultural heritage assets within the distances listed in Table 12.1.



**Table 12-1: Cultural heritage assets considered and distance from nearest proposed turbine.**

Cultural Heritage Asset	Distance Considered
National Monuments (State Ownership and Preservation Order Sites)	10km
Recorded Monuments, RPS	5km
NIAH structures	5km
Undesignated sites, if relevant	500m from Proposed Development

#### 12.2.4 Desktop Assessment

A primary cartographic source and baseline data for this assessment was the consultation of the Sites and Monuments Record (SMR) and Record of Monuments and Places (RMP) for County Cork. All known recorded archaeological monuments are indicated on 6 inch Ordnance Survey (OS) maps and are listed in this record. The 1st (1829-1841) and 2nd (1897-1913) edition OS maps for the area as well as large scale high detail aerial photographs were also consulted.

The primary source and base-line data for the architectural assessment was the consultation of the Record of Protected Structures and the National Heritage of Architectural Heritage for County Cork.

The following sources were consulted for this assessment report:

- The Sites and Monuments Record (SMR)
- The Record of Monuments and Places (RMP)
- The Topographical Files of the National Museum of Ireland ([www.heritagemaps.ie](http://www.heritagemaps.ie))
- First edition Ordnance Survey maps (OSI.ie)
- Second edition Ordnance Survey maps (OSI.ie)
- Aerial photographs (OSI.ie)
- Cork County Development Plan 2022
- Excavations Database
- National Inventory of Architectural Heritage (NIAH)
- Record of Protected Structures

#### **Record of monuments and places**

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 Cork. All known recorded archaeological monuments are indicated on 6 inch Ordnance Survey (OS) maps and are listed in this record. 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 which may be accessed at [www.archaeology.ie](http://www.archaeology.ie) was also consulted.



### ***Cartographic sources and aerial photography***

The 1st (1829-1841) and 2nd edition (1897-1913) OS maps for the area were consulted as was available aerial photography.

### ***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. The database of topographical files was consulted on [www.heritagemaps.ie](http://www.heritagemaps.ie).

### ***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 as yet undiscovered.

### ***Cork County Development Plan 2022***

The County Development Plan (2022) was consulted for the schedule of buildings (RPS) and items of cultural, historical or archaeological interest which may be affected by the Proposed Development. The development plan also outlines policies and objectives relating to the protection of the archaeological, historical and architectural heritage landscape of County Cork. The dataset for the Cork Record of Protected Structures was obtained from ArcGIS online published datasets and added to the base mapping for the Proposed Development in order to accurately assess any potential impacts on such structures.

### ***Database of Irish Excavation Reports***

The database of Irish excavations contains annual summary accounts of all excavations carried out under license. The database is available on line at [www.excavations.ie](http://www.excavations.ie) and includes excavations from 1985 to 2022. 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.

### ***National Inventory of Architectural Heritage (NIAH)***

This source 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 Culture, Heritage and the Gaeltacht. The NIAH database was consulted for all townlands within and adjacent to the EIAR study area. The NIAH survey for Cork 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 Culture, Heritage and the Gaeltacht 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 the Department of Culture, Heritage and the Gaeltacht 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, Record of Monuments and Places.

#### 12.2.5 Field Inspection

##### **General:**

The Proposed Development site was inspected by Tobar Archaeological Services in July 2014 and again in November 2022. Field work was carried out by two qualified archaeologists. The field inspection included all areas within the Proposed Development boundary. Every effort was made to ensure that any potential features of archaeological or architectural (stone walls, piers, gateways, derelict buildings etc) significance within the Proposed Development site were recorded. A photographic record of the Proposed Development area was made.

### **12.3 Receiving Environment**

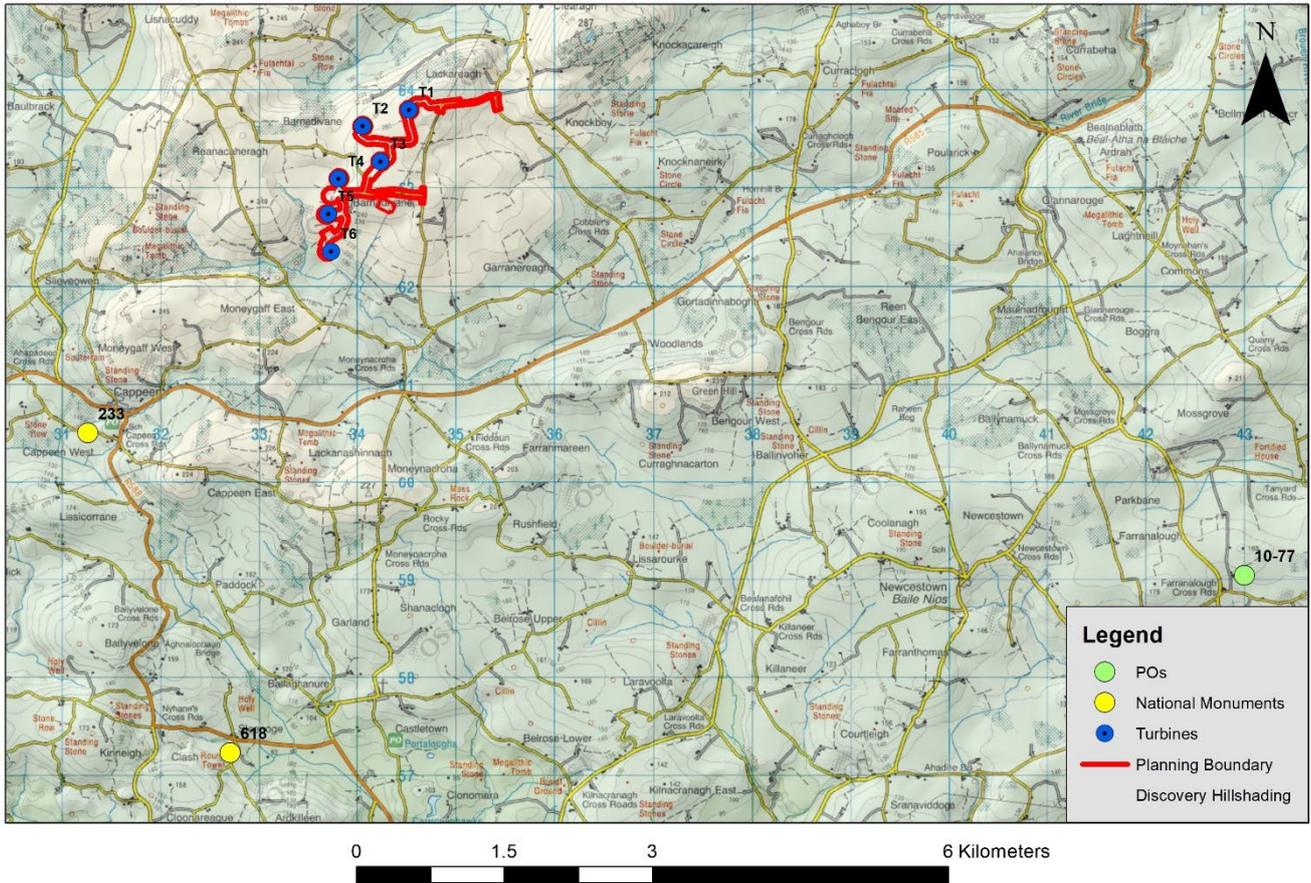
#### 12.3.1 Archaeological Heritage

Archaeological heritage includes all recorded archaeological monuments listed in the RMP/SMR maps and also includes newly discovered archaeological sites. These monuments are addressed separately for clarity. National Monuments are those recorded monuments which are in the ownership / guardianship of the Minister for Housing, Local Government and Heritage (DHLGH). They are frequently referred to as being in 'State Care'. It also includes sites which are subject to a preservation order.

##### *12.3.1.1 National Monuments and those Subject to a Preservation Order*

###### **12.3.1.1.1 Proposed Development**

No National Monuments or those subject to a Preservation Order are located within or immediately adjacent to the Proposed Development boundary. All National Monuments and those subject to a Preservation Order within 10km of the nearest proposed turbine are included here to assess potential impacts on setting. Two National Monuments (233 and 618) and one monument subject to a Preservation Order (10/77) are located within 10km of the nearest proposed turbine. They are listed in Table 12.2 and shown on Figure 12.2 below.



**Figure 12-2: National Monuments and those subject to a Preservation Order within 10km of the nearest proposed turbine and the Proposed Substation.**

**Table 12-2: National Monuments and those subject to a Preservation Order within 10km of the nearest proposed turbine.**

Nat. Mon. /PO No.	SMR	ITM E	ITM N	Monument	Townland	Turbine No.	Distance (m)
233	CO094-060001-	531230	560561	Cahervagliar Ringfort	Cappeen West	T6	3084
618	CO094-104002	532673	557297	Kinneigh Round Tower	Castletown-Kinneigh	T6	5218
10-77	CO095-075----	542958	559106	Ringfort - rath	Farranlough	T1	9715

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

**CO094-060001-**

Class: Ringfort - rath

Townland: CAPPEEN WEST



Scheduled for inclusion in the next revision of the RMP: Yes

Description: In pasture, atop slight spur, near W end of small river valley. Circular area (39m N-S; 39m E-W) enclosed by substantial earthen bank (int. H 1.7m); traces of stone facing on inner face. Second bank, separated from inner bank by shallow fosse, survives best to N (H 0.6m); external fosse (D 3m). Entrance to ESE, in ruins before excavation and reconstruction by OPW 1983-4 (Manning 1987-8). Dry-stone lintelled entrance (L 7.7m; max. Wth 2m) of roughly coursed large stones, through inner bank, encroaching on line of inner fosse. Excavation revealed sill stone at front with pair of double post-holes on its inside; second pair of post-holes midway along passage in shallow gully; possible third set at inner end. Stone facade on outer bank face flanking entrance (L 4.12m). According to the excavator, on the basis of the masonry the entrance is likely to date to within a century or two of the year 1000 A.D.' (Manning 1987-8, 54). Cultivation ridges cross interior on N-S axis; souterrain (CO094-060002-) in SE quadrant. National Monument no. 233.

The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 1: West Cork' (Dublin: Stationery Office, 1992). In certain instances, the entries have been revised and updated in the light of recent research.

Date of upload/revision: 14 January 2009



**Plate 12-1: Cahervagliar ringfort (Nat. Mon. No. 233). Photo courtesy of the National Monuments Service.**

**CO094-104002-**

Class: Round tower

Townland: SLEENOGH



Scheduled for inclusion in the next revision of the RMP: Yes

Description: Just outside SW corner of Kinneigh graveyard (CO094-104003-) stands round tower with unique hexagonal base to a height of 18 feet (Caulfield 1878, 16) with the remainder cylindrical to a surviving height of 67 feet 3 inches (Crawford 1927). Entered by a lintelled door on the NE face at 1st-floor level and lit by four small square-headed windows. Now survives to six storeys but originally taller; in recent times used as bellfry for adjacent C of I church. (Coleman 1984, 177-182 and 202-206). (Buckley 1905, 135-8).

The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 1: West Cork' (Dublin: Stationery Office, 1992). In certain instances, the entries have been revised and updated in the light of recent research.

Date of upload/revision: 14 January 2009

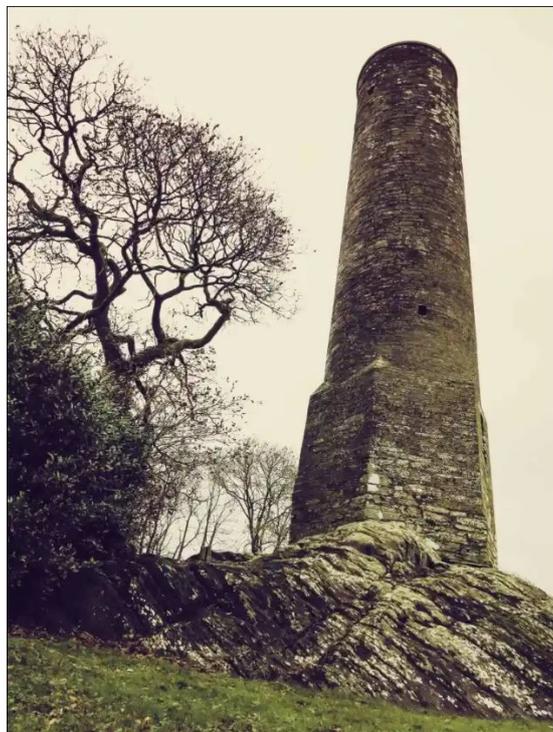


Plate 12-2: Kinneigh Round Tower (Nat. Mon. No. 618). Photo courtesy of Amanda Clarke 2016-2022  
<https://holywellscorkandkerry.com/>

**CO095-075----**

Class: Ringfort - rath

Townland: FARRANALOUGH

Scheduled for inclusion in the next revision of the RMP: Yes

Description: In pasture, on S-facing slope. Roughly circular area (diam. 33m N-S) enclosed by earthen bank (H 1.4m); external fosse survives to N, filled with stones and uprooted bushes. Interior used as dumping ground for field clearance material. Ó Ríordáin (1933, 61) mentions remains of outer bank.



The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 1: West Cork' (Dublin: Stationery Office, 1992). In certain instances, the entries have been revised and updated in the light of recent research.

Date of upload/revision: 14 January 2009

This monument is subject to a preservation order made under the National Monuments Acts 1930 to 2014 (PO no. 10/1977).

#### 12.3.1.1.1 Theoretical Visibility of Proposed Turbines from Cahervagliar Ringfort

Viewshed analysis from National Monument no. 233 Cahervagliar ringfort was carried out and demonstrated that no proposed turbines will theoretically be visible from this monument (Figure 12.3). No potential impacts to setting are therefore likely.

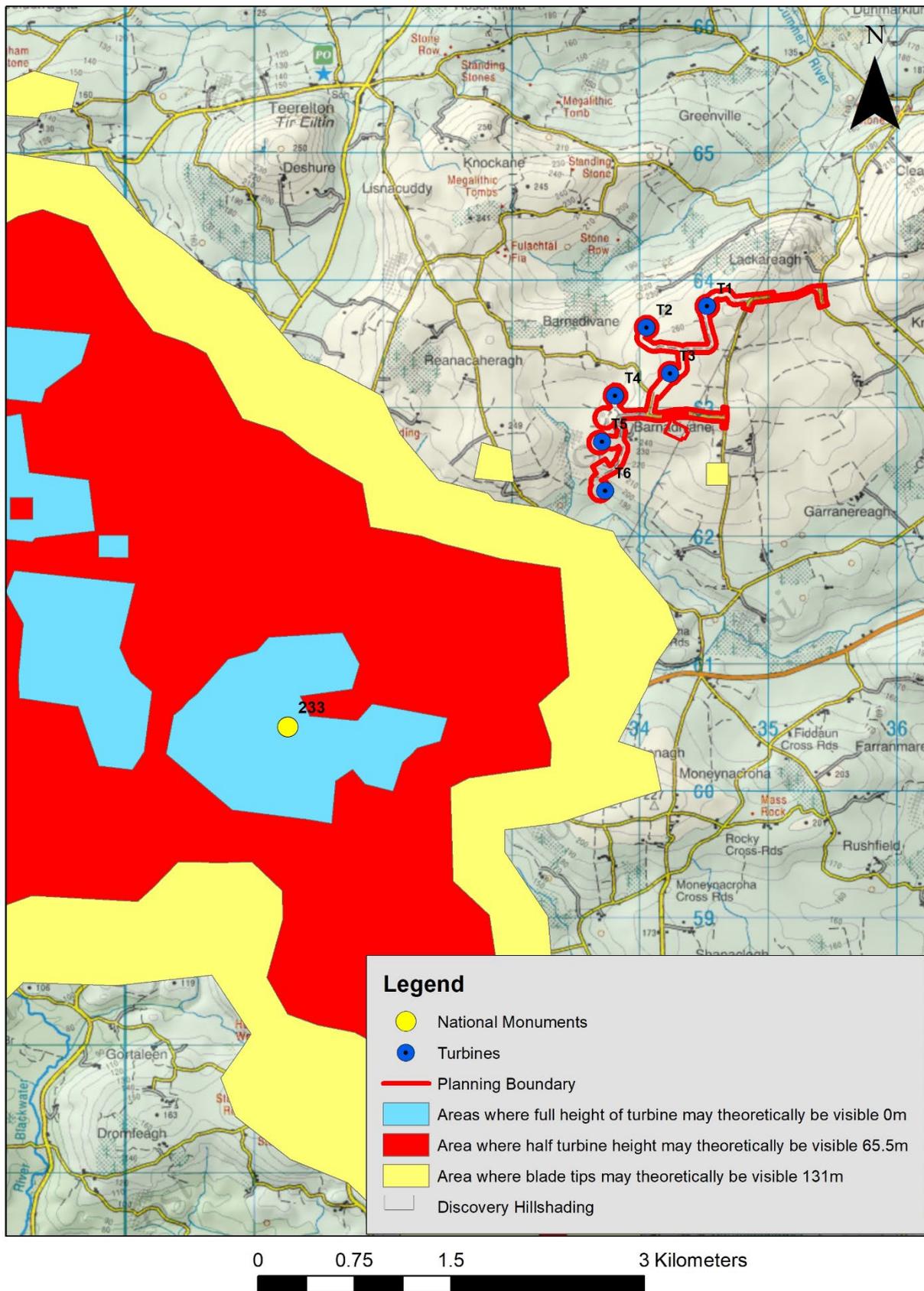


Figure 12-3: Viewshed analysis from National Monument 233 showing no theoretical visibility of proposed turbines.



#### 12.3.1.1.1.2 Theoretical Visibility of Proposed Turbines from Kinneigh Round Tower

Viewshed analysis from National Monument no. 618 Kinneigh Round Tower was carried out and demonstrated that no proposed turbines will theoretically be visible in full from this monument. Theoretical visibility of the blade tips (131m) of all six turbines was demonstrated, however (Figure 12.4).

#### 12.3.1.1.2 Proposed Substation

No National Monuments are located on or in the immediate vicinity of the Proposed Substation. The nearest National Monument to same is 3.7km to the south-west and comprises Cahervagliar ringfort (Nat Mon No. 233) (Figure 12.3).

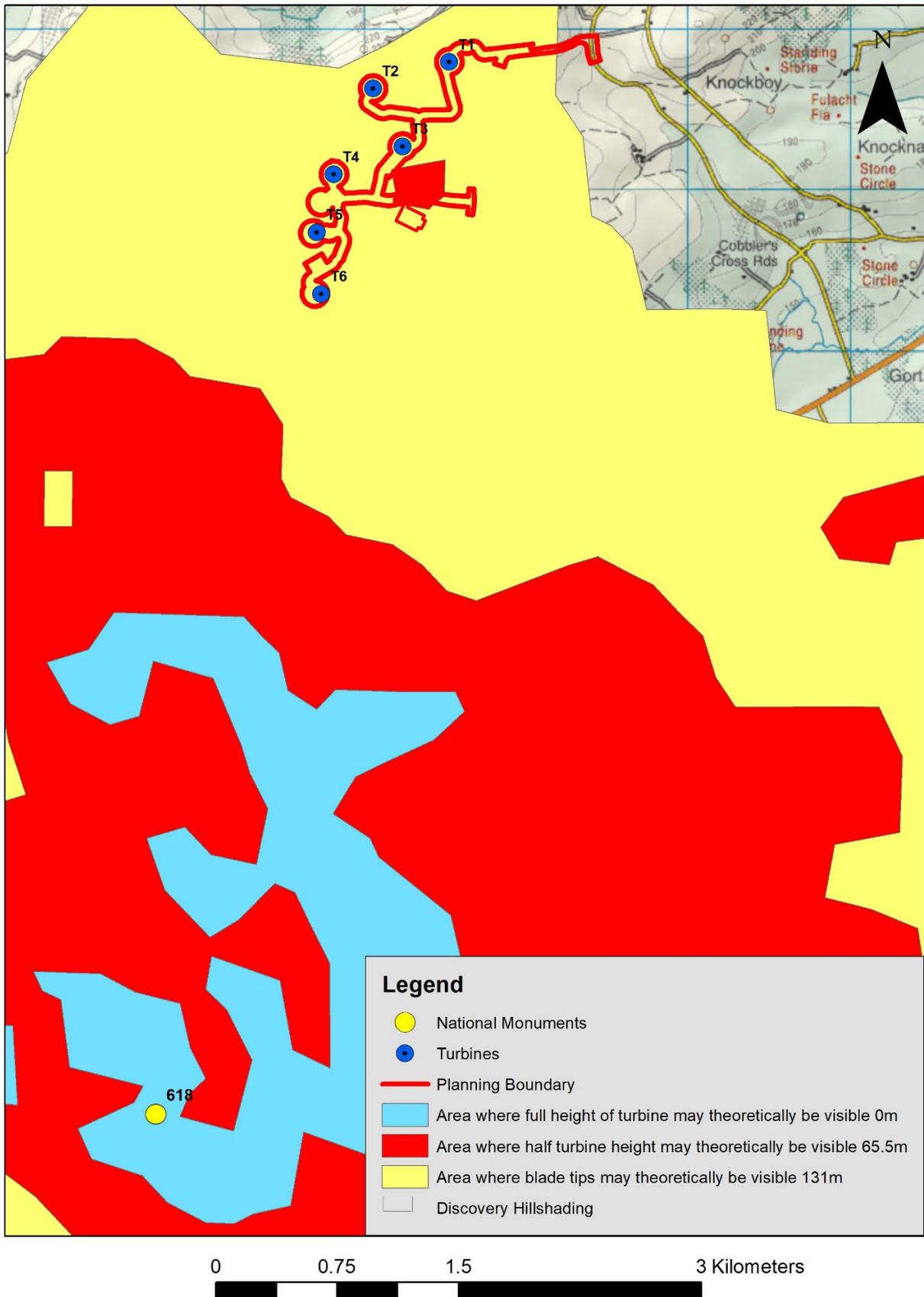


Figure 12-4: Viewshed analysis from Kinneigh Round Tower (Nat. Mon. No. 618).



### 12.3.1.2 Recorded monuments within the EIAR study area boundary

No recorded monuments are located within the Proposed Development boundary. All recorded monuments within 5km of the nearest proposed turbine are considered in this assessment and are discussed below.

### 12.3.1.3 Recorded monuments within 5km of the nearest Proposed Turbine

Two hundred and ninety-two (292) recorded monuments are located within 5km of the nearest proposed turbine (Figure 12.5). They are listed in Table 12.3 and are presented according to the distance of each monument to the nearest proposed turbine. Over 58% of the monuments are located in excess of 3km from the nearest proposed turbine and in this regard the immediate setting of these monuments will not be impacted by the Proposed Development. Over 20% of the monuments are located between 2 and 3km from the nearest proposed turbine, while over 17% of monuments are between 1 and 2km from the nearest proposed turbine. Just over 3% (10) monuments are located less than 1km from the nearest proposed turbine. The nearest monuments CO095-001---- and CO083-078---- ringforts are situated 225m and 251m from turbine 6 and 2, respectively. The next nearest monument, Enclosure CO094-036----, is situated c. 347m to the south-west of T6. The monuments are described below and shown on Figure 12.6.

**Table 12-3: Recorded monuments within 5km of the nearest proposed turbine.**

SMR	ITM E	ITM N	Monument	Townland	Turbine No.	Distance (m)
CO095-001----	533760	562198	Ringfort - rath	MONEYGAFF EAST	T6	225
CO083-078----	533952	563938	Ringfort - rath	LACKAREAGH (Muskerry West By.)	T2	251
CO094-036----	533369	562298	Enclosure	REANACAHERAGH	T6	347
CO094-034001-	533149	562160	Ringfort - rath	MONEYGAFF EAST	T6	603
CO094-034002-	533149	562160	Souterrain	MONEYGAFF EAST	T6	603
CO094-034003-	533149	562160	Hut site	MONEYGAFF EAST	T6	603
CO083-077----	533787	564379	Standing stone - pair	KNOCKANE (Muskerry West By.)	T2	721
CO094-035----	532954	562514	Ringfort - rath	REANACAHERAGH	T6	748
CO082-086----	533399	564334	Ringfort - rath	KNOCKANE (Muskerry West By.)	T2	888
CO095-003----	534613	562191	Ringfort - rath	GARRANEREAGH (Muskerry West By.)	T6	944
CO083-079----	535452	563290	Ringfort - rath	GARRANEREAGH (Muskerry West By.)	T1	1122
CO095-005----	534618	561734	Ringfort - rath	GARRANEREAGH (Muskerry West By.)	T6	1146



SMR	ITM E	ITM N	Monument	Townland	Turbine No.	Distance (m)
CO095-004----	534739	561940	Ringfort - rath	GARRANEREAGH (Muskerry West By.)	T6	1146
CO082-085006-	532972	564293	Fulacht fia	KNOCKANE (Muskerry West By.)	T2	1203
CO082-085005-	532956	564280	Fulacht fia	KNOCKANE (Muskerry West By.)	T2	1210
CO083-036002-	534043	565000	Souterrain	GREENVILLE	T1	1222
CO082-085004-	532934	564265	Fulacht fia	KNOCKANE (Muskerry West By.)	T2	1223
CO083-036001-	534041	565030	Hilltop enclosure	GREENVILLE	T1	1251
CO082-085002-	532894	564279	Fulacht fia	KNOCKANE (Muskerry West By.)	T2	1265
CO082-085003-	532915	564323	Fulacht fia	KNOCKANE (Muskerry West By.)	T2	1267
CO082-111----	533370	564823	Souterrain	KNOCKANE (Muskerry West By.)	T2	1299
CO094-032----	532939	561348	Enclosure	MONEYGAFF EAST	T6	1307
CO095-002----	534531	561407	Ringfort - rath	MONEYGAFF EAST	T6	1308
CO082-111001-	533358	564837	Burnt mound	KNOCKANE (Muskerry West By.)	T2	1317
CO082-085001-	532839	564307	Fulacht fia	KNOCKANE (Muskerry West By.)	T2	1326
CO082-082----	533441	564937	Standing stone	KNOCKANE (Muskerry West By.)	T2	1368
CO094-033001-	533280	561068	Ringfort - rath	MONEYGAFF EAST	T6	1409
CO094-033002-	533280	561068	Souterrain	MONEYGAFF EAST	T6	1409
CO095-008----	535067	561996	Ringfort - rath	GARRANEREAGH (Muskerry West By.)	T6	1434
CO095-006----	534856	561554	Mound	GARRANEREAGH (Muskerry West By.)	T6	1444
CO082-083----	532985	564726	Redundant record	KNOCKANE (Muskerry West By.)	T2	1458
CO082-084001-	532894	564651	Megalithic tomb - wedge tomb	KNOCKANE (Muskerry West By.)	T2	1474



SMR	ITM E	ITM N	Monument	Townland	Turbine No.	Distance (m)
CO082-084002-	532899	564658	Megalithic tomb - wedge tomb	KNOCKANE (Muskerry West By.)	T2	1474
CO082-084003-	532889	564671	Redundant record	KNOCKANE (Muskerry West By.)	T2	1490
CO095-009----	535201	562056	Ringfort - rath	GARRANEREAGH (Muskerry West By.)	T6	1547
CO095-007----	535048	561603	Mound	GARRANEREAGH (Muskerry West By.)	T6	1577
CO095-132001-	535719	562848	Bullaun stone	GARRANEREAGH (Muskerry West By.)	T1	1596
CO095-132002-	535719	562848	Redundant record	GARRANEREAGH (Muskerry West By.)	T1	1596
CO094-131----	532043	562304	Field boundary	SLIEVEOWEN	T6	1656
CO083-031----	535185	565373	Designed landscape - ornamental lake	GREENVILLE	T1	1665
CO082-081----	533260	565193	Ringfort - rath	KNOCKANE (Muskerry West By.)	T2	1677
CO083-080----	536186	564004	Ringfort - rath	KNOCKBOY (Muskerry West By.)	T1	1705
CO095-010----	535210	561580	Ringfort - rath	GARRANEREAGH (Muskerry West By.)	T6	1729
CO094-133----	531960	562422	Enclosure	SLIEVEOWEN	T6	1736
CO094-064----	533369	560662	Megalithic tomb - wedge tomb	CAPPEEN EAST	T6	1782
CO094-020----	531873	562791	Standing stone	CLASHBREDANE	T5	1796
CO082-077----	531860	562838	Enclosure	CLASHBREDANE	T5	1810
CO094-031----	532021	561646	Ringfort - rath	MONEYGAFF WEST	T6	1842
CO083-141----	535446	565464	Bridge	DUNMARKLUN	T1	1868
CO094-135----	532781	560761	Fulacht fia	CAPPEEN EAST	T6	1889
CO082-080----	533343	565472	Megalithic tomb - wedge tomb	KNOCKANE (Muskerry West By.)	T2	1900



SMR	ITM E	ITM N	Monument	Townland	Turbine No.	Distance (m)
CO095-011----	535313	561394	Ringfort - rath	GARRANEREAGH (Muskerry West By.)	T6	1912
CO094-022----	531766	562426	Megalithic tomb - wedge tomb	SLIEVEOWEN	T6	1930
CO083-037----	534791	565772	Dam	GREENVILLE	T1	1935
CO083-038----	535587	565495	Ringfort - rath	DUNMARKLUN	T1	1970
CO083-131----	535587	565495	Souterrain	DUNMARKLUN	T1	1970
CO083-081----	536457	563831	Standing stone	KNOCKBOY (Muskerry West By.)	T1	1971
CO094-019----	531689	562762	Boulder-burial	CLASHBREDANE	T5	1980
CO095-012001-	535593	561843	Ringfort - rath	GARRANEREAGH (Muskerry West By.)	T6	1981
CO095-012002-	535593	561843	Souterrain	GARRANEREAGH (Muskerry West By.)	T6	1981
CO083-082----	536472	563560	Ringfort - rath	KNOCKBOY (Muskerry West By.)	T1	2008
CO094-028----	531979	561345	Fulacht fia	MONEYGAFF WEST	T6	2022
CO094-065----	533255	560364	Standing stone	CAPPEEN EAST	T6	2097
CO082-079----	533088	565598	Standing stone	KNOCKANE (Muskerry West By.)	T2	2117
CO094-071001-	533384	560306	Burial	CAPPEEN EAST	T6	2131
CO094-071002-	533394	560279	Souterrain	CAPPEEN EAST	T6	2156
CO094-071003-	533396	560269	Standing stone	LACKANASHINNAGH	T6	2166
CO094-029----	531601	561778	Ringfort - rath	MONEYGAFF WEST	T6	2189
CO094-029001-	531601	561778	Hut site	MONEYGAFF WEST	T6	2189
CO095-013----	536025	562120	Ringfort - rath	GARRANEREAGH (Muskerry West By.)	T3	2193
CO083-041----	536066	565394	Standing stone	CLEARAGH	T1	2201
CO094-030----	531545	561898	Fulacht fia	MONEYGAFF WEST	T6	2212



SMR	ITM E	ITM N	Monument	Townland	Turbine No.	Distance (m)
CO083-083----	536700	563619	Redundant record	KNOCKBOY (Muskerry West By.)	T1	2227
CO082-078----	532548	565433	Souterrain	KNOCKKANE (Muskerry West By.)	T2	2274
CO083-042----	536291	565248	Rock art	CLEARAGH	T1	2276
CO095-014----	536192	562187	Ringfort - rath	GARRANEREAGH (Muskerry West By.)	T3	2300
CO095-014001-	536192	562187	Kiln - lime	GARRANEREAGH (Muskerry West By.)	T3	2300
CO082-061----	533602	566035	Cupmarked stone	ARDANENEEN	T1	2347
CO083-084----	536648	562896	Ringfort - rath	KNOCKNANEIRK	T1	2367
CO095-015----	536323	562270	Standing stone	GARRANEREAGH (Muskerry West By.)	T3	2376
CO083-086----	536893	563522	Fulacht fia	KNOCKNANEIRK	T1	2430
CO082-060----	533055	565974	Fulacht fia	ROSSNAKILLA	T2	2473
CO083-039----	536010	565817	Ringfort - rath	DUNMARKLUN	T1	2479
CO094-063----	532355	560316	Ringfort - rath	CAPPEEN EAST	T6	2490
CO094-021----	531158	562466	Enclosure	CLASHBREDANE	T5	2533
CO082-055----	532389	565664	Souterrain	ROSSNAKILLA	T2	2554
CO083-085001-	536998	563267	Standing stone	KNOCKNANEIRK	T1	2581
CO083-156----	536998	563267	Standing stone (present location)	KNOCKNANEIRK	T1	2581
CO082-058----	532560	565831	Standing stone	ROSSNAKILLA	T2	2584
CO082-054003-	531899	565190	Souterrain	LISNACUDDY	T2	2591
CO082-054001-	531899	565190	Ringfort - rath	LISNACUDDY	T2	2591
CO083-085002-	537020	563263	Stone circle - five-stone	KNOCKNANEIRK	T1	2603
CO082-054002-	531887	565210	Kiln - lime	LISNACUDDY	T2	2613



SMR	ITM E	ITM N	Monument	Townland	Turbine No.	Distance (m)
CO082-059----	532803	566010	Ringfort - rath	ROSSNAKILLA	T2	2613
CO083-043----	536829	565086	Fulacht fia	CLEARAGH	T1	2643
CO082-056----	532478	565850	Stone row	ROSSNAKILLA	T2	2647
CO082-052001-	531562	564761	Ringfort - rath	DESHURE	T2	2675
CO082-052002-	531562	564761	Souterrain	DESHURE	T2	2675
CO082-057----	532496	565905	Standing stone	ROSSNAKILLA	T2	2682
CO095-101----	535953	560941	Enclosure	BENGOUR WEST	T6	2695
CO083-040----	536322	565857	Country house	DUNMARKLUN	T1	2711
CO095-038----	534001	559718	Standing stone	MONEYNACROHA	T6	2713
CO094-061001-	531593	560663	Ringfort - rath	CAPPEEN WEST	T6	2736
CO094-061002-	531593	560663	Souterrain	CAPPEEN WEST	T6	2736
CO094-027----	531298	561041	Standing stone	MONEYGAFF WEST	T6	2763
CO082-053----	531649	565152	Fulacht fia	DESHURE	T2	2779
CO094-025----	531080	561434	Souterrain	MONEYGAFF WEST	T6	2793
CO095-131----	534302	559679	Mound	MONEYNACROHA	T6	2801
CO094-062----	531826	560306	Souterrain	CAPPEEN WEST	T6	2818
CO095-016----	537051	562677	Stone circle - multiple-stone	KNOCKNANEIRK	T1	2825
CO095-097----	534857	559836	Redundant record	FARRANMAREEN	T6	2828
CO083-044----	537061	565087	Fulacht fia	KILBARRY (Muskerry West By., Ballinadee Par.)	T1	2851
CO083-034----	533824	566635	Standing stone	ARDANENEEN	T1	2852
CO082-051----	531361	564742	Fulacht fia	DESHURE	T2	2854
CO083-035----	534624	566713	Boulder-burial	ARDANENEEN	T1	2855



SMR	ITM E	ITM N	Monument	Townland	Turbine No.	Distance (m)
CO083-150----	534669	566736	Country house	ARDANENEEN	T1	2881
CO083-051----	537253	564693	Ringfort - rath	KNOCKACAREIGH	T1	2889
CO094-024001-	530903	561621	Ringfort - rath	SLIEVEOWEN	T6	2903
CO094-024002-	530903	561621	Souterrain	SLIEVEOWEN	T6	2903
CO095-039----	534290	559490	Ringfort - rath	MONEYNACROHA	T6	2984
CO094-066----	533271	559390	Ringfort - rath	CAPPEEN EAST	T6	3054
CO094-066001-	533271	559390	Hut site	CAPPEEN EAST	T6	3054
CO094-060002-	531245	560551	Souterrain	CAPPEEN WEST	T6	3078
CO094-018----	530597	562515	Ringfort - rath	CLASHBREDANE	T5	3085
CO083-144----	537340	565038	Fulacht fia	KILBARRY (Muskerry West By., Ballinadee Par.)	T1	3087
CO094-060001-	531228	560551	Ringfort - rath	CAPPEEN WEST	T6	3092
CO082-037----	533078	566651	Ringfort - rath	ARDANENEEN	T2	3101
CO083-045----	537292	565217	Redundant record	KILBARRY (Muskerry West By., Ballinadee Par.)	T1	3116
CO083-087----	537460	562911	Ringfort - rath	KNOCKNANEIRK	T1	3122
CO094-023----	530640	561724	Standing stone	SLIEVEOWEN	T6	3133
CO095-017----	537342	562548	Ringfort - rath	KNOCKNANEIRK	T1	3143
CO095-019----	536602	561184	Ringfort - rath	BENGOUR WEST	T6	3156
CO083-089----	537604	563353	Ritual site - holy well	KNOCKNANEIRK	T1	3159
CO082-050001-	531168	565097	Ringfort - rath	DESHURE	T2	3174



SMR	ITM E	ITM N	Monument	Townland	Turbine No.	Distance (m)
CO082-050002-	531151	565088	Souterrain	DESHURE	T2	3185
CO095-051----	535498	559778	Standing stone	FARRANMAREEN	T6	3193
CO083-134----	537674	563534	Souterrain	KNOCKNANEIRK	T1	3204
CO083-146----	537208	565567	Fulacht fia	KILBARRY (Muskerry West By., Ballinadee Par.)	T1	3212
CO083-050----	537416	565191	Ringfort - rath	KNOCKACAREIGH	T1	3217
CO083-147----	537285	565454	Fulacht fia	KILBARRY (Muskerry West By., Ballinadee Par.)	T1	3220
CO083-145----	537595	564796	Fulacht fia	KNOCKACAREIGH	T1	3246
CO094-067----	532478	559394	Souterrain	PADDOCK (Carbery East (W.D) By., Kinneigh Par.)	T6	3256
CO094-068----	532556	559355	Fulacht fia	PADDOCK (Carbery East (W.D) By., Kinneigh Par.)	T6	3264
CO083-153----	537727	563415	Enclosure	KNOCKNANEIRK	T1	3271
CO083-088----	537676	562980	Fulacht fia	KNOCKNANEIRK	T1	3309
CO094-026----	530850	560720	Anomalous stone group	MONEYGAFF WEST	T6	3312
CO083-006----	534266	567180	Mass-rock	KILNAROVANAGH	T1	3326
CO094-069----	532667	559224	Ringfort - rath	PADDOCK (Carbery East (W.D) By., Kinneigh Par.)	T6	3352
CO083-148----	537229	565832	Fulacht fia	KILBARRY (Muskerry West By., Ballinadee Par.)	T1	3377
CO082-049----	531379	565826	Ringfort - rath	DESHURE	T2	3390
CO083-009001-	535957	566924	Ringfort - rath	TEEREEVEN	T1	3397
CO083-007----	534471	567267	Burial ground	KILNAROVANAGH	T1	3406
CO083-009002-	535950	566937	Souterrain	TEEREEVEN	T1	3406
CO082-076----	530551	564369	Ringfort - rath	BAULBRACK	T4	3441



SMR	ITM E	ITM N	Monument	Townland	Turbine No.	Distance (m)
CO082-033002-	531806	566346	Souterrain	TEERELTON	T2	3451
CO083-005----	534287	567307	Standing stone	KILNAROVANAGH	T1	3452
CO095-040001-	533650	558953	Ringfort - rath	GARLAND	T6	3461
CO095-040002-	533650	558953	Souterrain	GARLAND	T6	3461
CO094-070----	532997	559018	Enclosure	PADDOCK (Carbery East (W.D) By., Kinneigh Par.)	T6	3467
CO083-008----	535487	567207	Souterrain	TEEREEVEN	T1	3492
CO083-090001-	537956	563405	Ringfort - rath	KNOCKNANEIRK	T1	3499
CO083-090002-	537957	563385	Souterrain	KNOCKNANEIRK	T1	3503
CO083-049----	537650	565372	Fulacht fia	KNOCKACAREIGH	T1	3506
CO082-033001-	531754	566386	Ringfort - rath	TEERELTON	T2	3515
CO083-136----	537983	563280	Ringfort - rath	KNOCKNANEIRK	T1	3544
CO083-137----	537983	563280	Souterrain	KNOCKNANEIRK	T1	3544
CO082-036----	532646	567012	Standing stone	TEERELTON	T2	3588
CO083-046001-	537160	566271	Burial ground	KILBARRY (Muskerry West By., Ballinadee Par.)	T1	3599
CO082-034----	532255	566835	Ringfort - rath	TEERELTON	T2	3599
CO094-111----	530312	561168	Mound	SLIEVEOWEN	T6	3606
CO083-046002-	537234	566223	Redundant record	KILBARRY (Muskerry West By., Ballinadee Par.)	T1	3623
CO095-050----	535781	559425	Church	RUSHFIELD	T6	3645
CO094-110----	530046	562093	Mound	CLASHBREDANE	T6	3664
CO083-047001-	537179	566376	Burial ground	KILBARRY (Muskerry West By., Ballinadee Par.)	T1	3684



SMR	ITM E	ITM N	Monument	Townland	Turbine No.	Distance (m)
CO083-047002-	537179	566376	Church	KILBARRY (Muskerry West By., Ballinadee Par.)	T1	3684
CO095-020002-	537039	560859	Souterrain	BENGOUR WEST	T6	3687
CO095-020001-	537047	560855	Ringfort - cashel	BENGOUR WEST	T6	3696
CO095-021----	536844	560464	Ringfort - rath	BENGOUR WEST	T6	3703
CO082-032----	531472	566404	Ringfort - rath	TEERELTON	T2	3716
CO095-018----	537734	562036	Ringfort - rath	BENGOUR WEST	T1	3725
CO095-128----	537734	562036	Souterrain	BENGOUR WEST	T1	3725
CO095-049001-	535761	559296	Ringfort - rath	RUSHFIELD	T6	3740
CO095-049002-	535761	559296	Souterrain	RUSHFIELD	T6	3740
CO083-048----	537312	566331	Designed landscape feature	KILBARRY (Muskerry West By., Ballinadee Par.)	T1	3753
CO082-035001-	532339	567068	Ringfort - rath	TEERELTON	T2	3766
CO082-035002-	532339	567068	Souterrain	TEERELTON	T2	3766
CO095-041----	533867	558644	Ringfort - rath	GARLAND	T6	3774
CO082-075001-	530174	564322	Ringfort - rath	CARRIGBOY (Muskerry West By.)	T4	3781
CO082-075002-	530174	564322	Souterrain	CARRIGBOY (Muskerry West By.)	T4	3781
CO095-043----	534487	558711	Ringfort - rath	SHANACLOGH (Carbery East (W.D) By.)	T6	3787
CO083-139----	537326	566414	Fulacht fia	KILBARRY (Muskerry West By., Ballinadee Par.)	T1	3818
CO095-048----	535713	559162	Enclosure	BELROSE UPPER	T6	3827
CO095-033----	538056	562388	Ringfort - rath	BENGOUR EAST	T1	3862



SMR	ITM E	ITM N	Monument	Townland	Turbine No.	Distance (m)
CO094-059----	530692	559908	Ringfort - rath	LISSICORRANE	T6	3912
CO083-120----	538359	563138	Souterrain	KNOCKNANEIRK	T1	3939
CO082-031----	533104	567552	Ringfort - rath	MOUNTMUSIC	T1	3941
CO082-024----	531602	566824	Standing stone	MONEYCUSKER	T2	3951
CO083-091001-	538338	562959	Bridge	KNOCKNANEIRK	T1	3956
CO083-091002-	538366	562989	Mill - corn	KNOCKNANEIRK	T1	3976
CO095-042----	534350	558487	Ringfort - rath	SHANACLOGH (Carbery East (W.D) By.)	T6	3981
CO095-022----	537145	560383	Standing stone	BENGOUR WEST	T6	4003
CO095-023----	537089	560270	Ritual site - holy/saint's stone	BENGOUR WEST	T6	4014
CO095-052----	536736	559776	Kiln - lime	LISSAROURKE	T6	4025
CO094-099----	531509	559016	Ringfort - rath	BALLYVELONE WEST	T6	4041
CO095-034----	538270	562364	Ringfort - rath	BENGOUR EAST	T1	4069
CO095-129----	537663	561199	Souterrain	BENGOUR WEST	T3	4069
CO094-017002-	529987	560710	Fulacht fia	MALLOW (Carbery East (W.D) By.)	T6	4081
CO094-017001-	529968	560698	Fulacht fia	MALLOW (Carbery East (W.D) By.)	T6	4104
CO083-138----	536285	567567	Earthwork	TEEREEVEN	T1	4119
CO083-143----	538573	563317	Country house	CURRACLOGH	T1	4123
CO083-121----	538521	562997	Mill - fulling	KNOCKNANEIRK	T1	4126
CO095-032002-	538121	561846	Standing stone	BENGOUR EAST	T1	4156
CO094-014----	529522	562417	Ringfort - rath	CLASHBREDANE	T5	4165
CO095-127----	538270	562105	Kiln - lime	BENGOUR EAST	T1	4171



SMR	ITM E	ITM N	Monument	Townland	Turbine No.	Distance (m)
CO082-048----	530254	565527	Ringfort - rath	DESHURE	T2	4184
CO082-023----	531468	567016	Ringfort - rath	MONEYCUSKER	T2	4185
CO095-032001-	538151	561830	Ringfort - rath	BENGOUR EAST	T1	4190
CO095-032003-	538151	561830	Souterrain	BENGOUR EAST	T1	4190
CO082-030----	532482	567595	Standing stone	MOUNTMUSIC	T2	4190
CO083-004----	534673	568061	Barrow - ring-barrow	TOOMS EAST	T1	4204
CO095-035----	538433	562397	Ringfort - rath	BENGOUR EAST	T1	4209
CO095-047----	535994	558862	Standing stone	BELROSE UPPER	T6	4231
CO094-100----	531815	558621	Ringfort - rath	BALLYVELONE WEST	T6	4234
CO083-094----	538795	564123	Ringfort - rath	CURRACLOGH	T1	4316
CO082-022----	531120	566915	Standing stone	MONEYCUSKER	T2	4330
CO083-123----	537668	566813	Country house	KILBARRY (Muskerry West By., Ballinadee Par.)	T1	4340
CO083-093001-	538824	564013	Fulacht fia	CURRACLOGH	T1	4340
CO082-090----	531516	567255	Burial ground	MONEYCUSKER	T2	4350
CO083-093002-	538835	563978	Fulacht fia	CURRACLOGH	T1	4350
CO083-052----	538633	565183	Ringfort - rath	COOLDUFF	T1	4352
CO083-093003-	538842	563987	Fulacht fia	CURRACLOGH	T1	4357
CO082-073----	529321	563435	Redundant record	CARRIGBOY (Muskerry West By.)	T5	4395
CO082-029----	532542	567864	Standing stone	MOUNTMUSIC	T2	4421



SMR	ITM E	ITM N	Monument	Townland	Turbine No.	Distance (m)
CO095-076----	534522	558064	Ringfort - rath	CASTLETOWN (Carbery East (W.D.) By.)	T6	4428
CO082-021002-	530877	566844	Ringfort - rath	MONEYCUSKER	T2	4446
CO082-072----	529240	563201	Ringfort - rath	CARRIGBOY (Muskerry West By.)	T5	4447
CO095-054----	536707	559137	Ringfort - rath	LISSAROURKE	T6	4451
CO094-016----	529804	560241	Ringfort - rath	MALLOW (Carbery East (W.D) By.)	T6	4457
CO083-012----	536091	568026	Castle - unclassified	DUNISKY	T1	4463
CO082-021005-	530875	566870	Church	MONEYCUSKER	T2	4466
CO082-021001-	530875	566871	Graveyard	MONEYCUSKER	T2	4466
CO082-021004-	530873	566878	Church	MONEYCUSKER	T2	4473
CO083-092----	538946	563502	Standing stone	CURRACLOGH	T1	4474
CO094-015----	529644	560467	Souterrain	MALLOW (Carbery East (W.D) By.)	T6	4495
CO082-021003-	530844	566883	Ritual site - holy well	MONEYCUSKER	T2	4497
CO095-053----	536988	559348	Boulder-burial	LISSAROURKE	T6	4499
CO083-010----	535657	568212	Burial ground	DUNISKY	T1	4505
CO082-028----	532569	567983	Ringfort - rath	MOUNTMUSIC	T2	4525
CO082-071----	529196	563485	Ringfort - rath	CARRIGBOY (Muskerry West By.)	T5	4526
CO095-024----	538058	560965	Standing stone	BENGOUR WEST	T3	4528
CO083-098----	539016	563946	Fulacht fia	CURRACLOGH	T1	4530
CO082-027----	532277	567882	Standing stone	MOUNTMUSIC	T2	4533
CO094-102----	532913	557947	Ritual site - holy well	BALLYVELONE EAST	T6	4535



SMR	ITM E	ITM N	Monument	Townland	Turbine No.	Distance (m)
CO094-057----	530561	559118	Redundant record	ANAHARLICK	T6	4549
CO082-102----	529135	563635	Megalithic tomb - wedge tomb	CARRIGBOY (Muskerry West By.)	T5	4611
CO095-045----	535544	558184	Ringfort - rath	BELROSE UPPER	T6	4616
CO095-098----	538316	561242	Country house	BENGOUR EAST	T3	4618
CO082-110----	531846	567774	Souterrain	BALLINA	T2	4620
CO095-055----	536288	558553	Burial ground	LISSAROURKE	T6	4651
CO082-020----	530862	567161	Redundant record	MONEYCUSKER	T2	4686
CO095-025----	538132	560780	Ritual site - holy/saint's stone	BENGOUR WEST	T3	4690
CO083-095001-	539175	564219	Fulacht fia	CURRACLOGH	T1	4702
CO082-114----	530311	566595	Souterrain	MONEYCUSKER	T2	4705
CO082-074----	529305	564636	Country house	CARRIGBOY (Muskerry West By.)	T4	4705
CO083-013004-	536458	568139	Souterrain	DUNISKY	T1	4710
CO094-012----	529171	561099	Ringfort - rath	SHANACASHEL	T6	4712
CO083-013001-	536433	568161	Graveyard	DUNISKY	T1	4720
CO083-095002-	539195	564197	Fulacht fia	CURRACLOGH	T1	4720
CO083-013002-	536448	568170	Church	DUNISKY	T1	4734
CO083-011----	535975	568360	Inscribed stone	DUNISKY	T1	4739
CO083-013003-	536466	568177	Designed landscape - folly	DUNISKY	T1	4748
CO083-054002-	538839	565763	Church	COOLDUFF	T1	4750
CO094-098001-	531134	558407	Ringfort - rath	BALLYVELONE WEST	T6	4756



SMR	ITM E	ITM N	Monument	Townland	Turbine No.	Distance (m)
CO094-098002-	531134	558407	Souterrain	BALLYVELONE WEST	T6	4756
CO083-054001-	538844	565769	Graveyard	COOLDUFF	T1	4757
CO095-044----	535282	557908	Burial ground	BELROSE UPPER	T6	4777
CO094-101----	532053	557905	Ringfort - rath	BALLYVELONE EAST	T6	4799
CO095-026----	538265	560739	Ringfort - rath	BENGOUR WEST	T3	4824
CO082-046----	528835	562941	Ringfort - rath	CLASHBREDANE	T5	4836
CO083-096002-	539300	564338	Souterrain	CURRACLOGH	T1	4837
CO083-096001-	539304	564326	Ringfort - rath	CURRACLOGH	T1	4840
CO083-101----	539300	563067	Fulacht fia	POULARICK	T1	4879
CO083-099----	539380	563895	Fulacht fia	CURRACLOGH	T1	4894
CO082-070----	528970	564209	Burial ground	CARRIGBOY (Muskerry West By.)	T5	4906
CO083-124----	538000	567300	Bridge	CARRIGDARRERY	T1	4916
CO083-056----	538553	566625	Fulacht fia	COOLDUFF	T1	4917
CO094-056----	529848	559341	Ringfort - rath	ANAHARLICK	T6	4924
CO094-013----	528714	562421	Megalithic tomb - wedge tomb	CLASHBREDANE	T5	4970
CO082-067----	528924	564287	Ritual site - holy well	CARRIGBOY (Muskerry West By.),COOLACLEVANE	T5	4973
CO083-102----	539411	563112	Souterrain	POULARICK	T1	4981
CO082-089----	528734	563574	Kiln - lime	CARRIGBOY (Muskerry West By.)	T5	4996
CO095-057----	536748	558457	Ringfort - rath	LARAVOOLTA	T6	4998

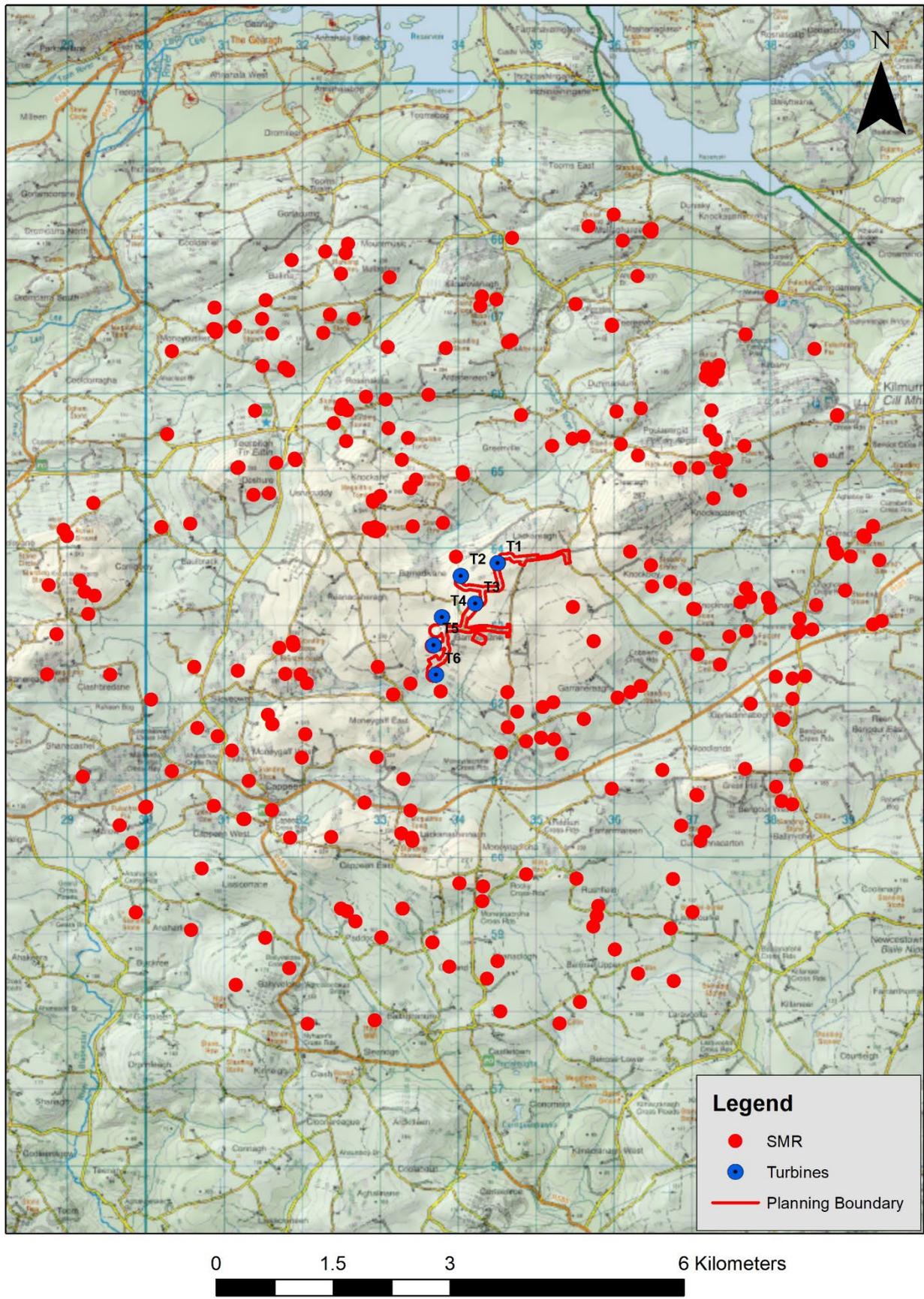


Figure 12-5: SMRs within 5km of the nearest proposed turbine.

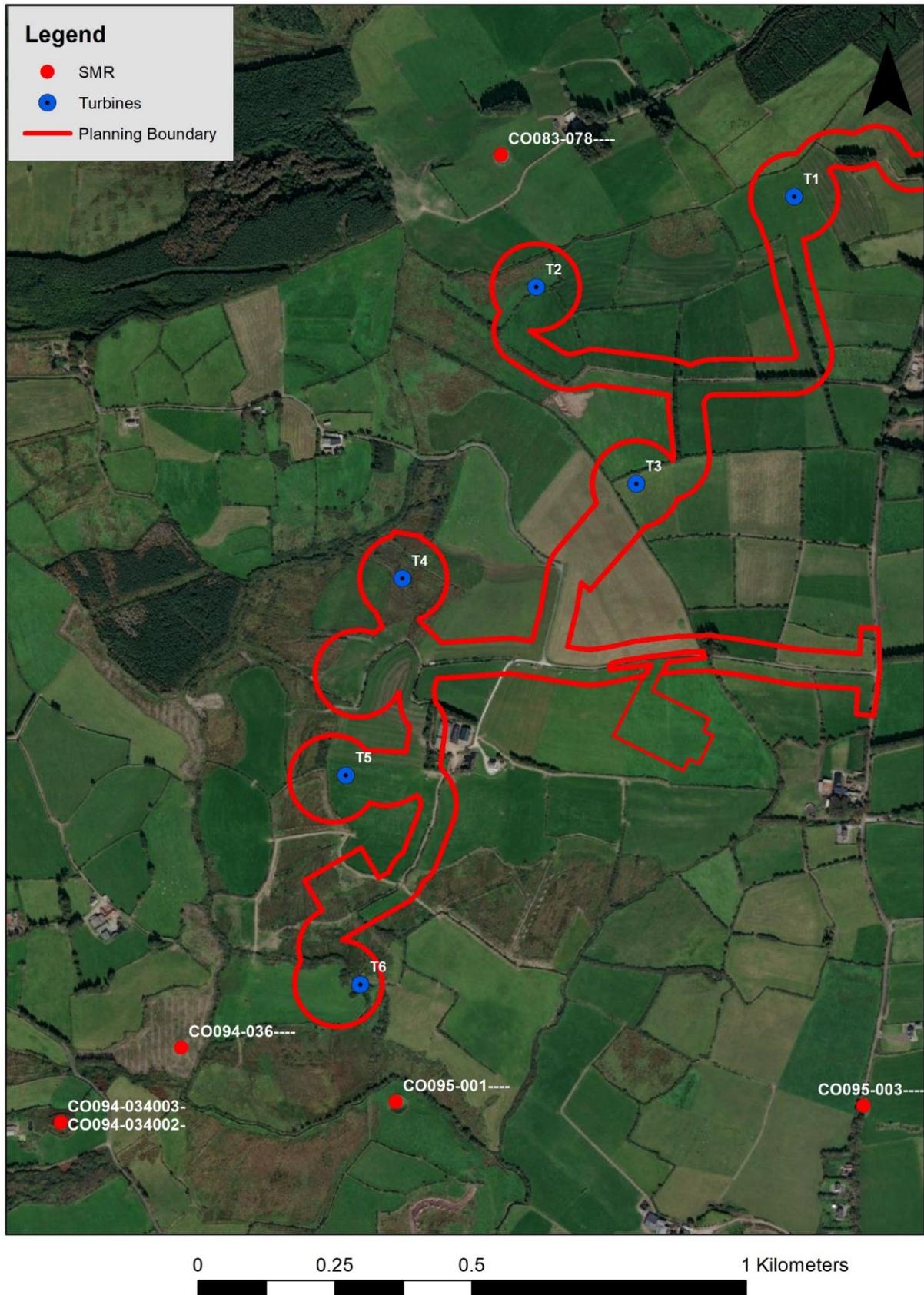


Figure 12-6: SMRs in the vicinity of the Proposed Development.



**CO095-001----**

Class: Ringfort - rath

Townland: MONEYGAFF EAST

Scheduled for inclusion in the next revision of the RMP: Yes

Description: On top of a natural rise, S of Bride River. Circular, heavily overgrown area (34.4m N-S; 33.1m E-W) enclosed by low earthen bank (max. H 1.4m).

The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 1: West Cork' (Dublin: Stationery Office, 1992). In certain instances, the entries have been revised and updated in the light of recent research.

Date of upload/revision: 14 January 2009

**CO083-078----**

Class: Ringfort - rath

Townland: LACKAREAGH (Muskerry West By.)

Scheduled for inclusion in the next revision of the RMP: Yes

Description: In pasture, on NNW-facing slope. Circular area (28.7m E-W; 28.5m N-S) enclosed by earthen bank (H 2m); shallow external fosse to E. Bank stone-faced in parts externally. Gap (Wth 1.5m) in bank to N; approach defined by low ridge on either side; cairn of field clearance stones dumped outside entrance beyond ridges. Stone-faced field boundary (H 1.1m) to SW and NW, 8m outside bank and concentric with it. Interior cut into hillside on SSE side and raised on NNW side to compensate for hillslope; crossed by remains of cultivation ridges on N-S axis.

The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 3: Mid Cork' (Dublin: Stationery Office, 1997). In certain instances, the entries have been revised and updated in the light of recent research.

Date of upload/revision: 14 January 2009

This ringfort was visited in 2014 and comprised an upstanding monument in fair condition (Plate 12.3).



Plate 12-3: Ringfort CO083-078---- looking SW.

**CO094-036----**

Class: Enclosure

Townland: REANACAHHERAGH

Scheduled for inclusion in the next revision of the RMP: Yes

Description: In bogland, in wide shallow valley. Shown on 1842 OS 6-inch map as hachured circular area (diam. c. 30m); as circular field on 1904 OS 6-inch map. Roughly circular area (37m N-S; 46m E-W) formed by natural rise and enclosed by low earthen bank (H 1m). Interior slopes noticeably from W to E.

The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 3: Mid Cork' (Dublin: Stationery Office, 1997). In certain instances the entries have been revised and updated in the light of recent research.

Date of upload/revision: 14 January 2009

**12.3.1.3.1 The Prehistoric Period**

The prehistoric period is well represented within 5km of the nearest proposed turbine with 92 of the 292 monuments dating to this time period. Of these the majority are fulachta fia (36), followed by standing stones of which there are 29. Seven (7) megalithic tombs are present as well as two (2) stone circles. Other prehistoric monuments such as barrows, an anomalous stone group, boulder burials and a stone pair occur in small numbers. Three hut sites are also located within 5km of the nearest proposed turbine, the nearest of which is situated just over 600m from T6.



Fulachta fia are one of the most numerous monuments in the country with thousands in Munster alone. They usually consist of crescent-shaped mounds of burnt soil and stones and represent ancient cooking places. Excavated examples show evidence for a trough which when water-filled is thought to have been used for cooking. The water was boiled by heating stones over a hearth and placing them in the water and in turn cooking the meat. The heated fire-cracked stones were then discarded around the trough, giving the monuments their characteristic horse-shoe shape. These monuments are frequently sited adjacent to or near a water source such as a stream or river or alternatively in low-lying marshy ground. Fulachta fia generally date to the Bronze Age (2400-500 BC). The nearest fulacht fia is located over 1.2km from the nearest proposed turbine, T2.

Seven megalithic tombs (wedge tombs) are located within 5km of the nearest proposed turbine. The nearest examples CO082-084001- and CO082-084002- are located approximately 1.5km to the north-west of the nearest turbine (T2), adjacent to a tract of forestry. Wedge tombs are long burial chambers, sometimes with an antechamber or small closed end-chamber. They are generally broader and higher at the front, which invariably faces in a westerly direction. They are roofed by slabs laid directly on the sidewalls which often have one or more rows of outer walling. Evidence from the small number of excavated examples suggests that they were being built between 2,500 and 2,000 BC representing the last phase of megalithic tomb building.

Twenty-nine standing stones are located within 5km of the nearest proposed turbine. Standing stones are a common feature of the prehistoric Irish landscape consisting of single, upright stones. They are known by various names such as gallán, dallán and long stone. All standing stones are not necessarily of the same date or have the same function. Excavations of standing stones have shown that some mark prehistoric burials and some may have had a ritual or commemorative function. They have a similar axis to standing stone pairs and may therefore date to the Bronze Age (2400-500BC). The nearest standing stone is situated c. 1.4km to the north-west of T2.

Three hut sites are located within 5km of the nearest proposed turbine, with the nearest c. 600m to the south-west of T6. The primary function and date of hut sites is slightly ambiguous. Examples of hut sites are known throughout the country, particularly in upland regions, and are frequently associated with the practice of transhumance or booleying. Transhumance refers to the practice of the seasonal movement of people and their livestock typically to higher pastures in the summer and lower valleys in the winter. In Ireland this practice is known as booleying and is believed to date to the early medieval period, although it continued well into the nineteenth and early twentieth century.

A number of hut sites were recorded on the lower southern slopes of the western Pap Mountain in 2001 (Coyné and Connolly 2002, 12-13). Two huts were subsequently investigated using limited test trenching in an attempt to glean more information regarding their date and function. A stone axe head and a perforated stone disk were recovered from a thin habitation or floor layer within Hut Site A indicating a prehistoric date for this structure. It is suggested that the other huts recorded on the slope of the mountain may be contemporary with Hut Site A and that the builders of the mountaintop cairn on the Paps may have inhabited the hut sites on the lower slopes of the mountains (*ibid.*, 14). A similar inference is drawn from the cairn and numerous hut sites at Turlough Hill in the Burren, Co. Clare (Coyné and O'Mahony, 2008).

Other uses for hillside huts has been noted at Mount Brandon where it is suggested that they functioned as temporary habitations for seaborne pilgrims. It is also thought that they were used as habitation sites such as booleying huts during the year when pilgrimage was not taking place. An extensive series of pre-bog walls was also noted on the southern slopes of Mount Brandon. It is noted in that instance that although pre-dating the bog, the peat may still have been growing well into the medieval period. In this regard such walls could be early medieval in date rather than prehistoric (Archaeology Ireland Heritage Guide No. 29). Furthermore, the potentially lengthy chronology of hut sites means that while some may be prehistoric others may date to the early or later medieval period or indeed to more modern times (*ibid.*).



#### 12.3.1.3.2 The Early Medieval Period

One hundred and forty (140) of the monuments within 5km of the nearest proposed turbine are represented by ringforts, enclosures and souterrains demonstrating the widespread occupation of the surrounding landscape in the early medieval period. The nearest of these monuments have been discussed above.

Ringforts and enclosures are the most numerous archaeological monuments in the Irish landscape. They consist of a circular or roughly circular area enclosed by an earthen bank formed by material thrown up from the digging of a concentric ditch on its outside. Ringforts are usually enclosed by a single bank (univallate) while bivallate or trivallate ringforts, i.e. those enclosed by double or triple rings of banks, are less common. The number of banks and ditches enclosing these monuments are considered to reflect the status of the site, rather than the strengthening of its defences. Sites enclosed by stone-built banks are known as cashels. Archaeological excavation has shown that the majority of ringforts functioned as enclosed farmsteads, built during the Early Christian period (5th – 9th century A.D.). Excavation within the interior of the monuments has traced the remains of circular and rectangular dwelling houses as well as smaller huts probably used to stall animals. The enclosing earthworks would also have protected domestic livestock from natural predators such as wolves and foxes. Souterrains are often found in association with ringforts and may be located within the fort or may originate inside the latter and extend outside the limits of the enclosing elements. They consist of man-made structures comprising a chamber or series of chambers linked by creepways. Two main methods of construction were employed to build souterrains. The first involved tunnelling a passage into the underlying clay or rock from a 'construction shaft' which was later backfilled. The second method involved the excavation of an open trench which was lined and capped with stone and then backfilled to conceal its presence. Although large numbers of these monuments have been identified in Ireland their distribution pattern is somewhat uneven (Clinton 2001, 33).

#### 12.3.1.3.3 Sites with religious or ritual association

Approximately twenty-five (25) monuments with religious or ritual association are located within 5km of the nearest proposed turbine and largely comprise burial grounds, church and graveyards, holy wells and a bullaun stone. All of these monuments are located in excess of 1.5km from the nearest proposed turbine, with the majority over 3km from same.

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. Holy wells may have their origins in prehistory but are associated with devotions from the medieval period (5th-16th centuries AD) onwards. Four holy wells are located within 5km of the nearest proposed turbine, all of which are in excess of 3km from same.

Bullaun stones may also have religious associations. 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). One bullaun stone is located within 5km of any proposed turbine.

#### 12.3.1.4 Recorded Monuments in the Vicinity of the Proposed Substation

No recorded monuments are located on or in the immediate vicinity of the Proposed Substation. The nearest recorded monument to the Proposed Substation site is situated c. 700m to the south-east and comprises a ringfort in Garranereagh townland CO095-003---- (Figure 12.6).



#### 12.3.1.5 Newly Recorded Monuments

No new sites or monuments of archaeological significance were detected during field inspection of the Proposed Development site. The land is largely in use for grazing and intensively farmed with some reclamation. Some marshy areas are located within the Proposed Development boundary. Low-lying marshy areas often produce site types such as fulachta fia. The latter are low-lying in nature and may not have any above ground trace. No such monuments were apparent during field inspection, however.

#### 12.3.1.6 Excavations Database

The database of excavations carried out in Ireland was consulted for investigations which may have taken place on or in the immediate vicinity of the Proposed Development site. A search of the database did not reveal any such excavations for the Proposed Development site itself. Two excavations were carried out in the surrounding townlands, however, neither of which produced archaeologically positive results. Summaries of the excavations as provided on [www.excavations.ie](http://www.excavations.ie) are as follows:

Cork  
2003:335  
Reanacaheragh  
No archaeological significance  
13296 06244  
03E0154

The removal of topsoil and the excavation of foundation trenches for a dwelling-house at Reanacaheragh, Terelton, Co. Cork, were monitored. The house site was located beside SMR 94:35, a possible ringfort. No archaeological finds or features were uncovered during groundworks.  
Annette Quinn, Archaeological Services Unit, University College Cork.

Garranereagh, Co. Cork  
12E326  
No archaeological significance  
535405, 563228 (ITM)  
Archaeological monitoring of topsoil removal associated with the construction of a 4-turbine wind farm commenced in November 2012. Topsoil was stripped from the area of the site compound and substation site. No archaeological finds, features or deposits were uncovered. The remainder of the topsoil removal will be archaeologically monitored in 2013.  
Annette Quinn, Tobar Archaeological Services, Saleen, Midleton, Cork.

#### 12.3.1.7 Topographical Files of the National Museum of Ireland

The dataset for the finds database of the National Museum of Ireland was consulted as part of the desktop assessment for this chapter on [www.heritagemaps.ie](http://www.heritagemaps.ie). No such find spots are located within or adjacent to the Proposed Development site. The nearest find spot is situated over 6km to the north and comprises a bronze sword.

National Museum Point: Bronze Sword (Leaf-shaped)

Name 1934:11,121

Object Type Bronze Sword (Leaf-shaped)



## 12.3.2 Architectural and Cultural Heritage

### 12.3.2.1 Protected Structures

#### 12.3.2.1.1 Proposed Wind Farm

No protected structures are located within the Proposed Development boundary or adjacent to same. Five structures are located within 5km of the nearest proposed turbine and are detailed in Table 12.4 and shown on Figure 12.7. Given the distance of the structures from the Proposed Wind Farm none will be directly impacted nor will there be any visual effects to their immediate setting.

**Table 12-4: RPS structures within 5km of the nearest proposed turbine.**

RPS ID	STRUCTURE	RMP REF	ITM E	ITM N	Turbine	Distance (m)
544	De La Cour Villa		536075	567869	T1	4311
547	Ardaneneen House	CO083-150	534671	566737	T1	2882
550	St. Andrews Church of Ireland Church	CO083-05402	538821	565766	T1	4735
488	Elmglyn Country House (Abandoned)	CO083-040	536324	565852	T1	2709
552	Hornhill Bridge	CO083-09101	538323	562966	T1	3939

#### 12.3.2.1.2 Proposed Substation

No Protected Structures are located on or in the immediate vicinity of the Proposed Substation site. The nearest Protected Structure comprises Elmglyn Country House (Abandoned) (RPS Ref. 488) which is c. 3.5km to the north-east (Figure 12.7).

### 12.3.2.2 NIAH and Historic Gardens

#### 12.3.2.2.1 Proposed Wind Farm

No NIAH structures or historic gardens are located on or in the immediate vicinity of the Proposed Wind Farm site. Fourteen NIAH structures are located within 5km of the nearest proposed turbine with the nearest comprising Clearagh House (Reg. 20908314) over 2.4km from T1. The nearest historic garden is situated c. 1.5km to the north of T1 and comprises Greenville. The NIAH structures are listed in Table 12.5 and shown on Figure 12.8.



**Table 12-5: NIAH structures within 5km of the nearest proposed turbine.**

Reg. No.	Date	Name	Townland	Rating	Type	ITM E	ITM N	T. No.	Distance (m)
20908301	1780 - 1820	De Lacour House	DUNISKY	Regional	country house	536073	567869	T1	4311
20908302	1750 - 1790	Warren's Bridge	CARRIGDARRERY, DUNISKY	Regional	bridge	538008	567344	T1	4953
20908309	1840 - 1880	St Andrew's Church of Ireland Church	COOLDUFF	Regional	church/chapel	538822	565766	T1	4736
20908310	1900 - 1920		COOLDUFF	Regional	house	538486	565674	T1	4391
20908312	1820 - 1860	Coolduff House	COOLDUFF	Regional	house	539195	565417	T1	4959
20908313	1780 - 1820		CLEARAGH	Regional	house	536066	565394	T1	2201
20908314	1800 - 1840	Clearagh House	CLEARAGH	Regional	house	536519	565236	T1	2454
20908315	1920 - 1940		CURRACLOGH	Regional	post box	538409	563447	T1	3944
20908317	1850 - 1890	Hornhill Mill	KNOCKNANEIRK	Regional	mill (water)	538367	562986	T1	3978
20908336	1835 - 1845	Beamish's Tower	DUNISKY	Regional	folly	536522	568169	T1	4765
20908209	1880 - 1920		TEERELTON	Regional	house	531775	565409	T2	2821
20908210	1860 - 1900		TEERELTON	Regional	house	531772	565390	T2	2812
20908205	1860 - 1880	Carrigboy Castle	CARRIGBOY	Regional	house	529316	564630	T4	4693
20909403	1950 - 1970		BALLYVELONE WEST	Regional	monument	531977	558828	T6	3977



#### 12.3.2.2.2 Proposed Substation

No NIAH structures or historic gardens are located on or in the immediate vicinity of the Proposed Substation site. The nearest NIAH structure is situated c. 3km to the north-east and comprises a house in Clearagh townland (Reg. 20908313). The nearest historic garden is also Greenville which is situated c. 2.4km to the north of the Proposed Substation site (Figure 12.8).

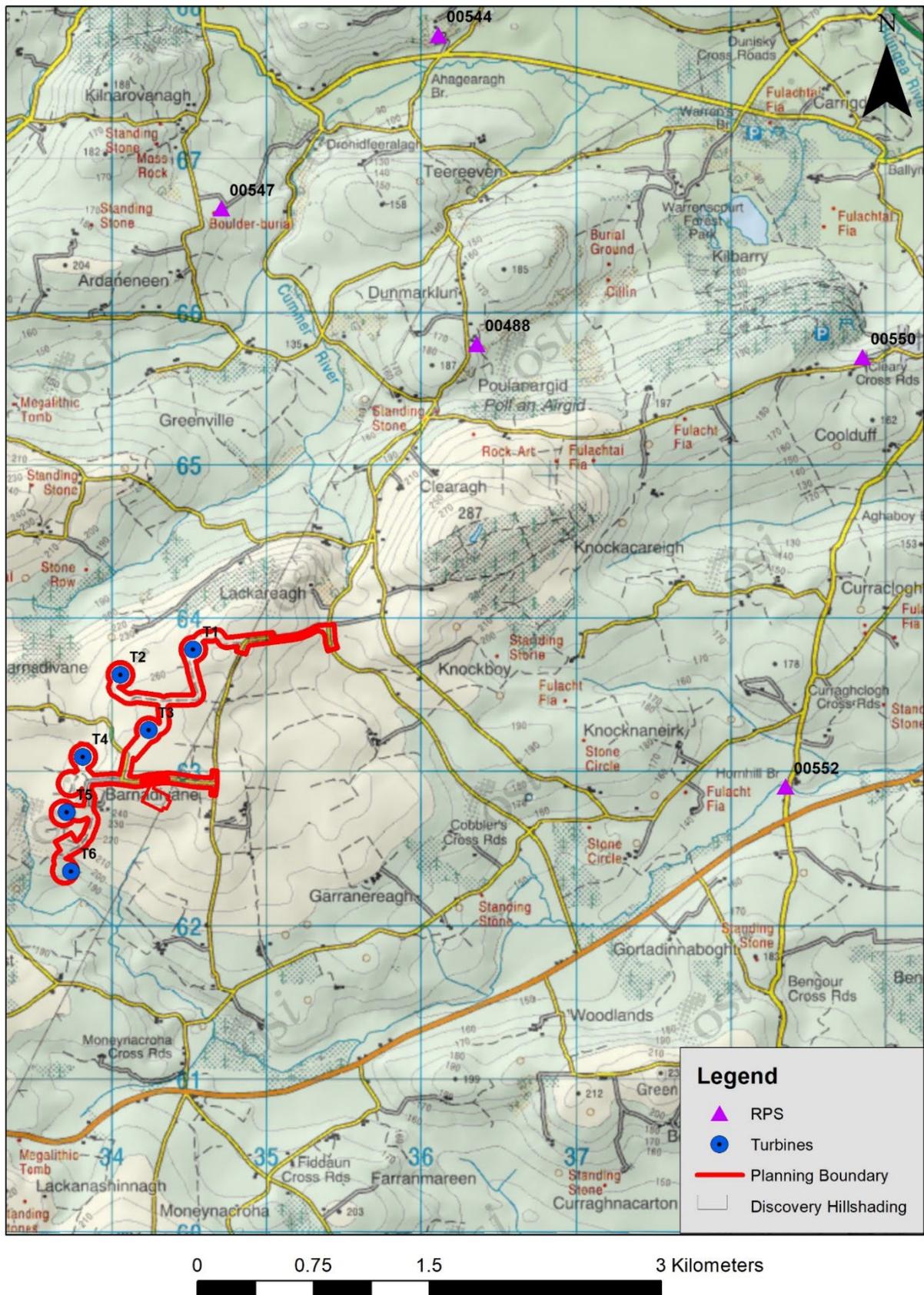


Figure 12-7: Protected Structures within 5km of the nearest proposed turbine and in the vicinity of the Proposed Substation.

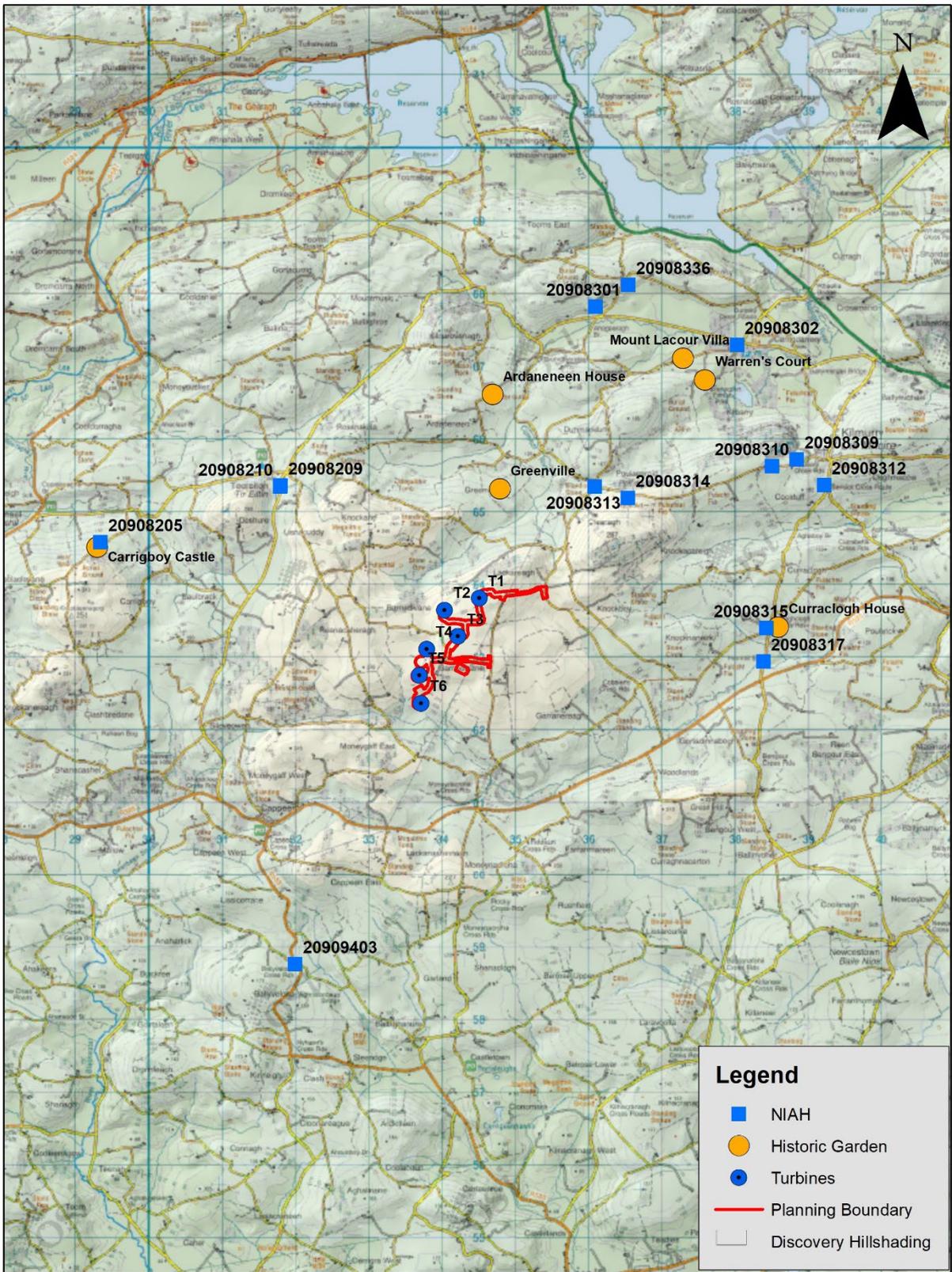


Figure 12-8: NIAH structures and historic gardens within 5km of the nearest proposed turbine and in the vicinity of the Proposed Substation.



### 12.3.2.3 *Documentary and Cartographic Evidence*

A number of documentary and cartographic sources were utilised in order to ascertain the potential for the presence of architectural /cultural heritage features on or within the area of the Proposed Development. Field inspection of the Proposed Development site also assisted in establishing the potential for the presence of architectural/cultural heritage. Architectural and cultural heritage includes items such as buildings, farmhouses, gates, bridges, piers, and stone field boundaries.

#### 12.3.2.3.1 Items of potential architectural heritage noted on the historic OS mapping

##### 12.3.2.3.1.1 Proposed Wind Farm

The 1st and 2nd edition maps were consulted as part of the assessment of the Proposed Wind Farm. The area within the Proposed Development site appears to have comprised agricultural land divided into a series of fields with associated small farm settlements. The only surviving remnants of such a settlement is the farmyard at Barnadivane townland (to the east of T5). The latter will not be impacted on by the Proposed Development.

In general, the majority of field boundaries within the Proposed Development area are represented by earth and stone walls, all 19th century in date. The stone walls add to the character of the area and represent local cultural heritage and craftsmanship. Where possible these stone wall boundaries should be maintained as part of the Proposed Development.

A limekiln is indicated on the 1st edition OS map to the south-west of T6 (at ITM 533653, 562376) (Figure 12.10). This area was inspected as part of the walk-over survey, and no surface trace of a limekiln was apparent. A number of natural rocky outcrops are located in this area however, some of which have stones built/stored against them.

Laharan School is named on the 2nd edition OS map and is just inside the Proposed Development boundary. The structure, possibly rebuilt since the 19th century, is now derelict and not in use. This feature will not be impacted by the Proposed Development as no infrastructure is proposed for this area.

A townland boundary extends through the Proposed Development site and will be traversed by the proposed internal access road which extends past T3 (Figure 12.9). The townland boundaries appear to comprise earth and stone boundaries which currently function as field divisions.

##### 12.3.2.3.1.2 Proposed Substation

No items of cultural heritage interest are noted on the 1st or 2nd edition OS maps within the footprint of the Proposed Substation site (Figure 12.9).

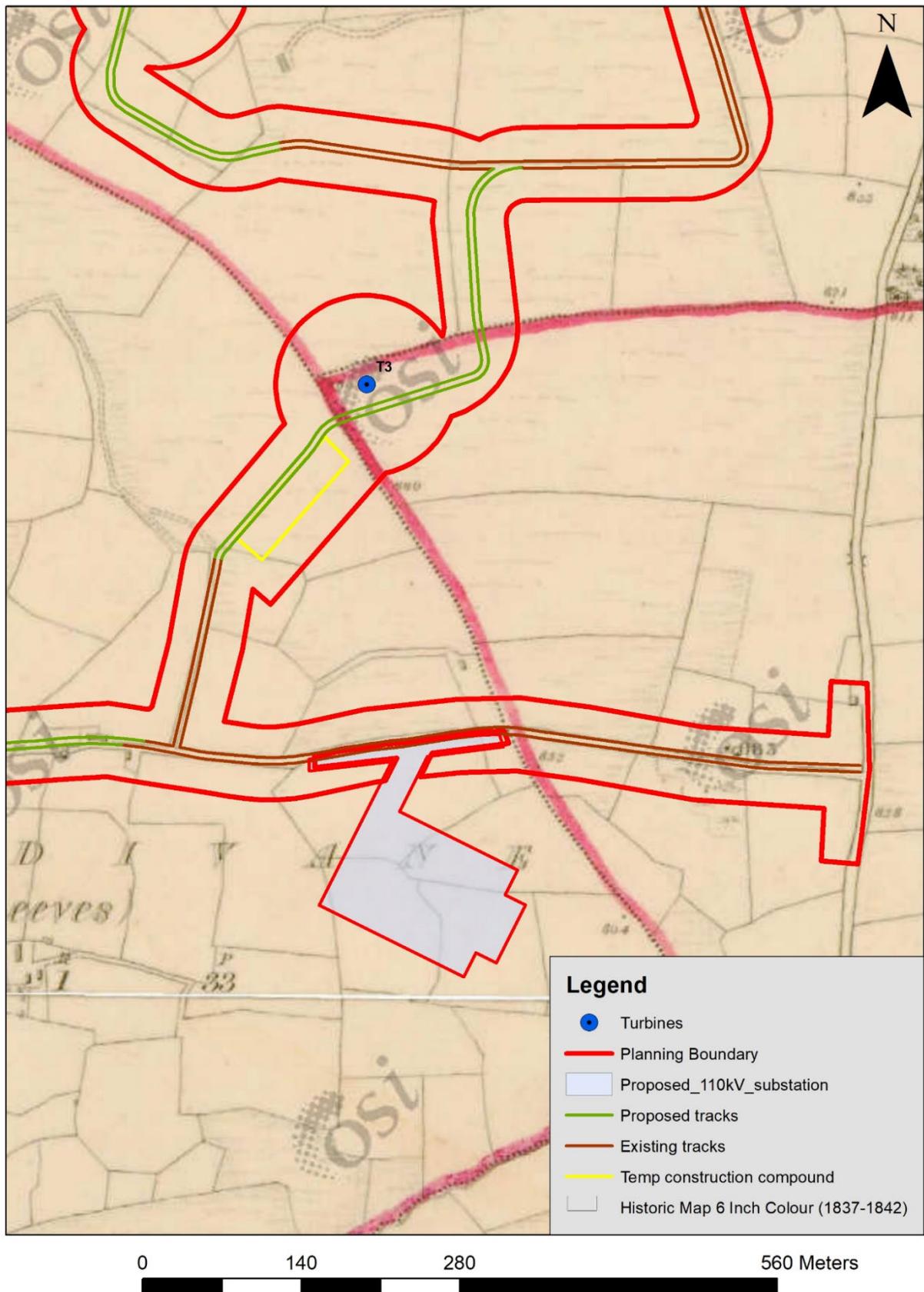


Figure 12-9: Proposed Development on 1st edition OS background, showing townland boundary in vicinity of T3.

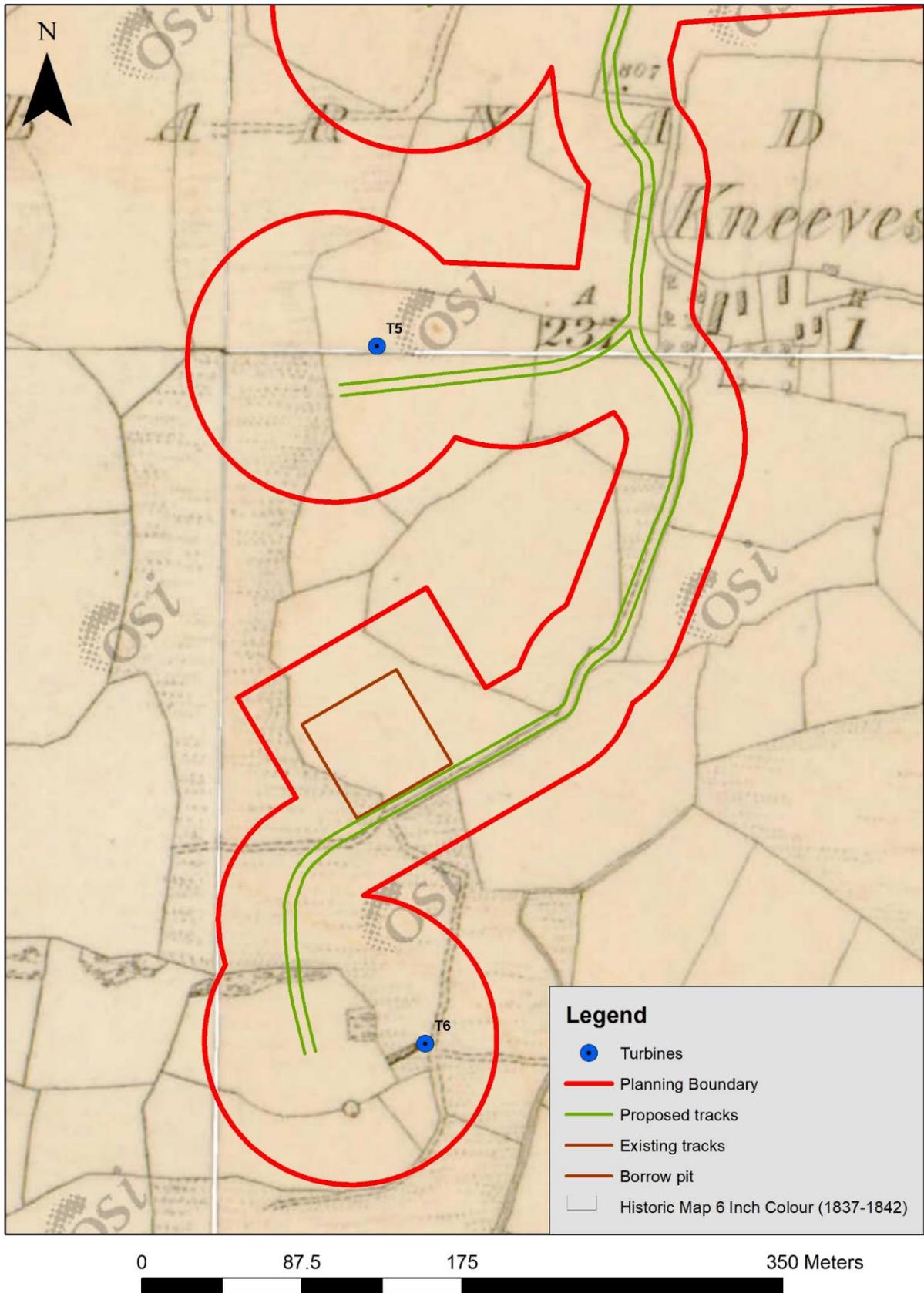


Figure 12-10: Southern end of Proposed Development site on 1st ed OS background showing lime kiln adjacent to T6.



#### 12.3.2.4 Place names

A townland name may indicate something about the past in relation to archaeology, history, land–use, or topography. Many place names had become anglicised by the time the Ordnance Survey had begun in the 1830s however. A number of sources were consulted to provide information on the possible origins of townland names in the Proposed Development site. The primary source is the Placenames Database of Ireland ([www.logainm.ie](http://www.logainm.ie)), although several placename publications are also useful sources of information.

No information which may yield archaeological or historical information was noted from any translation within the Proposed Development site.

- Bharr na dTaobhán (Barnadivane) - Recorded since 1841, possibly translates as 'gap of Duane'
- Mhuine Dhaimh Thoir (Moneygaff East)
- Leacan Riabhaí (Lackareagh) – possibly meaning grey hillside
- An Gharráin Riabhaigh (Garranereagh) - grey grove

## 12.4 Potential Impacts

Archaeological heritage is a non-renewable resource. The overall objective of this assessment of impacts of the Proposed Development is to ensure that where a potential impact has been identified that it can be mitigated to ensure that the archaeological, architectural and cultural heritage will be available for future generations. The potential impacts on the archaeological, architectural and cultural heritage are assessed here.

Impact will be discussed according to the types of impacts that may occur during and after the Proposed Development has been completed. The impacts on known recorded monuments and potential sub-surface archaeology are addressed separately.

### 12.4.1 Do Nothing Impact

If the Proposed Development were not to proceed the potential impacts on archaeology and cultural heritage assets would not apply with no need for mitigation.

### 12.4.2 Construction Phase Potential Impacts (Direct Impacts)

Direct Impact refers to a 'physical impact' on a monument or site. The construction phase of the Proposed Development consists largely of earthmoving activities such as peat and topsoil removal. The potential impacts on the known and potential archaeological, architectural and cultural heritage of the area are outlined below.

#### 12.4.2.1 *National Monuments in State Care / Preservation Orders*

##### 12.4.2.1.1 Proposed Development

No National Monuments or those subject to a Preservation Order are located on or within the immediate vicinity of the Proposed Development site. No direct impacts to this resource as a result of the proposed turbines or associated infrastructure are therefore identified.



#### *12.4.2.2 Recorded Monuments*

##### *12.4.2.2.1 Proposed Development*

No recorded monuments are located within the Proposed Development boundary or in the immediate vicinity of any proposed infrastructure e.g. proposed turbines, hardstands, access tracks etc. No direct impacts to this resource are therefore identified.

#### *12.4.2.3 Newly Recorded Archaeology*

##### *12.4.2.3.1 Proposed Development*

No newly recorded archaeological sites or features were noted within the Proposed Development boundary or in the immediate vicinity of any proposed infrastructure e.g. proposed turbines, hardstands, access tracks etc. No direct impacts to this resource are therefore identified.

#### *12.4.2.4 Potential Sub-surface Archaeology*

##### *12.4.2.4.1 Proposed Development*

The potential exists for sub-surface archaeological finds, features or deposits to exist within the Proposed Development site. Ground disturbance associated with the Proposed Development has the potential to uncover such features and associated artefacts, particularly in areas now covered by peat or topsoil. The construction of the Proposed Development, i.e., topsoil removal, could potentially directly impact on unknown sub-surface archaeological deposits or features which have no above ground expression should they exist within the footprint of the proposed infrastructure.

#### ***Pre-Mitigation Impact***

Should new sites be present within the Proposed Development site (currently not visible on the surface) the impact is likely to be significant negative and permanent (i.e. the excavation by machinery would permanently remove the sites resulting in a significant negative impact).

#### ***Proposed Mitigation Measures***

- Archaeological monitoring of any geotechnical / engineering trial pits or investigations and a report detailing the results of same.
- Pre-construction archaeological testing of turbine bases and hardstands and proposed access tracks will be carried out prior to construction. A report setting out the results of the testing will be submitted to the relevant authorities.
- Archaeological monitoring of ground works during construction. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project. This is in accordance with the appropriate guidelines.



## ***Residual Impact***

The sites, if detected, during the pre-construction testing or monitoring will be preserved by record (archaeologically excavated) or preserved in-situ (avoidance) and therefore a full record made of same. In this regard, the potential impact after the mitigation measures is likely to be slight.

## ***Significance of Impacts***

Slight

### ***12.4.2.5 Protected Structures/NIAH***

#### ***12.4.2.5.1 Proposed Development***

No Protected Structures or those included in the NIAH are located on or in the immediate vicinity of the Proposed Development. No potential direct impacts to this resource as a result of the Proposed Development are therefore identified.

### ***12.4.2.6 Items of Cultural Heritage Merit***

#### ***12.4.2.6.1 Proposed Development***

The proposed access track adjacent to T3 crosses a townland boundary. A direct impact to this feature is therefore identified.

## ***Pre-Mitigation Impact***

In the absence of appropriate mitigation measures the impact to the townland boundary is likely to be significant, negative and permanent (i.e. the excavation by machinery would permanently remove portions of the boundary resulting in a significant negative impact).

### ***Proposed Mitigation Measures***

- Archaeological monitoring of the removal of the townland boundary. A drawn and descriptive record of the portions of the boundary to be removed should be made and included in the monitoring report.

### ***12.4.3 Operational Phase Potential Impacts (Indirect)***

Indirect impacts are where a feature or site of archaeological or architectural heritage merit or their setting is located in close proximity to a Proposed Development. Indirect impacts here are mainly concerned with impacts on setting. Impacts on settings of sites may arise when a development is proposed immediately adjacent to a recorded monument or cluster of monuments. While the Proposed Development may not physically impact on a site, it may alter the setting of a monument or group of monuments. There is no standardised industry-wide approach for assessing the degree of impact to the setting of a monument.



Potential impact to the visual amenity of a site or area and the significance of same is dependent on a number of factors regarding the sensitivity of the location or ‘receptor’ and the scale or magnitude of the Proposed Development. Similarly, the extent of the development and its duration and reversibility should all be considered (Guidelines for Landscape and Visual Impact Assessment 3rd edition – Consultation Draft).

#### *12.4.3.1 National Monuments in State Care or those Subject to a Preservation Order*

##### **12.4.3.1.1 Proposed Wind Farm**

Viewshed analysis from National Monument no. 233 Cahervagliar ringfort was carried out and demonstrated that no proposed turbines will theoretically be visible from this monument. This accords with the ZTV which also indicates no theoretical visibility of the proposed turbines from the area of the National Monument. No potential impacts to the wider setting of this monument are therefore identified.

Viewshed analysis from National Monument no. 618 Kinneigh Round Tower was carried out and demonstrated that no proposed turbines will theoretically be visible in full from this monument. Theoretical visibility of the blade tips (131m) of all six turbines was demonstrated, however. This accords with the ZTV which also demonstrates theoretical visibility of the proposed turbines from this location. The Round Tower is located over 5km to the south of the nearest proposed turbine (T6) and impacts to its immediate setting as a result of the proposed turbines will not occur. A change to the wider setting of the monument is acknowledged, however, and is considered to be Not Significant.

##### **12.4.3.1.2 Proposed Substation**

No National Monuments are located on or in the immediate vicinity of the Proposed Substation. The nearest National Monument to same is 3.7km to the south-west and comprises Cahervagliar ringfort (Nat Mon No. 233). The viewshed analysis carried out from this monument demonstrates no theoretical visibility of the area of the Proposed Substation therefore no potential impacts to the wider setting of the monument as a result of the Proposed Substation are identified.

#### *12.4.3.2 Recorded Monuments*

##### **12.4.3.2.1 Proposed Development**

No recorded monuments are located within the Proposed Development boundary. Two hundred and ninety-two (292) recorded monuments are located within 5km of the nearest proposed turbine. The ZTV demonstrates theoretical visibility of the proposed turbines from many locations in the surrounding 5km. The immediate setting of these monuments will not be impacted by the proposed turbines given the distance between same. A change to the wider setting of many of these monuments is acknowledged, however, and is considered to be Not Significant.

#### ***Pre-Mitigation Impact***

Potential visual effects on wider setting of recorded monuments within 5km.

#### ***Proposed Mitigation Measures***

No mitigation is proposed.



### ***Residual Impacts***

Not Significant

### ***Significance of Effects***

Not Significant

#### **12.4.3.2.2 Nearest Recorded Monuments to Proposed Turbines**

The nearest monuments CO095-001---- and CO083-078---- ringforts are situated 225m and 251m from turbine 6 and 2, respectively. The next nearest monument Enclosure CO094-036----, is situated c. 347m to the south-west of T6. The ZTV demonstrates theoretical visibility of 5-6 turbines from all three locations. In this regard a change to the wider setting of the monuments as a result of the proposed turbines is acknowledged and is considered to be Slight.

### ***Pre-Mitigation Impact***

Potential visual effects on wider setting of adjacent recorded monuments.

### ***Proposed Mitigation Measures***

No mitigation is proposed.

### ***Residual Impacts***

Slight

### ***Significance of Effects***

Slight

#### **12.4.3.3 Protected Structures/NIAH**

##### **12.4.3.3.1 Proposed Development**

### ***Protected Structures***

No Protected Structures are located on or in the immediate vicinity of the Proposed Development. Five structures are located within 5km of the nearest proposed turbine. The ZTV demonstrates that there will be theoretical visibility of 5-6 turbines from three of these structures (RPS Ref. 544, 547 and 552) with no theoretical visibility of the proposed turbines from the other Protected Structures. Given the distance between the Protected Structures and the Proposed Development no visual effects to the immediate setting of any of the Protected Structures will occur. A change to the wider setting of three of the Protected Structures is acknowledged, however, as there is theoretical visibility of the proposed turbines from those locations. The potential visual effect is regarded as Imperceptible.

### ***Pre-Mitigation Impact***

Potential visual effects on wider setting of Protected Structures within 5km.



### ***Proposed Mitigation Measures***

No mitigation is proposed.

### ***Residual Impacts***

Imperceptible

### ***Significance of Effects***

Imperceptible

### ***NIAH structures or historic gardens***

No NIAH structures or historic gardens are located on or in the immediate vicinity of the Proposed Development. Fourteen NIAH structures are located within 5km of the nearest proposed turbine with the nearest comprising Clearagh House (Reg. 20908314) over 2.4km from T1. The ZTV shows no theoretical visibility of the proposed turbines from that location. There is some theoretical visibility from some of the other NIAH structures, however, no effects to the immediate setting of the structures will occur given the distance of the proposed turbines from same. A change to the wider setting in which the structures are located will occur but is regarded as Imperceptible.

### ***Pre-Mitigation Impact***

Potential visual effects on wider setting of Protected Structures within 5km.

### ***Proposed Mitigation Measures***

No mitigation is proposed.

### ***Residual Impacts***

Imperceptible

### ***Significance of Effects***

Imperceptible

## **12.5 Cumulative Effects**

Cumulative impact is defined as ‘The addition of many small impacts to create one larger, more significant, impact’ (EPA 2002, 33). It is also defined as ‘impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project’ (EC 1999). Cumulative impacts encompass the combined effects of multiple developments or activities on a range of receptors. In this case the receptors are the archaeological monuments and architectural/cultural heritage sites in the immediate vicinity of the Proposed Development. Cumulative Impacts at the Construction and Operational Stages are considered.

### **12.5.1 Cumulative Impacts (Direct Impacts)**

The addition of other projects to the Proposed Development was considered in order to assess cumulative impacts. These include permitted, proposed and existing wind farms within 20km, the permitted alternative underground grid connection and the permitted Turbine Delivery Route (TDR) works.



### *12.5.1.1 Potential Cumulative Effects to National Monuments, Recorded Monuments, RPS and NIAH Structures*

There are no National Monuments, Recorded Monuments, RPS structures or NIAH sites located within the footprint of the Proposed Development and therefore no direct effects on this resource were identified when considering the Proposed Development alone. In this regard no cumulative direct impacts to the known archaeological and cultural heritage resource will occur when considered with other permitted, proposed and existing wind farms, the permitted alternative grid connection and permitted TDR works.

### *12.5.1.2 Potential Cumulative Effects to Sub-surface Archaeological Sites*

Direct effects to sub-surface archaeological features/sites can occur as a result of topsoil or peat removal and groundworks. The Proposed Development in combination with other developments, could result in potential increased negative effects to sub-surface archaeological features ((i.e. cumulative impacts). Since all projects have been assessed from a cultural heritage perspective through the planning process, all potential negative effects are deemed to have been dealt with through the use of effective mitigation measures and planning conditions issued through the Planning Authorities.

If the mitigation measures prescribed in this EIAR are implemented then cumulative direct effects to unknown sub-surface archaeology will not occur, regardless of the other projects within 20km of the Proposed Development.

## 12.5.2 Cumulative Impacts on Setting (Indirect Impacts)

Indirect impacts on setting occur at the operational stage of the Proposed Development (when turbines are operational). In this regard in order to assess overall cumulative effects on archaeology and cultural heritage, the Proposed Development is considered in the context of other developments, in particular other permitted, existing and proposed wind farms, the permitted alternative grid connection and permitted TDR works.

### *12.5.2.1 Potential Cumulative Effects to National Monuments, Recorded Monuments, RPS and NIAH Structures*

A Not Significant indirect effect on the setting of one National Monument (Kinneigh Round Tower) as a result of the Proposed Development has been identified in this assessment. When considered cumulatively with other permitted, proposed and existing wind farms the effects on setting may increase to Slight.

When the Proposed Development is considered alone, the potential effects on setting of recorded monuments vary from Not Significant to Slight. When considered cumulatively with other projects the effects on setting may increase to Slight.

Similarly, an Imperceptible effect on the wider setting of RPS and NIAH structures as a result of the Proposed Development was acknowledged. When considered cumulatively with other permitted, proposed and existing wind farms this may increase to Not Significant.

No cumulative indirect (visual effects) as a result of the Proposed Development when considered with the permitted alternative grid connection or TDR works and other permitted developments are anticipated.



## 12.6 Conclusion

This chapter comprises an assessment of the potential impact of the Proposed Development on the Cultural Heritage resource. Cultural heritage includes archaeology, architectural heritage and any other tangible assets. The assessment was based on comprehensive desktop research, field inspection and GIS. Both Direct and Indirect effects were assessed. No National Monuments, recorded monuments, Protected Structures or NIAH structures are located within the Proposed Development EIAR boundary. No direct effects to these elements of the archaeological or cultural heritage resource were identified. Potential direct impacts to unknown sub-surface archaeology as a result of ground works associated with the Proposed Development were identified. Appropriate mitigation measures in the form of pre-development testing and construction stage monitoring to ameliorate this potential impact have been recommended. The residual impacts are likely to be low if the recommended mitigation measures are implemented. Residual impacts are defined as the degree of environmental change that will occur after the proposed mitigation measures have taken effect.

Cumulative impacts have also been assessed and have considered other permitted, existing and proposed wind farms, the permitted alternative grid connection and TDR works. While some increases to visual effects in the wider landscape may occur no significant cumulative impacts have been identified.

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2nd Edition OS maps

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[www.buildingsofireland.ie](http://www.buildingsofireland.ie)

[www.loganim.ie](http://www.loganim.ie)



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