

Chapter 14 Cultural Heritage

Slieveacurry Renewable
Energy Development,
Co. Clare

Environmental Impact Assessment
Report (EIAR)



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14. CULTURAL HERITAGE

14.1 Introduction

This cultural heritage chapter was prepared by Tobar Archaeological Services Ltd. It presents the results of an archaeological, architectural and cultural heritage impact assessment of the construction, operation and decommissioning of the proposed Slieveacurry Renewable Energy Development, the Proposed Project, located in the townland of Glendine North and adjacent townlands, Co. Clare.

The purpose of this chapter is to assess the potential direct and indirect effects of the Proposed Project on the surrounding archaeological, architectural and cultural heritage landscape. The assessment is based on both a desktop review of the available cultural heritage and archaeological data, and a field inspection of the Proposed Project footprint. An assessment of potential effects, including cumulative effects, is presented.

As detailed in Ch. 1: Introduction, for the purposes of this EIAR, the various project components are described and assessed using the following references: 'Proposed Project', 'Proposed Wind Farm Site', 'Proposed Grid Connection Site', 'Site' and 'Proposed Enhancement Site'.

14.1.1 Proposed Project

The Proposed Project comprises 9 no. wind turbines, underground 33kV cabling and the permanent extension of the existing 110kV substation at Knockalassa and all associated works and apparatus. The full description of the Proposed Project is detailed in Ch. 4: 'Description of the Proposed Project' of this EIAR. The current planning application is being made to An Coimisiún Pleanála under Section 37E of the Planning and Development Act, 2000, as amended.

14.1.2 Location and Topography

The Site is located approx. 7km south of Ennistimon, Co. Clare and 8km west of Inagh, Co. Clare. The town of Miltown Malbay is located approx. 5.8km east of the nearest Proposed Turbine (T07). It is proposed to access the Proposed Wind Farm Site via an existing access track off the local road to the northwest of the site. The Proposed Wind Farm Site is served by a number of existing local, forestry and agricultural roads and tracks.

The planning application includes for the construction of underground cabling from the Proposed Turbines to the existing Slievecallan 110kV substation in the townland of Knockalassa, Co. Clare. The planning application also includes for an extension to the existing Slievecallan 110kV substation at Knockalassa. Connection via Slievecallan would comprise underground cabling, measuring approximately 7.1 km in total, located on existing forest roads/land, agricultural land and within the public road corridor.

Current land-use on the Site comprises coniferous forestry, agriculture, turf cutting and public road corridor. Land-use in the wider landscape comprises a mix of agriculture, low density housing, renewable energy and commercial forestry.



Figure 14-1: Site location.

14.1.3 Statement of Authority

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

14.1.4 Relevant Guidance and Legislation

14.1.4.1 Guidance

The assessment of the potential effects of the Proposed Project on cultural heritage has been carried out in accordance with the various planning policies and strategy guidance detailed in Section 1.2 in Ch. 1: Introduction of this EIAR and the following:

- Architectural Heritage Protection Guidelines for Planning Authorities (Department of Arts, Heritage and the Gaeltacht, 2011).
- Department of Arts, Heritage, Gaeltacht and the Islands, 1999, Framework and Principles for the Protection of the Archaeological Heritage, 1999.
- Guidance on Setting and the Historic Environment, Historic Environment Division, February 2018.
- Clare County Development Plan 2023-2029.
- Guidelines for Cultural Heritage Impact Assessment of TII National Road and Greenway Projects (TII September 2025).

14.1.4.2 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).

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

The Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 will replace the existing National Monuments Acts (1930-2014) when it is brought into force by Ministerial Order. The majority of provisions of this Act have not yet come into force. One Commencement Order (Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 (Commencement) Order 2024 (S.I. No. 252 of 2024)) relating to Sections 1-6 and Section 7 insofar as relates to the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999 (other than section 5) came into effect on the 31st May 2024. These provisions relate to World Heritage Property in the State, inventories, the protection of certain records, the promotion of heritage, and the issuing of statutory guidance. Certain related and supporting provisions concerning implementation and enforcement are also commenced (www.archaeology.ie/news). The provisions now in force allow for the establishment and maintenance of inventories of relevant things of archaeological interest, architectural heritage, and wrecks of archaeological or historic interest. This bolsters the status of existing inventories recording sites of archaeological, historic and architectural interest, both on land and under the sea. It also ensures that legal protection is afforded to certain records or archaeological objects in the event that a person or company in possession of such records is no longer in a position to maintain them, which further strengthens existing practices (<https://www.gov.ie>).

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’*.

14.1.4.3 Granada Convention

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

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

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

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

14.1.4.4 **Clare County Development Plan 2023-2029**

The Clare County Development Plan 2023-2029 (CCDP) was adopted by the Elected Members of Clare County Council at a Special Meeting on 9th March 2023. The CCDP came into effect 6 weeks from the date of adoption, on 20th April 2023. The relevant policies and objectives of Clare County Council regarding archaeology and built heritage were consulted in the CCDP and include the following:

14.1.4.4.1 **Architectural heritage including Industrial and vernacular heritage**

'CDP16.1 It is an objective of Clare County Council: a) To ensure the protection of the architectural heritage of County Clare through the identification of Protected Structures, the designation of Architectural Conservation Areas, the safeguarding of historic gardens, and the recognition of structures and elements that contribute positively to the vernacular and industrial heritage of the county; and b) To ensure that the archaeological and architectural heritage of the county is not damaged either through direct destruction or by unsympathetic developments. c) To support and promote architectural vernacular skills training and facilities in the county.'

'CDP16.2 It is an objective of Clare County Council: a) To protect, as set out in the Record of Protected Structures, all structures, which are of special architectural, historical, archaeological, artistic, cultural, scientific, social, or technical interest; and b) To review the Record of Protected Structures periodically and add structures of special interest as appropriate, including significant elements of industrial, maritime or vernacular heritage and any twentieth century structures of merit.'

'CDP16.3 It is an objective of Clare County Council: To protect and preserve buildings and features of industrial heritage such as mills, bridges, lighthouses and harbours, amongst others. Proposals for refurbishment works to, or redevelopment/conversion of, these sites will be subject to a full architectural and archaeological assessment together with an ecological assessment with respect to the presence of protected species.'

'CDP16.4 It is an objective of Clare County Council: a) To seek the retention, appreciation and appropriate revitalisation of the vernacular heritage of County Clare, in towns, villages and rural areas, by discouraging the replacement of good quality vernacular buildings with modern structures and by protecting vernacular buildings where they contribute to the character of an area or settlement and/or where they are rare examples of a structure type; b) To support proposals to refurbish vernacular structures that are in a sub-standard or derelict condition, provided that: I. Appropriate traditional building materials and methods are used to carry out repairs to the historic fabric; II. Proposals for extensions to vernacular structures are reflective and proportionate to the existing building and do not erode the setting and design qualities of the original structure which make it attractive III. Direction for the design is taken from the historic building stock of the area, though it can be expressed in

contemporary architectural language; and (c) To ensure that visitor pressures from tourism associated with built and cultural heritage do not impact negatively on the capacity of local services (including water, waste water) or facilities such as car parking.’

‘CDP16.7 It is an objective of Clare County Council: a) To advocate for greater financial assistance, including the Built Heritage Investment Scheme and the Historic Structures Fund, for the maintenance and improvement of architectural heritage in County Clare; b) To support community initiatives and projects regarding preservation, presentation and access to archaeological heritage and underwater cultural heritage, provided such are compatible with appropriate conservation policies and standards, having regard to the guidance and advice of The Department of Housing, Local Government and Heritage c) To provide advice and guidance to community groups, owners and occupiers with regards to the maintenance and repair of buildings and structures of architectural heritage importance and to promote initiatives by the Council, the Heritage Council, local communities, heritage property owners and other stakeholders pursuing the maintenance and improvement of the architectural heritage; and d) To undertake a risk assessment of the Archaeological and Architectural Heritage and Cultural Assets in the county to assess the vulnerability and the risk to the historical environment from the impacts of climate change and to help build resilience to these important assets.’

14.1.4.4.2 Archaeological Heritage

‘CDP16.8 It is an objective of Clare County Council: a) To safeguard sites, features and objects of archaeological interest generally; b) To secure the preservation (i.e. preservation in situ or in exceptional cases preservation by record) of all archaeological monuments included in the Record of Monuments and Places as established under Section 12 of the National Monuments (Amendment) Act, 1994, and of sites, features and objects of archaeological and historical interest generally; c) In securing such preservation, to have regard to the advice and recommendations of the Department of the Culture, Heritage and the Gaeltacht; d) To have regard to the government publication Framework and Principles for the Protection of the Archaeological Heritage 1999 in relation to protecting sites, features and objects of archaeological interest; and e) To advocate for greater financial assistance for the maintenance and improvement of features of archaeological interests in County Clare.’

‘CDP16.9 It is an objective of Clare County Council: To protect and preserve archaeological sites discovered since the publication of the Record of Monuments and Places.’

‘CDP16.10 It is an objective of Clare County Council: To protect the Zones of Archaeological Potential located within both urban and rural areas as identified in the Record of Monuments and Places.’

‘CDP16.11 It is an objective of Clare County Council: To ensure that decisions relating to development (including infrastructure associated with broadband, telecommunications, renewable energy, major road/rail infrastructure, flood relief schemes and other services) which may have implications for Recorded Archaeological Monuments/Sites, Zones of Archaeological Potential or undiscovered archaeology, are informed by an appropriate level of archaeological investigation undertaken by qualified persons and the case of flood relief schemes have regard to archaeological Guidelines for Flood Relief Schemes (DHLGH and OPW2022).’

‘CDP16.12 It is an objective of Clare County Council: To support the Climate Change Sectoral Adaptation Plan for Built and Archaeological Heritage 2019, as published by the Department of Culture, Heritage and the Gaeltacht and any subsequent guidance or plans for dealing with climate change and archaeological heritage. The Council shall seek to: a) Promote awareness and the appropriate adaptation of Ireland’s built and archaeological heritage to deal with the effects of climate change; b) Identify the built and archaeological heritage in Local Authority ownership and areas at risk from climate change including, but not necessarily restricted to, the Record of Monuments and Places, Protected Structures and architectural conservation areas designated in the Development Plan; c) Undertake climate change vulnerability assessments for the historic structures and sites in its area, subject to resources and funding; d) Develop disaster risk reduction policies addressing direct and indirect risks to the built and archaeological heritage in its area; e) Develop resilience and adaptation

strategies for the built and archaeological heritage in its area; f) Develop the skills capacity within the Local Authority to address adaptation/mitigation/emergency management issues affecting historic structures and sites in order to avoid inadvertent loss or damage in the course of climate change adaptation or mitigation works.'

'CDP16.12 It is an objective of Clare County Council: a) To raise awareness of and improve practice in relation to archaeology in County Clare; and b) To promote the care and conservation of historic graveyards throughout the county. Within the lifetime of the Plan it is an objective to prepare conservation plans for a number of historical church and graveyard sites, with the objective of identifying necessary works required to address the decay of the fabric of the sites.'

'CDP16.13 It is an objective of Clare County Council a) To protect, preserve and promote the archaeological value of underwater archaeological sites in rivers, lakes, coastal, marine, intertidal and sub tidal environments; and b) To support the further exploration of the underwater archaeology of County Clare, including the San Marcos project, and any subsequent projects that may arise during the lifetime of this Plan.'

14.1.4.4.3 Cultural Heritage

'CDP16.14 It is an objective of Clare County Council: (a) To conserve and enhance its cultural identity and enable access to both culturally-distinct areas and facilities for cultural experiences; (b) To advocate for investment in infrastructure and initiatives that develop the role of arts, heritage and culture and employment opportunities in these sectors in County Clare including funding streams outlined in 'Project Ireland 2040 Investing in our Culture, Language and Heritage 2018- 2027'; (c) To assist in the delivery of actions under arts, heritage and cultural strategies in the county; (d) To ensure that decisions relating to investment in arts, cultural and heritage infrastructure/facilities are informed by an appropriate level of environmental assessment; and (e) To develop a vibrant cultural and creative sector in County Clare as a key enabler of enterprise growth, innovation, regeneration, place-making and community development, health and wellbeing and support measures under Culture 2025, Creative Ireland Strategy 2017-2022 and the Action Plan for Rural Development.'

'CDP16.15 It is an objective of Clare County Council a) To facilitate further development of and extensions to museum, heritage centres and archives across the county; b) To ensure that the County Museum's collections and associated information are accessible to the public; c) To promote a wider appreciation and understanding of the unique natural, cultural and archaeological heritage of the County; d) To recognise and support the role of private and community facilities in making heritage artefacts and information available to the public; and (e) To support the development of a network of community arts and cultural hubs.'

'CDP16.17 It is an objective of Clare County Council: a) To provide for the linguistic and cultural heritage of the county through the provision of support for organisations involved in the continued promotion and preservation of the Irish language and culture and the normalising of the use of Irish; b) To work in a positive and encouraging way to create and maintain a bilingual environment in the county, and to ensure the availability of opportunities for the use of spoken and written Irish. (c) To support the implementation of the Language Plan for the Irish Language Network in Ennis.

CDP16.18 It is an objective of Clare County Council To support and facilitate the gathering, recording, preservation and promotion of folklore and oral cultural heritage in the county and to work closely with groups such as Cuimhneamh an Chláir to realise their objectives.'

The undertaking of this Cultural Heritage assessment of the Proposed Project is in accordance with Clare County Council's aforementioned policies and objectives on archaeological, architectural and cultural heritage.

14.1.5 Scoping and Consultation

The scope for this chapter of the EIAR has also been informed by consultation with statutory consultees, bodies with environmental responsibility and other interested parties. This consultation process and the List of Consultees is outlined in Section 2.7 of Ch. 2: ‘Background to the Proposed Project’ of this EIAR. Matters raised by Consultees in their responses with respect to cultural heritage are summarised in Table 14-1 below.

Table 14-1 Summary of scoping response.

Consultee	Description	Addressed in Section
Development Applications Unit, Department of Housing Local Government and Heritage	An Archaeological Impact Assessment should be undertaken as part of the overall Cultural Heritage Impact Assessment of the proposed development, which should be integrated into the finalised Environmental Impact Assessment Report (EIAR).	Section 14.2, Section 14.3, Section 14.4

14.1.5.1 Clare County Council

No scoping response specifically relating to archaeology, architectural or cultural heritage has been received from Clare County Council.

14.1.5.2 Department of Housing Local Government and Heritage

The following response was received from the Development Applications Unit (DAU) on foot of the scoping request issued to the Department of Housing, Local Government and Heritage (DHLGH):

‘Archaeology

The Department has reviewed the Environmental Impact Assessment Scoping Document and associated mapping provided by the consultants. The information provided is not sufficiently detailed to allow for a full assessment of the archaeological implications of this proposal, however the Department wishes to advise that, as part of Environmental Impact Assessment (EIA) requirements, your client is obliged to retain the services of a Consultant Archaeologist to carry out an Archaeological Impact Assessment as part of the overall Cultural Heritage Impact Assessment of the proposed development, which should be integrated into the finalised Environmental Impact Assessment Report (EIAR). In this regard, the Department awaits the results of the Cultural Heritage Impact Assessment (CHIA) and full EIAR for the scheme before commenting further.

Further to the above, and by way of general archaeological advice, please note that, whilst the proposed development site (PDS) may or may not contain within it known or subsurface Recorded Monuments and/or Archaeological sites that may require assessment as part of the overall CHIA, the PDS itself is located within a wider area of known archaeological settlement and activity (National Monuments Service initial review of the Record of Monuments and Places, www.archaeology.ie and cartographic sources). All of these Recorded Monuments, both within and outside the PDS, are subject to statutory protection in the Record of Monuments and Places, established under section 12 of the National Monuments Act 1930-2014. Therefore, the CHIA should include an assessment of the possible effects of the proposal on the wider archaeological landscape. It is of importance that the study area for the CHIA should be of sufficient size and extent to support this.

It should be additionally noted that an absence or paucity of recorded archaeological sites/monuments within a geographical study area may reflect a deficit in previous archaeological survey, particularly in upland regions, and does not necessarily signify that hitherto unrecorded archaeological sites/monuments (with above ground and/or sub-surface expressions) do not exist.

The Department advises that the CHIA should incorporate a robust desk-study supported by a comprehensive field inspection as well as a visual impact assessment (to assist in identifying any possible impacts to the setting of sites or monuments).

In this respect it should be noted that, in addition to site-specific vulnerabilities to impact on setting, many monument types – for example prehistoric monuments such as Standing Stone Alignments, Standing Stone Rows, Single Standing Stones, as well as some megalithic tombs – are often considered to represent a wide area of associated archaeological settlement and activity. As a result, the bunding/stockpiling of materials, intrusion into view sheds, and so on, may have a negative visual impact on such monuments and may diminish or interrupt alignment views and alter key aspects of their original function and layout. The Visual Impact Assessment should:

- *Set out the key characteristics of the monument(s) and its surroundings that contribute to its setting and the degree to which this setting is integral to the significance and appreciation of the monument.*
- *Assess the effects of the development – both positive and negative – on these key characteristics. The development should be considered in terms of its location and siting relative to the monument as well as its form, appearance and permanence.*
- *Be supported by appropriate illustrations of the monument, its setting and the development.*

The Department further advises that the following is also carried out as part of the overall CHIA to ensure a comprehensive assessment of the proposed development:

The desk-study and field inspection regime should inform:

- *Targeted non-intrusive advance geophysical survey or prospection (such as Ground Penetrating Radar Survey).*
- *Targeted advance archaeological test excavation.*
- *Any and all intrusive advance investigations (such as, but not limited to, ground investigations for soils/geology/hydrogeology) carried out as part of the EIA and/or design process should be subject to a programme of archaeological monitoring by a suitably qualified archaeologist licensed under the National Monuments Act. The results of these investigations should inform the EIA process and be incorporated within the EIA Report. The Department is happy to provide further advice and clarification, as and if required, in relation to the preparation of suitably comprehensive assessments as outlined above, with particular regard to the scope and locations for any advance non-intrusive prospection or advance test excavation that would be appropriate to inform the assessment of this proposed scheme. Notwithstanding the above, the Department awaits the submission of this assess before commenting further.'*

14.1.6 Geographical Information Systems (GIS)

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. 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 (i.e. Economic and Social Research Institute (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.

14.1.7 Desktop Assessment

The desktop assessment for the Proposed Project involved the consultation of, but was not limited to, the following sources:

- UNESCO World Heritage Sites Ireland (<https://whc.unesco.org/en/statesparties/ie/>)
- The Record of Monuments and Places (RMP) County Clare
- The Sites and Monuments Record (SMR) County Clare
- National Monuments in State Care County Clare
- Monuments Subject to a Preservation Order County Clare
- The Topographical Files of the National Museum of Ireland
- First edition Ordnance Survey maps (Tailte Éireann)
- Second edition Ordnance Survey maps (Tailte Éireann)
- Third edition Ordnance Survey maps (Tailte Éireann)
- Aerial photographs (copyright of Tailte Éireann)
- Excavations Database
- National Inventory of Architectural Heritage (NIAH)
- Record of Protected Structures
- Clare County Development Plan 2023-2029
- Previous archaeological assessments
- Survey of the Megalithic Tombs of Ireland – Vol. 1 County Clare

14.1.7.1 Record of Monuments and Places, Sites and Monuments Record and National Monuments

A primary cartographic source and base-line data for the assessment was the consultation of the Sites and Monuments Record (SMR) and Records of Monuments and Places (RMP) for County Clare. All known recorded archaeological monuments are indicated on 6-inch Ordnance Survey (OS) maps and are listed in these records. The SMR/RMP is not a complete record of all monuments as newly discovered sites may not appear in the list or accompanying maps. In conjunction with the consultation of the SMR and RMP the electronic database of recorded monuments and SMRs which may be accessed on the Historic Environment Viewer (HEV) at www.heritagedata.maps.arcgis.com was also consulted.

A review of all National Monuments in State Care and those subject to Preservation Orders in County Clare was also undertaken as part of the assessment.

14.1.7.2 Cartographic Sources and Aerial Photography

The available cartographic sources were consulted as part of the assessment, where available, as was Tailte Éireann aerial photography, Google Earth imagery and MapGenie imagery. The following cartographic sources were consulted:

- Down Survey barony maps (1656-8) (<https://downsurvey.tchpc.tcd.ie/>, accessed March 2026)
- First (1829-41), second (1897-1913) and third (1830s -1930s) edition Ordnance Survey (OS) maps (Tailte Éireann)

14.1.7.3 Topographical Files - National Museum of Ireland

Details relating to finds of archaeological material and monuments in numerous townlands in the country are contained in the topographical files held in the National Museum of Ireland. In order to establish if any new or previously unrecorded finds had been recovered from the Site these files, as available on Heritage Maps (www.heritagemaps.ie), were consulted for each townland within and immediately adjacent to the Site.

14.1.7.4 Archaeological Inventory Series

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

14.1.7.5 Record of Protected Structures

The CCDP was consulted for the schedule of buildings (Record of Protected Structures) and items of cultural, historical or archaeological interest which may be affected by the Proposed Project. The dataset for the Clare Record of Protected Structures was added to the base mapping for the Proposed Project in order to accurately assess any potential effects on such structures.

14.1.7.6 Excavations Database

The Excavations Database is an annual account of all excavations carried out under license. The database is available online at www.excavations.ie and includes excavations from 1985 to 2026. 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 Site.

14.1.7.7 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 DHLGH. The NIAH database was consulted for all townlands within and adjacent to the Site. The NIAH survey has been published and the digital dataset was downloaded on to the base mapping for the Proposed Project (www.buildingsofireland.ie). The NIAH is a state initiative under the administration of the DHLGH 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).

14.1.8 Field Inspection

The Site was subject to a walk-over survey over a number of days in June, July and September 2020 as part of a previous assessment carried out on the Site and again in May 2025 as part of the assessment

for the Proposed Project. The surveys were undertaken by Miriam Carroll of Tobar Archaeological Services Ltd and consisted of a walk-over examination of the Proposed Wind Farm Site infrastructure locations and the Proposed Grid Connection Site.

A photographic and descriptive record was made of the Site and any features of interest therein. The photographic record is included as Appendix 14-1 of this EIAR.

14.1.9 Limitations Associated with the Assessment

14.1.9.1 Field Assessment

Access to all relevant areas of the Proposed Wind Farm Site and the Proposed Grid Connection Site for the purposes of a walk-over survey and visual inspection was possible. No significant limitations were encountered during fieldwork; however, dense forestry cover is present in areas of the Site. Mitigation in the form of additional walk-over surveys post clear-felling of forestry is proposed in Section 14.3 below in this regard.

14.1.9.2 Desktop Assessment

No significant limitations were encountered during the desktop assessment.

14.1.10 Assessment of Likely Significant Effects

The likely effects on the existing archaeological, architectural and cultural heritage environment are assessed using the criteria as set out in the *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports*' (EPA, 2022) and described in section 1.8.2 of Ch.1: Introduction. The following terminology is used when describing the likely effects of the Proposed Project from a Cultural Heritage perspective.

14.1.10.1 Types of Effect

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

14.1.10.1.1 Magnitude of Effects (Significance)

- Profound: Applies where mitigation would be unlikely to remove adverse effects. Reserved for adverse, negative effects only. These effects arise where an archaeological site is completely and irreversibly destroyed.
- Very Significant: An effect which by its character, magnitude, duration or intensity significantly alters most of the sensitive aspect of the environment.
- Significant: An effect which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment. An effect like this would be where part of a site would be permanently impacted upon, leading to a loss of character, integrity and data about an archaeological site.

- Moderate: A moderate effect arises where a change to an archaeological site is proposed which though noticeable, is not such that the integrity of the site is compromised and which is reversible. This arises where an archaeological site can be incorporated into a modern-day development without damage and that all procedures used to facilitate this are reversible.
- Slight: An effect which causes changes in the character of the environment which are not high or very high and do not directly impact or affect an archaeological site.
- Not Significant: An effect which causes noticeable changes in the character of the environment but without significant consequences.
- Imperceptible: An effect on an archaeological site capable of measurement but without noticeable consequences.

14.1.10.2 Cultural Heritage Receptors Considered

For the purposes of this assessment the following Cultural Heritage receptors were considered:

- UNESCO World Heritage Sites and those on the Tentative List
- National Monuments (State Care, Ownership or Guardianship) and those subject to a Preservation Order
- Recorded Monuments (SMR/RMP)
- Protected Structures
- NIAH Structures and Historic Gardens
- Items of local cultural heritage merit

14.1.10.2.1 Sensitivity of Receptors

Rating the importance or sensitivity of cultural heritage receptors relies on the judgment of the Cultural Heritage Professional and may be subjective. A number of factors may be taken into consideration when determining the sensitivity of a receptor such as whether it is of International, National, Regional or local significance, its state of preservation, designation, etc. It should be noted, however, that not all receptors may have a statutory designation or designated significance (i.e. International, National, Regional, Local) therefore all receptors are considered on their own merits in the context of the information available at the time of the assessment and may be subject to change. The following sensitivity of receptors was determined for this assessment (Table 14-2) and is with regard to guidance contained within Guidelines for Cultural Heritage Impact Assessment of TII National Road and Greenway Projects (TII September 2025).

Table 14-2: Sensitivity of Cultural Heritage Receptors Considered

Cultural Heritage Asset/Receptor	Sensitivity
UNESCO World Heritage Sites (including tentative sites)	Very High
National Monuments (State Ownership and Preservation Order Sites)	Very High
Sites and Monuments and Recorded Monuments	Medium-High
Protected Structures	Medium-High
NIAH structures and Historic Gardens	Medium-Low

Undesignated items of local cultural heritage merit	Low
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14.1.10.3 Methodology for the assessment of effects on visual setting (indirect effects)

A standardised approach was utilised for the assessment of effects of visual setting (indirect effects) according to types of monuments and cultural heritage assets which may have varying degrees of sensitivity. This assessment does not include visits to each and every site as this is considered to be beyond the scope of this EIAR as they are mainly located on private lands to which the public have no access. The assessment of effects on visual setting was undertaken using both the Zone of Theoretical Visibility (ZTV) map in the Landscape and Visual Impact Assessment (LVIA), as presented in Ch. 13 ‘Landscape and Visual’, and also photomontages from relevant locations. The analysis used in the assessment of potential effects on the visual setting of cultural heritage assets in the wider landscape of 5km, 10km and 25km considers the effects of the Proposed Turbines. The tall, vertical nature of the Proposed Turbines make them the most prominent elements of the Proposed Project from a visual perspective and have the most potential to give rise to significant, indirect, effects.

Other components of the Proposed Project such as roads, tracks, temporary construction compounds, etc. are not deemed to be as visually prominent as the Proposed Turbines.

The proposed 30m anemometry mast (referred to as the proposed met mast) is also a tall vertical structure, thus it is fully considered throughout this chapter. It will, however, be substantially less visible than any turbine given its shorter and slender lattice form. The proposed extension to the existing 110kV Slievecallan Substation was also considered

While direct physical effects to a site or monument can easily be assessed in quantitative terms, the assessment of effects on setting can be subjective and as such is a matter of qualitative, professional judgement and experience. The distances outlined in Table 14-3 used in the assessment of effects on setting are regarded as appropriate and are based on professional judgement.

Table 14-3: Distance considered from the Proposed Turbines to cultural heritage assets according to sensitivity

Cultural Heritage Asset	Distance Considered from the Proposed Turbines
UNESCO World Heritage Sites (including tentative sites)	25km
National Monuments (State Ownership and Preservation Order Sites)	10km
Sites and Monuments and Recorded Monuments, RPS	5km
NIAH structures	5km
Undesignated sites, if relevant	500m

The **potential** visual effects of the Proposed Turbines on the setting of other cultural heritage assets such as recorded monuments are graded according to two criteria (Table 14-4):

1. **Distance to the nearest Proposed Turbine:** Each increment of distance is numbered from 1-5 in severity with 1 being the lowest in severity (i.e. 4-5km from the nearest Proposed Turbine and 5 being the most severe (0-1km from the nearest turbine).
2. **Number of Proposed Turbines visible on ZTV.** Each increment is also numbered from 1-3 with 1 being the least severe (i.e. 1-3 turbine visible) and 3 being the most severe (7-9 turbines visible).

The number values are then multiplied to arrive at a potential effect (from Imperceptible to Moderate). For the purposes of the Proposed Wind Farm Site there are no Significant effects. Very Significant and Profound are reserved for adverse direct effects which result in the total removal of cultural heritage assets which does not occur from visual effects. The following table is used to ascertain the potential visual effect on Cultural Heritage assets within 5km of the Proposed Project not assuming any vegetation, existing buildings, and any other screening in the landscape.

Table 14-4: Grading of Potential visual effects according to Distance and No. of Proposed Turbines visible from Cultural Heritage Assets

No. of Turbines Visible (ZTV)	1-3 (1)	4-6 (2)	7-9 (3)
Distance of asset to turbine			
4-5km (1)	1	2	3
3-4km (2)	2	4	6
2-3km (3)	3	6	9
1-2km (4)	4	8	12
0-1km (5)	5	10	15
Imperceptible (0)	Not Significant (1-5)	Slight (6-10)	Moderate (11-15)

14.2 Existing Environment

14.2.1 Results of Field Inspection

No potential archaeological sites, structures or stray finds were noted within the Site during the site walk-over survey.

14.2.2 Archaeological, Architectural and Cultural Heritage

Archaeological heritage includes UNESCO World Heritage Sites and those on the tentative list, National Monuments in State Care and those which are subject to a preservation order, sites listed in the RMP/SMR, newly discovered archaeological sites and potential sub-surface archaeology. Architectural heritage includes Protected Structures, NIAH structures and historic gardens while cultural heritage also includes items not included in the RPS or NIAH which may be indicated on the historic mapping or noted during field survey. Such items may include gate piers, local vernacular architecture, field walls, etc. Each of these are addressed in the following sections.

A number of documentary and cartographic sources (as listed in Section 14.1.7 above) were utilised in order to ascertain the potential for the presence of cultural heritage features on or within the area of the Proposed Project. Section 14.2.2.1 addresses the Proposed Wind Farm Site, Section 14.2.2.2 addresses the Proposed Grid Connection Site, Section 14.2.2.4 addresses the Proposed Turbine delivery route and Section 14.2.2.3 address the Proposed Enhancement Site.

14.2.2.1 Proposed Wind Farm Site

14.2.2.1.1 UNESCO World Heritage Sites and those on Tentative List

No UNESCO World Heritage Sites (WHS) or those on the Tentative list are located within the Site or within 25km of same. The nearest UNESCO WHS on the Tentative List is situated over 90km to the north-east and comprises the observatory at Birr Castle Demesne.

14.2.2.1.2 National Monuments

National Monuments are those recorded monuments which are in the ownership / guardianship of the Minister for Housing, Local Government and Heritage. They are frequently referred to as being in 'State Care'. National Monuments also include those which are subject to a Preservation Order. No National Monuments or those subject to a Preservation Order are located within the Site. Only one monument subject to a Preservation Order (PO No. 7/1987) is located within 10km of the nearest Proposed Turbine, while no National Monuments in State Care are located within 10km of the nearest Proposed Turbine. PO 7/1987 comprises a group of two ringforts at Dough townland which are located over 7km to the north of the nearest Proposed Turbine, T1. The monuments are described on the HEV as follows:

CL015-092— : Ringfort - rath: DOUGH (Corcomroe By.)

Description: On top of a prominent E-W ridge in pasture with a marshy estuary to N and good views in all directions. A subcircular earthen enclosure (int. dims. 28.25m N-S; 28m E-W; overall dims. 58.75m N-S; 53.2m E-W) defined by a bank (av. int. H 0.7m; Wth c. 5m; ext. H up to 2.55m), a steep-sided and flat-bottomed fosse (Wth 2-3m) and an outer bank (Wth 3.9-5.1m; ext. H 1-1.25m). A causewayed entrance (Wth 4.25-5.5m; H 0.6m above the fosse) is at E. The interior slopes gently to N. The perimeter is densely overgrown. There are numerous cattle gaps in both banks and some poaching on the external bank at SSW. A second rath (CL015-093—) lies c. 45m to the E. Compiled by: Mary Tunney. Date of upload: 11 November 2019. This monument is subject to a preservation order made under the National Monuments Acts 1930 to 2014 (PO no. 7/1987).



Plate 14-1: CL015-092— from the north (Courtesy of NMS).

CL015-093— : Ringfort - rath: DOUGH (Corcomroe By.)

Description: On the E end of a short ridge in fertile pasture, S of a marshy estuary with good views all around. A subcircular enclosure (diam. 23.25m N-S; 25m E-W) defined by a round-topped earth and gravel bank (Wth 3.2m; int. H 0.2-0.9m; ext. H 0.5-1.35m) from NNE to NNW. At N it has been reduced to a scarp (H 0.4m). There is a possible entrance (Wth 2.9m) at ESE with smaller cattle gaps at

S and WSW. A fair amount of cattle poaching is evident along the NW and SW sectors as well as at the ESE entrance. The interior is slightly higher in the centre than at the perimeter and slopes down to the N. A band of rushes around the perimeter at S noted on a field inspection in 1998 is only now evident at SW. A bivallate rath (CL015-092—) lies 45m to the W on the same ridge. Compiled by: Mary Tunney.

Date of upload: 11 November 2019. This monument is subject to a preservation order made under the National Monuments Acts 1930 to 2014 (PO no. 7/1987).



Plate 14.2: CL015-093— looking West (courtesy of NMS).

The ZTV demonstrates no theoretical visibility of the Proposed Turbines from this location.

Table 14-5: Monuments subject to a Preservation Order within 10km of the nearest Proposed Turbine.

PO No.	SMR NO.	ITM E	ITM N	PO Description	CLASS	TOWNLAND	TURBINE ID	DISTANCE TO NEAREST TURBINE (m)
7/1987	CL015-092—, CL015-093—	510426	688394	Group of two Ringforts	Ringforts	DOUGH (Corcomroe By.)	T1	7750

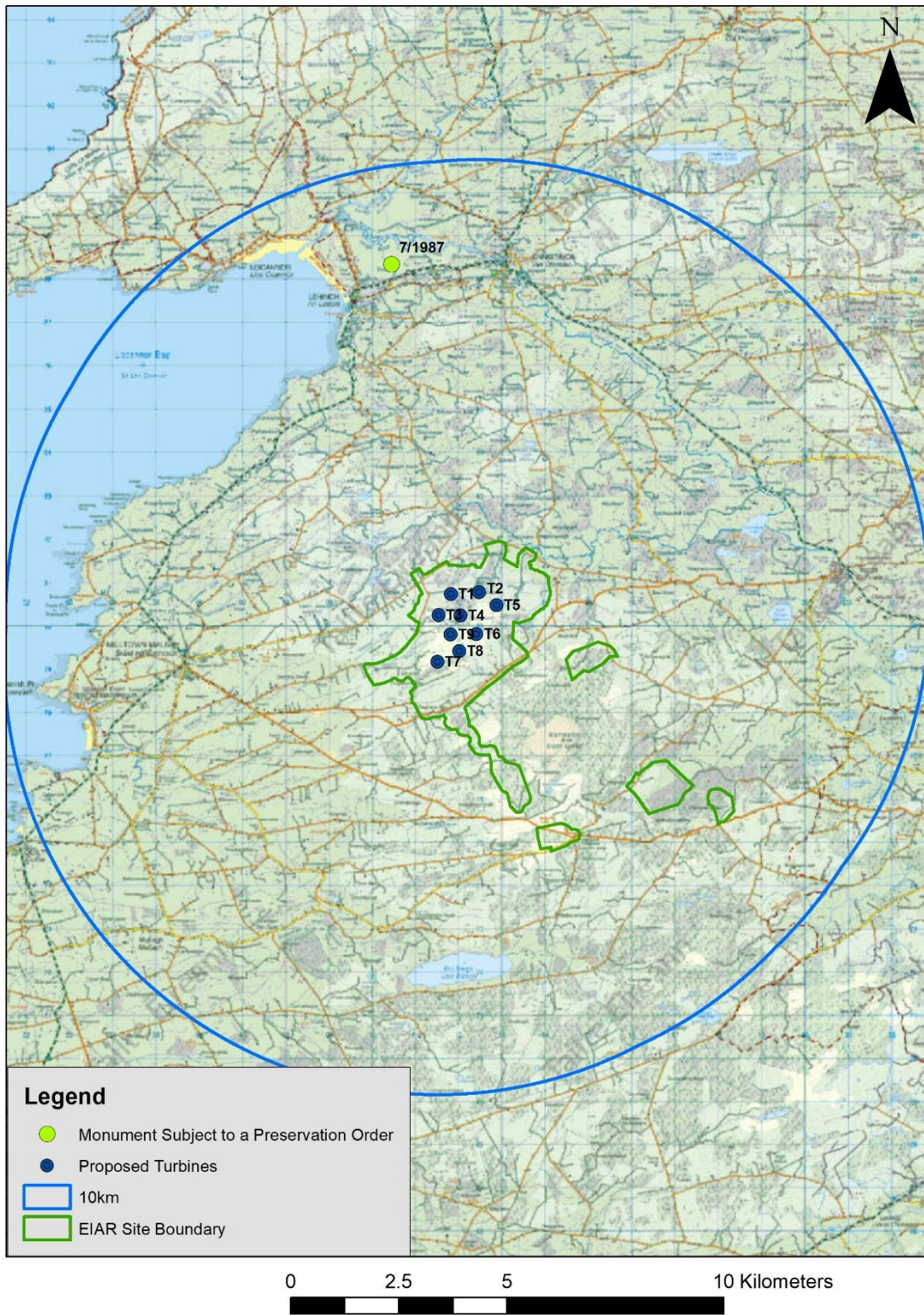


Figure 14-2: Monuments subject to a Preservation Order within 10km of the nearest Proposed Turbine.

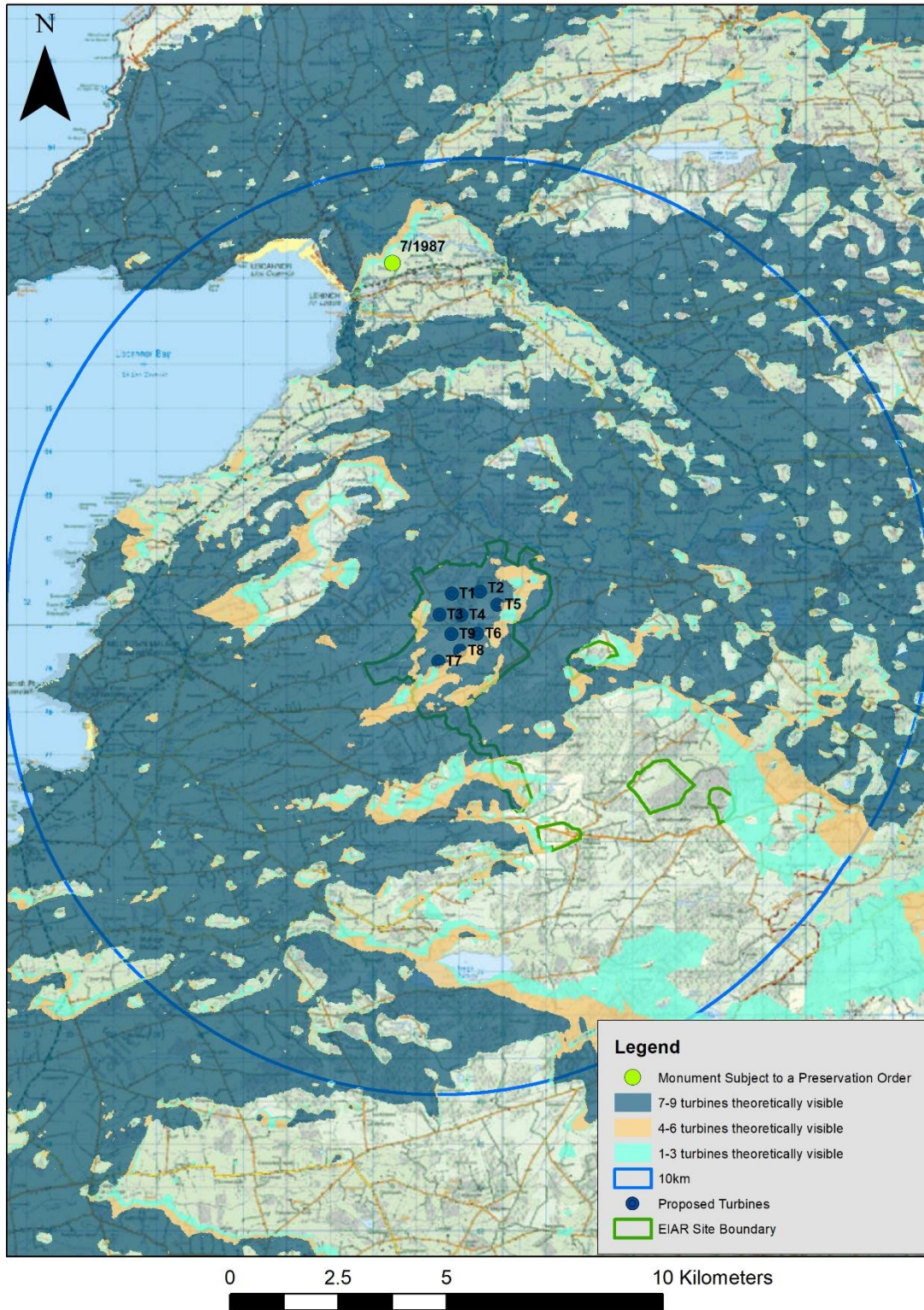


Figure 14-3: Monuments subject to a Preservation Order within 10km of the nearest Proposed Turbine with ZTV.

14.2.2.1.3 Recorded Monuments within the Site

The dataset for the SMR was downloaded from ArcGIS online and added to the base mapping for this assessment. This Archaeological Survey of Ireland (ASI) dataset is published from the database of the National Monuments Service Sites and Monuments Record (SMR). This dataset also can be viewed and interrogated through the online HEV. GIS software (ArcMap) was then utilised to calculate the number of recorded monuments located within the Site.

Three recorded monuments are located within the Site and comprise a multiple stone circle (CL031-052—), an earthwork (CL031-019—) and a ringfort (CL031-018—). The monuments are listed in Table 14-6 and shown on Figure 14-4. A description of the monuments is not currently available on the HEV. The multiple stone circle CL031-052— was visited as part of the field work carried out in 2020 and comprises an upstanding monument. Multiple stone circles comprise a distinctive form of stone circle, typically found only in counties Cork and Kerry. They consist of a ring of free-standing stones, uneven in number (between 7 and 19), symmetrically arranged so that one stone, the axial stone, is set directly opposite two stones, usually the tallest, marking the entrance to the circle. Characteristically, the stones reduce in height to the axial stone, which is set consistently in the south-western part of the circle. The diameters of these circles rarely exceed 10m. These circles form part of the funerary/ritual tradition of the Bronze Age (c. 2400-500 BC).

The stone circle CL031-052— is located in rough pasture to the east of a narrow farm track with good views to the NE, and of higher ground in the distance to the E. Views to the SE are obscured by tracts of coniferous forestry. Four stones are extant and are arranged in a semi-circle from E-N-W. Three upright stones of thin shale stand from E-N, with the western stone lying almost prostrate. Internal diameter measures c. 8m E/W. The monument is not marked on the first, second or third edition historic OS maps. It is located in low-lying boggy pasture near to an east facing slope, c. 48m to the east of an existing farm track. A second farm track (proposed for upgrade) is located to the west of the aforementioned track, c. 79m west of the monument. A borrow pit is proposed to be located immediately to the west the existing track due for upgrade, c. 86m to the west-south-west of the stone circle. Turbine 5 is proposed to be located c. 275m to the north of the monument with the proposed location of T6 c. 570m to the south-west. The proposed 33kV underground cabling is located c. 290m to the south of the monument (See Section 14.2.2.2 below) (Figure 14-5).



Plate 14-3: Remains of Stone Circle CL031-052— looking south towards forestry. Slievecallan Wind Farm is visible in the background.



Plate 14-4: Stone Circle CL031-052— looking NNE.

Table 14-6: Recorded monuments located within the Site.

SMR NO.	ITM E	ITM N	CLASS	TOWNLAND	TURBINE ID	DISTANCE TO NEAREST TURBINE (m)
CL031-052—	512804	680240	Stone circle - multiple-stone	CURRAGHODEA	T5	275
CL031-019—	510684	679154	Earthwork	SILVERHILL	T7	805
CL031-018—	509914	678916	Ringfort - rath	SILVERHILL	T7	1599

The earthwork CL031-019— and ringfort CL031-018— are located in Silverhill townland at the west side of the Site. They are not located in proximity to any Proposed Wind Farm Site infrastructure. The earthwork CL031-019— is located c. 800m to the west of the nearest Proposed Turbine, T7, while the ringfort CL031-018— is located c. 1.5km south-west of T7. The Archaeological Survey of Ireland (ASI) files were consulted for both monuments. The ASI file for earthwork CL031-019— states that no visible trace of the monument could be found when the site was visited in 1999 and the earthwork is regarded as levelled. The ASI file for ringfort CL031-018— records the monument as a sub-circular area measuring 22.9m SE/NW x 25.2m SW/NE internally and defined by a steep-sided round topped earthen bank.



Plate 14-5: Ringfort CL031-018—, looking E (photo courtesy of ASI survey file).

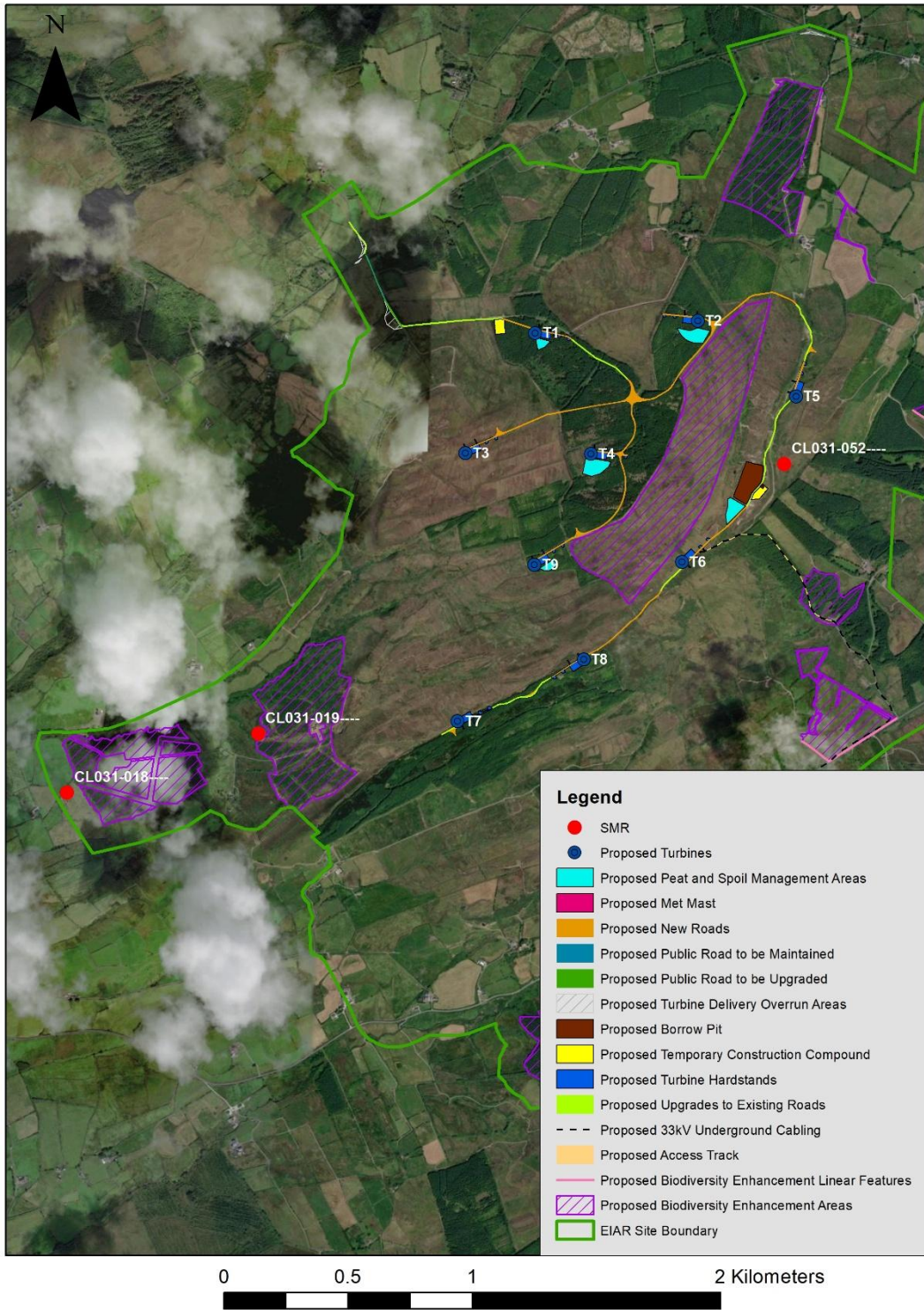


Figure 14-4: Recorded monuments located within the Site.

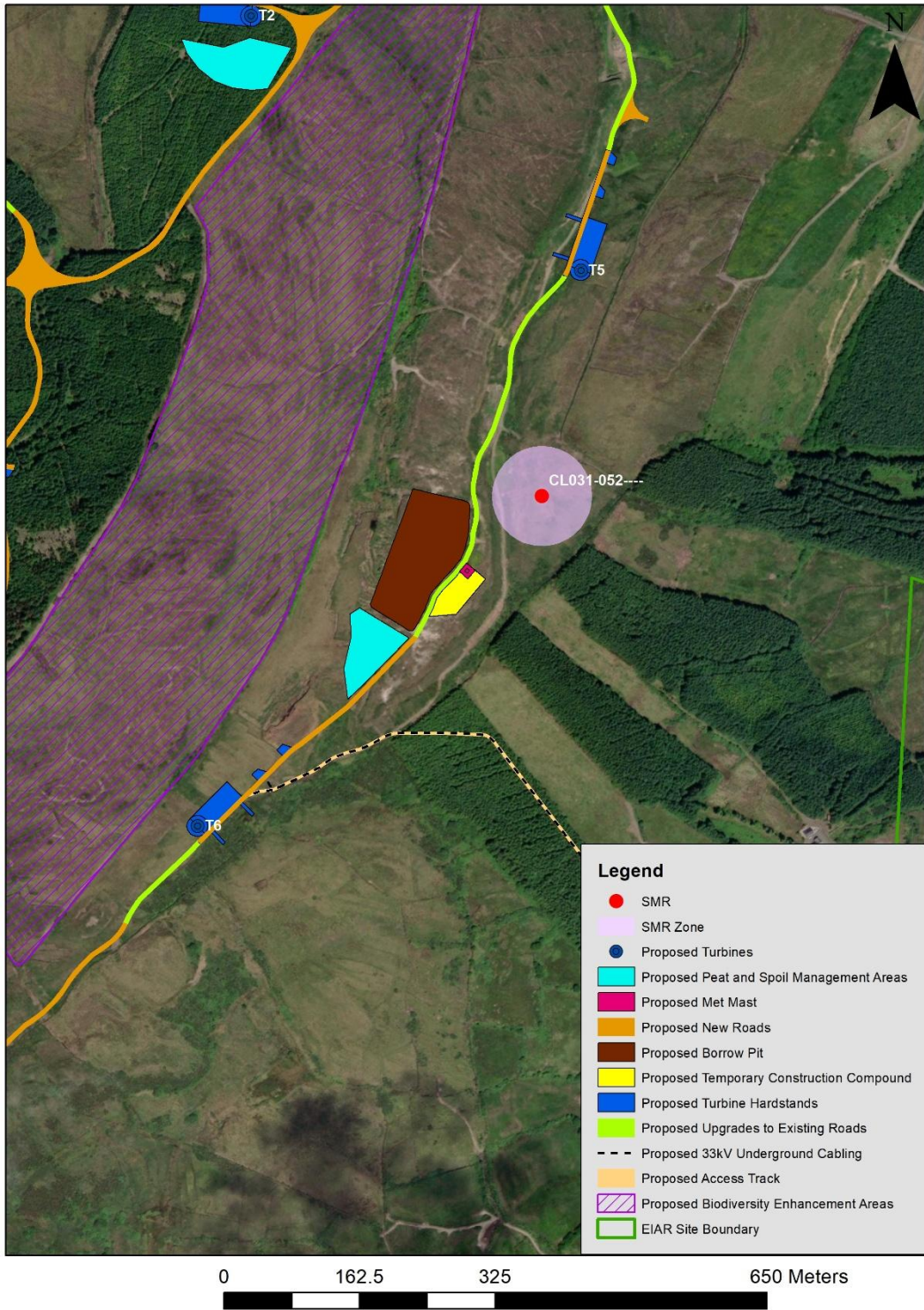


Figure 14-5: Stone circle CL031-052— located within the Site in relation to nearby proposed infrastructure and associated Zone of Notification.

14.2.2.1.4 **Previously Unrecorded Monuments within the Site**

No previously unrecorded archaeological monuments, stray finds or structures were noted within the Site during the walk-over survey.

14.2.2.1.5 **Recorded Monuments within 5km of the nearest Proposed Turbine**

A total of eighty-three (83) recorded monuments are located within 5km of the nearest Proposed Turbine. This number includes the three monuments located within the Site discussed in Section 14.2.2.1.3 above. The monuments are listed in Table 14-7 and shown on Figure 14-6. They are grouped according to monument type or period and discussed below to provide an overview of the range and type of monuments represented within the surrounding wider landscape and the time periods to which they belong.

Peatland Monuments

Only one peatland monument comprising a Post Row is located within 5km of the nearest Proposed Turbine. Post rows comprise a line of related posts, including stakes, in a peatland context. In certain instances, they may be the vestigial underpinnings of single-plank toghers and may date from prehistory (c. 8000 BC - AD 400) to the early medieval period (5th-12th centuries AD). The post row is located c. 4.9km from the nearest Proposed Turbine, T5.

The Prehistoric Period

At least 15 of the 83 monuments located within 5km of the nearest Proposed Turbine date to the prehistoric period and are represented by barrows (ring and ditched) (3), megalithic tombs (3), standing stones (4), fulachta fia (2), a mound, a cairn and the multiple stone circle discussed in Section 14.2.2.1.3 above.

Ring Barrows are a circular or oval raised area (generally up to 1m above the external ground level or level with it) enclosed by fosse(s) and outer bank(s), with or without an entrance. They are part of the Bronze/Iron Age burial tradition (c. 2400 BC - AD 400). Ditch barrows comprise a circular or oval level or slightly raised area (less than 1m above the external ground level) defined by a fosse; generally, less than 20m in diameter. They are often found in clusters or in association with other barrow types. They are funerary monuments that may date to the Neolithic (c. 4000-2400 BC) but more usually date to the Bronze/Iron Ages (c. 2400 BC - AD 400). The barrows range in distance from 2.8km to 4.8km to the nearest Proposed Turbine.

The megalithic tombs within 5km of the nearest Proposed Turbine are represented by a wedge tomb and two unclassified tombs. Wedge tombs comprise a long burial gallery, 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 side-walls 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. Unclassified megalithic tombs, as the name suggests, is a term used for megalithic tombs that cannot be classified as a court tomb, portal tomb, passage tomb or wedge tomb. They may date from the Neolithic to the Bronze Age (c. 4000 - c. 500 BC). The nearest unclassified megalithic tomb is located c. 3.4km from the nearest Proposed Turbine T8 while the wedge tomb is located c. 4.3km from T8.

Four standing stones are located within 5km of the nearest Proposed Turbine. Standing stones consist of a stone which has been deliberately set upright in the ground, usually orientated on a north-east-south-west axis, although other orientations do occur, and varying in height from 0.5m up to 6m. They

functioned as prehistoric burial markers, commemorative monuments, indicators of routeways or boundaries and date from the Bronze and Iron Ages (c. 2400 BC - AD 500), with some associated with early medieval ecclesiastical and burial contexts (c. 5th-12th centuries). The nearest standing stone is located c. 1.8km from T7, with other standing stones located up to c. 4.6km from the nearest Proposed Turbine.

An unclassified cairn is located c. 3.7km from the nearest Proposed Turbine, T8. These monuments comprise a mound constructed primarily of stone which cannot be classified as a specific cairn type. They can date to any period from prehistory onwards. The term cairn is derived from the Irish word 'carn' meaning a heap or pile of stones.

Two fulachta fia are located within 5km of the nearest Proposed Turbine, the nearest being c. 1.7km from T7. Fulacht fia comprise a horseshoe-shaped or kidney-shaped mound consisting of fire-cracked stone and charcoal-enriched soil built up around a sunken trough located near or adjacent to a water supply, such as a stream or spring, or in wet marshy areas. The first recorded use of the Irish term 'fulacht fiadh/fia' (cooking pit of the deer or of the wild) as relating to ancient cooking sites was in the 17th century. They are generally interpreted to have been associated with cooking and date primarily to the Bronze Age (c. 2400-500 BC).

The Early Medieval Period

The Early Medieval period is represented by enclosures, ringforts and earthworks which account for at least 39 of the 83 monuments within 5km of the nearest Proposed Turbine. Enclosures consist of an area defined by an enclosing element (e.g. bank, wall, fosse, scarp), or indicated as such cartographically, and occurring in a variety of shapes and sizes, possessing no diagnostic features which would allow classification within another monument category. These may date to any period from prehistory onwards. Enclosures with a diameter greater than 70m should be classed as Large Enclosure. Ringforts are a roughly circular or oval area surrounded by an earthen bank with an external fosse. Some examples have two (bivallate) or three (trivallate) banks and fosses, but these are less common and have been equated with higher status sites belonging to upper grades of society. They functioned as residences and/or farmsteads and broadly date from 500 to 1000 AD. The nearest of these monuments is the earthwork CL031-019— located within the Site and discussed in Section 14.2.2.1.3 above. The remainder of the monuments of this period are located at distances ranging between c. 1.5km and 4.8km from the nearest Proposed Turbine.

The Medieval Period

At least two monuments dating to the medieval period are located within 5km of the nearest Proposed Turbine. They comprise an unclassified castle and a bawn and are located c. 4.2km from T1. An unclassified castle is that which cannot be more precisely classified. They can date from the late 12th to the 16th century AD. A bawn is located adjacent to the castle and would originally have enclosed it. Bawns comprise the courtyard of a medieval house, tower house or fortified house (12th - 17th centuries AD). There are some instances where the bawn survives but the building it was constructed to defend does not.

The Later Medieval and Post-Medieval Period

At least two monuments dating to the later medieval or post-medieval period are located within 5km of the nearest Proposed Turbine and comprise a 16th/17th century house and a quarry. The 16th/17th century house is located c. 2.8km from the nearest Proposed Turbine, T2. Such monuments comprise a building for human habitation which dates to the 16th/early 17th century AD and which is not a tower house or a fortified house.

The quarry is located c. 3.2km from the nearest Proposed Turbine, T7.

Monuments with Religious Associations

At least 18 monuments within 5km of the nearest Proposed Turbine have religious associations and may date to a number of time periods. The monuments include burial grounds, church and graveyards, children's burial grounds, holy wells, and a shrine.

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. These may have their origins in prehistory but are associated with devotions from the medieval period (5th-16th centuries AD) onwards. Three churches, one graveyard, three burial ground and two children's burial grounds are located within 5km of the nearest Proposed Turbine. In some cases, these monuments are found in association with each other. They can be of any date from c. 500 AD onwards. Children's burial grounds comprise an area of unconsecrated ground for the interment of unbaptised or stillborn children, often known under various Irish names: Cillin, Caldragh, Ceallúnach or Calluragh. The graves were generally marked by simple, low, upright stones or slabs almost invariably without any inscription or other carving. This burial practice may be medieval in origin and continued in Ireland until the 1960s.

The monuments with religious associations are located at distances ranging between 3.3km and 4.8km from the nearest Proposed Turbine.

Table 14-7: Recorded monuments within 5km of the nearest Proposed Turbine.

Map ID	SMR	Monument Type	ITM E	ITM N	Townland	Turbine ID	Distance (m)
1	CL031-052—	CURRAGHODEA	512804	680240	Stone circle - multiple-stone	T5	275
2	CL031-019—	SILVERHILL	510684	679154	Earthwork	T7	805
3	CL031-018—	SILVERHILL	509914	678916	Ringfort - rath	T7	1599
4	CL031-037—	CLOGHAUN MORE	510120	678049	Fulacht fia	T7	1789
5	CL031-051—	DOONSALLAGH EAST	511896	677399	Standing stone	T7	1850
6	CL023-037—	KNOCKATULLAGHAUN	514309	683019	House - 16th/17th century	T2	2879
7	CL023-061—	CLOONEYOGAN SOUTH	510934	683524	Concentric enclosure	T1	2890
8	CL023-036—	KNOCKATULLAGHAUN	514225	683109	Barrow - ring-barrow	T2	2897
9	CL031-009—	LEEDS	508587	680987	Ringfort - rath	T3	3015

Map ID	SMR	Monument Type	ITM E	ITM N	Townland	Turbine ID	Distance (m)
10	CL023-034—	CLOONEYOGAN NORTH	511291	683845	Ringfort rath	- T1	3120
11	CL023-030001-	CLOONEYOGAN SOUTH	510133	683512	Ringfort rath	- T1	3212
12	CL023-030002-	CLOONEYOGAN SOUTH	510133	683512	House indeterminate date	- T1	3212
13	CL031-029—	DOONSALLAGH WEST	509631	676528	Ringfort rath	- T7	3256
14	CL031-049—	CAHEROGAN	508707	677463	Quarry	T7	3280
15	CL031-017—	KNOCKKOSKERAUN	508270	678536	Ringfort rath	- T7	3286
16	CL023-035003-	MOOGHNA	514128	683663	Ringfort rath	- T2	3302
17	CL023-035001-	MOOGHNA	514129	683663	Burial ground	T2	3303
18	CL031-044—	KNOCKKOSKERAUN	508308	678179	Ringfort rath	- T7	3340
19	CL023-044—	DRUMBAUN	508592	681938	Ringfort rath	- T3	3362
20	CL023-035002-	MOOGHNA	514218	683695	Ritual site holy well	- T2	3376
21	CL031-045—	DOONSALLAGH WEST	509602	676346	Mound	T7	3423
22	CL031-035—	KNOCKALASSA	514177	676726	Megalithic tomb unclassified	- T8	3490
23	CL031-028—	DOONSALLAGH WEST	509292	676376	Ringfort cashel	- T7	3579
24	CL031-030—	KILLERNAN	509697	676038	Hut site	T7	3636

Map ID	SMR	Monument Type	ITM E	ITM N	Townland	Turbine ID	Distance (m)
25	CL031-008002	KILFARBOY	508112	681593	Graveyard	T3	3650
26	CL031-031—	KILLERNAN	510493	675681	Ringfort rath	T7	3660
27	CL031-008001	KILFARBOY	508104	681602	Church	T3	3660
28	CL031-008003	KILFARBOY	508084	681582	Ritual site - holy well	T3	3672
29	CL031-024—	CARROWDUFF (Ibrickan By.)	508124	677669	Ringfort rath	T7	3697
30	CL031-033001	KNOCKALASSA	514160	676412	Cairm unclassified	T8	3731
31	CL031-033002	KNOCKALASSA	514159	676410	Inscribed stone	T8	3732
32	CL023-026—	AILLBRACK,TOOR	509418	683652	Ringfort rath	T1	3741
33	CL023-031—	MOY MORE	510514	684308	Ringfort rath	T1	3767
34	CL023-043—	KILFARBOY	508372	682358	Ringfort rath	T3	3769
35	CL023-029—	MOY MORE	509883	684013	Ringfort rath	T1	3770
36	CL031-016002	KILCORCORAN	507596	679464	Enclosure	T7	3900
37	CL031-016001	KILCORCORAN	507570	679486	Children's burial ground	T7	3928
38	CL031-016003	KILCORCORAN	507570	679486	Shrine	T7	3928
39	CL031-015—	KILCORCORAN	507553	679412	Ritual site - holy well	T7	3940

Map ID	SMR	Monument Type	ITM E	ITM N	Townland	Turbine ID	Distance (m)
40	CL023-033—	MOY MORE	510724	684617	Church	T1	3998
41	CL031-007—	KILFARBOY	507582	681602	Ringfort - rath	T3	4151
42	CL031-014—	KILCORCORAN	507287	679468	Ringfort - unclassified	T7	4209
43	CL031-048—	KILCORCORAN	507282	679386	Standing stone	T7	4209
44	CL023-027002 -	MOY BEG	509592	684369	Castle - unclassified	T1	4225
45	CL023-027001 -	MOY BEG	509581	684371	Bawn	T1	4232
46	CL032-007—	GLENNAGEER	516306	678045	Enclosure	T5	4245
47	CL023-027003 -	MOY BEG	509590	684391	Well	T1	4245
48	CL031-006—	CARROWKEEL (Ibrickan By.)	507437	681467	Earthwork	T3	4250
49	CL023-032—	TULLYGARVAN WEST	510677	684873	Ritual site - holy well	T1	4257
50	CL031-043—	GLENDINE SOUTH	507261	678485	Ringfort - rath	T7	4287
51	CL023-063—	TOOR	508967	684031	Fulacht fia	T1	4322
52	CL031-032—	KNOCKALASSA	513751	675493	Megalithic tomb - wedge tomb	T8	4330
53	CL031-005—	ILLAUN	507212	680780	Megalithic tomb - unclassified	T3	4335
54	CL031-013—	POULAWILLIN	507145	678753	Ringfort - rath	T7	4366
55	CL031-012—	KILCORCORAN	507103	679152	Ringfort - rath	T7	4385

Map ID	SMR	Monument Type	ITM E	ITM N	Townland	Turbine ID	Distance (m)
56	CL031-004—	ILLAUN	507131	680931	Ringfort - cashel	T3	4435
57	CL031-042—	KILCORCORAN	507017	679003	Barrow - ditch barrow	T7	4475
58	CL031-027—	KILLERNAN	509101	675353	Ringfort - rath	T7	4530
59	CL023-028—	MOY BEG	509799	684844	Ringfort - rath	T1	4542
60	CL023-041—	BALLYVASKIN NORTH	507191	681669	Ringfort - rath	T3	4544
61	CL032-008002 -	BALLYNOE	516328	677517	Children's burial ground	T6	4573
62	CL032-008001 -	BALLYNOE	516333	677503	Church	T6	4585
63	CL031-047—	KILCORCORAN	506921	679619	Standing stone	T7	4585
64	CL031-025—	DOONSALLAGH WEST	508169	675945	Ringfort - rath	T7	4650
65	CL031-046—	KILCORCORAN	506824	679547	Standing stone	T7	4676
66	CL031-026002 -	KILLERNAN	508953	675269	Ritual site - holy well	T7	4680
67	CL039-012—	KILLERNAN	509042	675210	Ritual site - holy well	T7	4682
68	CL031-039—	ILLAUN	506845	680588	Ringfort - rath	T3	4683
69	CL031-011002 -	POULAWILLIN	506839	678629	Hut site	T7	4684
70	CL031-011001 -	POULAWILLIN	506831	678629	Ringfort - rath	T7	4692

Map ID	SMR	Monument Type	ITM E	ITM N	Townland	Turbine ID	Distance (m)
71	CL031-026001	KILLERNAN	508960	675250	Burial ground	T7	4692
72	CL023-025—	MOY BEG	509364	684826	Ringfort rath	T1	4734
73	CL031-010—	KILCORCORAN	506741	679339	Burial ground	T7	4748
74	CL023-023—	CLOONEYBREEN, TOOR	508144	683845	Enclosure	T1	4779
75	CL039-015—	SHANAVOGH WEST	509658	674725	Ringfort rath	T7	4837
76	CL031-003001	ILLAUN	506682	680391	Ringfort rath	T3	4838
77	CL032-001—	DERRYHARRIV	517622	679698	Ritual site - holy well	T5	4840
78	CL023-042—	BALLYVASKIN NORTH	507246	682563	Barrow - ring-barrow	T3	4843
79	CL031-003002	ILLAUN	506676	680399	Hut site	T3	4844
80	CL031-041—	LEAGARD NORTH	506615	679631	Ringfort rath	T7	4891
81	CL024-036—	DRUMCULLAUN	517328	682529	Post row - peatland	T5	4911
82	CL031-034—	KNOCKALASSA	515014	675537	Ringfort rath	T8	4942
83	CL031-038—	ILLAUN	506575	680436	Enclosure	T3	4946

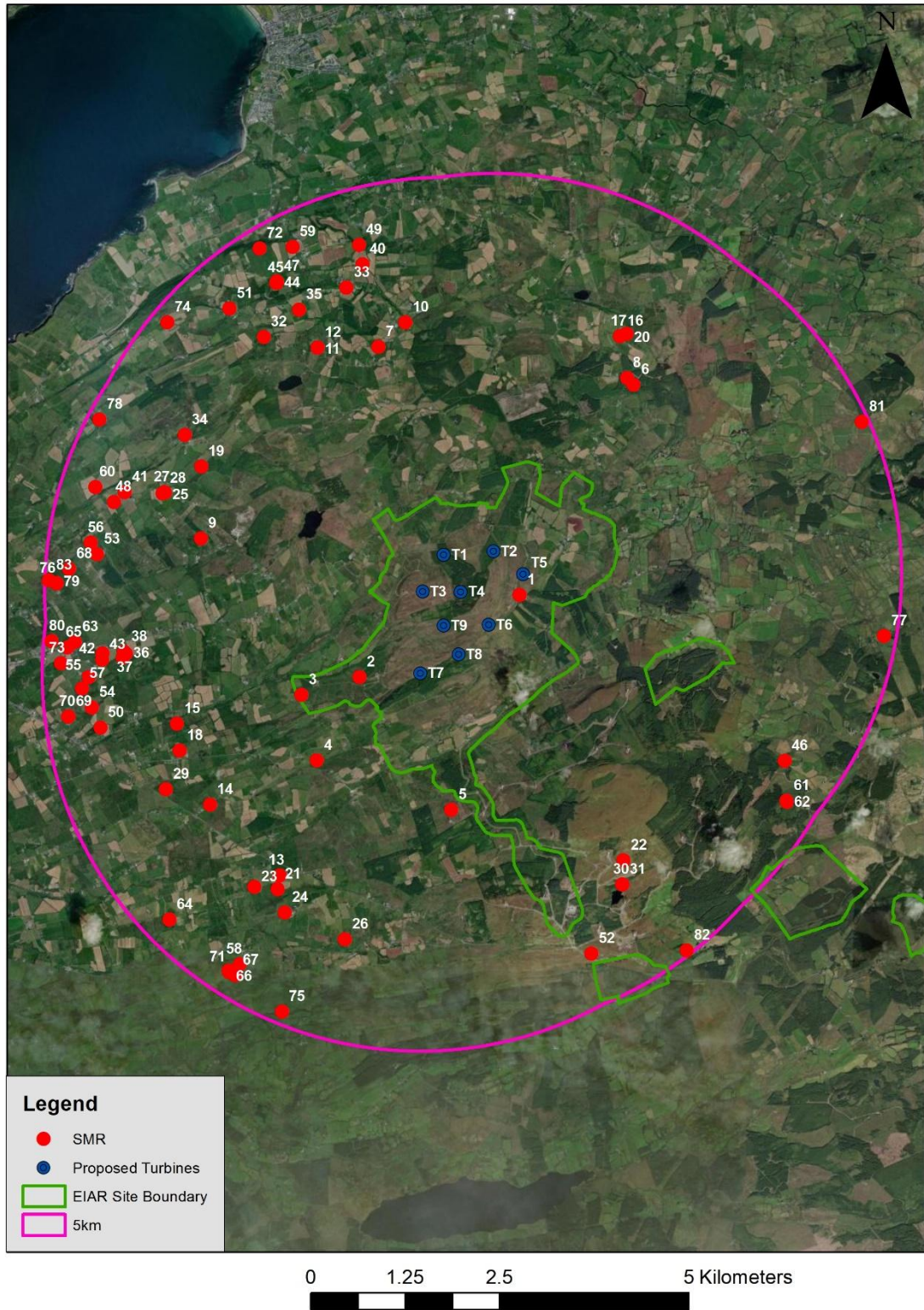


Figure 14-6: Recorded monuments within 5km of the nearest Proposed Turbine.

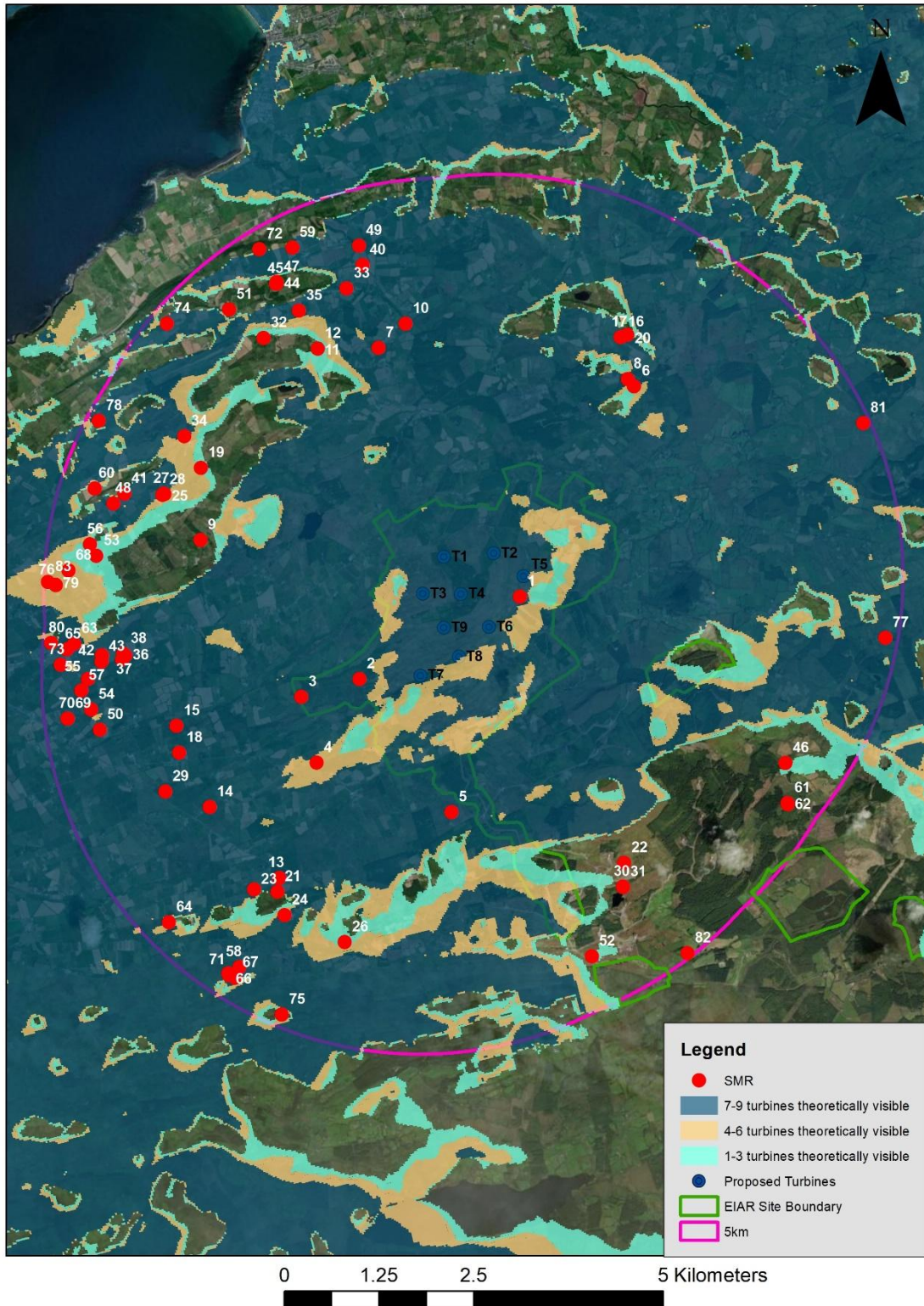


Figure 14-7: Recorded monuments within 5km of the nearest Proposed Turbine and ZTV.

14.2.2.1.6 **Excavations Database**

The Site is located in the following townlands (
 Table 14-8 Townlands within which the Proposed Project is Located

Development Works	Townland
Proposed Wind Farm Site.	Cloghaun More, Curraghodea, Fahanlunaghtamore, Fahanlunaghta Beg, Glendine North, Silverhill, Tooreen, and Cloghaun Beg*
Proposed Grid Connection Site	Curraghodea, Doonsallagh East, Knockalassa, Letterkelly, Shanavogh East* and Boolynamiscaun*
Proposed Enhancement Site	Boolinrudda, Cloonlaheen Middle, Curraghodea, Letterkelly, Magherbaun, Silverhill, Slievealoughaun, Ballynoe*, Boolyduff*, Cloonanaha*, Cloonlaheen East*, Cloontabonniv*, Doonsallagh East*, Fahanlunaghta Beg*, Glenletternafinny*, Gortalougha*, Knockloskeraun*, Knockogonnell*, Silverhill*

*Townlands located within EIAR boundary, but not within planning application boundary

). Each townland was entered into the database of excavations carried out in Ireland in order to determine if any such investigations have taken place on or immediately adjacent to the Site.

Table 14-8 Townlands within which the Proposed Project is Located

Development Works	Townland
Proposed Wind Farm Site.	Cloghaun More, Curraghodea, Fahanlunaghtamore, Fahanlunaghta Beg, Glendine North, Silverhill, Tooreen, and Cloghaun Beg*
Proposed Grid Connection Site	Curraghodea, Doonsallagh East, Knockalassa, Letterkelly, Shanavogh East* and Boolynamiscaun*
Proposed Enhancement Site	Boolinrudda, Cloonlaheen Middle, Curraghodea, Letterkelly, Magherbaun, Silverhill, Slievealoughaun, Ballynoe*, Boolyduff*, Cloonanaha*, Cloonlaheen East*, Cloontabonniv*, Doonsallagh East*, Fahanlunaghta Beg*, Glenletternafinny*, Gortalougha*, Knockloskeraun*, Knockogonnell*, Silverhill*

*Townlands located within ELAR boundary, but not within planning application boundary

One entry was returned (see below) and relates to archaeological monitoring of ground works carried out for Slieveacurry Wind Farm which is located to the south-east of the Site. No archaeological sites or features were uncovered during the course of the monitoring.

2017:741 - BOLLINRUDDA, BOOLYNAMISCAUN, COOR EAST, DOONSALLAGH EAST, GLENNAGEER, KNOCKNALASSA, LETTERKELLY, MAGHERABAUN & SHANVOGH EAST, Clare

County: Clare

Site name: BOLLINRUDDA, BOOLYNAMISCAUN, COOR EAST, DOONSALLAGH EAST, GLENNAGEER, KNOCKNALASSA, LETTERKELLY, MAGHERABAUN & SHANVOGH EAST

Sites and Monuments Record No.: N/A

Licence number: 16E0010

Author: Dominic Delany, Dominic Delany & Associates

Author/Organisation Address: Creganna, Oranmore, Co. Galway

Site type: No archaeology found

Period/Dating: N/A

ITM: E 513399m, N 677063m

Archaeological monitoring of the construction phase of a windfarm development was carried out at Boolinrudda, Boolynamiscaun, Coor East, Doonsallagh East, Glennageer, Knockalassa, Letterkelly, Magherabaun and Shanvogh East, Co. Clare between November 2015 and February 2017. The development comprised the construction of 31 wind turbines, substation and 2 associated control buildings, borrow pits, anemometry mast, underground electricity cabling, new and upgraded access roads and all ancillary site works. There are six recorded monuments within the development site boundary; CL031-032 (Wedge tomb), CL031-03301 (Cairn – unclassified), CL031-03302 (Inscribed stone) and CL031-034 (Ringfort – rath), CL031-035 (Megalithic tomb – unclassified) and CL031-051 (Standing stone). The megalithic tomb at Knockalassa (CL031-035) was found during the course of fieldwork for the Environmental Impact Assessment and was classified as a possible boulder burial. There was no direct impact on any of the recorded monuments as all are located in excess of 100m from the nearest windfarm infrastructure. Several examples of vernacular architecture and other cultural heritage sites including gate piers and a milestone were identified in the Environmental Impact Assessment and constrained out of consideration for the siting of windfarm infrastructure. Three additional vernacular architecture structures were identified within the development boundary during the course of the project but these were not located in the vicinity of any windfarm infrastructure. All excavations associated with the development were monitored. No archaeology was found.

14.2.2.1.7 Topographical Files of the National Museum of Ireland

The Topographical Files of the National Museum of Ireland as shown on www.heritagemaps.ie were consulted as part of this assessment. No finds are recorded from within the Site. The nearest recorded finds are listed below (Table 14-9) and shown on Figure 14-8.

Table 14-9: Nearest find spots to the Site.

Museum Find No.	ITM E	ITM N	DESCRIPTION
1960:562	506984	677552	Bronze Sword (flange-hilted)
IA/251/2009	518639	682616	Bronze socketed axehead
1961:162	512300	671786	Hollow-based Arrowhead

14.2.2.1.8 Sub-Surface Archaeological Potential

Due to the extent of groundworks associated with the construction phase of the Proposed Project, the greenfield nature of portions of the Proposed Wind Farm Site and the presence of monuments within same, it is possible that previously unrecorded sub-surface archaeological finds, features or deposits are located within the Proposed Wind Farm Site. The potential therefore exists that sub-surface archaeological sites or features, if present within the Proposed Wind Farm Site, may be directly affected by construction phase activities. Mitigation measures to ameliorate this potential effect are detailed in Section 14.3.3.5 below.

14.2.2.1.9 **Archaeological Landscapes**

No archaeological landscapes have been formally identified or designated in the Clare CDP 2023-2029.

14.2.2.1.10 **Orthophotographic Review**

A review of the available aerial imagery of the Site including Google Earth and MapGenie was undertaken. No potential archaeological features were noted within the Site from that review.

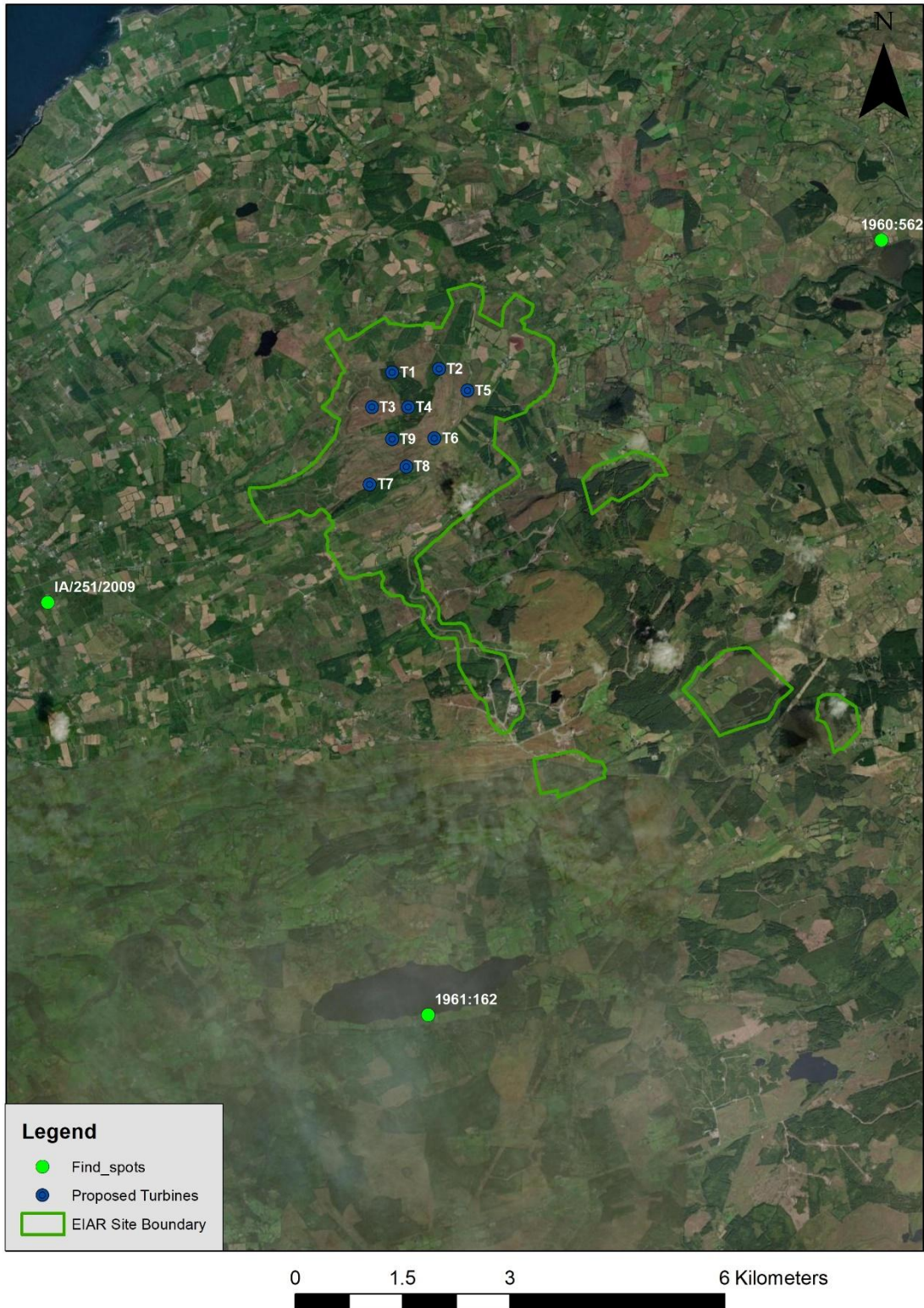


Figure 14-8: Nearest find spots to the Proposed Project.

14.2.2.1.11 Protected Structures within the Site

One built heritage structure subject to statutory protection by way of inclusion in the Record of Protected Structures (RPS) is located within the Site and consists of a derelict national school (RPS ID 637). It is located on the north side of a trackway which extends East/West to the north of the regional road (R460). The structure is not located adjacent to any proposed infrastructure (Figure 14-9). The nearest proposed infrastructure comprises the proposed underground cable connection which will be c.

280 to the south-east. The school is situated over 800m to the south-east of the nearest Proposed Turbine, T7.



Plate 14-6: RPS 637 (photo courtesy of RPS, Vol 4 CCDP).

14.2.2.1.12 **Protected Structures within 5km of the nearest Proposed Turbine**

A total of six (6) Protected Structures are located within 5km of the nearest Proposed Turbine including the National School (RPS. 637) located within the Site as discussed above. The structures are listed and described in Table 14-10 and shown on Figure 14-9. Three of the structures are also included in the NIAH. The nearest Protected Structure to the Proposed Turbines is the National School (RPS 637) as discussed above, while the remaining structures are located at distances ranging between 2.5km and 4.5km from the nearest Proposed Turbine.

Table 14-10: RPS structures within 5km of the nearest Proposed Turbine.

RPS ID	NIAH Reg.	Structure	Description	ITM E	ITM N	Turbine	Distance To Turbine (m)
637	N/A	National School	Detached four-bay single-storey former National School dated 1862 with sash windows and natural slate roof, now derelict.	511872	678459	T7	837
564	N/A	Fahy's Cottage	Four-bay single-storey 19th century house with Moher slate roof. Original condition throughout	514120	682770	T2	2568
202	20403106	Doonsallagh Bridge	Single arch coursed stone-built road bridge over river, c.1820, with cut-stone voussoirs and inscribed benchmark; repaired c. 1990.	509342	676807	T7	3216

RPS ID	NIAH Reg.	Structure	Description	ITM E	ITM N	Turbine	Distance To Turbine (m)
635	N/A	Kilfarboy Church, Graveyard and Holy Well	Ruined church largely dating from the 15th century, though large stones on the lower masonry courses suggests that it incorporates parts of an older structure. Repairs carried out by Clare County Council 2008 and 2010. Recorded Monument CL031-008001.	508089	681580	T3	3666
162	20402308	St. Flannan's Church	Detached single-bay double-height gable-fronted single-cell Catholic Church, c.1870, with bellcote over gable and five-bay side elevations having stepped buttresses; extended to rear, c.1910, comprising two-bay single-storey sacristy; renovated, c.1960, with single-bay single-storey flat-roofed projecting porch added to front.	509886	684704	T1	4378
207	20403108	Honan's Bridge	Single arch rubble stone-built road bridge over river, dated 1872, with inscribed cut-stone plaque. Extensively overgrown.	507089	678194	T7	4512

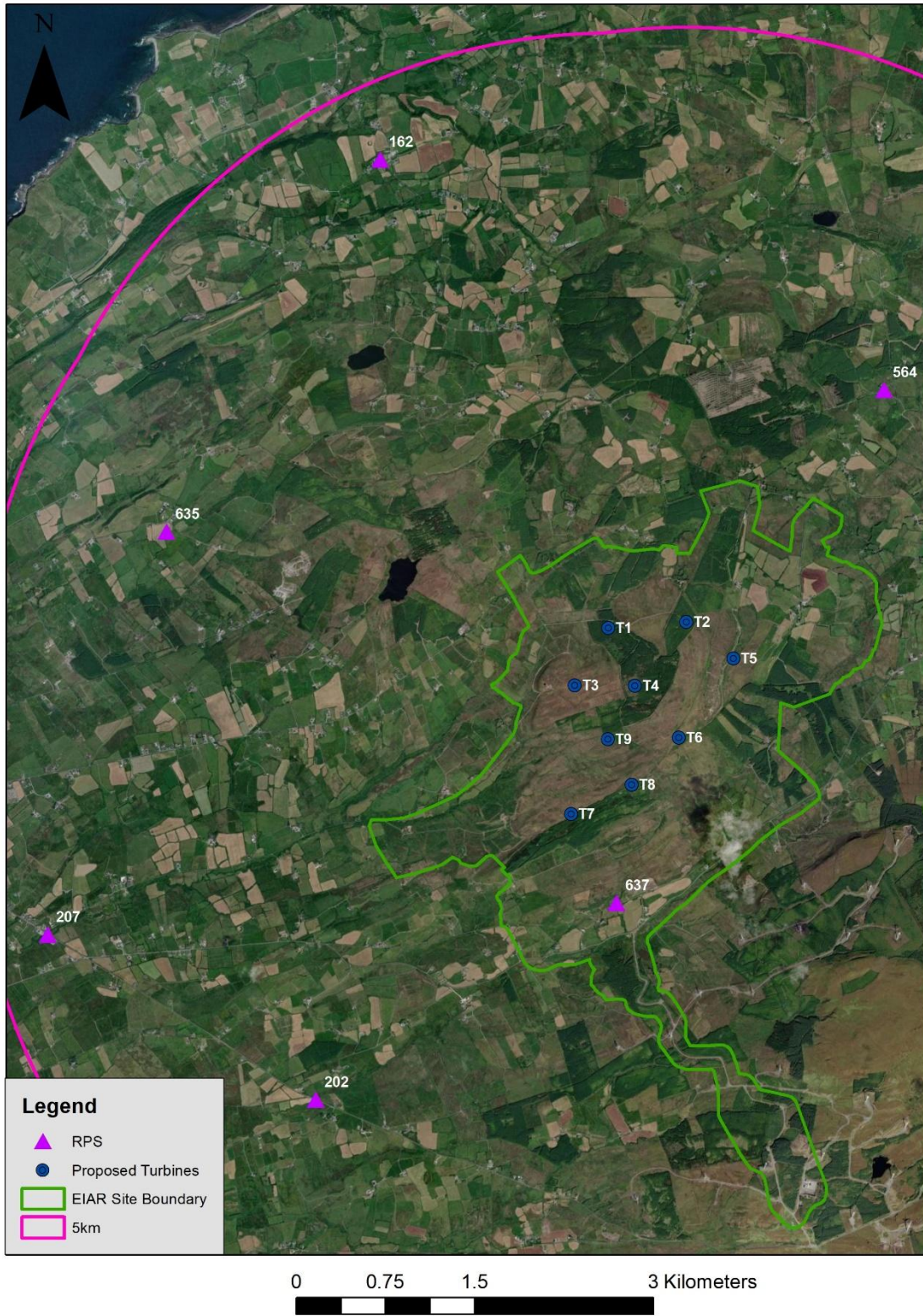


Figure 14-9: Protected Structures within 5km of the nearest Proposed Turbine.

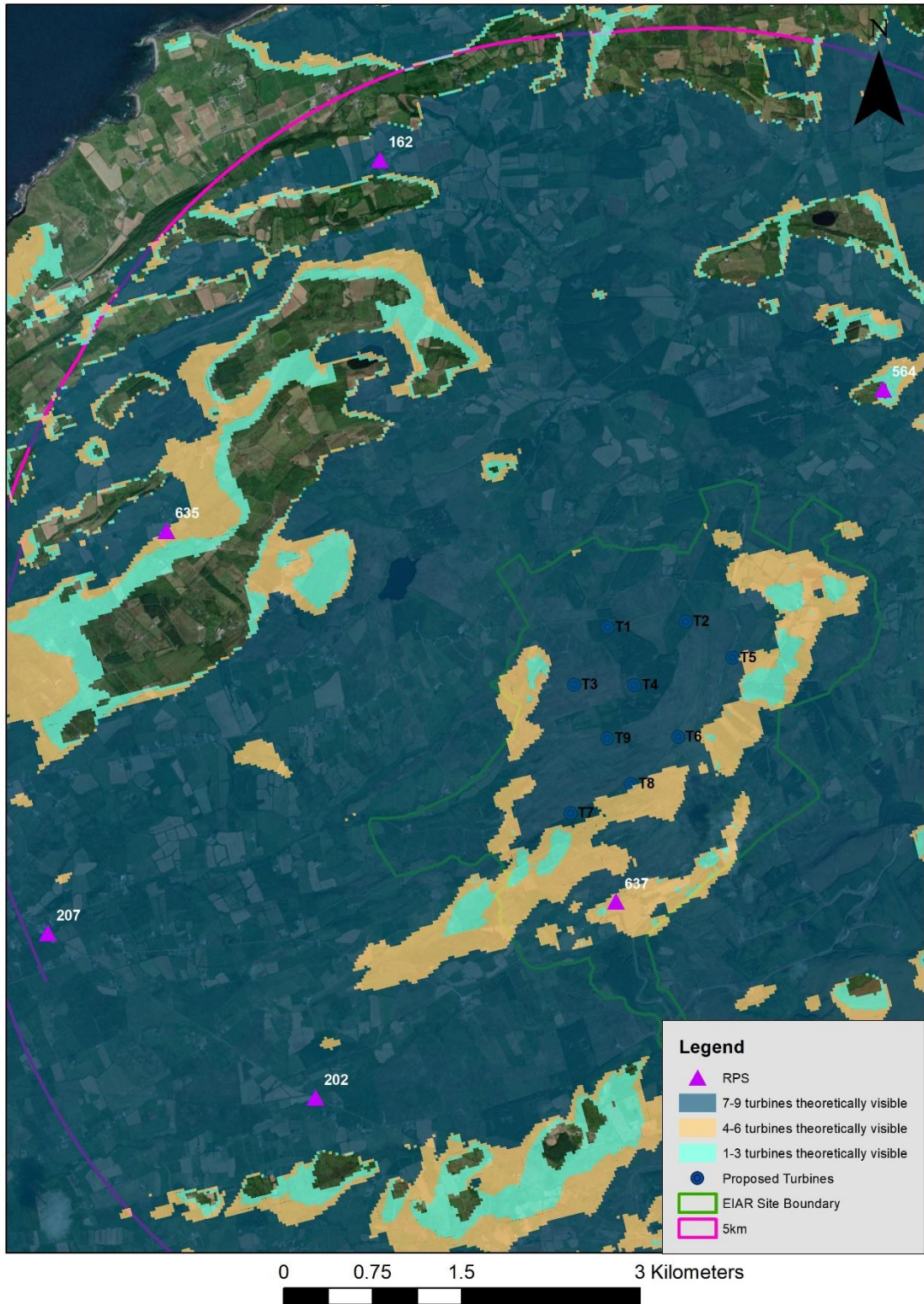


Figure 14-10: Protected Structures within 5km of the nearest Proposed Turbine and ZTV.

14.2.2.1.13 NIAH Structures and Historic Gardens within 5km of the nearest Proposed Turbine

No NIAH structures or historic gardens are located within the Site. Three NIAH structures are located within 5km of the nearest Proposed Turbine. They are listed in Table 14-11 and shown on Figure 14-11.

The nearest of the structures is located c. 3.2km from the nearest Proposed Turbine, T7 and comprises Doonsallagh Bridge, NIAH Reg. 20403106.

One historic garden, that associated with Glenville House, is located within 5km of the nearest Proposed Turbine. It is situated c. 4.3km north-west of the nearest Proposed Turbine, T1.

Table 14-11: NIAH structures within 5km of the nearest Proposed Turbine.

NIAH REG.	TYPE.	NAME	TOWNLAND	DAT E	ITM E	ITM N	TURBI NE	DISTAN CE TO TURBIN E (m)
20403106	bridge	Doonsallagh Bridge	DOONSALLAGH EAST, DOONSALLAGH WEST, KNOCKBRACK (IBRICKAN)	1800 - 1840	509342	676807	T7	3216
20402308	church/chapel	Saint Mary's Catholic Church	MOY BEG	1860 - 1880	509882	684704	T1	4379
20403108	bridge	Honan's Bridge	GLENDINE SOUTH, KNOCKLOSKEAUN	1870 - 1875	507091	678193	T7	4511

Table 14-12: Historic garden within 5km of the nearest Proposed Turbine.

NAME	ITM E	ITM N	TURBINE	DISTANCE (metres)
Glenville House	510369	684838	T1	4315



Figure 14-11: NIAH structures and historic gardens within 5km of the nearest Proposed Turbine.



Figure 14-12: NIAH structures and historic gardens within 5km of the nearest Proposed Turbine and ZTV.

Cartographic Evidence and Local Cultural Heritage

The available historic Ordnance Survey maps were consulted for any items of cultural heritage merit that may be located within the Site. Field survey also assisted in determining if any local cultural heritage features were located in the vicinity of any Proposed Project infrastructure. The cartographic sources consulted include the Down Survey barony maps (1656-8), and the first (1829-41), second (1897-1913) and third (1830s-1930s) edition Ordnance Survey (OS) maps.

Down Survey Barony Maps

The Down Survey maps of Ireland are available to view at www.downsurvey.tcd.ie and were consulted as part of this assessment (<https://downsurvey.tchpc.tcd.ie/>, accessed 19th December 2025). Following Cromwell's invasion of Ireland in the mid-17th century, the country had been devastated, the population decimated, the economic infrastructure destroyed. The English had effectively created a blank slate in Ireland onto which they now sought to project a new plantation society. Following this a Civil Survey was taken from 1654-6 in order to value the lands in Leinster, Munster, Ulster and Connaught. The Civil Survey is a collation of landowner records, standardized to townland level and was considered by many of the new owners to be inaccurate. The Down Survey, so called because a chain was laid down and a scale made, was therefore taken from 1656-8 under the direction of William Petty. The resulting maps, made at a scale of 40 perches to one inch (the modern equivalent of 1:50,000), were the first systematic mapping of a large area on such a scale attempted anywhere. The primary purpose of these maps was to record the boundaries of each townland and to calculate their areas with great precision. The maps are also rich in other detail showing churches, roads, rivers, castles, houses and fortifications.

The Down Survey barony maps for the area of the Proposed Project were destroyed in 1711 and therefore are not available for consultation.

First, Second and Third Edition OS maps

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

First Edition

The early Ordnance Survey maps are an unrivalled source for the period immediately before the Great Irish Famine (1847-50) when the population was at the highest level ever recorded. The maps depict large portions of the Site as open mountainous land with field enclosures and associated small settlements on the lower slopes (Figure 14-13). Both the earthwork (CL031-019—) and the ringfort (CL031-018—) located towards the west side of the Site are indicated as hachured sub-circular areas. No other features of archaeological potential are shown within the Site.

A ruinous stone structure (CH1) was noted adjacent to the proposed 33kV underground cabling in Letterkelly townland during field survey carried out as part of this assessment. The structure is indicated

on the first and second edition OS maps and appears to represent the remains of a small settlement likely to date to the early to mid-19th century (See Section 14.2.2.2 below) (Figure 14-15).

Second Edition

The aforementioned stone structure is also indicated on the second edition 25-inch OS map. By this time a more extensive network of field enclosures are shown within the Site and attest to an intensification of agricultural activity in this area during the late 19th and early 20th centuries (Figure 14-14).

A stone road bridge (CH2) is located within the Site on the R460 Regional road on the Letterkelly - Cloghaun Beg townland boundary (Figure 14-15). It is an example of a single arched stone road bridge with cut limestone voussoirs of 19th century appearance. It is not indicated or named on either the first or second edition OS maps. The bridge was clearly visible from the entrance to Slievecallan Wind Farm looking north towards the public road and is situated c. 59m to the west of the proposed 33kV underground cabling.



Plate 14-7: CH2 stone road bridge to west of the proposed 33kV underground cabling at Letterkelly - Cloghaun Beg townlands.

Third Edition

The Site is depicted in a similar manner on the third edition 6-inch OS map to that shown on the second edition map.

Table 14-13: Items of local cultural heritage merit located within the Site.

CH. No.	Type	ITM E	ITM N
CH1	Ruinous stone structure	512924	679668



CH. No.	Type	ITM E	ITM N
CH2	Stone road bridge	511947	678201

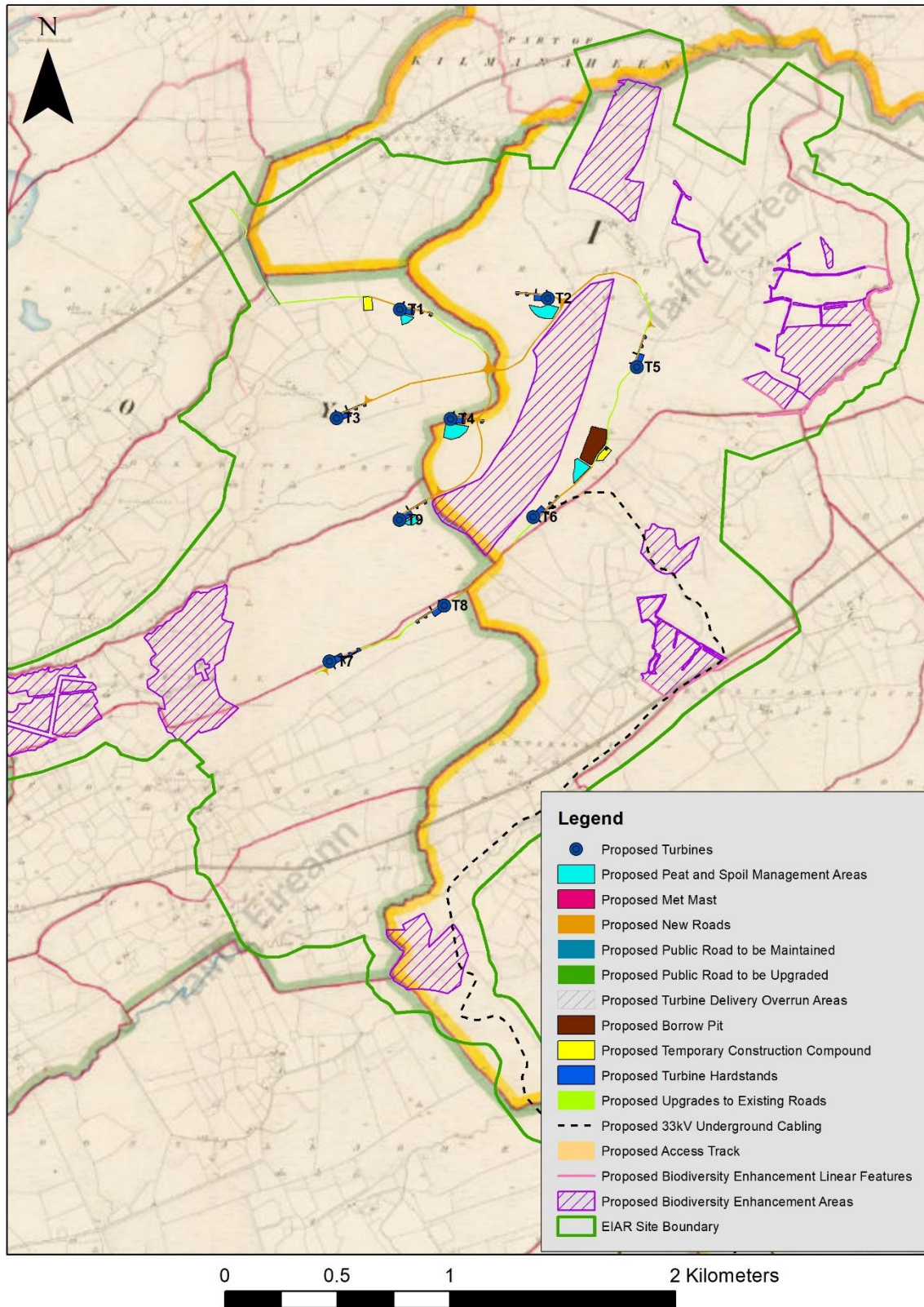


Figure 14-13: Overview of Proposed Wind Farm Site on first edition 6-inch OS background.

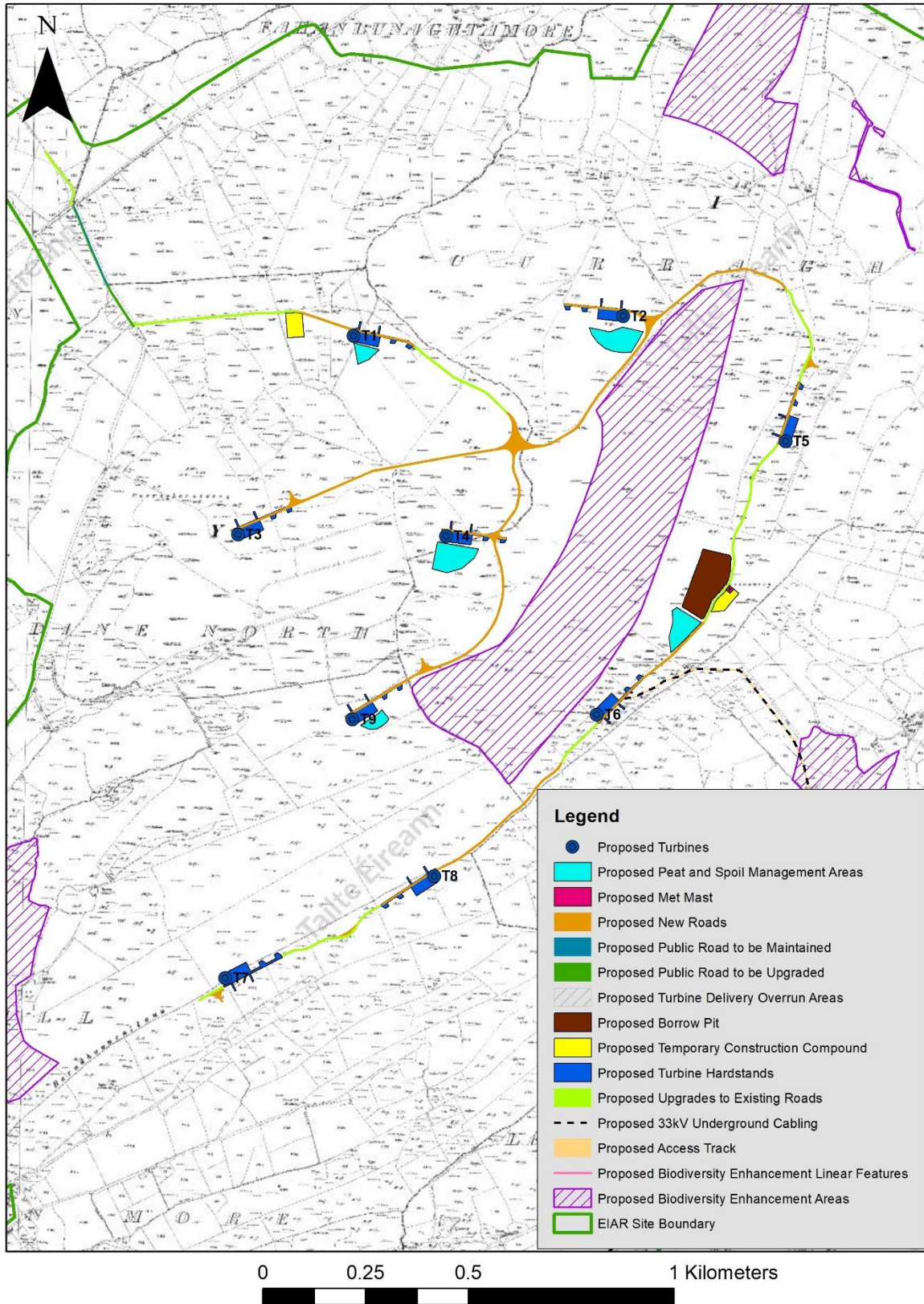


Figure 14-14: Overview of Proposed Wind Farm Site on second edition 25-inch OS background.

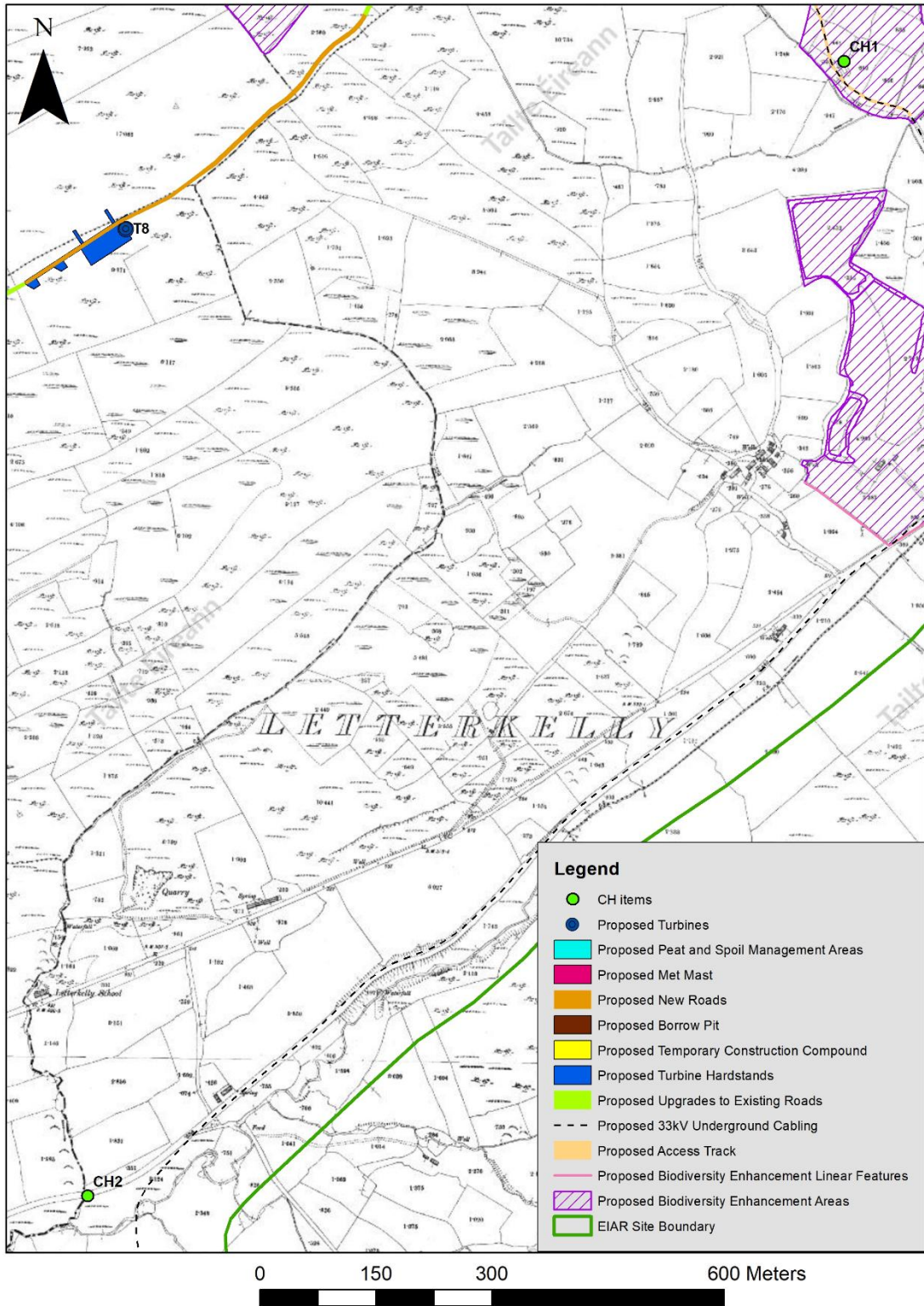


Figure 14-15: CH1 and CH2 on second edition 25-inch OS background.

14.2.2.1.15

Townlands and administrative boundaries

Townlands and administrative boundaries may indicate the presence of archaeological features within a development site. Administrative counties are subdivisions of pre-established counties which were formed for administrative purposes in the nineteenth and twentieth centuries. Baronies are administrative units larger than civil parishes and originally established as the primary subdivision of counties by the British administration in Ireland. Irish baronies which were formed at the time of the Norman conquest were usually named either after Irish territories, or from places which had been of importance in pre-Norman times. Irish baronies came into existence at different periods. The division of Ireland into counties and baronies was a process which continued down to the reign of James I. The original baronies in Ireland were the domains of the Norman barons; in the final stage of development, they were divisions of counties created merely for greater convenience of administration. The word barony is of feudal origin, and was applied to a tenure of a baron, that is, of one who held his land by military service, either directly from the king, or from a superior feudal lord who exercised royal privileges. The origin of the Irish barony (a division of land corresponding to the English hundred) is to be found in the grants of lands which were made to the barons of Leinster and the barons of Meath (Liam Price, 'Ráith Oinn', Éigse VII, lch. 186-7). Civil parishes are administrative units larger than townlands and based on medieval ecclesiastical parishes. Civil parishes, modern Catholic parishes and Church of Ireland parishes may differ in extent and in nomenclature. Counties are administrative units larger than baronies and originally established by the British administration in Ireland between the twelfth and the seventeenth centuries. Some of these were subsequently subdivided into smaller administrative county units.

Townlands are the smallest land units which were determined and established in the Irish administrative system in the first half of the nineteenth century. Many of the townlands were in existence prior to that. Townland names are a valuable source of information, not only on the topography, land ownership and land use within the landscape, but also on its history, archaeological monuments and folklore. Logainm.ie was utilised to ascertain the origin of the townland names within the Proposed Project (Table 14-14).

Table 14-14: Townlands within the Proposed Project and their meaning.

Townland Name	Irish	Meaning
TOOREEN	Tuairín	small bleach, or green field
FAHANLUNAGHTA MORE	-	-
FAHANLUNAGHTA BEG	-	-
CURRAGHODEA	Curragh Uí Deaghaidh	O'Dea's moor
CLOONANAHA	Cluain an Fhathaigh	the plain, bog-island or meadow of the giant
LETTERKELLY	Leitir Cheallaigh	Kellach's slope or hill side
BOOLYNAMISCAUN	Buaile na meascán	booley of the butter rolls
CLOGHAUN BEG	Clochán beag	clochán is a row of stepping stones
CLOGHAUN MORE	Clochán mór	As above
SILVERHILL	Cnocán an airgid	hillock of the silver

GLENDINE NORTH	Gleann doimhinn	Deep valley
DOONSALLAGH EAST	Dún saileach	fort of the shallows
SHANAVOGH EAST	Seana bhoith	old booth, or tent
KNOCKALASSA	Cnoc a' leasa	hill of the fort
CLOONLAHEEN MIDDLE	-	-
MAGHERABAUN	Machaire bhán	white plain
SLIEVEALOUGHHAUN	Sliabh an Locháin	-
BOOLINRUDDA	Buaile an ruide	booley of the mire

14.2.2.1.16 **The Schools' Collection**

The National Folklore Collection (NFC) is a UNESCO recognised folklore archive, and one of Europe's largest archives of oral tradition and cultural history, based at University College Dublin. It comprises various documentary formats including manuscript, photographic, audio, library, art and other archival collections. Part of the NFC is the Schools' Collection which comprises approximately 740,000 pages of folklore and local tradition which were collected by pupils from 5,000 primary schools in the Irish Free State between 1937 and 1939 (<https://www.duchas.ie/en/info/cbe-collections>, accessed 24th March 2026).

While some of the placenames within and surrounding the Proposed Project are mentioned in the collections, none of the stories contain information directly related to the Site.

14.2.2.1.17 **Historical Associations**

A search of placenames in the vicinity of the Proposed Project led to the discovery of information relating to the burial places of British Soldiers during the War of Independence. The bogs near Connolly are thought to be the burial place of a Private Robertson who is said to have been buried in the property of Colonel Frederick St Ledger Tottenham, a local Unionist landlord. Tottenham's bog was chosen as the site for Robertson's burial since it was felt that his lands were unlikely to be searched by the British forces. The bogs are thought to be located in the vicinity of Connolly village, however, the precise location is unclear.

The British Army never found any trace of Private Robertson, except for his bloodstained uniform cap. Three years after Private Robertson's disappearance, during the Civil War, the Duke of Devonshire began correspondence with Richard Mulcahy, commander in chief of the Free State Army, in an effort to locate the remains of Private Robertson and the other British soldiers who had been killed and secretly buried in Clare. Because so many members of the IRA from Connolly, Miltown Malbay and Lahinch had taken the Republican side during the Civil War, the Free State Army was unable to glean much information about the location of these soldiers' remains. The Free State Army was able to confirm that Private Robertson and a second British soldier, Private George Chalmers, had been executed in West Clare and could give the approximate date and location of each execution to the duke. However, they were unable to locate the grave of either soldier and were forced to admit defeat after concluding "there are a good many bogs in that district, the information is not very definite" (History Ireland).

There are Tottenham's recorded in both the 1901 and the 1911 Census residing at Ballynoe, Fermoy (National Archives: Census of Ireland 1911). Ballynoe is 3.6km to the south-east of Site.

The potential for the discovery of human remains relating to the War of Independence can be mitigated by the presence of an archaeologist on site during construction works. Should human remains be uncovered, the archaeologist will follow all necessary procedures regarding the discovery of human remains.

14.2.2.2 The Proposed Grid Connection Site

Each turbine and the meteorological mast will be connected to the proposed extension to the existing 110kV Slievacallan substation via underground 33kV electricity cabling. Fibre-optic cables will also connect each wind turbine and the meteorological mast to the proposed substation extension compound. The electricity and fibre-optic cabling connecting to the proposed extension to the existing 110kV Slievacallan substation compound will be run in cable ducts approx. 1.2m beneath ground level following the access tracks to each turbine location.

The proposed 33kV underground cabling exits the Proposed Wind Farm Site through forestry for approximately 0.83km, onto a farm track for 0.55km before entering the public road corridor. It stays within the public road corridor for approximately 1.55km. The proposed 33kV underground cabling then exits onto existing forestry/wind farm roads, following these for approximately 4.17km before reaching the proposed extension to the existing 110kV Slievacallan substation compound. The total length of cabling along the Proposed Grid Connection Site measures approximately 7.1km.

No recorded cultural heritage assets are located within the footprint of the proposed extension to the existing 110kV Slievacallan substation or on the proposed 33kV underground cabling. The nearest recorded monument comprises the multiple stone circle CL031-052— discussed in Section 14.2.2.1.3 above which is located c. 290m to the north. No newly recorded monuments or potential archaeological sites were noted in the proposed substation extension footprint or along the proposed 33kV underground cabling during the walk-over survey.

No Protected Structures, NIAH structures or historic gardens are located within the footprint of the proposed extension to the existing 110kV Slievacallan substation or along the on the Proposed Grid Connection Site underground cable route. The nearest Protected Structure comprises the National School at Letterkelly townland (RPS 637) which is located c. 284m north-west of the Proposed Grid Connection Site underground cable route and c. 2.8km north-west of the proposed extension to the existing 110kV Slievacallan substation. The nearest NIAH structure is located over 3km west of the proposed 33kV underground cabling and over 4km north-west of the proposed extension to the existing 110kV Slievacallan substation extension.

A review of the available cartographic sources including the first, second and third edition OS maps was also carried out for the Proposed Grid Connection Site. A derelict stone house was recorded in forestry adjacent to the proposed 33kV underground cabling during the field survey (ITM E512924, N679668) in the townland of Letterkelly. The structure is located within forestry although a small area around the structure remains unplanted. It is poorly preserved, roofless and overgrown both within and surrounding the structure. A number of buildings are marked on the first, second and third edition OS map in this location and one of the buildings is likely to represent the surviving structure. The structure is located c. 10m to the east-north-east of the proposed 33kV underground cabling. The building is likely to date the mid-late 19th Century. It is not subject to statutory protection, however, it does represent an item of local cultural heritage merit.



Plate 14-8: CH1 stone structure adjacent to Proposed Grid Connection Site underground cable route.

The townlands in which the Proposed Grid Connection Site is located and their meanings are listed in Table 14-15 below.

Table 14-15: Townlands in which the Proposed Grid Connection Site is located and their meaning.

Townland Name	Irish	Meaning
CURRAGHODEA	Curragh Uí Deaghaidh	O'Dea's moor
LETTERKELLY	Leitir Cheallaigh	Kellach's slope or hill side
DOONSALLAGH EAST	Dún saileach	fort of the sallows
SHANAVOGH EAST	Seana bhoith	old booth, or tent
KNOCKALASSA	Cnoc a' leasa	hill of the fort

14.2.2.3 Proposed Biodiversity Management and Enhancement Plan

A number of areas within the Site are proposed as part of the Biodiversity Management and Enhancement Plan (BMEP), hereafter termed the Proposed Enhancement Site. This will include deforestation and restoration measures, management of farmland for the Hen Harrier, Marsh Fritillary habitat management and the planting of linear hedgerow and riparian woodland habitat.

No recorded cultural heritage assets are located within the Proposed Enhancement Site. Two recorded monuments, CL031-018— Ringfort and CL031-019— Earthwork, are located adjacent to but outside of

areas proposed for conifer felling at the west side of the Site. It is not considered that the proposed conifer felling will directly affect the monuments, however, precautionary mitigation measures are proposed in Section 14.3.3.3 below.

One item of local cultural heritage merit (CH1) is located within an area proposed for conifer felling. CH1 comprises a ruinous stone structure likely to date to the early-mid 19th century. The proposed conifer felling will be located immediately adjacent to the structure therefore precautionary mitigation measures are proposed in Section 14.3.3.8 below.

Given the nature of the proposals, it is not considered that the proposed grassland management, Marsh Fritillary habitat management and planting of linear hedgerow and riparian woodland habitat has the potential to negatively directly or indirectly affect the recorded or unrecorded cultural heritage resource. Coniferous forestry occupies some areas within the Proposed Enhancement Site. Mitigation measures are proposed for areas currently under forest cover (See Section 14.3.3 below).

The townlands in which the Proposed Enhancement Site is located and their meanings are listed in Table 14-16 below.

Table 14-16: Townlands located within the Proposed Enhancement Site and their meaning.

Townland Name	Irish	Meaning
CURRAGHODEA	Curragh Uí Deaghaidh	O'Dea's moor
LETTERKELLY	Leitir Cheallaigh	Kellach's slope or hill side
SILVERHILL	Cnocán an airgid	hillock of the silver
CLOONLAHEEN MIDDLE	-	-
MAGHERABAUN	Machaire bhán	white plain
SLIEVEALOUGHHAUN	Sliabh an Locháin	-
BOOLINRUDDA	Buaile an ruide	booley of the mire

14.2.2.4 Proposed Turbine Delivery Route (TDR) Overrun Areas

For the purpose of this EIAR, the Port of Foynes has been selected and assessed to facilitate turbine delivery to the Site. It is proposed that wind turbine components will be delivered to the Proposed Wind Farm Site, from the Foynes Port, via the N85 National Secondary Road. From Ennis the turbines will be transported northwest along the N85 National Secondary Road to Inagh before turning left on to the R460 Regional Road and transported west for 4.2km to the junction with the L1074 Local Road. The turbines will be transported west/northwest for 4.1km before turning left onto the L1076 local road at Fahabeg. At Fahabeg, the turbines will be transported southwest for 2km after which the route will take a sharp left onto the L6230 local road approaching the Site from the northwest.

Works such as road widening are sometimes required along Proposed Turbine transport routes to accommodate the large vehicles used to transport turbine components to wind farm sites. The proposed transport route for the Proposed Project has been the subject of a route assessment to determine if any works are required along its length. Accommodation works will be required at various locations on the national and regional road network between the port of arrival and Ennis. These will be limited to temporary measures including temporary local road widening, overruns of roundabout island and temporary relocation of some signs and street furniture. The following temporary overrun areas relevant to this assessment will be required along the Proposed TDR (See Ch. 4: 'Description of the Proposed Project' for further detail).

Location 5 – L1074 / L1076 Fahanlunaghta More Road junction

The analyses indicate that temporary local road widening will be required at this junction in order to accommodate the wind turbine vehicles.

Location 6 – L1076 Fahanlunaghta More Road / L6230 Local Road

The analyses indicates that a temporary run-over area and visibility splays will be required at this junction in order to accommodate the wind turbine vehicles.

No recorded cultural heritage assets are located at or in close proximity to the proposed overrun areas therefore no potential effects to same will occur. Potential effects to sub-surface archaeology are detailed in Section 14.3.3.5 below with proposed mitigation.

14.3 Likely Effects and Associated Mitigation Measures

14.3.1 Do Nothing Scenario

If the Proposed Project were not to proceed, the Site will continue to function as it does at present, with no changes made to the current land-use and potential for impacts on population and human health through the construction, operation and decommissioning of the Proposed Project would not occur.

If the Proposed Project were not to proceed, the opportunity to capture part of County Clare's valuable renewable energy resource would be lost, as would the opportunity to contribute to meeting Government and EU targets for the production and consumption of electricity from renewable resources by 2030 and the reduction of greenhouse gas emissions. The opportunity to generate local employment and investment and to diversify the local economy would also be lost.

Furthermore, as this application includes a Biodiversity Management and Enhancement Plan (Appendix 6-4) to be implemented during the development's operation, the opportunity to enhance the site for biodiversity, at a local scale, would also be lost

14.3.2 Construction Phase Potential Effects (Indirect)

Indirect effects, in terms of archaeology, architectural and cultural heritage are considered to be those effects which happen away from the Site. This includes effects on visual setting of any cultural heritage assets in the wider landscape. Since these effects are largely only possible once development is operational, they are considered operational effects and are therefore discussed in Section 14.3.4 below. While visual effects are possible during the construction stage of a Proposed Project, an assessment of the fully operational development is considered more robust and all encompassing.

14.3.3 Construction Phase Potential Effects (Direct)

Direct effects refers to a 'physical effect' on a monument or site. The construction phase of a development may consist of earthmoving activities such as topsoil/peat removal and excavation works as part of the construction phase. This may have a number of potential negative effects on the known and potential archaeological heritage. These are outlined below with the proposed mitigation measures. The potential effects of the Proposed Enhancement Site have also been considered. Given the nature of the works which will be required as part of the plan (including felling of forestry, management of farmland and hedgerow and riparian planting) no potential direct effects to the recorded or sub-surface archaeological resource within these areas are considered likely. No recorded cultural heritage assets are located within the Proposed Enhancement Site areas and in this regard no potential direct effects to same will occur. Two areas proposed for conifer felling are located adjacent to recorded monuments CL031-018— Ringfort and CL031-019— Earthwork. The potential effect of works required for the Proposed Enhancement Site areas (such as clear-felling, stump flipping and surface smoothing) on the Cultural Heritage resource are also considered. See Sections 14.3.3.3, 14.3.3.4, 14.3.3.5 and 14.3.3.8) below for assessment of potential effects.

14.3.3.1 UNESCO World Heritage Sites and those on Tentative List

Identification of Effect

No UNESCO World Heritage Sites (WHS) or those on the Tentative list are located within the Site or within 25km of same. The nearest UNESCO WHS on the Tentative List is situated over 90km to the north-east and comprises the observatory at Birr Castle Demesne.

No direct effects to such assets as a result of the Proposed Project are therefore identified. This is considered a Neutral effect and is Not Significant.

14.3.3.2 National Monuments

Identification of Effect

No National Monuments or those subject to a Preservation Order are located within the Site. Only one monument subject to a Preservation Order (PO No. 7/1987) is located within 10km of the nearest Proposed Turbine, while no National Monuments in State Care are located within 10km of the nearest Proposed Turbine.

No direct effects to these aspects of the cultural heritage resource as a result of the Proposed Project are identified. This is considered a Neutral effect and is Not Significant.

14.3.3.3 Recorded Monuments

Identification of Effect

Three recorded monuments are located within the Site and comprise a multiple stone circle (CL031-052—), an earthwork (CL031-019—) and a ringfort (CL031-018—). The ringfort and earthwork are located at the west side of the Site and are not located in proximity to any Proposed Wind Farm Site infrastructure. The earthwork CL031-019— is located c. 800m to the west of the nearest Proposed Turbine, T7, while the ringfort CL031-018— is located c. 1.5km south-west of T7. The monuments are located adjacent to but outside areas proposed for conifer felling as part of the BMEP. No direct effects to these monuments will occur as a result of the Proposed Project including the Proposed Enhancement Site. Some mitigation is proposed, however, as a precautionary measure given the proximity of the monuments to the proposed felling areas.

Stone circle CL031-052— is located in low-lying boggy pasture c. 48m to the east of an existing farm track. A second farm track (proposed for upgrade) is located to the west of the aforementioned track, c. 79m west of the monument. A borrow pit is proposed to be located immediately to the west of the existing track due for upgrade, c. 86m to the west-south-west of the stone circle. The proposed location of T5 is located c. 275m to the north of the monument with the proposed location of T6 c. 570m to the south-west. The proposed 33kV underground cabling is located c. 290m to the south of the monument. As no Proposed Project infrastructure will be located at the stone circle no direct effects to the monument are identified. This is considered a Neutral effect and is Not Significant. Some mitigation is proposed as a precautionary measure, however, given that the archaeological monument will be located less than 100m from proposed ground works and moving machinery.

Proposed Mitigation Measures

- A 30m exclusion zone will be established around Stone Circle CL031-052— prior to the commencement of the construction phase of the project. The exclusion zone will be established under the supervision of the appointed archaeologist and be delimited by durable fence posts and fencing with 'Keep Out' signage. A photographic record of the exclusion zone will be made by the appointed archaeologist and included in the subsequent reporting for the Site. The requirement for the exclusion zone, fencing materials and signage will be included in the CEMP.
- The location of recorded monuments CL031-018— Ringfort and CL031-019— Earthwork should be clearly shown in the CEMP. No tracking of machinery or other activities associated with the conifer felling will take place in the area of the recorded monuments.

Residual Effect

The implementation of the exclusion zone around Stone Circle CL031-052— will ensure that accidental damage to the monument will not occur and will not result in any direct effects to this monument. The inclusion of the locations of recorded monuments CL031-018— Ringfort and CL031-019— Earthwork in the CEMP will ensure accidental damage to the monuments as a result of conifer felling will not occur. In this regard the residual effect is considered to be Neutral/Imperceptible and Short-term, which is Not Significant.

Significance of Effects

The construction phase will not have any significant effects on recorded monuments since they are excluded from areas proposed for construction works and BMEP works and will be dealt with by way of mitigation measures. The overall significance of effects is Not Significant.

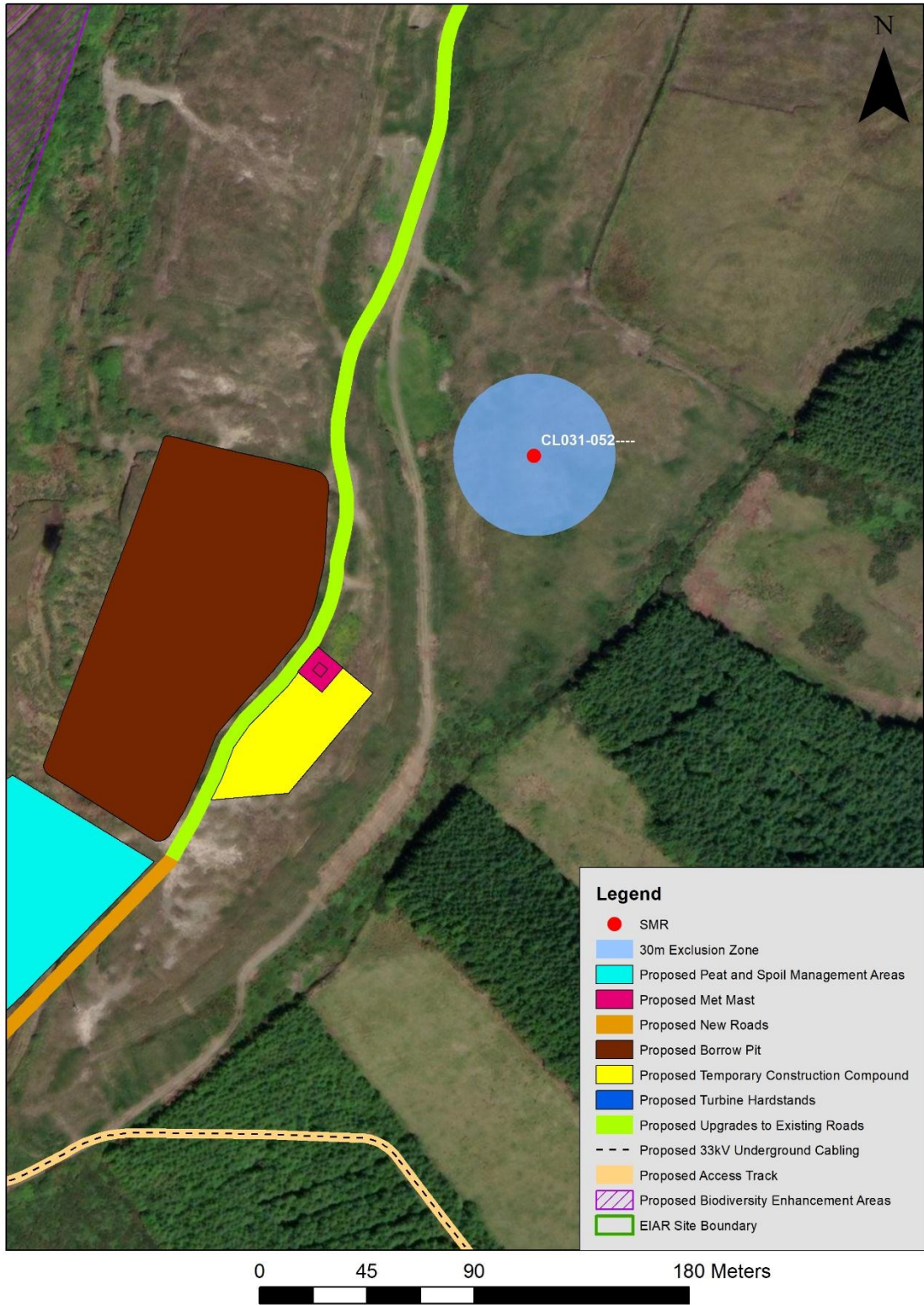


Figure 14-16: Proposed 30m Exclusion Zone around Stone Circle CL031-052—.

14.3.3.4 Previously Unrecorded Monuments within the Site

Pre-Mitigation Effect

No previously unrecorded archaeological monuments, stray finds or structures were noted within the Proposed Wind Farm Site or Proposed Grid Connection during the walk-over survey. In this regard no

potential direct effects to such finds or sites are identified. This is considered a Neutral effect and is Not Significant.

The Proposed Enhancement Site includes areas proposed for clear-felling which are currently densely forested. Such forestry cover may obscure the presence of previously unknown Cultural Heritage assets, although none are indicated on the available historic mapping. In this regard and in the interest of ensuring the continued preservation of any items of Cultural Heritage merit which may be located within the Proposed Enhancement Site some mitigation is proposed as a precautionary measure.

Proposed Mitigation Measures

- A walk-over survey of the Proposed Enhancement Site will be carried out post-clear-felling but prior to any other works such as stump flipping or drain blocking.
- The location of any potential Cultural Heritage features therein will be recorded and a photographic record made of same. A report on the results of the walk-over survey will be compiled on completion of same and will include any further required mitigation measures such as additional buffer zones, etc, deemed necessary.

14.3.3.5 Sub-surface Archaeological Potential

Pre-Mitigation Effect

The potential exists for the Site to contain as yet unrecorded sub-surface archaeology and artefacts. It is possible that such archaeology may be uncovered either within the peat/topsoil and/or at the level of the underlying natural subsoil. The excavation of topsoil /peat for the turbine bases, hardstands and associated infrastructure (roads, cable route, borrow pits etc.) may affect any sub-surface archaeological finds, features or deposits, if present. Other groundworks associated with the junction accommodation areas along the TDR may also directly affect sub-surface archaeological features, if present.

Ground works for the construction of the Proposed Wind Farm Site, Proposed Grid Connection Site, and proposed TDR overrun areas has the potential to directly affect such sub-surface finds, structures and deposits should they exist within the Site. In the absence of appropriate mitigation measures the potential effect is considered to be direct, negative and permanent and would result in a Significant effect to such features if present.

Ground works for the Proposed Enhancement Site areas are considered to be minimal in terms of depth as they will largely comprise the flipping of tree stumps and surface smoothing. The former comprises the flipping of the tree stumps into the adjacent furrow using a mechanical excavator equipped with a toothed bucket. Ground disturbance associated with this work is localised to the generally shallow root system of the tree and will not require deep excavation. Surface smoothing is the process where the ridge and furrows of the forestry drains are levelled or smoothed out using a combination of damping down with the excavator bucket, flipping or mulching stumps, and cross tracking. Surface smoothing also does not involve any deep excavation and may be regarded as minimally invasive given that the key principles of such work are ‘enough and no more’ and aim to minimise compaction and disturbance. In this regard, no potential direct effects to sub-surface archaeology are identified, however, mitigation measures are proposed on a precautionary basis.

Proposed Mitigation Measures

- Archaeological monitoring under licence from the NMS of any geotechnical / engineering trial pits or investigations will be carried out by a suitably qualified archaeologist. A report detailing the results of the monitoring will be compiled on completion of the work and submitted to the NMS and Planning Authority/Body.

- Pre-development testing, under licence from the NMS, will be carried out in areas where peat depths allow a meaningful investigation. Testing will only be undertaken in areas where ground disturbance will take place as part of the Proposed Project. Where peat depths become a limitation to testing, monitoring at the construction stage will be undertaken. The areas to be tested will be chosen by the appointed archaeologist and the number of test trenches agreed between the archaeologist and the NMS through the licensing system. A report on the testing will be compiled on completion of the work. Should archaeological finds, structures or deposits be uncovered as a result of the testing further mitigation measures such as preservation in situ or preservation by record (excavation) may be required and will be decided in consultation with the NMS. Such mitigation measures will be implemented, where relevant, following consultation with the NMS.
- Archaeological monitoring of ground works during the construction stage of the Proposed Project under licence from the NMS will be carried out by a suitably qualified archaeologist. Should archaeological finds, structures or deposits be uncovered as a result of the monitoring further mitigation measures such as preservation in situ or preservation by record (excavation) may be required and will be decided in consultation with the NMS. Such mitigation measures will be implemented where relevant following consultation with the NMS. A report detailing the results of the monitoring and/or any further necessary mitigation as referred to above will be compiled on completion of the work and submitted to the NMS and Planning Authority/Body.
- A walk-over survey of the Proposed Enhancement Site will be carried out post-clear-felling but prior to any other works such as stump flipping or drain blocking.
- The location of any potential Cultural Heritage features therein will be recorded and a photographic record made of same. A report on the results of the walk-over survey will be compiled on completion of same and will include any further required mitigation measures such as buffer zones, etc, deemed necessary.
- A second phase of walk-over survey will be carried out after stump flipping to ensure that any potential finds, features or deposits, if present, can be recorded and any other mitigation required can be implemented where necessary.

Residual Effect

Any archaeological features or sites, if detected during the testing, monitoring or walk-over of the clear-felled forestry within the Proposed Enhancement Site areas 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 effect after the implementation of mitigation measures is likely to be Long-term, Negative and Slight which is Not Significant.

Significance of Effects

The construction phase will not have any significant effects on unrecorded potential sub-surface sites since they will be dealt with by way of mitigation measures. The overall significance of effects is Not Significant.

14.3.3.6 Protected Structures

Identification of Effect

One built heritage structure subject to statutory protection by way of inclusion in the Record of Protected Structures (RPS) is located within the Site and consists of a derelict national school (RPS ID 637). The school is not located adjacent to any proposed infrastructure with the nearest proposed

infrastructure comprising the proposed 33kV underground cabling which will be c. 280 to the south-east. The school is situated over 800m to the south-east of the nearest Proposed Turbine, T7. No direct effects to the Protected Structure as a result of the Proposed Project are therefore identified. This is considered a Neutral effect which is Not Significant.

14.3.3.7 NIAH structures and Historic Gardens

Identification of Effect

No NIAH structures or historic gardens are located within the Site, therefore no potential direct effects to this resource are identified. This is considered a Neutral effect which is Not Significant.

14.3.3.8 Items of Local Cultural Heritage Merit

Two items of local cultural heritage merit (CH1 and CH2) are located within the Site. CH1 comprises a ruinous stone structure located c. 10m to the east of the proposed 33kV underground cabling in Letterkelly townland. The structure is indicated on the first and second edition OS maps and appears to represent the remains of a small settlement likely to date to the early to mid-19th century. It is also located within an area proposed for conifer felling in the BMEP. CH2 comprises a stone road bridge located on the public road c. 59m to the west of the proposed 33kV underground cabling. No direct effects are identified to either structure as a result of the Proposed Project, however, mitigation is proposed at CH1 stone structure given the proximity to the proposed 33kV underground cabling and to the conifer felling proposed as part of the BMEP as a precautionary measure. This is considered a Neutral effect which is Not Significant.

Proposed Mitigation Measures

- A 10m exclusion zone will be established around CH1 stone structure prior to the commencement of the construction phase of the project. The exclusion zone will be established under the supervision of the appointed archaeologist and be delimited by durable fence posts and fencing with 'Keep Out' signage. A photographic record of the exclusion zone will be made by the appointed archaeologist and included in the subsequent reporting for the Site. The requirement for the exclusion zone, fencing materials and signage will be included in the CEMP.

Residual Effect

The implementation of the exclusion zone around CH1 will ensure that accidental damage to the structure will not occur and will not result in any direct effects to same. In this regard the residual effect is considered to be Neutral/Imperceptible and Short-term, which is Not Significant.

Significance of Effects

The construction phase will not have any significant effects on the identified local cultural heritage items (CH1 and CH2) since they are excluded from areas proposed for construction works and will be dealt with by way of mitigation measures. The overall significance of effects is Not Significant.

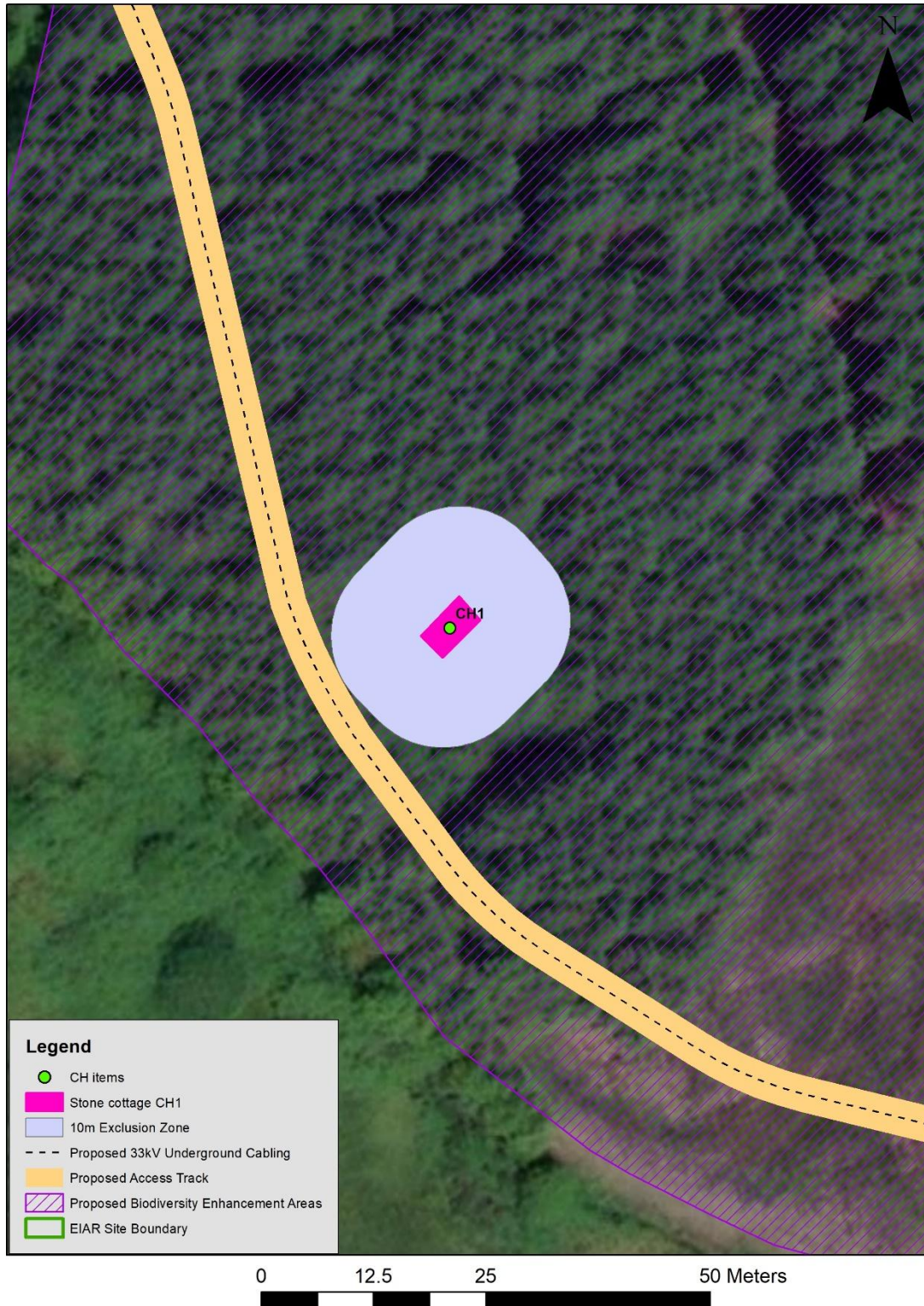


Figure 14-17: 10m Exclusion Zone to be established around derelict stone cottage CH1 at Letterkelly td.

14.3.4 Operational Phase Potential Effects (Indirect)

Indirect effects are where a feature or site of archaeological, architectural heritage merit or their setting is located in close proximity to a proposed development. Indirect effects here are mainly concerned with effects on setting of cultural heritage sites.

Effects on settings of sites may arise when a development is proposed immediately adjacent to a recorded monument or cluster of monuments. While the Proposed Project may not affect 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 effect to the setting of a monument. For purposes of assessing visual effects on setting, the uniqueness of the monuments, the potential interrelationships of monuments, the inter-visibility of monuments, visual dominance and whether a setting is altered or unaltered can be used to assess effect. The nature and dominance of the Proposed Project is also taken into consideration and the topography within which the Proposed Project is located. Operational effects are considered largely as a result of the Proposed Turbines rather than other elements of the Proposed Project which would not be dominant in the wider landscape setting in general, however the proposed extension to the existing 110kV substation and the proposed met mast are also considered. The potential visual effect of the Proposed Enhancement Site on the cultural heritage resource has also been assessed. The assessment of effects on visual setting was undertaken using both the Zone of Theoretical Visibility (ZTV) map in the Landscape and Visual Impact Assessment (LVIA), as presented in Ch. 13: Landscape and Visual, and also with reference to photomontages. The ZTV is a bare-ground model which does not take screening vegetation into account.

14.3.4.1 UNESCO World Heritage Sites and those on Tentative List

Identification of Effect

No UNESCO World Heritage Sites (WHS) or those on the Tentative list are located within the Site or within 25km of same. The nearest UNESCO WHS on the Tentative List is situated over 90km to the north-east and comprises the observatory at Birr Castle Demesne. No indirect effects to the setting of UNESCO World Heritage Sites (WHS) or those on the Tentative list will occur as a result of the Proposed Project. This is regarded as a Neutral effect and is Not Significant.

14.3.4.2 National Monuments

Identification of Effect

No National Monuments or those subject to a Preservation Order are located within the Site. Only one monument subject to a Preservation Order (PO No. 7/1987) is located within 10km of the nearest Proposed Turbine, while no National Monuments in State Care are located within 10km of the nearest Proposed Turbine. PO 7/1987 comprises a group of two ringforts at Dough townland which are located over 7km to the north of the nearest Proposed Turbine, T1.

The ZTV demonstrates no theoretical visibility of the Proposed Turbines from the location of these monuments. In this regard no potential visual effects to those monuments subject to a Preservation Order as a result of the Proposed Project are identified. This is regarded as a Neutral effect and is Not Significant.

14.3.4.3 Recorded Monuments

Identification of Effect

A total of eighty-three (83) recorded monuments are located within 5km of the nearest Proposed Turbine. This number includes the three monuments located within the Site. No recorded monuments are located on the proposed extension to the existing 110kV Slievecallan substation. The underground nature of the proposed cable connection is such that potential visual effects to the cultural heritage resource as a result of same will not occur.

Both the distance to the nearest turbine and the number of turbines visible from cultural heritage assets are used to arrive at a level of potential effect on setting (see Table 14-4). Potential effects on setting as

detailed in Table 14-17 below are based on a theoretical precautionary scenario in that natural screening, boundaries, buildings and vegetation are not taken into account in the ZTV model. In reality the effect will be reduced since the ZTV model does not take natural screening and buildings into consideration which will alleviate if not remove the effect on setting altogether. Furthermore, many of these monuments are not readily discernible in the landscape which further ameliorates effects on setting.

Recorded monuments within the Site

Three recorded monuments are located within the Site and comprise a multiple stone circle (CL031-052—), an earthwork (CL031-019—) and a ringfort (CL031-018—). The ringfort and earthwork are located at the west side of the Site and are not located in proximity to any Proposed Wind Farm Site infrastructure. Both are located in an area where the ZTV demonstrates theoretical visibility of 7-9 Proposed Turbines. While the immediate setting of the monuments will not be affected a change to the wider setting in which they are located will occur. On the basis of the criteria as set out in Table 14-4 above, a potential Moderate, Negative, Long Term effect to the wider setting of these monuments is identified, which is Not Significant. The low-visibility nature of the monuments and the presence of intervening natural screening will mitigate the identified effect.

Stone circle CL031-052— is located in boggy pasture c. 48m to the east of an existing farm track. A second farm track (proposed for upgrade) is located to the west of the aforementioned track, c. 79m west of the monument. A borrow pit is proposed to be located immediately to the west of the existing track due for upgrade, c. 86m to the west-south-west of the stone circle. The proposed location of T5 is located c. 275m to the north of the monument with the proposed location of T6 c. 570m to the south-west. The proposed 33kV underground cabling is located c. 290m to the south of the monument. The ZTV demonstrates theoretical visibility of 7-9 Proposed Turbines from this monument. On the basis of the criteria as set out in Table 14-4 above, a potential Moderate, Negative, Long-Term effect to the wider setting of the stone circle is identified, which is Not Significant. It should be noted that the Proposed Turbines are not located between the stone circle and any potentially inter-related or inter-visible monuments in the surrounding landscape. The nearest of such monuments comprise a standing stone (CL031-051—, Map ID 5) located c. 2.9km to the south-west and an unclassified megalithic tomb (CL031-035—, Map ID 22) located c. 3.7km to the south-east.

Potential visual effects to recorded monuments as a result of the Proposed Enhancement Site is also considered. Two recorded monuments, CL031-018— Ringfort and CL031-019— Earthwork, are located adjacent to but outside of areas proposed for conifer felling at the west side of the Site. It is considered that the felling of the conifer plantations adjacent to the monuments will result in a Positive visual effect to the setting of the monuments, despite both comprising low-visibility monuments within the landscape.

Recorded monuments within 5km of the nearest Proposed Turbine outside the Site

The ZTV shows that 49 of the 83 monuments located within 5km of the nearest Proposed Turbine are located in areas where 7-9 turbines will theoretically be visible. Twelve monuments are located in areas where 4-6 turbines will theoretically be visible while seven monuments are located in areas where 1-3 turbines will theoretically be visible. Sixteen monuments are located in areas where the ZTV demonstrates no theoretical visibility of the Proposed Turbines. Potential effects to the wider setting in which those monuments are located are discussed below and set out in the following table. The potential effects to the wider setting of recorded monuments within 5km ranges from Moderate-Not Significant, Negative, Long Term, which is Not Significant. No potential effects are determined for monuments located where no turbines will theoretically be visible.

Table 14-17: Table of potential effects on setting of recorded monuments within 5km of the nearest Proposed Turbine.

Map ID	SMR	Monument Type	ITM E	ITM N	Townland	Number of turbines theoretically visible	Distance to nearest Proposed Turbine (m)	Theoretical Significance of Effect
1	CL031-052—	CURRAGHODEA	512804	680240	Stone circle - multiple-stone	7-9	275	Moderate
2	CL031-019—	SILVERHILL	510684	679154	Earthwork	7-9	805	Moderate
3	CL031-018—	SILVERHILL	509914	678916	Ringfort - rath	7-9	1599	Moderate
4	CL031-037—	CLOGHAUN MORE	510120	678049	Fulacht fia	4-6	1789	Slight
5	CL031-051—	DOONSALLAGH EAST	511896	677399	Standing stone	7-9	1850	Moderate
6	CL023-037—	KNOCKATULLAGHAUN	514309	683019	House - 16th/17th century	4-6	2879	Slight
7	CL023-061—	CLOONEYOGAN SOUTH	510934	683524	Concentric enclosure	7-9	2890	Slight
8	CL023-036—	KNOCKATULLAGHAUN	514225	683109	Barrow - ring-barrow	7-9	2897	Slight
9	CL031-009—	LEEDS	508587	680987	Ringfort - rath	0	3015	None
10	CL023-034—	CLOONEYOGAN NORTH	511291	683845	Ringfort - rath	7-9	3120	Slight
11	CL023-030001-	CLOONEYOGAN SOUTH	510133	683512	Ringfort - rath	1-3	3212	Not Significant

Map ID	SMR	Monument Type	ITM E	ITM N	Townland	Number of turbines theoretically visible	Distance to nearest Proposed Turbine (m)	Theoretical Significance of Effect
12	CL023-030002-	CLOONEYOGAN SOUTH	510133	683512	House indeterminate date	1-3	3212	Not Significant
13	CL031-029—	DOONSALLAGH WEST	509631	676528	Ringfort - rath	7-9	3256	Slight
14	CL031-049—	CAHEROGAN	508707	677463	Quarry	7-9	3280	Slight
15	CL031-017—	KNOCKLOSERAUN	508270	678536	Ringfort - rath	7-9	3286	Slight
16	CL023-035003-	MOUGHNA	514128	683663	Ringfort - rath	7-9	3302	Slight
17	CL023-035001-	MOUGHNA	514129	683663	Burial ground	7-9	3303	Slight
18	CL031-044—	KNOCKLOSERAUN	508308	678179	Ringfort - rath	7-9	3340	Slight
19	CL023-044—	DRUMBAUN	508592	681938	Ringfort - rath	1-3	3362	Not Significant
20	CL023-035002-	MOUGHNA	514218	683695	Ritual site - holy well	7-9	3376	Slight
21	CL031-045—	DOONSALLAGH WEST	509602	676346	Mound	7-9	3423	Slight
22	CL031-035—	KNOCKALASSA	514177	676726	Megalithic tomb - unclassified	0	3490	None

Map ID	SMR	Monument Type	ITM E	ITM N	Townland	Number of turbines theoretically visible	Distance to nearest Proposed Turbine (m)	Theoretical Significance of Effect
23	CL031-028—	DOONSALLAGH WEST	509292	676376	Ringfort - cashel	7-9	3579	Slight
24	CL031-030—	KILLERNAN	509697	676038	Hut site	7-9	3636	Slight
25	CL031-008002-	KILFARBOY	508112	681593	Graveyard	4-6	3650	Not Significant
26	CL031-031—	KILLERNAN	510493	675681	Ringfort - rath	1-3	3660	Not Significant
27	CL031-008001-	KILFARBOY	508104	681602	Church	4-6	3660	Not Significant
28	CL031-008003-	KILFARBOY	508084	681582	Ritual site - holy well	4-6	3672	Not Significant
29	CL031-024—	CARROWDUFF (Ibrickan By.)	508124	677669	Ringfort - rath	7-9	3697	Slight
30	CL031-033001-	KNOCKALASSA	514160	676412	Cairn - unclassified	0	3731	None
31	CL031-033002-	KNOCKALASSA	514159	676410	Inscribed stone	0	3732	None
32	CL023-026—	AILLBRAK,TOOR	509418	683652	Ringfort - rath	0	3741	None
33	CL023-031—	MOY MORE	510514	684308	Ringfort - rath	7-9	3767	Slight

Map ID	SMR	Monument Type	ITM E	ITM N	Townland	Number of turbines theoretically visible	Distance to nearest Proposed Turbine (m)	Theoretical Significance of Effect
34	CL023-043—	KILFARBOY	508372	682358	Ringfort - rath	4-6	3769	Not Significant
35	CL023-029—	MOY MORE	509883	684013	Ringfort - rath	7-9	3770	Slight
36	CL031-016002-	KILCORCORAN	507596	679464	Enclosure	7-9	3900	Slight
37	CL031-016001-	KILCORCORAN	507570	679486	Children's burial ground	7-9	3928	Slight
38	CL031-016003-	KILCORCORAN	507570	679486	Shrine	7-9	3928	Slight
39	CL031-015—	KILCORCORAN	507553	679412	Ritual site - holy well	7-9	3940	Slight
40	CL023-033—	MOY MORE	510724	684617	Church	7-9	3998	Slight
41	CL031-007—	KILFARBOY	507582	681602	Ringfort - rath	7-9	4151	Not Significant
42	CL031-014—	KILCORCORAN	507287	679468	Ringfort - unclassified	7-9	4209	Not Significant
43	CL031-048—	KILCORCORAN	507282	679386	Standing stone	7-9	4209	Not Significant

Map ID	SMR	Monument Type	ITM E	ITM N	Townland	Number of turbines theoretically visible	Distance to nearest Proposed Turbine (m)	Theoretical Significance of Effect
44	CL023-027002-	MOY BEG	509592	684369	Castle - unclassified	0	4225	None
45	CL023-027001-	MOY BEG	509581	684371	Bawn	0	4232	None
46	CL032-007—	GLENNAGEER	516306	678045	Enclosure	0	4245	None
47	CL023-027003-	MOY BEG	509590	684391	Well	0	4245	None
48	CL031-006—	CARROWKEEL (Ibrickan By.)	507437	681467	Earthwork	7-9	4250	Not Significant
49	CL023-032—	TULLYGARVAN WEST	510677	684873	Ritual site - holy well	7-9	4257	Not Significant
50	CL031-043—	GLENDINE SOUTH	507261	678485	Ringfort - rath	7-9	4287	Not Significant
51	CL023-063—	TOOR	508967	684031	Fulacht fia	0	4322	None
52	CL031-032—	KNOCKALASSA	513751	675493	Megalithic tomb - wedge tomb	0	4330	None
53	CL031-005—	ILLAUN	507212	680780	Megalithic tomb - unclassified	1-3	4335	Not Significant

Map ID	SMR	Monument Type	ITM E	ITM N	Townland	Number of turbines theoretically visible	Distance to nearest Proposed Turbine (m)	Theoretical Significance of Effect
54	CL031-013—	POULAWILLIN	507145	678753	Ringfort - rath	7-9	4366	Not Significant
55	CL031-012—	KILCORCORAN	507103	679152	Ringfort - rath	7-9	4385	Not Significant
56	CL031-004—	ILLAUN	507131	680931	Ringfort - cashel	1-3	4435	Not Significant
57	CL031-042—	KILCORCORAN	507017	679003	Barrow - ditch barrow	7-9	4475	Not Significant
58	CL031-027—	KILLERNAN	509101	675353	Ringfort - rath	7-9	4530	Not Significant
59	CL023-028—	MOY BEG	509799	684844	Ringfort - rath	7-9	4542	Not Significant
60	CL023-041—	BALLYVASKIN NORTH	507191	681669	Ringfort - rath	0	4544	None
61	CL032-008002-	BALLYNOE	516328	677517	Children's burial ground	0	4573	None
62	CL032-008001-	BALLYNOE	516333	677503	Church	0	4585	None

Map ID	SMR	Monument Type	ITM E	ITM N	Townland	Number of turbines theoretically visible	Distance to nearest Proposed Turbine (m)	Theoretical Significance of Effect
63	CL031-047—	KILCORCORAN	506921	679619	Standing stone	7-9	4585	Not Significant
64	CL031-025—	DOONSALLAGH WEST	508169	675945	Ringfort - rath	4-6	4650	Not Significant
65	CL031-046—	KILCORCORAN	506824	679547	Standing stone	7-9	4676	Not Significant
66	CL031-026002-	KILLERNAN	508953	675269	Ritual site - holy well	7-9	4680	Not Significant
67	CL039-012—	KILLERNAN	509042	675210	Ritual site - holy well	7-9	4682	Not Significant
68	CL031-039—	ILLAUN	506845	680588	Ringfort - rath	4-6	4683	Not Significant
69	CL031-011002-	POULAWILLIN	506839	678629	Hut site	7-9	4684	Not Significant
70	CL031-011001-	POULAWILLIN	506831	678629	Ringfort - rath	7-9	4692	Not Significant
71	CL031-026001-	KILLERNAN	508960	675250	Burial ground	7-9	4692	Not Significant

Map ID	SMR	Monument Type	ITM E	ITM N	Townland	Number of turbines theoretically visible	Distance to nearest Proposed Turbine (m)	Theoretical Significance of Effect
72	CL023-025—	MOY BEG	509364	684826	Ringfort - rath	0	4734	None
73	CL031-010—	KILCORCORAN	506741	679339	Burial ground	7-9	4748	Not Significant
74	CL023-023—	CLOONEYBREEN, TOOR	508144	683845	Enclosure	7-9	4779	Not Significant
75	CL039-015—	SHANAVOGH WEST	509658	674725	Ringfort - rath	1-3	4837	Not Significant
76	CL031-003001-	ILLAUN	506682	680391	Ringfort - rath	4-6	4838	Not Significant
77	CL032-001—	DERRYHARRIV	517622	679698	Ritual site - holy well	7-9	4840	Not Significant
78	CL023-042—	BALLYVASKIN NORTH	507246	682563	Barrow - ring-barrow	7-9	4843	Not Significant
79	CL031-003002-	ILLAUN	506676	680399	Hut site	4-6	4844	Not Significant
80	CL031-041—	LEAGARD NORTH	506615	679631	Ringfort - rath	4-6	4891	Not Significant

Map ID	SMR	Monument Type	ITM E	ITM N	Townland	Number of turbines theoretically visible	Distance to nearest Proposed Turbine (m)	Theoretical Significance of Effect
81	CL024-036—	DRUMCULLAUN	517328	682529	Post row - peatland	7-9	4911	Not Significant
82	CL031-034—	KNOCKALASSA	515014	675537	Ringfort - rath	0	4942	None
83	CL031-038—	ILLAUN	506575	680436	Enclosure	4-6	4946	Not Significant

Mitigation Measures

No mitigation measures proposed.

Residual Effect

The residual effects range from Moderate-Not Significant as outlined in Table 14-17 of Potential Effects.

Significance of Effects

The operational phase will not have any significant effects on recorded monuments. The overall significance of effects is Not Significant.

14.3.4.4 Previously Unrecorded Monuments

Identification of Effect

No previously unrecorded archaeological monuments, stray finds or structures were noted within the Site during the walk-over survey. In this regard no potential visual effects to the setting of such finds or sites are identified. This is regarded as a Neutral effect and is Not Significant.

14.3.4.5 Sub-surface Archaeology

Potential visual effects to sub-surface archaeology which may exist within the Site are negated by the sub-surface nature of such features that do not have any above-ground elements on which the Proposed Project will have a visual effect. This is regarded as a Neutral effect and is Not Significant.

14.3.4.6 Archaeological Landscapes

The Proposed Project is not located in or immediately adjacent to areas which have been designated as Archaeological Landscapes. Potential visual effects to any such landscapes will therefore not occur.

14.3.4.7 Protected Structures

Identification of Effect

One Protected Structure is located within the Site and consists of a derelict national school (RPS ID 637). The school is not located adjacent to any proposed infrastructure with the nearest proposed infrastructure comprising the proposed 33kV underground cabling which will be c. 280 to the south-east. The school is situated over 800m to the south-east of the nearest Proposed Turbine, T7. A total of six (6) Protected Structures are located within 5km of the nearest Proposed Turbine including the National School (RPS. 637) located within the Site.

Both the distance to the nearest Proposed Turbine and the number of turbines theoretically visible from cultural heritage assets are used to arrive at a level of potential effect on setting (see Table 14-4). The theoretical significance of effects to Protected Structures located within 5km of the nearest Proposed Turbine is listed in Table 14-18 below. The ZTV demonstrates theoretical visibility of the Proposed Turbines from 5 of the 6 Protected Structures located within 5km.

The immediate setting of the Protected Structures within 5km will not be affected, however, a change to the wider setting within which they are located is acknowledged and ranges from Not Significant to Slight, Negative, Long Term, which is Not Significant. The distance of Protected Structures from the

Proposed Turbines will mitigate some potential visual effects. Additionally, many of these structures are located on private lands which are not formally accessible to the public. It is also noted that natural screening, boundaries, buildings and vegetation were not taken into consideration in the ZTV and will also potentially screen some visual effects.

Table 14-18: Table of potential effects on setting of Protected Structures within 5km of the nearest Proposed Turbine.

RPS ID	NIAH Reg.	Structure	ITM E	ITM N	No. of Turbines Theoretically Visible	Distance To Turbine (m)	Theoretical Significance of Effects
637	N/A	National School	511872	678459	4-6	837	Slight
564	N/A	Fahy's Cottage	514120	682770	0	2568	None
202	20403106	Doonsallagh Bridge	509342	676807	7-9	3216	Slight
635	N/A	Kilfarboy Church, Graveyard and Holy Well	508089	681580	4-6	3666	Not Significant
162	20402308	St. Flannan's Church	509886	684704	7-9	4378	Not Significant
207	20403108	Honan's Bridge	507089	678194	7-9	4512	Not Significant

Mitigation Measures

No mitigation measures are proposed.

Residual Effect

The residual effects will be the Not Significant-Slight, Negative, Long Term as identified in the table of Potential Effects.

Significance of Effects

The overall significance of effects is Not Significant.

14.3.4.8 NIAH Structures and Historic Gardens

Identification of Effect

No NIAH structures or historic gardens are located within the Site. Three NIAH structures are located within 5km of the nearest Proposed Turbine. One historic garden, that associated with Glenville House, is located within 5km of the nearest Proposed Turbine. It is situated c. 4.3km north-west of the nearest Proposed Turbine, T1.

The ZTV demonstrates theoretical visibility of 7-9 Proposed Turbines from all of the structures and the historic garden within 5km.

Both the distance to the nearest Proposed Turbine and the number of turbines theoretically visible from cultural heritage assets are used to arrive at a level of potential effect on setting (see Table 14-4). The theoretical significance of effects to NIAH structures located within 5km of the nearest Proposed Turbine is listed in Table 14-19 while the theoretical significance of effects on the setting of historic gardens is listed in

Table 14-20 and ranges from Slight to Not Significant, Negative, Long Term, which is Not Significant. In regard to the historic gardens, it should be noted that many of these sites may not retain their original features and by their very nature are not readily visible in the wider landscape. Potential visual effects as identified in the table below will therefore be mitigated by distance to the Proposed Turbines, intervening natural screening and the low visibility nature of the garden.

Table 14-19: Table of potential effects on setting of NIAH structures within 5km of the nearest Proposed Turbine.

NIAH REG.	Type.	Name	No. of Turbines Theoretically Visible	Distance To Turbine (m)	Theoretical Significance of Effect
20403106	bridge	Doonsallagh Bridge	7-9	3216	Slight
20402308	church/chapel	Saint Mary's Catholic Church	7-9	4379	Not Significant
20403108	bridge	Honan's Bridge	7-9	4511	Not Significant

Table 14-20: Table of potential effects on setting of Historic Gardens within 5km of the nearest Proposed Turbine.

NAME	ITM E	ITM N	No. of Turbines Theoretically Visible	Distance To Turbine(M)	Theoretical Significance of Effect
Glenville House	510369	684838	7-9	4315	Not Significant

Mitigation Measures

No mitigation proposed.

Residual Effect

The residual effects will be Slight-Not Significant as identified in the table of Potential Effects.

Significance of Effects

The operational phase will not have any significant effects on NIAH structures or Historic Gardens. The overall significance of effects is Not Significant.

14.3.4.9 Items of Local Cultural Heritage Merit

Two items of local cultural heritage merit (CH1 and CH2) are located within the Site. CH1 comprises a ruinous stone structure located c. 10m to the east of the proposed 33kV underground cabling in Letterkelly townland. The structure is indicated on the first and second edition OS maps and appears to

represent the remains of a small settlement likely to date to the early to mid-19th century. It is also located within an area proposed for conifer felling in the BMEP. CH2 comprises a stone road bridge located on the public road c. 59m to the west of the proposed 33kV underground cabling.

The felling of the conifers currently surrounding the stone structure CH1 is considered to have a Positive visual effect to the setting of this item of local cultural heritage merit. The trees currently surrounding CH1 obscure the structure from view. Removal of the trees immediately surrounding same will help to restore the immediate setting of the structure to that which likely existed at the time of its construction.

No potential visual effects to bridge CH2 as a result of the Proposed Project are identified. This is considered a Neutral effect which is Not Significant.

14.4 Decommissioning Phase

There will be no significant potential effects to the archaeological, architectural and cultural heritage environment during the decommissioning phase of the Proposed Project. Any potential direct effects will already have been resolved through mitigation measures during the construction phase. Therefore, there is no potential for any cumulative effects to arise during the decommissioning phase.

14.5 Cumulative Effects

A cumulative effect is defined as ‘The addition of many small effects to create one larger, more significant effect’ (EPA 2022). Cumulative effects 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 vicinity of the Proposed Project. The potential cumulative effects between the Proposed Project and the other projects described in Ch. 2: ‘Background to the Proposed Project’, hereafter referred to as the other projects, have been considered in terms of effects on archaeology and cultural heritage.

The other projects considered in relation to the potential for in combination effects arising from construction, operational and decommissioning phases of the Proposed Project and for which all relevant data was reviewed include those listed below.

14.5.1 Non-Wind Farm Projects within 20km

A list of all extant planning applications within 20km of the Proposed Turbines was considered in terms of cumulative effects. The majority of these applications comprise agricultural and residential developments such as single dwelling houses, and agricultural buildings in addition to other larger developments such as quarries, larger residential developments, solar PV developments, etc. Such developments if located in proximity to archaeological monuments or other cultural heritage assets may have the potential to directly or indirectly affect such features. It is considered, however, that the planning authority would have regard to the protection of any known or unknown cultural heritage sites through the requirement for assessments or implementation of appropriate mitigation measures through the planning process or the discharge of conditions attached to a grant of planning permission, where relevant.

14.5.2 Other Wind Farms

A number of other existing, permitted or proposed wind farms are located within 25km of the Proposed Turbines as detailed in Section 2.9 of Ch. 2 ‘Background to the Proposed Project’.

14.5.3 Cumulative Effects (Direct Effects – Construction stage)

The interaction between other projects and the Proposed Project has been considered in order to assess Cumulative Effects. These include wind farms within 25km of the Proposed Turbines. Direct effects for the Proposed Project are considered to be confined to within the Site and relate to construction effects.

14.5.3.1 Cumulative effects (direct)

14.5.3.1.1 Cumulative effects to UNESCO World Heritage sites (tentative), National Monuments in State Care, Recorded Monuments, NIAH and RPS

No UNESCO WHS or those on the Tentative List, National Monuments in State Care or NIAH sites are located within the footprint of the Proposed Project and therefore no direct effects on these resources were identified when considering the Proposed Project alone. Three recorded monuments and one Protected Structure are located within the Site, however, no direct effects to these features as a result of the Proposed Project have been identified. When the Proposed Project is considered cumulatively with other projects therefore, it does not result in direct cumulative effects since none were identified in the first place.

14.5.3.1.2 Cumulative effects on potential sub-surface archaeology

Potential direct effects identified at the construction stage of the Proposed Project are those which may occur to hitherto unknown sub-surface archaeological finds, features or deposits. This potential effect was identified as being direct, permanent and negative. After the mitigation measures are implemented, however, these potential effects will be Slight and Not Significant. The overall significance of effects is therefore Slight and Not Significant.

The same potential construction stage effect could be identified for the other wind farm projects since groundworks could impact on hitherto unknown archaeological, finds, features or deposits or other cultural heritage assets. In this regard there could potentially be a cumulative effect when the Proposed Project is considered cumulatively with other wind farm sites. Mitigation measures seek to alleviate such negative effects if not remove the effect altogether and therefore there will be no significant cumulative effects on sub-surface remains. Furthermore, archaeological monitoring of ground works associated with the nearby Slievacallan Wind Farm did not uncover any potential sub-surface archaeological remains with no resulting direct effects.

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

14.5.4 Cumulative Effects (Indirect Effects – Operational Stage)

Indirect effects on setting occur at the operational stage of the development (when turbines are operational). In this regard in order to assess overall cumulative effects on archaeology and cultural heritage, the Proposed Project is considered in the context of its operation in combination with other wind farms within 25km of the Proposed Turbines. See Ch. 2: 'Background to the Proposed Project', section 2.9 for detail regarding the methodology for cumulative assessment.

14.5.4.1 UNESCO World Heritage sites (tentative)

No UNESCO World Heritage Sites (WHS) or those on the Tentative list are located within the Site or within 25km of same. The nearest UNESCO WHS on the Tentative List is situated over 90km to the north-east and comprises the observatory at Birr Castle Demesne. No indirect effects to the setting of UNESCO World Heritage Sites (WHS) or those on the Tentative list will occur as a result of the Proposed Project. As no potential visual effects to those sites will occur as a result of the Proposed Project there is no potential for cumulative effects when considered with other wind farms within 25km.

14.5.4.2 National Monuments

No National Monuments or those subject to a Preservation Order are located within the Site. Only one monument subject to a Preservation Order (PO No. 7/1987) is located within 10km of the nearest Proposed Turbine, while no National Monuments in State Care are located within 10km of the nearest Proposed Turbine. PO 7/1987 comprises a group of two ringforts at Dough townland which are located over 7km to the north of the nearest Proposed Turbine, T1. The ZTV demonstrates no theoretical visibility of the Proposed Turbines from the location of these monuments. In this regard no potential visual effects to those monuments subject to a Preservation Order as a result of the Proposed Project are identified. As no potential visual effects to those sites will occur as a result of the Proposed Project there is no potential for cumulative effects when considered with other wind farms within 25km.

14.5.4.3 Recorded Monuments

A total of eighty-three (83) recorded monuments are located within 5km of the nearest Proposed Turbine. This number includes the three monuments located within the Site. No recorded monuments are located on the proposed extension to the existing 110kV Slievecallan substation.

Three recorded monuments are located within the Site and comprise a multiple stone circle (CL031-052—), an earthwork (CL031-019—) and a ringfort (CL031-018—). The ringfort and earthwork are located at the west side of the Site and are not located in proximity to any Proposed Wind Farm Site infrastructure. Both are located in an area where the ZTV demonstrates theoretical visibility of 7-9 Proposed Turbines. While the immediate setting of the monuments will not be affected a change to the wider setting in which they are located will occur. A potential Moderate, Negative, Long Term effect to the wider setting of these monuments is identified which is Not Significant. The low-visibility nature of the monuments and the presence of intervening natural screening will mitigate the identified effect. A potential Moderate, Negative, Long-Term effect to the wider setting of the stone circle CL031-052— is also identified and is Not Significant. It should be noted that the Proposed Turbines are not located between the stone circle and any potentially inter-related or inter-visible monuments in the surrounding landscape. The nearest of such monuments comprise a standing stone (CL031-051—, Map ID 5) located c. 2.9km to the south-west and an unclassified megalithic tomb (CL031-035—, Map ID 22) located c. 3.7km to the south-east.

The potential visual effect on the remaining recorded monuments outside the Site ranges from Moderate- Not Significant with no potential visual effect to those monuments located where none of the Proposed Turbines will theoretically be visible.

When considered cumulatively with other wind farms within 25km of the Proposed Turbines the ZTV demonstrates theoretical visibility of the Proposed Turbines and some of the existing Slievecallan turbines, some of the proposed Illaunbaun turbines, some of the proposed Cahermurphy II turbines, all of the existing Booltiagh 1 and Booltiagh Extension turbines and some of the existing Glenmore and Letteragh turbines. Further to the south-west theoretical visibility of the existing Crossmore, Moanmore and Tullabrack turbines and the permitted Ballykett turbines is also demonstrated. In this regard, there is potential for cumulative effects to the wider setting of the recorded monuments within the 5km study area. No cumulative effects to the immediate setting of the monuments are identified, however. Given the distance of the majority of the proposed, permitted and existing turbines from the recorded

monuments in the 5km study area, no significant cumulative effects to their wider setting are anticipated. The nearest existing turbines are those of Slievecallan Wind Farm, some of which are visible from the stone circle CL031-052— located within the Site. It is not considered that the Moderate effect to the wider setting of this monument as identified in this assessment will increase when considered cumulatively with the Slievecallan turbines. A Moderate effect is that which *'alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.'* (EPA 2022).

The Proposed Project will have no significant cumulative effects on recorded monuments when considered in combination with other plans or projects in the vicinity of the site.

14.5.4.4 Archaeological Landscapes

The Proposed Project is not located in or immediately adjacent to areas which have been designated as Archaeological Landscapes. Potential visual effects to any such landscapes will therefore not occur. In this regard no potential cumulative effects will occur when the Proposed Project is considered with other wind farms within 25km.

14.5.4.5 Protected Structures and NIAH

One Protected Structure is located within the Site and consists of a derelict national school (RPS ID 637). The school is not located adjacent to any proposed infrastructure with the nearest proposed infrastructure comprising the proposed underground cable connection which will be c. 280 to the south-east. The school is situated over 800m to the south-east of the nearest Proposed Turbine, T7. A total of six (6) Protected Structures are located within 5km of the nearest Proposed Turbine including the National School (RPS. 637) located within the Site. The overall effects to the setting of Protected Structures as a result of the Proposed Project ranges from Not Significant to Slight which is Not Significant. No potential visual effects are identified where no Proposed Turbines are theoretically visible from such structures.

No NIAH structures or historic gardens are located within the Site. Three NIAH structures are located within 5km of the nearest Proposed Turbine. One historic garden, that associated with Glenville House, is located within 5km of the nearest Proposed Turbine. The theoretical effects on the setting of NIAH structures and historic gardens ranges from Slight to Not Significant which is Not Significant.

When considered cumulatively with other wind farms within 25km of the Proposed Turbines the ZTV demonstrates theoretical visibility of the Proposed Turbines and some of the existing Slievecallan turbines, some of the proposed Illaunbaun turbines, some of the proposed Cahermurphy II turbines, all of the existing Booltiagh 1 and Booltiagh Extension turbines and some of the existing Glenmore and Letteragh turbines. Further to the south-west theoretical visibility of the existing Crossmore, Moanmore and Tullabrack turbines and the permitted Ballykett turbines is also demonstrated. In this regard there is potential for cumulative effects to the wider setting of the Protected Structures, NIAH structures and historic gardens within the 5km study area. No cumulative effects to the immediate setting of the monuments are identified, however. Given the distance of the majority of the proposed, permitted and existing turbines from the recorded monuments in the 5km study area, no significant cumulative effects to their wider setting are anticipated. The nearest existing turbines are those of Slievecallan Wind Farm some of which are visible from the derelict national school (RPS ID 637) located within the Site. It is not considered that the Moderate effect to the wider setting of this structure as identified in this assessment will increase when considered cumulatively with the Slievecallan turbines. A Moderate effect is that which *'alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.'* (EPA 2022).

The Proposed Project will have no significant cumulative effects on Protected Structures and NIAH structures and gardens when considered in combination with other plans or projects in the vicinity of the site.

14.5.4.6 Items of Local Cultural Heritage Merit

Two items of local cultural heritage merit (CH1 and CH2) are located within the Site. CH1 comprises a ruinous stone structure located c. 10m to the east of the Proposed Grid Connection Site in Letterkelly townland. The structure is indicated on the first and second edition OS maps and appears to represent the remains of a small settlement likely to date to the early to mid-19th century. It is also located within an area proposed for conifer felling in the Proposed Enhancement Site. CH2 comprises a stone road bridge located on the public road c. 59m to the west of the proposed 33kV underground cabling.

The felling of the conifers currently surrounding the stone structure CH1 is considered to have a Positive visual effect to the setting of this item of local cultural heritage merit. The trees currently surrounding CH1 obscure the structure from view. Removal of the trees immediately surrounding same will help to restore the immediate setting of the structure to that which likely existed at the time of its construction. No potential visual effects to bridge CH2 as a result of the Proposed Project are identified.

When considered cumulatively with other wind farms within 25km of the Proposed Turbines, the ZTV demonstrates theoretical visibility of the Proposed Turbines and some of the existing Slieveacurry turbines, some of the proposed Illaunbaun turbines, some of the proposed Cahermurphy II turbines, all of the existing Booltiagh 1 and Booltiagh Extension turbines and some of the existing Glenmore and Letteragh turbines. Further to the south-west theoretical visibility of the existing Crossmore, Moanmore and Tullabrack turbines and the permitted Ballykett turbines is also demonstrated. In this regard there is potential for cumulative effects to the wider setting of CH1.

Given the distance of the majority of the proposed, permitted and existing turbines from CH1 no significant cumulative effects to its wider setting are anticipated.

14.6 Conclusion

This Cultural Heritage chapter was prepared by Tobar Archaeological Services Ltd. It presents the results of an archaeological, architectural and cultural heritage impact assessment of the Proposed Project. The assessment was based on desktop research, field surveys, GIS based mapping, ZTV and was also assisted by representative photomontage images. A detailed examination of the available baseline data was undertaken in addition to a comprehensive site inspection. The latter comprised a walk-over survey of the Proposed Wind Farm Site and Proposed Grid Connection Site and any proposed infrastructure therein.

Where potential effects have been identified, such as to potential sub-surface archaeology appropriate mitigation measures have been recommended in order to minimise any such effects. Proposed mitigation includes pre-development testing, archaeological monitoring of construction stage ground works and any further geotechnical site investigations, and the implementation of an exclusion zone around stone circle CL031-052—.

Potential indirect effects on the setting of any UNESCO World Heritage Sites and those on a Tentative List within 25km, National Monuments within 10km, recorded monuments within 5km and RPS/NIAH structures within 5km were included in order to assess potential effects on setting in the wider landscape. The ZTV demonstrates theoretical visibility of the Proposed Turbines from some cultural heritage assets within 5km. Both the distance to the nearest turbine and the number of turbines visible from each cultural heritage asset were used to arrive a level of potential effect on setting. Potential effects on setting are based on the precautionary scenario in that natural screening, boundaries, buildings and vegetation are not taken into account in the ZTV model and in reality the potential effect is likely to be less. Furthermore, many of these monuments may not be readily discernible in the landscape which further ameliorates effects on setting.

An assessment of potential cumulative effects was also undertaken taking into consideration other planning applications and identified cumulative wind farm projects within 25km. While some potential

cumulative visual effects to the wider setting of cultural heritage assets are possible when considered with the cumulative wind farm projects, no significant cumulative effects have been identified and no cumulative effects to the immediate setting of cultural heritage assets will occur.

No significant direct or indirect effects to the recorded cultural heritage resource as a result of the Proposed Project have been identified. Where potential direct effects to sub-surface archaeology have been identified appropriate mitigation measures are proposed in order to ameliorate this potential effect.

EIA Classification Summary

Please see the below table for a summary of all identified impacts for the Proposed Project relating to cultural heritage.

Table 14-21 Impact Assessment Classification Summary

Cultural Heritage	Pre-Mitigation Effect	Section Reference	Residual Effect	Significant
Construction Phase				
UNESCO WHS and those on the Tentative List	Neutral	Section 14.3.3.1	Neutral	Not Significant
National Monuments and those Subject to a Preservation Order	Neutral	Section 14.3.3.2	Neutral	Not Significant
Recorded Monuments	Neutral	Section 14.3.3.3	Neutral	Not Significant
Previously Unrecorded Monuments	Neutral	Section 14.3.3.4	Neutral	Not Significant
Sub-surface Archaeology	Permanent, Significant, Negative	Section 14.3.3.5	Long term, Slight, Negative	Not Significant
Protected Structures	Neutral	Section 14.3.3.6	Neutral	Not Significant
NIAH Structures and Historic Gardens	Neutral	Section 14.3.3.7	Neutral	Not Significant
Items of Local Cultural Heritage Merit	Neutral	Section 14.3.3.8	Neutral	Not Significant
Operational Phase				
UNESCO WHS and those on the Tentative List	Neutral	Section 14.3.4.1	Neutral	Not Significant
National Monuments and those Subject to a Preservation Order	Neutral	Section 14.3.4.2	Neutral	Not Significant
Recorded Monuments	Moderate-Not Significant, Negative, Long Term	Section 14.3.4.3	Moderate-Not Significant, Negative, Long Term	Not Significant
Previously Unrecorded Monuments	Neutral	Section 14.3.4.4	Neutral	Not Significant

Sub-surface Archaeology	Neutral	Section 14.3.4.5	Neutral	Not Significant
Archaeological Landscapes	N/A	Section 14.3.4.6	N/A	N/A
Protected Structures	Not Significant to Slight, Negative, Long Term	Section 14.3.4.7	Not Significant to Slight, Negative, Long Term	Not Significant
NIAH Structures and Historic Gardens	Not Significant to Slight, Negative, Long Term	Section 14.3.4.8	Not Significant to Slight, Negative, Long Term	Not Significant
Items of Local Cultural Heritage Merit	Positive	Section 14.3.4.9	Positive	Not Significant
Decommissioning Phase				
N/A	N/A	Section 14.4	N/A	N/A