

14 CULTURAL HERITAGE

14.1 INTRODUCTION

This chapter assesses the impacts of the Project (**Figure 1.2**) on cultural heritage which encompasses assets relevant to both the tangible resources (archaeology and architectural heritage); and non-tangible resources (history, folklore, tradition, language, placenames etc.). The recorded and potential cultural heritage resource within study areas encompassing the various elements of the development and surrounding lands was assessed in order to compile a comprehensive cultural heritage baseline and context.

The Project refers to all elements of the application for the construction of Letter Wind Farm (**Chapter 2: Project Description**). Where negative effects are predicted, the chapter identifies appropriate mitigation strategies therein. The assessment will consider the potential effects during the following phases of the Project:

- Construction of the Project
- Operation of the Project
- Decommissioning of the Project

Common acronyms used throughout this EIAR can be found in **Appendix 1.2**. This chapter of the EIAR is supported by Figures provided in Volume III and by the following Appendix documents provided in Volume IV of this EIAR:

- **Appendix 14.1 Description of recorded archaeological monuments located within 2km of the proposed development site, and 100m from the proposed grid connection route.**

A Construction and Environmental Management Plan (CEMP) is appended to the EIAR in **Appendix 2.1**. This document will be developed into a Site-Specific Letter CEMP post consent/pre-construction once a contractor has been appointed and will cover construction of the Development. It will include all of the mitigation recommended within the EIAR. For the purpose of this application, a summary of the mitigation measures is included in **Appendix 17.1**.

14.1.1 Statement of Authority

Through Time Ltd. is a rebranded (2017) archaeological consultancy company that has previously traded as Arch Consultancy Ltd. for almost twenty years. Based in Athenry, County Galway, the company is directed by licensed archaeologists Martin Fitzpatrick M.A. and Fiona Rooney B.A. Both have been involved in all stages of development projects from initial design, compilation of EIAs, archaeological monitoring and resolution during

construction. The projects managed ranges from single dwelling houses to impact assessments for large-scale residual landfills, road developments and wind farms. Both directors have been involved in the development of residual landfill facilities for almost twenty years from initial design consultations, impact assessments, EIAs and involvement in ensuring that the archaeological and cultural heritage conditions attached to the developments are completed to the highest professional standards. Martin Fitzpatrick, the author of this chapter has worked in Irish archaeology for the past 25 years. He is a graduate of NUIG and completed a Master's Degree specialising in the architecture of 15th/16th century Tower Houses in County Galway. Martin has previously overseen the completion of impact assessments on wind farms, landfill developments and a 60 km motorway development on the M6.

14.1.2 Assessment Structure

In line with the revised EIA Directive and current EPA guidelines (as detailed in **Section 14.2.2** below) the structure of this chapter will consist of separate considerations of cultural heritage effects in the following order:

- Assessment of cultural heritage value and sensitivity
- Assessment of the magnitude of cultural heritage effects within the Study Area
- Assessment of the significance of cultural heritage impacts
- Assessment of cumulative cultural heritage impacts

14.2 ASSESSMENT METHODOLOGY AND SIGNIFICANCE CRITERIA

14.2.1 Definition of Study Area

This chapter includes an assessment of the archaeological, architectural and cultural heritage resource within the study that includes the footprint of the proposed development and lands within a radius of 2km from the development site and within 100m of the proposed grid connection route (**Appendix 14.1**). World Heritage Sites or sites listed on the tentative list for World Heritage Sites within a radius of 20km were assessed for impact on visual setting. National Monuments within a 10km radius of the proposed development were assessed for impact on visual setting.

14.2.2 Assessment Methodology

The methodology used for this assessment is based on Environmental Protection Agency (EPA 2003) *Advice Notes on Current Practice in the preparation of Environmental Impact Statements* and EPA (2002) *Guidelines on the Information to be contained in Environmental Impact Statements*; as well as more recent (draft) guidance methods have also been utilised

per EPA (2015) *Draft Advice Notes for Preparing an EIS* and (2022) *Guidelines for Information to be Contained in EIAR*. The chapter seeks to comply with the requirements of Directive 2011/92/EU as amended by Directive 2014/52/EU, and the Planning and Development Act, 2000 (as amended) and Planning and Development Regulations, 2001 (as amended). The assessment has also been informed by guidelines for the assessment of impacts on the cultural heritage resource as published by the International Council on Monuments and Sites (ICOMOS 2011).

14.2.3 Relevant Legislation and Guidance

The tangible elements of the cultural heritage resource can be loosely divided into the archaeological resource comprising sites and monuments dating from the prehistoric period to the post-medieval period and the architectural heritage resource, encompassing standing structures and sites of cultural importance often dating to the post-medieval and modern periods. In addition, assets such as local placenames, folklore and traditions are considered part of the intangible cultural heritage resource. The management and protection of the cultural heritage resource in Ireland is achieved through a framework of international conventions and national laws and policies. This framework was established in accordance with the provisions of the 'European Convention on the Protection of the Archaeological Heritage' (the Valletta Convention) and the 'European Convention on the Protection of Architectural Heritage' (Grenada Convention). Both of these conventions were ratified by the Republic of Ireland in 1997. The UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage, 2003, was ratified by Ireland in 2015.

The relevant legislation and guidelines that are relevant to this assessment include the following:

- National Monuments Act 1930 (and amendments);
- Heritage Act (1995);
- National Cultural Institutions Act (1997);
- Architectural Heritage (National Inventory) and Historic Monuments (Misc) Provisions Act (1999);
- Planning and Development Act (2000) as amended;
- Department of Arts, Heritage and Gaeltacht (2011) *Architectural Heritage Protection: Guidelines for Planning Authorities*
- Department of Arts, Heritage, Gaeltacht and the Islands (1999) *Framework and Principles for the Protection of Archaeological Heritage*

14.2.3.1 Archaeological Heritage

The National Monuments Service (NMS) is currently based in the Department of Housing, Local Government and Heritage and is responsible for the preservation, protection and promotion of Ireland's archaeological heritage. The National Monuments Acts 1930 (and amendments), the Heritage Act 1995 and relevant provisions of the National Cultural Institutions Act 1997 are the primary means of ensuring the satisfactory protection of archaeological remains. There are a number of mechanisms under the National Monuments Acts that are applied to secure the protection of archaeological monuments. These include the designation of National Monument status, the Register of Historic Monuments (RHM), the Record of Monuments and Places (RMP) and the Sites and Monuments Record (SMR) as well as the placing of Preservation Orders and Temporary Preservation Orders on endangered sites.

A National Monument is described as 'a monument or the remains of 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' (Section 2, National Monument Act, 1930).

The RMP was established under Section 12 (1) of the National Monuments (Amendment) Act, 1994 and was based on the SMR and RHM. These records comprise lists and maps of all known archaeological monuments and places for each county in the State. All archaeological sites listed in the RMP receive statutory protection under the National Monuments Act 1994 and no works can be undertaken at their locations, including their surrounding Zones of Notification, without providing two months advance notice to the NMS.

14.2.3.2 Architectural Heritage

Protection of architectural or built heritage is provided for through a range of legal instruments that include the Heritage Act 1995, the Architectural Heritage (National Inventory) and National Monuments (Misc. Provisions) Act 1999, and the Planning and Development Act 2000. Section 2.1 of the Heritage Act 1995, describes architectural heritage as follows:

'All structures, buildings, traditional and designed, and groups of buildings including streetscapes 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, and, without prejudice to the generality of the foregoing, includes railways and related buildings and structures and any place comprising the remains or traces of any such railway, building or structure.'

The Planning and Development Act 2000 requires Planning Authorities to maintain a 'Record of Protected Structures' (RPS) of buildings and other structures that are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. All structures listed for protection in current Development Plans, are designated Protected Structures and planning permission is required for any works to such structures that would affect their character. A protected structure also includes the lands and other structures within its curtilage. While the notion of curtilage is not defined by legislation, the *Architectural Heritage Protection Guidelines for Local Authorities* (Dept. Arts, Heritage and the Gaeltacht 2011), describes it as the parcel of land immediately associated with a structure and which is (or was) in use for the purposes of the structure. The Planning and Development Act 2000 also provides for the inclusion of objectives for preserving the character of places, areas, groups of structures or townscapes of special interest designated as Architectural Conservation Areas (ACAs).

The Architectural Heritage Act 1999 established the National Inventory of Architectural Heritage (NIAH) and the NIAH Historic Gardens and Designed Landscapes to create a record of built heritage structures and associated lands within the State. While inclusion in a NIAH inventory does not provide statutory protection to a structure, the inventory is used to advise local authorities on compilation of their Records of Protected Structures.

14.2.3.3 Leitrim County Development Plan 2023-2029

Leitrim County Council has written policies on the preservation of archaeological, architectural and cultural heritage remains in relation to permitted development in the Leitrim County Development Plan ("the CDP"). Details of relevant policies and objectives are included in **Section 14.4.6**.

14.3 DESK STUDY

This involved an evaluation of the archaeological, historical and cultural heritage resource through a desk study of published and unpublished cartographic sources and historical accounts supported by a field survey.

The following sources were examined as part of the assessment.

- Record of Monuments and Places ("RMP") for County Leitrim;
- Sites and Monuments Record ("SMR") for County Leitrim;
- The Archaeological Inventory for County Leitrim;
- Topographical files of the National Museum of Ireland;

- Cartographic sources, comprising pre-19th century historic maps and various editions of the Ordnance Survey (OS) six-inch maps and 25-inch maps;
- Excavations Bulletins and Excavations Database (Excavations 1970 to 2020);
- NIAH, Building Survey and Garden Survey (NIAH 2020);
- Placenames Database of Ireland (Logainm 2020);
- Aerial imagery online: Google Earth 2001 to 2018 (Google Earth 2001 to 2018), Bing 2013 (Bing 2020) and Ordnance Survey Ireland (OSI) 1995; 2000; 2005 to 2012 (OSI 2020);
- Schools collection
- Leitrim County Development Plan 2023-2029;
- Leitrim Heritage Plan 2020-2025
- Townland names; and
- The schools collection.

National Monuments in State Care

The Department of Housing, Local Government and Heritage (DHLGH) maintains a database on a county basis of National Monuments in State Care. The term National Monument is defined in Section 2 of the National Monuments Act (1930) as a monument or the remains of 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”. The database is a list of all the National Monuments in State guardianship or ownership. Each is assigned a National Monument number whether in guardianship or ownership and has a brief description of the remains of each Monument. The Minister for the DHLGH may acquire national monuments by agreement or by compulsory order. The state or local authority may assume guardianship of any national monument (other than dwellings). The owners of national monuments (other than dwellings) may also appoint the Minister or the local authority as guardian of that monument if the state or local authority agrees. Once the site is in ownership or guardianship of the state, it may not be interfered with without the written consent of the Minister.

Record of Monuments and Places & Sites and Monuments Record

The Sites and Monuments Record SMR, as revised in the light of fieldwork, formed the basis for the establishment of the statutory Record of Monuments and Places RMP in 1994 (RMP; pursuant to Section 12 of the National Monuments (Amendment) Act, as amended in 1994). The RMP records known upstanding archaeological monuments, their original location (in cases of destroyed monuments) and the position of possible sites identified as

cropmarks on vertical aerial photographs. The information held in the RMP files is read in conjunction with published constraint maps. Archaeological sites identified since 1994 have been added to the non-statutory SMR database of the Archaeological Survey of Ireland (NMS, DHLGH), which is available online (NMS 2020) and includes both RMP and SMR sites. Those sites designated as SMR sites have not yet been added to the statutory record but are scheduled for inclusion in the next revision of the RMP.

Topographical Files of The National Museum of Ireland

This is the archive of all known finds recorded by the National Museum. The archive primarily relates to artefacts but also includes references to monuments and previous excavations. The find spots of artefacts are important contributors to the knowledge of the archaeological landscape. Location information relating to finds is an important indicator of human activity.

Photography

The Ordnance Survey of Ireland aerial photographs (www.osi.ie) were consulted to identify any archaeological features in the landscape which may not have been previously recorded. Photomontage from the LVIA chapter were examined.

Leitrim County Development Plan 2023-2029

The County Development plan (2023-2029) was consulted for the schedule of buildings (Record of Protected Structures) and items of cultural, historical or archaeological interest that may be affected by the proposed development.

National Inventory of Architectural Heritage

The NIAH maintains a non-statutory register of buildings and structures and historic gardens and designed landscapes recorded on a county basis.

Cartographic Analysis

Consultation of the historical mapping such as the Ordnance Survey Maps from 1838 to the present day, Lewis map 1837 and Taylor and Skinner maps facilitated a further assessment of the archaeological and architectural and cultural heritage.

Excavation Bulletins

The Bulletin is a summary publication that has been produced every year since 1970. This summarises every archaeological excavation that has taken place in Ireland during that year up until 2013 and since 1987 has been edited by Isabel Bennett. This information is

vital when examining the archaeological content of any area, which may not have been recorded under the SMR and RMP files. This information is also available online (www.excavations.ie) from 1970–to 2018.

Schools Collection

The Schools Collection forms part of the National Folklore Collection, created in the late 1930's it is comprised of folklore and local traditions compiled by school children throughout Ireland. Documents relating to the area of the proposed development were examined relating to details of community, placenames and folklore.

14.3.1 Field Survey

Field inspection is necessary to determine the extent and nature of archaeological and architectural remains and can also lead to the identification of previously unrecorded or suspected sites and portable finds through topographical observation and local information.

The archaeological and architectural field walking inspection entailed:

- Walking the proposed development area and its immediate environs;
- Noting and recording the terrain type and land usage;
- Noting and recording the presence of features of archaeological, architectural or cultural heritage significance;
- Verifying the extent and condition of recorded sites;

14.3.2 Predicted Impacts on Archaeological, Architectural and Cultural Heritage

14.3.2.1 Level of Impact

The following provides a summary of the criteria used to assess impacts in order to concisely outline the methodology specifically applied to the cultural heritage resource which has been informed by relevant EPA and ICOMOS guidelines (see **Section 14.2** above).

Duration of Effect

The duration of effects is assessed based on the following criteria:

- Momentary (seconds to minutes)
- Brief < 1 day
- Temporary <1 year
- Short-term 1-7 years
- Medium Term 7-15 years

- Long Term 15-60 years
- Permanent > 60 years
- Reversible: Effects that can be undone, for example through remediation or restoration

Quality of Effect

The quality of an effect on the cultural heritage resource can be positive, neutral or negative:

- Positive Effect – a change which improves the quality of the cultural heritage environment (e.g., increasing amenity value of a site in terms of managed access, signage, presentation etc. or high-quality conservation/restoration and re-use of an otherwise vulnerable derelict structure).
- Neutral Effect – no change or effects that are imperceptible, within the normal bounds of variation for the cultural heritage environment.
- Negative Effect – a change which reduces the quality of the cultural heritage resource (e.g. visual intrusion on the setting of an asset, physical intrusion on features/setting of a site etc.)

Type of Effect

The type of effect on the cultural heritage resource can be direct, indirect or no predicted impact.

- Direct Impact – where a cultural heritage site is physically located within the footprint of the proposed development, which will result in its complete or partial removal.
- Indirect Impact – where a cultural heritage site or its setting in the landscape is located in within environs of the proposed development.
- No predicted impact – where the proposed development will not adversely or positively affect a cultural heritage site.

Magnitude of Effect

This is based on the degree of change, incorporating any mitigation measures, on a cultural heritage asset and can be negative or positive. The magnitude is ranked without regard to the value of the asset according to the following scale: High; Medium; Low and Negligible and has been informed by criteria published in the International Council on Monuments and Sites Guidance on Heritage Impact Assessments for Cultural World Heritage Properties (ICOMOS 2011) (**Table 14.1**).

Value assessment criteria

The evaluation of the values of cultural heritage asset used for the purposes of assessment is not intended as definitive, but rather an indicator which contributes to a wider judgment

based the individual circumstances of each asset. The Value of all known or potential assets that may be affected by development are ranked according to the following scale: Very High; High; Medium; Low and Negligible. The factors for assessing the value of cultural heritage assets provided in **Table 14.2** have regard to the ICOMOS Guidance on Heritage Impact Assessments for Cultural World Heritage Properties¹ (ICOMOS 2011, 14.17). This guidance is intended as indicative and is used in combination with a consideration of the condition/preservation; documentary/historical significance, group value, rarity, visibility in the landscape, fragility/vulnerability and amenity value of the cultural heritage assets on a case-by-case basis. The values assigned to identified assets within the study areas were determined following the completion of the desktop research combined with subsequent site inspections and are presented in **Section 14.4** of this chapter.

Significance of Effects

The significance of effect can be described as Profound, Very Significant, Significant, Moderate, Slight, Not Significant or Imperceptible (**Table 14.3**) and is assigned based on the combined evaluation of effect magnitude and asset significance (**Table 14.4**).

Table 14.1: Magnitude of Impact Assessment Indicators of the Cultural Heritage Asset

Indicative factors for assessing the Magnitude of Impact on the Cultural Heritage Asset (after ICOMOS Guidelines 2011)	
High	Most or all key archaeological or architectural materials affected such that the resource is totally altered. Comprehensive changes to setting. Changes to most or all key historic landscape elements, parcels or components; extreme visual effects; fundamental changes to use or access; resulting in total change to historic landscape character unit. Major changes to area that affect Intangible Cultural Heritage activities or associations or visual links and cultural appreciation.
Medium	Changes to many key archaeological or historic building materials/elements such that the resource is clearly/significantly modified. Considerable changes to setting that affect the character of the archaeological asset. Changes to the setting of a historic building, such that it is significantly modified. Change to many key historic landscape elements, parcels or components, visual change to many key aspects of the historic landscape, considerable changes to use or access, resulting in moderate changes to historic landscape character. Considerable changes to area that affect the Intangible Cultural Heritage activities or associations or visual links and cultural appreciation.
Low	Changes to key archaeological materials/historic building elements, such that the resource is slightly altered/slightly different. Slight changes to setting of an archaeological monument.

¹ https://www.iccom.org/sites/default/files/2018-07/icomos_guidance_on_heritage_impact_assessments_for_cultural_world_heritage_properties.pdf

Indicative factors for assessing the Magnitude of Impact on the Cultural Heritage Asset (after ICOMOS Guidelines 2011)	
	Change to setting of a historic building, such that it is noticeably changed. Change to few key historic landscape elements, parcels or components; slight visual changes to few key aspects of historic landscape; slight changes to use or access; resulting in limited change to historic landscape character. Changes to area that affect the Intangible Cultural Heritage activities or associations or visual links and cultural appreciation.
Negligible	Very minor changes to key archaeological materials or setting. Slight changes to historic building elements or setting that hardly affect it. Very minor changes to key historic landscape elements, parcels or components; virtually unchanged visual effects; very slight changes to use or access; resulting in very small change to historic landscape character. Very minor changes to area that affect the Intangible Cultural Heritage activities or associations or visual links and cultural appreciation.

Table 14.2 Value Indicators of the Cultural Heritage Asset

Indicative factors for assessing Value of Cultural Heritage Assets (after ICOMOS Guidelines 2011)	
Very High	<i>Potential International Significance</i> World Heritage Sites (including Tentative List properties). Assets of acknowledged international importance. Assets that can contribute significantly to international research objectives.
High	<i>Potential National Significance</i> Designated National Monuments (archaeological). Assets of significant quality and importance, including designated RMP sites. Assets that can contribute significantly to acknowledged national research objectives. Protected Structures/National NIAH Grade Buildings. Conservation Areas containing significant buildings of importance, including group value. Archaeological Landscapes with significant inter-group value and potential for presence of hitherto unrecorded archaeological sites.
Medium	<i>Potential Regional Significance</i> Assets of good quality and importance, including designated RMP sites. Assets that can contribute significantly to acknowledged regional research objectives. Regional Grade NIAH Buildings. Undesignated buildings that can be shown to have exceptional qualities in their fabric or historical associations. Conservation Areas containing buildings that contribute significantly to its historic character. Historic townscape or built-up areas with important historic integrity in their buildings, or built settings (e.g., including street furniture and other structures).
Low	<i>Potential Local Significance</i> Assets compromised by poor preservation and/or poor survival of contextual associations. Assets of limited value, but with potential to contribute to local research objectives. Historic Townscape or built-up areas of limited historic integrity in their buildings, or built settings (e.g., including street furniture and other structures).

Indicative factors for assessing Value of Cultural Heritage Assets (after ICOMOS Guidelines 2011)

Negligible	Assets with very little or no surviving archaeological interest Buildings of no architectural or historical note; buildings of an intrusive character.
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Table 14.3 Significance of Effects

Indicative factors for assessing Value of Cultural Heritage Assets (after ICOMOS Guidelines 2011)

Imperceptible	An effect capable of measurement but without significant consequences.
Not Significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.
Slight	An effect which causes noticeable changes in the character of the environment but without affecting its sensitivities.
Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
Significant	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.
Very Significant	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.
Profound	An effect which obliterates sensitive characteristics.

Table 14.4 Significance of Effects

Magnitude of Impact	High	Not Significant/ Slight	Moderate/ Significant	Significant/ Very Significant	Very Significant/ Profound
	Medium	Not Significant	Slight	Moderate/ Significant	Significant/ Very significant
	Low	Not Significant/ Imperceptible	Slight/ Not Significant	Slight	Moderate
	Negligible	Imperceptible	Not Significant/ Imperceptible	Not Significant/ Slight	Slight
		Negligible	Low	Medium	High
Value/Sensitivity of the Asset					

14.4 BASELINE DESCRIPTION

14.4.1 Introduction

The following sections presents summary details of the main periods within the Irish archaeological record with references to known archaeological sites, designated architectural heritage structures (RPS and NIAH) and identified undesignated cultural heritage assets located within the study areas around the main wind farm site, grid connection route and turbine delivery route. Datasets have been interrogated and retrieved

from current state and local authority sources and are considered accurate at the time of writing in March 2023. The published inventory entries of all recorded archaeological sites and designated architectural heritage structures within the main wind farm and grid connection study areas are presented within the following sections.

14.4.2 Archaeological and Historical Background

There are no recorded archaeological sites located within the red line boundary of the proposed wind farm. Three recorded monuments are located within 2km of the proposed development with all three located c. 1.3km from the Site (**Appendix 14.1**). There are no National Monuments in State Ownership/Guardianship, or sites with Preservation Orders, located within the study area or its close environs. The Passage Tomb Landscape of County Sligo is included in the Tentative List for Ireland for UNESCO World Heritage Site (WHS) Status. The Carrowkeel Passage tomb complex is located c. 17km south-west of the Site.

Early Prehistoric periods

Until the recent identification of human butchery marks on a bear bone recovered from a cave in County Clare and dated to 12,800-12,600 cal. BC, which places it in the Palaeolithic period, the earliest recorded evidence for human settlement in Ireland dated to the Mesolithic period (7000 – 4000 BC) when groups of hunter-gatherers arrived on the heavily forested island. While the transient Mesolithic communities did not construct permanent settlements or monuments that have left any above ground traces, their presence in an area can often be identified by scatters of worked flint in ploughed fields and sub-surface remains of their temporary camps. There are no recorded Mesolithic sites within the study area or the surrounding landscape.

The Neolithic period (4000-2400 BC) began with the arrival and establishment of agriculture as the principal form of economic subsistence, which resulted in more permanent settlement patterns. As a consequence of the more settled nature of agrarian life, new site-types, such as more substantial rectangular timber houses and various types of megalithic tombs begin to appear in the archaeological record during this period. While there are no definitive recorded Neolithic sites within the study area, a cairn (LE016004----) in Altavra townland could potentially date from this period although a more recent origin cannot be discounted. Evidence of Neolithic activity within the wider landscape is provided by the presence of a court tomb (LE015-108001-) in Mullaghmore townland, which is located within a commercial forestry plantation approximately 1.5km to the northwest of the proposed development site. The Archaeological Survey of Ireland has recorded that this monument was largely removed during tree-planting and cutting works undertaken in recent decades (www.archaeology.ie).

There are other recorded Neolithic monuments located within the wider landscape surrounding the study area and the National Museum of Ireland also records the discovery of a polished stone axe within lands located approximately 6km to the east (NMI ref. 1988: 143).

Late Prehistoric periods

The Bronze Age (2400–500 BC) saw the arrival of metal-working techniques to Ireland, initially based on copper-working and gradually adopting the more durable bronze alloy. As well as new metal artefact types, this period also saw the arrival of new monument types such as standing stones, stone rows, stone circles and fulachta fiadh. The burnt mound or fulacht fiadh is the most common Bronze Age site within the archaeological record. Over 4500 fulachta fiadh have been recorded in the country. Although burnt mounds of shattered stone occur as a result of various activities that have been practiced from the Mesolithic to the present day, those noted in close proximity to a trough are generally interpreted as Bronze Age cooking/industrial sites. *Fulachta fiadh* generally consist of a low mound of burnt stone, commonly in horse-shoe shape and are found in low lying marshy areas or close to streams and rivers. Often these sites have been ploughed out and survive as a spread of heat shattered stones in charcoal rich soil with no surface expression in close proximity to a trough. A burnt mound (LE017-012----) is recorded in Corralustia townland 1.3km NW of the study area.

Early medieval

Ireland underwent radical change from the 5th century AD. An upsurge in grasses and weeds is demonstrated in the pollen record, associated with increased pasture and arable farming. A combination of factors led to a revolution in the landscape. Foremost amongst these was the introduction of Christianity in the early 5th century. The new religion was readily accepted and spread throughout the country from the 5th century presenting a catalyst for change. Population expansion was also central to the transformation that swept across Ireland around this time which resulted in a complete, if uneven, spread of settlement across the country. Secular habitation sites in the early medieval period include *crannógs*, cashels and ringforts. Given the marginal wetland nature of the landscape, the area of proposed development would not have provided an ideal location for settlement.

The construction of ringforts in Ireland dates from the early Christian/medieval period (c. 500 AD to 1170 AD) and possibly continued up to the seventeenth century. The most recent study of ringforts has suggested that there are a total of 45,119 potential ringforts or enclosure sites throughout Ireland (Stout, 1997). Rath is the term applied to those ringforts

of earthen construction, while cashel refers to those constructed from stone. A ringfort generally consists of a circular, sub circular, oval or D-shaped area, enclosed by one or more banks of earth or stone, or a combination of both. Earthen ringforts usually have an external fosse surrounding the bank, and a causewayed entrance giving access to the interior. The bank is generally built by piling up inside the fosse, the material obtained by digging the latter. The function of ringforts was generally as enclosed homesteads, with the defences protecting the houses and outbuildings in the interior, but they may also have been used for social gatherings. While there are no recorded monuments dating to the early medieval period within the study area, there are a large number of recorded ringforts and enclosures in the surrounding lands indicating dense settlement within the wider landscape surrounding the study area during the early medieval period.

Late and post-medieval

The piecemeal conquest by the Anglo-Normans of Ireland had a fundamental impact on the Irish landscape. By the end of the 12th century the Anglo-Normans had succeeded in conquering much of the country. The Anglo-Norman invasion stimulated the development of towns and while some stone castles were constructed, earthen mottes or motte-and-bailey castles continued in use. Tower houses developed from the 15th century onwards and were defended stone settlements that originated from the early stone castles but were smaller in size accommodating extended families. During the early part of this period, Leitrim formed the western half of the Kingdom of Breifne. This area was controlled the O'Ruairc clan who had their seat in Dromahair, approximately 10km north-west of the study area. Initial Anglo-Norman forays into the territory were repulsed with a significant Irish victory at the Battle of Áth an Chip in 1270. However, following the collapse of Gaelic Ireland in the early 1600's much of the county was confiscated with lands being transferred to English planters, leading families being the Villers and Hamiltons. There are no recorded sites dating to these periods within the study area. A sweathouse (LE015-017----), dating from the 18th or 19th century, in Treannadullagh townland is located 3km north of the study area.

14.4.3 Record of Monuments and Places (RMP)

No recorded monuments are located within the Site. Three recorded monuments are located within 2km of the proposed development (**Table 14.5**). All three are located c. 1.3km from study area and include a burnt mound (LE017-012----) in Corralustia townland and a ringfort (LE017-004001-) and associated house (LE017-004001-) in Lugmeeltan townland. A detailed description of these monuments is provided in **Appendix 14.1**.

Table 14.5: Details of Recorded Monuments located within 2km of the proposed development site.

RMP No.	TOWNLAND	SITE TYPE	DISTANCE TO SITE
LE017-012----	Corralustia	Burnt Mound	1.3km
LE017-004001-	Lugmeeltan	Ringfort	1.3km
LE017-004002-	Lugmeeltan	House	1.3km

14.4.4 Topographical Files of the National Museum of Ireland

There are no records of artefacts from the proposed development site or surrounding lands.

14.4.5 Aerial Photography & LiDAR

The Ordnance Survey of Ireland aerial photographs (www.osi.ie) were consulted to identify any archaeological features in the landscape that may not have been previously recorded. There was no evidence of additional archaeological, architectural or cultural heritage features recorded on the aerial photographs within the study area.



Plate 1: Extract from digital globe ortho image 2011-2013.

14.4.6 Leitrim County Development Plan 2023-2029

The plan aims to conserve, protect and enhance Leitrim's archaeological and cultural heritage. These following policies relate to archaeological features and objects, built structures, views and scenic routes. Some of these policies and objectives are outlined below:

Policies

POL 1 To secure the preservation (i.e. preservation in-situ or in particular circumstances where the Council is satisfied that this is not possible, preservation by record as a minimum) of all archaeological remains and sites of importance such as National Monuments, Recorded Monuments, protected wrecks and underwater archaeological heritage, to include their setting and context.

POL 2 To promote public awareness of the rich archaeological heritage that exists in Co. Leitrim.

POL 3 To protect and enhance public accessibility to the county's industrial heritage.

POL 4 To protect, preserve and promote the archaeological value of underwater archaeological sites and objects in rivers, lakes, intertidal and subtidal environments. In assessing proposals for development, the Council will take account of the archaeological potential of rivers, lakes, intertidal and sub-tidal environments. Where flood relief schemes are being undertaken, the Council will have regard to the 'Archaeological Guidelines for Flood Relief Schemes' (DHLGH and OPW 2021).

POL 5 To support community initiatives and projects regarding preservation, presentation, publication of 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.

Objectives

OBJ 1 To promote the county's archaeological heritage as a tourism resource, in partnership with tourism organisations and stakeholders.

OBJ 2 To ensure that any development (above or below ground or underwater), within the vicinity of a site of archaeological interest or protected wreck or area of underwater archaeological heritage shall not be detrimental to the archaeological remains, character of the site or its setting.

OBJ 3 To require, where appropriate, that an archaeological assessment or underwater archaeological impact assessment be carried out by a suitably qualified person prior to the

commencement of any activity that may impact upon archaeological heritage, including underwater archaeological heritage.

OBJ 4 To protect the zones of archaeological potential, as identified in the Record of Monuments and Places, protected reefs and underwater archaeological heritage.

OBJ 5 To protect archaeological sites, protected wrecks and underwater archaeological heritage discovered since the publication of the Record of Monuments and Places, which are recorded in the Sites and Monuments Record.

14.4.7 UNESCO World Heritage Sites (and those on tentative list)

The Passage Tomb Landscape of County Sligo was included in 2022 on the new Tentative List for Ireland for UNESCO World Heritage Site (WHS) Status. The Carrowkeel Passage tomb complex is located in the Bricklieve Hills in south County Sligo c. 17km SW of the Site.

14.4.8 National Monuments in State Ownership/Care

The Department of Housing, Local Government and Heritage maintains a database on a county basis of National Monuments in State Care. 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 Housing, Local Government and Heritage (DHLGH). Section 5 of the National Monuments Act (1930) allows owners of other national monuments to appoint the Minister for DHLGH 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. Monuments are also protected by Preservation Orders, also National Monuments. There are no National Monuments recorded in the study area or within 10km radius of the proposed development.

14.4.9 National Inventory of Architectural Heritage

The NIAH maintains a register of buildings and structures recorded on a county basis. The register records no structures in the area of the proposed development. The closest structures are located in Drumkeeran village c. 2.8km east of the proposed development and include houses (Reg. 30807003 and 308007005), a courthouse (Reg. 30807004), a church (Reg. 30807004), and a water pump (Reg. 30807001),

14.4.10 Previous Archaeological Work: Excavations Database

A review of the Excavations Database (1970–2021) revealed that no licensed archaeological work was undertaken in the study area. Archaeological monitoring associated with Derrysallagh wind farm, located c. was completed by Angela Wallace in 2016 (license 16E324) and described as follows:

Archaeological monitoring was required for groundworks at a substation associated with Derrysallagh Windfarm which consists of 12 wind turbines, in the townland of Garvagh Glebe, Seltan, Drumkeeran, Co. Leitrim. Excavation work was required for an extension to the existing Garvagh Glebe 110kV grid connection substation compound (53m x 26m) with switchgear housing (11.6m x 15.3m x 7.3m high), equipment plinths, bunds and fencing, oil interception and associated site development works. All excavation works were archaeologically monitored. This is an upland peat area and peat depths ranging from 0.4-1.5m were observed across the substation area. Drainage channels excavated were also monitored. No evidence for any archaeological finds, features or deposits were encountered (www.excavations.ie).

14.4.11 Ordnance Survey Maps

Consultation of the Ordnance Survey Maps from 1838 to the present day provided further information to aid the Cultural Heritage Assessment. The cartographic sources examined for the study area included the 1st edition of the 6-inch OS maps (surveyed 1830s-40s) the 25-inch OS maps (surveyed in 1888-1913) and the Cassini edition of the 6-inch OS map. There were no unrecorded features of archaeological interest noted on the footprint of the proposed development during the inspection of these sources. Two house sites are indicated on the first edition map in the south of Lent townland, in the area of the proposed access road. A single rectangular structure is indicated in this area on the 25-inch OS map of 1888-1913. This map also records a house in both the south and south-west of the study area. Both of these structures survive as ruins today. These structures will not be impacted by the proposed infrastructure. The area of the proposed development is generally recorded as marginal wet pasture. The land in the south of the study area is recorded as one large holding on the first edition OS map however this area is divided into numerous small fields on the 25-inch OS. Map indicating a more organised, enclosed agricultural landscape. The existing trackway giving access to the forestry plantation in the townland of Boleybaun is recorded on the 25-inch OS. Map.

14.4.12 Schools Collection

The Schools Collection forms part of the National Folklore Collection, created in the late 1930's it is comprised of folklore and local traditions compiled by school children throughout Ireland. Documents relating to the area of the proposed development were examined.

14.4.13 Townland Names

Townlands are the smallest land divisions in the Irish landscape and many may preserve early Gaelic territorial boundaries that pre-date the Anglo-Norman conquest. The layout of Irish townlands was recorded and standardised by the work of the Ordnance Survey in the 19th century. The Irish translation of townland names often refer to natural topographical features, but name elements may also give an indication of the presence of past human activities within the townland. **Table 14.5.** provides the possible translation of the Irish origin of the townland names in the study area and surrounding townlands. The townland of Boleybaun would appear to refer to a tradition where people gathered their cattle to have them milked while Letter refers to a hillside.

Table 14.6: Townland names in the area of the proposed development

Townland	Irish	Possible Meaning
Boleybaun	Na Bhuaile Bhán	Bán- White, grassy Buaile- cattle-fold, summer-pasture <i>'White Booley'</i>
Knocknacoska	Cnocán an Chasctha	Cnocán- Hillock <i>'The hillock of the restraining'</i>
Letter	Leitreach	Hillside
Leckaun	An Leacáin	Place of flagstones
Stangaun	An Stangáin	The small stang (measure of land)
Bargowla	Bharr Gabhla	Barr- top

14.4.14 Field Work

The Site was inspected in March 2023 in clear weather conditions that allowed for good landscape visibility. The Site is located on relatively high ground at elevations ranging between 230m and 250m. The site is situated c. 3km west of Drumkeernan village in County Leitrim and is comprised of open bogland and commercial forestry. There is an

existing access road to the forestry section in the north of the proposed development, in the area of the proposed turbines 1 and 2. The southern section of the proposed development site (incorporating Turbines 3 and 4 and the substation) is currently accessed from a local road.



Plate 2: Existing track in south-east of site.



Plate 3: Reeds and grassland on southern slope of proposed development site. Taken from south-east.



Plate 4: Area of open bog with covering of heather. Taken from the south.

An access road to the proposed wind farm will utilise an existing track to the south of a quarry face. This track climbs steeply through a young conifer plantation and open marshy grassland to a vast area of upland peat covered in heather. The proposed substation will be located at the lower levels in the area of grassland to the north of the existing local road. The access road will zigzag up the slope through marshy grassland and upland peat to Turbine 4 and Turbine 3. Turbine 4 is located west of a conifer plantation in an area of upland peat covered with heather and tall grass. Turbine 3 is located higher in similar ground.

Turbines 1 and 2 are both located in a large conifer plantation in the north of the proposed development. A watercourse with very steep sides divides the area of bogland from the forestry plantation. This forestry plantation is accessed via a roadway in the north. Both turbines 1 and 2 and the met mast will be located within the conifer plantation.



Plate 5: Forestry plantation in N of site. Taken from the SE.



Plate 6: Northern end of forestry road. Met mast will be located to left and access to T2 in right.

A walk over survey of the area of the proposed development revealed no features of archaeological significance.

14.4.15 Grid Connection

The proposed grid connection will travel east from the on-site substation along the L4282 before veering north-west along the L8280 for 6.4km and connecting to the existing Corderry 110kV substation. A ringfort LEO17-004001 with an associated house LEO17-004002 in Lugmeeltan townland is located c. 80m east of the proposed grid connection route and will not be impacted.

14.5 POTENTIAL IMPACTS

Following on from the identification of the baseline environment, the available data is utilised to identify and categorise potential impacts likely to affect the cultural heritage environment as a result of the proposed development. Impacts can be assessed based on the detailed information on the project, the nature of the area affected, and the range of resources potentially affected. A wind farm development can potentially affect the cultural heritage landscape in a number of ways (see **Section 14.3.3**).

14.5.1 Do Nothing Effect

If the Project were not to proceed, then potential effects on cultural heritage assets would not apply with no need for mitigation. The area of the proposed development continues as an area of upland bog and commercial forestry plantation.

14.5.2 Potential Effect (Direct) Construction

The Development will involve the mechanical excavation of peat layers down to and through geologically deposited strata to enable ground engineering works. As identified in **Section 14.4.3** no recorded monuments are located within the proposed development site with three monuments recorded within 2km of the proposed development. No recorded monument will be directly impacted. As a result, the proposed development will have a long-term neutral effect of no significance on recorded monuments. No National Monuments are located within 10km of the proposed development site. The proposed development will have a long-term neutral effect of no significance on National Monuments. No Protected Structures are located within 2km of the proposed development site. The proposed development will have a long-term neutral effect of no significance on Protected Structures. No structures recorded in the NIAH are located within 2km of the proposed development site. The Development will have a long-term neutral effect of no significance on structures recorded in the NIAH.

It is possible that sub-surface archaeological features and/or artefacts survive in the areas of upland peat.

14.5.3 Potential Effect on sub-surface archaeology

The field walkover of the Site recorded no features and/or finds of archaeological significance on the surface of the peat. It is possible however that hitherto unrecorded sub-surface archaeology survives below ground level, either within the peat or at the level of the underlying natural subsoil. Ground disturbance associated with the Development may have a potential impact on unrecorded sub-surface archaeology, however the potential impact cannot be measured.

14.5.4 Potential Effects (indirect) Construction

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 impacts here are mainly concerned with impacts on setting (see **Chapter 12: Landscape and Visual Amenity** of this EIAR).

Impacts on settings of sites arise when a development is proposed immediately adjacent to a recorded monument or cluster of monuments. While the Development may not physically impact on a site, it may alter the setting of a monument or group of monuments. For purposes of assessing visual impact 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 impact.

There is a visual impact on the human landscape. There are no monuments recorded within the proposed development site or study area therefore there is no significant visual impact on the setting. The proposed development infrastructure may be visible from surrounding monuments outside the study area however the visual impact of the development is partially negated by commercial forestry plantations in the south and east. It will still be possible to view any monument from one side or the other without the proposed development infrastructure in the background.

14.5.5 Potential Effects (Direct) Operation

There are **no likely direct effects of significance** during the operational phase of the proposed development on the cultural heritage environment.

14.5.6 Potential Effects (Indirect) Operation

There will be a visual impact on the cultural heritage environment. The upstanding proposed development infrastructure will be visible from the surrounding cultural heritage features.

14.5.7 Mitigation Measures

The following mitigation measures will be implemented during the construction phase:

- All ground disturbance associated with the construction of the proposed development will be monitored by a suitably qualified archaeologist working under licence as issued by the minister (DCHG) under section 26 of the National Monuments Acts (1994-2014).
- In the event of archaeological features, finds and/or deposits been encountered during the monitoring, all relevant authorities should be notified immediately. Preservation in-situ or preservation by record (excavation) may be required.

14.5.8 Residual Impacts

14.5.8.1 Residual Impacts Construction

There will be **no residual effects** during construction phase on the archaeological, architectural and cultural heritage resource within the wind farm development site after mitigation measures have taken place. There will be **negative short-term** visual effects on the archaeological, architectural or cultural heritage resource in the wider area.

14.5.8.2 Residual Impacts Operation

There will be **no residual effects** during operation on the archaeological, architectural and cultural heritage resource within the wind farm development site after mitigation measures have taken place. There will be **negative** long-term visual effects on the archaeological, architectural or cultural heritage resource.

14.5.8.3 Residual Impacts Decommissioning

No new effects are predicted during the decommissioning phase of the project on the archaeological, architectural and cultural heritage environment. Therefore, no mitigation is required.

14.5.8.4 Cumulative

Cumulative impacts encompass the combined effects of multiple developments or activities on a range of receptors. In this case, the receptors are the cultural heritage features in the immediate vicinity of the proposed Development.

The existing 13 turbine Garvagh Glebe wind farm is located in c.1km west of the proposed development while consent for a 10-turbine wind farm has been sought in Croagh, c.3km west of the proposed development. When the location of the proposed development is taken into consideration the overall **long-term negative indirect effect** on the archaeological landscape will increase slightly.

It must be noted that this increase in cumulative impact does not result in any direct effects to archaeology or cultural heritage.

14.6 CONCLUSIONS

The development of a wind farm in the townlands of Letter, Boleybaun, and Stangaun will not impact on any national monument, recorded monument, recorded structure or structure recorded in the National Inventory of Architectural Heritage. A walk over survey of the area

found that the substation will be located in an area of marshy grassland while Turbines 3 and 4 will be located in a large area of open upland bog. No features of archaeological significance were identified in the walk over survey of this area. Turbines 1 and 2 and the met mast will be located in a mature conifer forestry plantation. No features of archaeological significance were identified in the walk over survey of this area.

14.7 STATEMENT OF SIGNIFICANCE

This assessment has identified **no likely significant direct effects (negative)** from the proposed Development on the receiving environment, given the layout and design of the proposed development and the mitigation measures recommended. Parts of the proposed development are located in areas of upland peat where there is potential subsurface wetland archaeology surviving in-situ.