

## 13 Archaeology & Cultural Heritage

### 13.1 Introduction

Moore Group was commissioned to complete an archaeology and cultural heritage impact assessment for a proposed biogas facility development at Ballyvass, Co. Kildare as described herein. This subject site is in low lying arable agricultural land currently under crop, the boundaries of the subject site are demarcated by semi-mature trees and hedgerows. The subject site is bounded by greenfield to the north and west, by the M9 to the south.

Recorded monument KD038-076----, a Fulacht fiadh excavated (and is therefore no longer extant) in advance of a Bord Gáis pipeline development (Gregory, 1999). The excavation revealed three shallow pits and two complete troughs. This site was located in the southern end of the Proposed Development Area (PDA). Roughly 275m from the southern boundary of the PDA another excavation related to the gas pipeline (KD038-062----) revealed a pit with a fill of ash and humus soil and associated finds of pig teeth (Cleary et al. 1987, 5).

A ringfort (KD038-036----) and moated site (KD038-034----) are located to the west in Mullaghreelan townland (both roughly 45m distant). 261m to the east there is an extant mound (KD038-031----). There are no NIAH or RPS structures or demesne lands in the vicinity.

#### 13.1.1 Scope of Work

This study aims to assess, as far as reasonably possible from existing records, the archaeological and cultural heritage environment (hereafter referred to as cultural heritage environment or cultural heritage resource), to evaluate the potential or likely impacts that the proposed development will have on this environment and, where appropriate, to suggest mitigation measures to ameliorate potential impacts, in accordance with the policies of:

- Department of Housing, Local Government and Heritage.
- The National Monuments Acts (1930-2005).
- The Kildare County Development Plan 2023 - 2029.
- Best practice guidelines.

Following on from this, the residual impact that the proposed scheme will have on the baseline environment is identified and evaluated.

### 13.1.2 Terms & Definitions

#### 13.1.2.1 Cultural Heritage

The phrase 'cultural heritage' is a generic term used to identify a multitude of cultural, archaeological, and architectural sites and monuments. The term 'cultural heritage', in Environmental Impact Statement compliance with Section 2(1) of the Heritage Act (1995), is used throughout this report in relation to archaeological objects, features, monuments and landscapes as well as all structures and buildings which are considered to have historical, archaeological, artistic, engineering, scientific, social, or technical significance/merit. For the purposes of this report the definition of "cultural heritage" is taken broadly from the UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972, which considers the following to be "cultural heritage":

- tangible cultural heritage,
- movable cultural heritage (artefacts),
- immovable cultural heritage (monuments, archaeological sites, etc),
- underwater cultural heritage (shipwrecks, underwater ruins, and cities); and
- intangible cultural heritage (oral traditions, folklore etc).

Cultural heritage comprises archaeology, architectural heritage, folklore, and history. Archaeology is the study of past societies through surviving structures, artefacts, and environmental data, and is concerned with known archaeological sites and monuments, areas of archaeological potential and underwater archaeology. Architectural heritage comprises 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. Architectural heritage and archaeology together form 'built heritage' or 'tangible heritage'. Folklore and history are aspects of 'intangible heritage', which also includes language, musical traditions, traditional crafts and skills, townland names, poetry and so on. These forms of cultural heritage are "non-moveable, non-material and largely non environmental although by their associations with certain sites and places, add to the character of an area".

#### 13.1.2.2 World Heritage Sites

Although not formally recognised in Irish legislation, impacts on World Heritage Sites will nonetheless be a material consideration for developments in their wider vicinity. To be included on the World Heritage List, sites must be of outstanding universal value and meet at least one out of ten selection criteria. A World Heritage Site is a landmark or area with legal protection by an international convention administered by the United Nations Educational, Scientific and Cultural Organization (UNESCO). World Heritage Sites are designated by UNESCO for having cultural, historical, scientific, or other form of significance. The sites are judged to contain "cultural and natural heritage around the world considered to be of outstanding value to humanity".

A World Heritage Site is a landmark or area with legal protection by an international convention administered by the United Nations Educational, Scientific and Cultural Organisation (UNESCO). World Heritage Sites are designated by UNESCO for having cultural, historical, scientific, or other form of significance. The sites are judged to contain "cultural and natural heritage around the world considered to be of outstanding value to humanity".

### **13.1.2.3 National Monuments**

On a national level, the highest degree of protection granted to archaeological monuments are those afforded National Monument status, which are protected under the National Monuments Act of 1930 and its various amendments. These are the pre-eminent archaeological sites in Ireland and fall into several categories including:

- Sites that are in the ownership or guardianship of the state.
- Monuments that are the subject of Preservation Orders.
- Monuments in the ownership of a local authority; and
- Walled towns.

Generally National Monuments in state care are numbered amongst the best preserved and most impressive monuments in the country.

### **13.1.2.4 Record of Monuments and Places/Archaeological Survey Database**

The legislation that affords protection to the archaeology of Ireland has seen several amendments since the first National Monuments Act of 1930 and there is a legacy of several different registers and associated terminology.

A feature recorded in the 'Record of Monuments and Places' (RMP) refers to a recorded archaeological site that is granted statutory protection under the National Monuments Act 1930-2004. The RMP is the most widely applying provision of the National Monuments Acts. It comprises a list of recorded monuments and places (resulting from the Archaeological Survey of Ireland [ASI]) and accompanying maps on which such monuments and places are shown for each county. The information contained within the RMP is derived from the earlier non-statutory Sites and Monuments Record (SMR). However, some entries were not transferred to the statutory record as they refer to features that on inspection by the Archaeological Survey were found not to merit inclusion in that record or could not be located with sufficient accuracy to be included. Such sites however remain part of the SMR. The record is a dynamic one and is updated to take account of on-going research.

The most up-to-date record of archaeological monuments, the Archaeological Survey Database (ASD), is available for viewing and download on the [www.archaeology.ie](http://www.archaeology.ie) website. This record is continually revised and indicates several additional sites that do not feature in the RMP. The National Monuments Service also makes available SMR Zones of Notification on the website.

### **13.1.2.5 Sites and Monuments Record**

The Sites and Monuments Record (SMR) is an inventory of the known archaeological monuments in the State. There are more than 150,800 records in the database and over 138,800 of these relate to archaeological monuments.

An 'area of archaeological potential' refers to an area of ground that is deemed to constitute one where archaeological sites, features or objects may be present in consequence of location, association with identified/recorded archaeological sites and/or identifiable characteristics.

### **13.1.2.6 Register of Historic Monuments**

Section 5 of the 1987 National Monuments Act states that the Minister is required to establish and maintain a Register of Historic Monuments. Historic monuments and archaeological areas

present on the register are afforded statutory protection under the 1987 Act. Any interference with sites recorded in the Register without the permission of the Minister is illegal, and two months' notice in writing is required prior to any work being undertaken on or in the vicinity of a registered monument. This list was largely replaced by the Record of Monuments and Places following the 1994 Amendment Act.

#### **13.1.2.7 Architectural Conservation Areas**

The Planning and Development Act 2000, as amended, provides that all Development Plans must now include objectives for preserving the character of Architectural Conservation Areas (ACAs). An ACA is a place, area, group of structures or townscape of special architectural, historical, archaeological, artistic, cultural, scientific, social, or technical interest, or which contribute to the appreciation of protected structures.

In these areas, the protection of the architectural heritage is best achieved by controlling and guiding change on a wider scale than the individual structure, to retain the overall architectural or historic character of an area.

#### **13.1.2.8 Record of Protected Structures/National Inventory of Architectural Heritage**

The importance of our built heritage is enshrined in the Planning and Development Act, 2000 (Part II, Section 10) which places a statutory obligation on local authorities to include in their Development Plans objectives for the protection of structures, or parts of structures, which are of special interest. The principal mechanism for the protection of these structures is through their inclusion on the Record of Protected Structures (RPS). This list provides recognition of the importance of a structure, protection from adverse impacts and potential access to grant aid for conservation works. The record of Protected Structures is an ongoing process and can be reviewed and added to. In considering additions to the Record of Protected Structures local authorities have recourse to the National Inventory of Architectural Heritage (NIAH) which provides a source of guidance on the significance of buildings in their respective areas.

#### **13.1.2.9 Designed Landscapes-Demesnes, Historic Gardens & Country Estates**

The Architectural Section of the DHLGH is in the process of a multi-phase study looking at Designed Landscapes and Historic Gardens that appear as shaded areas on the First Edition Ordnance Survey Maps, circa. 1830.

'The objective of this survey is to begin a process of understanding of the extent of Ireland's historic gardens and designed landscape. Sites were identified using the 1st edition Ordnance Survey maps. These were compared with current aerial photography to assess the level of survival and change.'

### 13.1.3 Methodology

In this assessment, tangible cultural heritage resources are captured under the relevant sections of archaeology and architectural/built heritage., while non-tangible associations with these sites and the wider study area (i.e., history and folklore) are assessed, where known, in the archaeological and historical background section of this report, with further information presented in relevant sections.

Evaluation of the potential impacts of the proposed development upon the archaeological, architectural, and cultural heritage resource is based on a desktop study of written, graphic, photographic, cartographic, and electronic information sources followed by a field survey. Considering, amongst other aspects, the legislative protection afforded to the cultural heritage resource, this report evaluates the archaeological, architectural, cultural, and historical importance of the subject area and examines the potential impacts of the proposed development and the effects on that resource.

The methodology used in the preparation of this assessment is broadly based on guidance provided in the Guidelines for Cultural Heritage Impact Assessment of TII National Road and Greenway Projects (TII Publication Number PE-ARC-02009. 2024), the EPA's Guidelines on the information to be contained in Environmental Impact Assessment Reports (EPA 2023) and other relevant guidelines.

#### 13.1.3.1 Desktop Assessment

Known cultural heritage sites were reviewed on the Archaeological Survey of Ireland (ASI) along with aerial photography and Ordnance Survey Ireland (OSI) mapping and other relevant sources. The following information sources, where relevant, were used for this report:

##### Archaeological Heritage

- UNESCO World Heritage Sites including the tentative list of candidate sites.
- National Monuments, be they in the ownership or guardianship of the State, in the ownership of a local authority or monuments under preservation orders.
- Potential National Monuments in the ownership of a local authority.
- Walled Towns.
- Archaeological Monuments that are the subject of both Preservation Orders and Temporary Preservation Orders.
- The Register of Historic Monuments.
- Archaeological Survey Database (ASD) from [www.archaeology.ie](http://www.archaeology.ie) (Sites and Monuments Record available through the Historic Environment Viewer).
- Record of Monuments & Places (RMP) for Dublin City.
- National Monuments Service (NMS) Sites and Monuments Record (SMR) Zones of Notification.

##### Architectural Heritage

- Architectural Conservation Areas from the Kildare County Development Plan 2023 - 2029.
- Protected Structures from Kildare County Development Plan 2023 - 2029.
- National Inventory of Architectural Heritage (NIAH) and NIAH Garden Survey.
- Demesnes Landscapes and Historic Gardens indicated on the OSI First Edition Mapping.

Where appropriate, sites considered of exceptional value or sensitivity in the broader area were also reviewed.

The Kildare County Development Plan 2023 - 2029 was reviewed to obtain a comprehensive understanding of the cultural heritage of the area. The development plans contain lists of cultural heritage sites including national monuments, recorded monuments, architectural conservation areas, protected structures, and protected views as well as baseline assessments of the landscape character of the county.

The plans also outline the county's heritage policies and objectives that aim to protect and promote the archaeological, architectural, and cultural heritage resource. This evaluation was carried out with due regard to these policies and other relevant information contained within the plans.

To assess the potential impact of the proposed works the following sources were also consulted or reviewed:

- Excavations Bulletin. The Excavation Bulletin is both a published directory and an online database ([www.excavations.ie](http://www.excavations.ie)) that provides summary accounts of all the excavations carried out in Ireland and Northern Ireland from 1970 to 2012. The database gives access to over 15,000 reports and can be browsed or searched using multiple fields, including Year, County, Site Name, Site Type, Grid Reference, Licence No., Sites and Monuments Record No. and Author.
- Topographical files of the National Museum of Ireland. The topographical files of the NMI identify all recorded finds held in the NMI archive that have been donated to the state in accordance with national monuments legislation. The files sometimes include reports on excavations undertaken by NMI archaeologists in the early 20th century. Valuable information that can be gleaned might include the exact location, ground type, depth below ground level and condition when found, of each find. However, the amount and the usefulness of the information available on each find can vary considerably. The topographical files are listed by county and townland and/or street name.
- Cartographic Sources. Analysis of historic mapping shows how the landscape has changed over time. The comparison of editions of historic maps can show how some landscape features have been created, altered, or removed over a period. Sometimes features that appear on these early maps are found to be of potential archaeological significance during fieldwork.
- Toponyms. Townland names are a rich source of information for the land use, history, archaeology, and folklore of an area. The placename can have a variety of language origins such as, Irish, Viking, Anglo-Norman and English. The names can provide information on families, topographical features, and historical incidents. In terms of the built environment many names reference churches, fords, castles, raths, graveyards, roads and passes etc. In compiling the following data, several resources were consulted including the Placenames Database of Ireland [www.logainm.ie](http://www.logainm.ie) and Irish Names of Places by P.W. Joyce (Joyce, 1913).
- Aerial photographs. The usefulness of aerial photography is that it allows for a different perspective - 'the distant view'. Archaeological sites may show up on the ground surface, depending on their state of preservation, by light and shadow contrasts (shadow marks), tonal differences in the soil (soil marks) or differences in height and colour of the cultivated cereal (crop marks). It is also a useful aid in pinpointing existing features and can assist in ascertaining their extent and degree of preservation.

- Lidar. The Geological Survey Ireland Open Topographic Data Viewer was consulted for available 1m/2m DTM Lidar data of the PDA<sup>1</sup>.
- Published archaeological inventories; and
- Documentary Sources: several literary references were consulted.

### **Field Inspection**

In addition to documentary and archival research and analysis, a detailed surface-based inspection of the area of the PDA was undertaken by the author. This also involved visiting selected accessible monuments to appraise the possible effects that the proposed development would have on the receiving archaeological, architectural, and cultural heritage environment as well as to determine sites' current extent and condition. Field inspection is necessary to determine the extent and nature of archaeological, architectural, and historical remains and can also lead to the identification of previously unrecorded or suspected sites and portable finds through topographical observation and local information.

#### **13.1.3.2 Field Inspection**

In addition to documentary and archival research and analysis, a detailed surface-based inspection of the Proposed Development Area (PDA) was undertaken by the author. This also involved visiting selected accessible monuments to appraise the possible effects that the proposed development would have on the receiving archaeological, architectural, and cultural heritage environment as well as to determine sites' current extent and condition. Field inspection is necessary to determine the extent and nature of archaeological, architectural, and historical remains and can also lead to the identification of previously unrecorded or suspected sites and portable finds through topographical observation and local information.

#### **13.1.4 Difficulties Encountered**

No difficulties were encountered during the completion of this assessment. Nonetheless it should be noted that Information held by public data sources can normally be assumed to be reliable, but uncertainty can arise in a number of ways:

Documentary sources are rare before the Medieval period, and as documents were not usually compiled for archaeological purposes, they are inherently biased.

Primary sources, especially older records, often fail to accurately locate sites and are obviously subjective in any interpretation.

The usefulness of aerial photographs depends upon geology, land use and weather conditions when the photographs were taken. Some types of remains do not produce crop, soil or vegetation marks. Aerial photographs necessarily involve some subjective interpretation of the nature of sites.

#### **13.1.5 Description of Project**

The proposed development will consist of the following:

- Construction of 2 no. primary digesters (with an overall height of c. 9.1m), a digestate storage tank (with a height of c. 11.3m), a pump house (with a gross floor

<sup>1</sup> <https://dcenr.maps.arcgis.com/apps/webappviewer>



- RECEIVED 12/08/2025
- area (GFA) of c. 362 sq.m), 2 no. post digester tanks (with an overall height of c. 9.1m), and a safety flare (c. 11.3m in height), located in the southeastern section of the site.
- Construction of 2 no. prepits (c. 4.3m in height), a pasteurisation buffer tank (c. 4.3m in height), and a pasteurisation unit (with a maximum height of c. 4.2m), located to the west of the primary digesters, within the southern section of the site.
  - Construction of digestate treatment and feedstock reception building and odour abatement system (with a GFA of c. 2,797 sq.m and a height of c. 12.1m and c. 16.2m to top of odour abatement stack) located within the southwestern section of the site.
  - Construction of roofed silage clamps (with a GFA of 2,424 sq.m and a height of c. 8.7m) and a fuel storage tank (c. 2m in height), located within the western section of the site.
  - Construction of a combined heat and power (CHP) unit (with a GFA of c. 39 sq.m and a height of c. 2.6m and c. 5.6m to top of flue), a biogas boiler (c. 2.6m in height and c. 5.6m in height to top of flue), a backup boiler (c. 2.6m in height), located within the northern section of the site.
  - Construction of a gas treatment unit (c. 4.2m in height), a grid injection unit (with a GFA of c. 22 sq.m and a height of c. 2.8m), and a CO<sub>2</sub> liquefactor (with an overall height of c. 10.7m to top of storage vessels) a propane tank compound accommodating 2 no. propane tanks (c. 1.6m in height), and an ESB substation (with a GFA of c. 24 sq.m and a height of c. 3.4m), located within the northern section of the site.
  - Construction of a two storey ancillary administration building (with a GFA of c. 327 sq.m and a height of c. 11m) within the northern section of the site, adjacent to the site entrance.
  - Alterations to the adjacent local road and site access road, including junction improvement and widening and site entrance and access arrangements.
  - Associated and ancillary works including parking (9 no. standard, 2 no. EV and 1 no. accessible parking spaces, and bike storage for 10 no. bikes), site entrance and gate, a weighbridge, solar PV arrays at roof level, wastewater treatment equipment, bunding and surface treatments, boundary treatments, lighting, services, lightning protection masts, drainage, landscaping and tree planting, and all associated and ancillary works.

Extracts from the planning drawings as submitted can be seen in **Figure 13.1** and **13.2**. A detailed description of the processes involved at this Proposed Development are included in **Chapter 2: Project Description** of this EIAR.



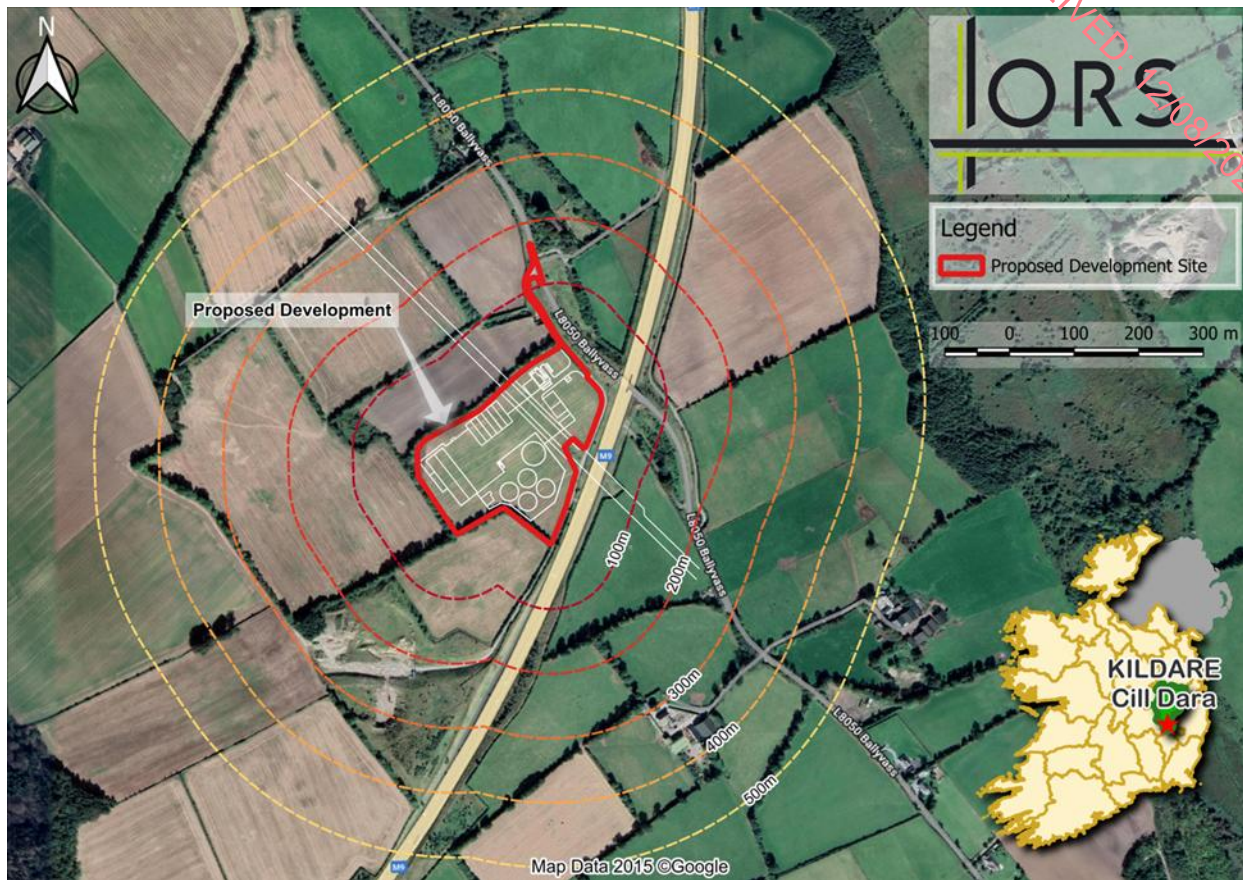


Figure 13.1: Location of the Proposed Development

**CAR PARKING REQUIREMENTS**

Category	Requirement	Notes
Disabled Parking Bays	2.5% of total parking	Minimum 2 bays
Electric Vehicle Charging Bay	1.0% of total parking	Minimum 1 bay
Bike Parking	1.0% of total parking	Minimum 1 bay

**LEGEND**

- LANDSCAPING: Green hatched area
- CONCRETE SURFACE: Grey solid area
- EARTHWORK 1.00 MESH: Orange solid area
- STRUCTURE IDENTIFICATION: Yellow solid area

**STRUCTURE IDENTIFICATION**

- 01. ENTRANCE GATE
- 02. GATE POND
- 03. RECEPTOR
- 04. OFFICE
- 05. BLDG. 10000
- 06. BLDG. 10001
- 07. BLDG. 10002
- 08. BLDG. 10003
- 09. BLDG. 10004
- 10. BLDG. 10005
- 11. BLDG. 10006
- 12. BLDG. 10007
- 13. BLDG. 10008
- 14. BLDG. 10009
- 15. BLDG. 10010
- 16. BLDG. 10011
- 17. BLDG. 10012
- 18. BLDG. 10013
- 19. BLDG. 10014
- 20. BLDG. 10015
- 21. BLDG. 10016
- 22. BLDG. 10017
- 23. BLDG. 10018
- 24. BLDG. 10019
- 25. BLDG. 10020
- 26. BLDG. 10021
- 27. BLDG. 10022
- 28. BLDG. 10023
- 29. BLDG. 10024
- 30. BLDG. 10025
- 31. BLDG. 10026
- 32. BLDG. 10027
- 33. BLDG. 10028
- 34. BLDG. 10029
- 35. BLDG. 10030
- 36. BLDG. 10031
- 37. BLDG. 10032
- 38. BLDG. 10033
- 39. BLDG. 10034
- 40. BLDG. 10035
- 41. BLDG. 10036
- 42. BLDG. 10037
- 43. BLDG. 10038
- 44. BLDG. 10039
- 45. BLDG. 10040
- 46. BLDG. 10041
- 47. BLDG. 10042
- 48. BLDG. 10043
- 49. BLDG. 10044
- 50. BLDG. 10045
- 51. BLDG. 10046
- 52. BLDG. 10047
- 53. BLDG. 10048
- 54. BLDG. 10049
- 55. BLDG. 10050
- 56. BLDG. 10051
- 57. BLDG. 10052
- 58. BLDG. 10053
- 59. BLDG. 10054
- 60. BLDG. 10055
- 61. BLDG. 10056
- 62. BLDG. 10057
- 63. BLDG. 10058
- 64. BLDG. 10059
- 65. BLDG. 10060
- 66. BLDG. 10061
- 67. BLDG. 10062
- 68. BLDG. 10063
- 69. BLDG. 10064
- 70. BLDG. 10065
- 71. BLDG. 10066
- 72. BLDG. 10067
- 73. BLDG. 10068
- 74. BLDG. 10069
- 75. BLDG. 10070
- 76. BLDG. 10071
- 77. BLDG. 10072
- 78. BLDG. 10073
- 79. BLDG. 10074
- 80. BLDG. 10075
- 81. BLDG. 10076
- 82. BLDG. 10077
- 83. BLDG. 10078
- 84. BLDG. 10079
- 85. BLDG. 10080
- 86. BLDG. 10081
- 87. BLDG. 10082
- 88. BLDG. 10083
- 89. BLDG. 10084
- 90. BLDG. 10085
- 91. BLDG. 10086
- 92. BLDG. 10087
- 93. BLDG. 10088
- 94. BLDG. 10089
- 95. BLDG. 10090
- 96. BLDG. 10091
- 97. BLDG. 10092
- 98. BLDG. 10093
- 99. BLDG. 10094
- 100. BLDG. 10095

**PROPOSED SITE LAYOUT**

13-10



## Gas Pipeline & Grid Injection unit

Biomethane will be supplied to the existing gas network via the Grid Injection Unit (GIU) at the site, connecting to the existing medium pressure distribution gas pipeline located onsite. The GIU will be owned and operated by Gas Networks Ireland.

GNI has confirmed that the existing grid capacity is adequate to accommodate the production output of the Proposed Development. All works to the existing and proposed gas pipelines will be carried out by GNI in accordance with Standard I.S. 328 2021 Gas transmission – Pipelines and pipeline installations.

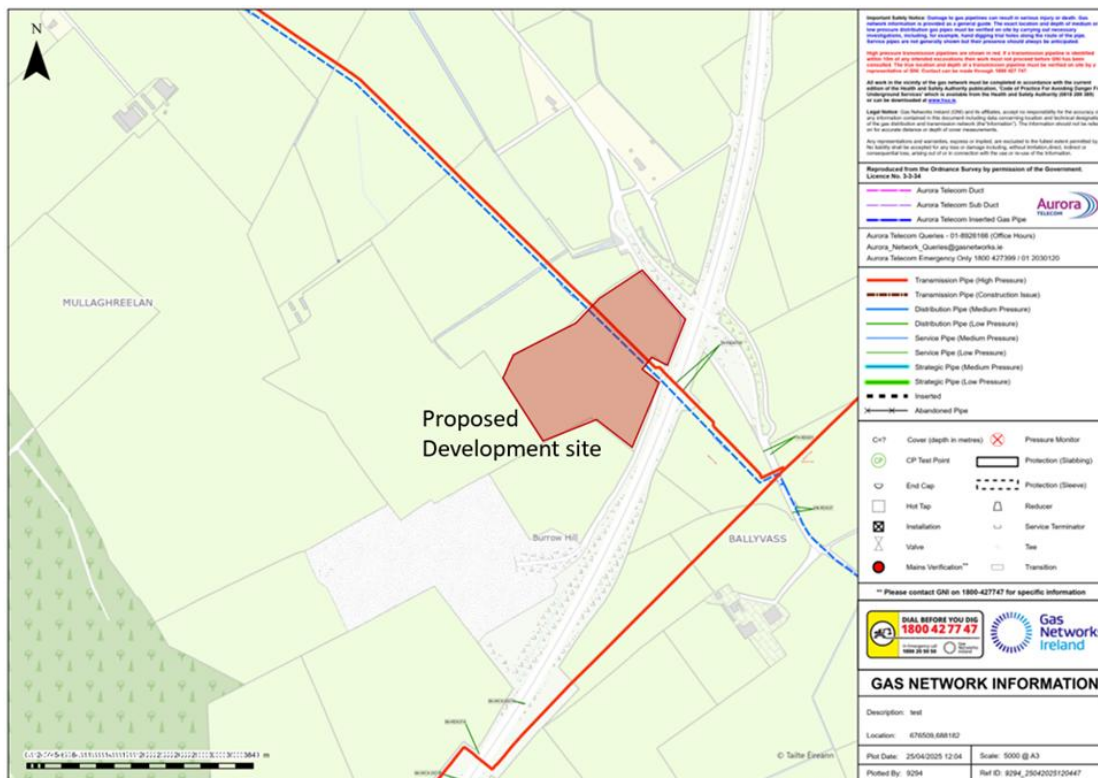


Figure 13.3: Proposed gas network connection point and pipeline route from Proposed Development

## 13.2 Existing Environment

### 13.2.1 Location Details

The proposed project is in Ballyvass townland, Co. Kildare, roughly 3km to the north of Castledermot.

<b>County and Town</b>	Kildare
<b>Barony</b>	Kilkea and Moone
<b>Parish</b>	Castledermot
<b>Street</b>	N/A
<b>Townland</b>	Ballyvass
<b>Archaeological Monuments</b>	None within Proposed Development boundary or in immediate vicinity
<b>Architectural Sites</b>	KD038-076----, a Fulacht fiadh is located within the boundary (this site was excavated and removed in 1999).
<b>ITM</b>	Centred on 676827/688227

**Table 13.1: Location details**

### 13.2.2 Archaeological Baseline Data

#### 13.2.2.1 General Archaeological and Historical Background

The Mesolithic (middle stone age) people were the first inhabitants of Ireland, arriving about 9000 years ago (c.6000BC – 4000 BC). They were a mobile society relying on wild resources for food which was hunted and gathered using stone tools as well as boats, nets and traps. Settlement was in temporary and semi-permanent groups of huts constructed of wood slung with hide which may have operated as seasonal or hunting camps.

The archaeological evidence has indicated a concentration of activity in the north-west and south-west of Ireland during this period and it has not been until recent decades that a wider appreciation of the distribution of the first settlers to Ireland. Central to this were the finds made during the dredging of the River Barrow in the 1920s and 30s when Mesolithic stone axes and stone clubs were discovered. The discovery of a Mesolithic site at Lough Boora, Co. Offaly, in 1977 confirmed the possibility that the midlands were also settled in this period, and it became apparent that Mesolithic peoples did not confine their activities to coastal areas and that rivers provided rich food resources, a convenient mode of transport and abundant sources of materials in the surrounding woodlands. Despite the prominence of the finds from the River Barrow, the river did not become the focus of further targeted survey until the 1990s. At this time a survey was undertaken (the Ballylough Archaeological Project) where field walking yielded up to 800 artefacts of prehistoric date. Another survey was undertaken by Thomas Kador of UCD at the same time as a Discovery Programme project also on the River Barrow in the 2000s. Both projects have led to the discovery of more artefacts of Mesolithic date. Evidence from the Discovery Programme showed prehistoric finds from the River Barrow north of Athy and along gravel terraces between Carlow and Graiguenamanagh. In Kador's project, which covered the area from Monasterevin to north of Carlow town, he discovered the highest incidence of artefact recovery came from rock banks along the Barrow where it met some of its tributaries. Excavations at Ardreich, Co. Kildare medieval settlement also yielded Mesolithic evidence with the discovery of a late Mesolithic polished stone axe.

Farming was first adopted in the Middle East but spread gradually across Europe in succeeding centuries, arriving in Ireland about 4000 BC. During this period communities became less mobile, and their economy became based on the rearing of stock and cereal cultivation. The transition to the Neolithic was marked by major social change. Communities had expanded and moved further inland to more permanent settlements. Tending of crops and animals required a more sedentary lifestyle and larger permanent settlements were built. The megalithic (from the Greek mega – large and lith – stone) monuments of the Neolithic people built as communal tombs or for ceremonial purposes, are relatively common in the landscape. New methods were adopted for shaping stone tools and the first long distance trade networks were established.

The Neolithic is well represented in the region, with a series of megalithic tombs north of Borris, Co. Carlow as well as the portal tomb of Brownshill, near Carlow town.

As stone tools were replaced using copper, later combined with tin to make bronze, the structure of society also changed over centuries. While some communal megalithic monuments, particularly wedge tombs continued to be used, the Bronze Age is characterised by a movement towards single burial and the production of prestige items and weapons, suggesting that society was increasingly stratified and warlike.

Amongst the clustered distribution of early Bronze Age burials in this area the record is dominated by bowl associations including cemeteries at Graney West, Halverstown, Ploopluck and another in Moone townland, all Co. Kildare, which also contain unaccompanied crouched inhumations (Mount 1998; Ó Ríordáin 2002). Pottery, including sherds from two bipartite vases and five vase urns, came from apparently domestic contexts at Ballymount (McCarthy 2009; Grogan and Roche 2009d), as did sherds from a bowl at Ballyvass (Tobin and O'Connell 2009; Grogan and Roche 2010).

In late Bronze Age Ireland, the use of the metal reached a high point with the production of high-quality decorated weapons, ornament and instruments, often discovered from hoards or ritual deposits. The Barrow Valley in particular has one of the highest concentrations of Early Bronze Age burials in Ireland. There are numerous examples of cists and mounds occurring in townlands along the navigation and a single cremation was excavated at Ardreich, Co. Kildare, during the extensive pre-road construction archaeological investigations there in the 2000s. At Ardreich the cremated remains of a man between 35 and 45 was interred in a plain ceramic vessel. This urn was excavated intact and analysis of soil samples from around the burial indicate that a number of timbers were used in the cremation pyre, including oak, crab-apple and yew.

The advances made in the Bronze Age were highly significant, with the introduction of copper and bronze ending the complete reliance on stone tools. The societies that developed throughout this period have left a number of monuments in the landscape, as well as a finds inventory of stunning workmanship. These artefacts include highly renowned goldwork, with enigmatic lunulae, sun discs and torcs datable to this period. Bronze Age settlements were usually located on well drained soils near rivers, with fording points of particular importance. The most common Bronze Age site within the archaeological record is the burnt mound or *fulacht fiadh*. Over 7000 *fulachtaí fia* have been recorded in the country and hundreds excavated, making them the most common prehistoric monument in Ireland (Waddell, 1998, 174). Although burnt mounds of shattered stone occur as a result of various activities that have been practised from the Mesolithic to the present day, those noted in close proximity to a trough are generally interpreted as Bronze Age cooking/industrial sites. *Fulacht fiadh* generally consist of a low mound of burnt stone, commonly in horseshoe shape, and are found in low

lying marshy areas or close to streams. 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 fulacht fiadh is located at the subject site and was excavated in 1999 attesting to significant bronze age activity in the area.

The Iron Age is sometimes erroneously known as a 'dark age' in Irish prehistory. Iron objects are found rarely but there is no evidence for the warrior culture of the rest of Europe although the distinctive La Tené style of art with animal motifs and spirals was adopted. Life in Iron Age in Ireland seems to have been much as it was in the early historic period – mixed farmers living in or around small, defended settlements known as ringforts or stone cashels. There is little evidence in the area for bronze or Iron Age activity apart from enclosures and ringforts, the domestic dwelling places of the later prehistoric and early historic period. As in Europe, there are two phases of the Iron Age in Ireland; the Hallstatt and the La Tène. The Hallstatt period generally dates from 700 BC onwards and spread rapidly from Austria, across Europe, and then into Ireland. The later Iron Age or La Tène culture also originated in Europe during the middle of the 5th century BC. For several centuries the La Tène Celts were the dominant people in Europe until they were finally overcome by the Roman Empire. There are no known sites dating to the Iron Age Period within the development area or its immediate environs.

County Kildare is rich in archaeological sites and monuments, the best-known concentration occurring near Kildare town on the Curragh, where a range of prehistoric sites suggest that it was relatively densely populated during the Bronze Age and Iron Age. The name Kildare is derived from the Irish Cill (meaning Church) and Dara (meaning Oak).

In the 5th or 6th century St. Brigid founded a monastery here which became the principal church of the Kingdom of Leinster. The settlement was a double monastery (one for nuns and one for monks) ruled by an Abbess and an Abbot-Bishop. By 650 A.D. it was a significant foundation and important ecclesiastical centre, so much so that Cogitosus, author of 'A Life of St. Brigid', describes it as, c. 650, "a vast and metropolitan city. within whose outskirts – which Saint Brigid marked out with a clearly defined boundary – no earthly adversary is feared" (Keneally, 1995). Even allowing for some element of exaggeration there is no doubt as to Kildare's importance as an ecclesiastical centre. The monastery may have been a successor to a site associated with the worship of the Celtic Goddess Brigid. Reputedly the Christian Saint Brigid was admitted to the Church of Uisneach, the mythical centre of Ireland. She died on the 1st of February – Imbolc – the feast dedicated to the Irish Fertility Goddess – also named Brigid. The Brigid myth is suffused with miracles and druidic associations. It has been suggested that her monastery began as a successor to a druidic cult centred around a huge Oak, the sacred tree of the druids – possibly giving rise to the name Kildare. A perpetual fire was kept burning in the town until the dissolution. A 12th century account describes the fire as burning in a circular fenced enclosure, forbidden to men, where it was tended by nineteen nuns.

The area that was to become the county of Kildare formed the central part of the Kingdom of Leinster and was included in the lands inherited by Strongbow. It included not only the modern county of Kildare but Laois, Offaly and parts of Wicklow (Otway-Ruven (B), pp.181-6). He quickly began to grant the lands of Kildare to his loyal supporters, building a network of defensive military earthworks to hold the newly acquired land. Adam De Hereford, Maurice FitzGerald, Robert De Bermingham and Walter De Riddlesford, the great magnates of the Anglo-Norman invasion, all received lands in Leinster (ibid, p 181), and part of Offaly, including the baronies of East and West Offaly, Kilcullen and Connell, were initially retained by Strongbow. Giraldus Cambrenis, author of a contemporary chronicle of invasion, tells us that

Strongbow granted parts of Kildare, including the barony of Connell, to Meiler FitzHenry, but in 1181 FitzHenry was forced to exchange Kildare for lands in Laois (Orpen, pp.381-2).

The influx of Anglo-Norman colonists, who arrived in Ireland after the invasion, began establishing a network of manorial villages and towns in Kildare. The network of Military bases built in the initial years of the invasion, in the shape of motte and baileys, and to a lesser extent, ringwork castles, provided the foci for these new settlements.

The first military fortifications built by the Anglo-Normans may have been little more than temporary entrenches camps. Nothing remains of Kildare Castle, erected by William Marshall c. 1185. The first castle was probably a motte and bailey. The town prospered in the 13th century, although precise details of its growth are scarce. A charter is implied in a claim made in 1297 by the burgesses of the right to try offences. By 1309-1310 the town was once again flourishing with research indicating that there were about 200 burgages and a population in the region of 1000. In 1316 the town was granted to John Fitzgerald. By 1505 there is evidence of town defences in Henry VIII's charter, which authorised the burgesses to enclose the town with stone walls and fosses. The possible outline of this wall remains conjectural. A contemporary account of Kildare after the Elizabethan wars record that it was "totally disinhabited". In 1641 the town was captured by the Confederates, in 1647 by the Parliamentarian, Col. Jones, and in 1649 by the Royalist, Ormonde. A list of Irish walled towns in 1657 included Kildare.

The name Ballyvass or Baile an Bhasaigh is unusual and roughly translates as "the town of the Vass, Wese's or Wes". In the placenames Database of Ireland the Wese's Wes of Vass is described as an English family name. The name Vass has many variants of spelling but is thought to have old French beginnings, possibly deriving "vaux" meaning "the place in the valley". Equally, the name Vas may be German as the pre-7th century word Fas or Vas meant round. Vass is also one of the oldest Hungarian surnames which mean iron when translated in English. In Britain the first recorded spelling of the name (Vaux) is dated to AD 1086 in the Domesday Book for Essex during the reign of King William 1st, 1066-1087. Vass can also be found amongst the surnames of the Huguenot exile from France to Ireland during the seventeenth century. Several monuments are located within a 1 km radius of the site. A miscellaneous site (KD038-062) is approximately 200m to the south. A possible ringfort, rath or cashel (KD038-036) approximately 450m to the southwest and a rectangular enclosure (KD038-034) approximately 550 m to the west.

### **13.2.3 Archaeological Heritage**

#### **13.2.3.1 World Heritage Sites**

There are no World Heritage Sites or potential World Heritage Sites contained in the Tentative List of Candidate Sites within 20km of the study area.

#### **13.2.3.2 National Monuments in State Care, Guardianship or under Protection Order**

There are no National Monuments in State Care (Ownership or Guardianship) or Monuments that are subject to a preservation order within the vicinity of the proposed development. Record of Monuments and Places/Archaeological Survey Database/Register of Historic Monuments

The following sections contain information relative to the Register of Historic Monuments (RHM), the Record of Monuments and Places (RMP) and the Archaeological Survey Database



(ASD). Archaeological monuments are general registered by the National Monuments Service using a Sites and Monuments Record (SMR) number.

### **13.2.3.3 Record of Monuments and Places/Archaeological Survey Database/Register of Historic Monuments**

#### **KD038-076---- : Fulacht fia : BALLYVASS**

**Description:** Archaeological excavation (Gregory 1999, 1-19: Excavation Licence No. 99E0453) in advance of a Bord Gáis pipeline development revealed three shallow pits and two complete troughs. The pits contained a primary ash layer fill and a layer of charcoal-rich soil mixed with burnt stone. The site extended S, beyond the area of initial excavation, where the northern portion of two more pits were excavated. They had the same fill as the other pits and two flint scrapers were found in one. One of the troughs consisted of a steep-sided oval hollowing of the natural subsoil. Its fill was similar to that of the pits. The other trough was circular. While it had the same fill as the other trough and pits, it was lined with redeposited natural subsoil, the relatively impermeable nature of which helped retain water.

#### **D038-031---- : Mound : BALLYVASS**

**Description:** Approximately circular mound (max diam. c. 30m) of earth with some stone content, and with a rounded summit, situated on a slight rise in well-drained pasture land.

#### **KD038-037---- : Church : BALLYVASS**

**Description:** The grass-covered foundations of a rectangular structure, (dims. 11m x 7m) aligned E-W on the top of a steep sided, possibly artificial hillock or mound (diam. c. 20m). A ramp-like feature leads from the surrounding field level to the summit at the S.

#### **KD038-034---- : Moated site : MULLAGHREELAN**

**Description:** Shown as a rectangular enclosure defined by bank of 1837 OS 6-inch map (max. dims. c. 40m NW-SE x 45m NE-SW). Visible as very low sub-rectangular platform (Wth. c. 23.5m) to N of E-W field fence now crossing the site. Possibly a moated site.

#### **KD038-036---- : Ringfort - rath : MULLAGHREELAN**

**Description:** Shown on the 1909 OS 6-inch map as circular enclosure (max diam. c. 50m), with second external bank at N-E-S. Extensively damaged by sand digging, but described in 1955 as consisting of a low, wide, denuded bank and shallow fosse (Danaher 1955, no. 307). Some dark earth and pieces of bone visible in pit face. Situated on slope in tillage area.

#### **KD038-062---- : Excavation - miscellaneous : BALLYVASS**

**Description:** A pit (dims 0.42m x 0.34m; D. 0.12m), with a fill of ash and humus, and associated finds of pig teeth was uncovered during work along the gas pipeline corridor (Cleary et al. 1987, 5).

RECEIVED: 12/08/2025

#### 13.2.3.4 Previous Archaeological Fieldwork in the vicinity

One Recorded monument KD038-076----, a Fulacht fiadh which was excavated (and is therefore no longer extant) in advance of a Bord Gáis pipeline development and is located within the site boundary. The excavation revealed three shallow pits and two complete troughs.

##### **2000:0465 - BALLYVASS TO ATHY GAS PIPELINE, Kildare**

County: Kildare Site name: BALLYVASS TO ATHY GAS PIPELINE

Sites and Monuments Record No.: N/A Licence number: 99E0434

Author: Niall Gregory

Site type: Excavation - miscellaneous

Period/Dating: Multi-period

ITM: E 677009m, N 687991m

Monitoring work between 1 August and 30 October 1999, in conjunction with a Bord Gáis pipeline corridor, revealed sites of archaeological relevance. These were subsequently excavated under their own licence numbers. The development was a 20m-wide corridor that extended from Ballyvass townland in a west-north-westerly direction to the outskirts of Athy. It traversed green fields as well as tilled land. The topsoil was stripped to a depth of 0.25–0.3m. The southern portion of the corridor served as an access route for plant machinery, while the northern portion was trench-dug to a depth of 1.8m and width of 0.4m, to accommodate the pipeline.

The sites revealed were 99E0453, Ballyvass, an Early Bronze Age fulacht fiadh (Excavations 1999, 121); 99E0587, Kilkea Lower, a possible medieval wetland track (see Excavations 2000, No. 489); 99E0474, Leinster Lodge, late to post-medieval demolition debris (Excavations 1999, 131); and 99E0473, Grangerosnolvan, a possible hearth of undetermined date (Excavations 1999, 127).

##### **1999:359 - BALLYVASS, Kildare**

County: Kildare Site name: BALLYVASS

Sites and Monuments Record No.: N/A Licence number: 99E0453

Author: Niall Gregory, for Margaret Gowen & Co. Ltd.

Site type: Fulacht fia

Period/Dating: Prehistoric (12700 BC-AD 400)

ITM: E 676864m, N 688038m

Latitude, Longitude (decimal degrees): 52.937643, -6.856539

Description: Archaeological excavation (Gregory 1999, 1-19: Excavation Licence No. 99E0453) in advance of a Bord Gáis pipeline development revealed three shallow pits and two complete troughs. The pits contained a primary ash layer fill and a layer of charcoal-rich soil mixed with burnt stone. The site extended S, beyond the area of initial excavation, where the northern portion of two more pits were excavated. They had the same fill as the other pits and two flint scrapers were found in one. One of the troughs consisted of a steep-sided oval hollowing of the natural subsoil. Its fill was similar to that of the pits. The other trough was circular. While it had the same fill as the other trough and pits, it was lined with redeposited natural subsoil, the

relatively impermeable nature of which helped retain water. Compiled by: Gearóid Conroy  
Date of upload: 14 December 2012

Excavation of a fulacht fiadh site took place before Bord Gáis pipeline development. The site encompassed an area of 55m<sup>2</sup> of undeveloped land. The site was revealed during archaeological monitoring as a spread of burnt stone and charcoal-rich soil. Excavation revealed three shallow pits and two complete troughs. The pits consisted of a primary ash layer fill, followed by charcoal-rich soil mixed with burnt stone. Both fills were found to extend beyond the edges of the pits. The fulacht fiadh site extended southwards beyond the area of excavation, where the northern portion of two further pits were excavated. They had the same fill as the other pits. However, the base of one of them contained two flint scrapers.

One of the troughs consisted of a steep-sided oval hollowing of the natural subsoil. Its fill was similar to that of the pits. The other trough was circular. While it had the same fill as the other trough and pits, it also had a cladding of redeposited natural subsoil. Removal of this revealed that the subsoil that was dug into to create the trough was of a sandy and therefore porous composition. The cladding would have served to retain water in the trough.

#### **2006:935 - BALLYVAAS, Kildare**

County: Kildare Site name: BALLYVAAS

Sites and Monuments Record No.: N/A Licence number: E002937

Author: Emma Devine, for Cultural Resource Development Services Ltd.

Site type: Pit

Period/Dating: Undetermined

ITM: E 676675m, N 687699m

A single isolated pit was uncovered by Cólín Ó Drisceoil during centreline testing for a BGE pipeline associated with the rerouting of the N9/N10. The pit was oval in shape and measured 1.76m by 0.67m by 0.34m. A charcoal-rich deposit and fire-reddened/rubified subsoil lined the pit cut and presented clear evidence for in situ burning. Several charcoal-rich lenses were identified within the fire-reddened deposit, suggesting a fire was set in the pit on several occasions. The pit was then abandoned and filled by natural silting from the surrounding subsoil. It had been slightly truncated on its north-eastern edge by later agricultural activity. Post-excavation analysis of charcoal sampled will hopefully provide more information and a date.

#### **2006:935 - BALLYVAAS, Kildare**

County: Kildare Site name: BALLYVAAS

Sites and Monuments Record No.: N/A Licence number: E002937

Author: Emma Devine, for Cultural Resource Development Services Ltd.

Site type: Pit

Period/Dating: Undetermined

ITM: E 676675m, N 687699m

A single isolated pit was uncovered by Cólín Ó Drisceoil during centreline testing for a BGE pipeline associated with the rerouting of the N9/N10. The pit was oval in shape and measured 1.76m by 0.67m by 0.34m. A charcoal-rich deposit and fire-reddened/rubified subsoil lined the pit cut and presented clear evidence for in situ burning. Several charcoal-rich lenses were

identified within the fire-reddened deposit, suggesting a fire was set in the pit on several occasions. The pit was then abandoned and filled by natural silting from the surrounding subsoil. It had been slightly truncated on its north-eastern edge by later agricultural activity. Post-excavation analysis of charcoal sampled will hopefully provide more information and a date.

#### **2007:754 - BALLYVASS, Kildare**

County: Kildare Site name: BALLYVASS

Sites and Monuments Record No.: N/A Licence number: E002940

Author: Tara Doyle, Headland Archaeology Ltd.

Site type: Fulacht fia

Period/Dating: Multi-period

ITM: E 676864m, N 688038m

This site was excavated as part of the N9/N10 Kilcullen to Waterford scheme, Phase 3: Kilcullen to Carlow. This site was situated on flat agricultural land; a drainage ditch formed a field boundary to the immediate west and south. Testing by CRDS in 2006 revealed a burnt mound and a possible laneway, the latter being marked on the first-edition OS map. An area measuring c. 2000m<sup>2</sup> was stripped of topsoil.

Excavation revealed two burnt mounds. The first was located to the south-west of the site; it measured 12m long by 9.5m wide and was 0.1m thick. Associated with Burnt Mound 1 were a trough, post-holes, stake-holes and six shallow pits. The trough measured 3.91m by 2.45m and was 0.39m deep. Modern drainage truncated most of these features.

The second burnt mound was located 15m south of Burnt Mound 1. This measured 16m long by 9m wide and had an average thickness of 0.2m. It was truncated by several agricultural drains and a large drainage ditch to the west. A total of four pits and one trough were identified under the burnt-mound material. A possible well was located 1.5m south of Burnt Mound 2. This measured 4.4m long by 3.55m wide and was 1.43m deep. It had a peat fill with charcoal and small stones; fragmented wooden planks were recovered from the base of the feature. The upper fills were truncated by a modern drain.

A cluster of ten stake-holes was located to the south-west corner of the site. They were randomly placed and did not appear to form a structure or windbreak. A possible laneway discovered during testing was positively identified as a stone drain and an earth-cut drain. Both were orientated east-west and were situated c. 0.2m from each other. Finds mostly came from the topsoil and included several flint flakes, ceramic clay-pipe stems and post-medieval pottery.

#### **2007:752 - BALLYVASS, Kildare**

County: Kildare Site name: BALLYVASS

Sites and Monuments Record No.: N/A Licence number: E002938

Author: Tara Doyle, Headland Archaeology Ltd.

Site type: Kiln - corn-drying kiln

Period/Dating: Undetermined

ITM: E 676831m, N 688028m

This site was excavated as part of the N9/N10 Kilcullen to Waterford scheme, Phase 3: Kilcullen to Carlow. An area measuring 100m<sup>2</sup> was stripped of topsoil.

The earliest archaeological activity on site was a post-hole/pit located under the fire pit of the kiln. It measured 0.5m long by 0.42m wide and 0.37m deep and contained mid-brown silt clay with charcoal inclusions. A 2.52m-long by 1m-wide truncated keyhole cereal-drying kiln lay directly over the post-hole/pit. The kiln was located in the centre of the site and was orientated north-south. The fire pit had a maximum width of 1m and a depth of 0.23m. This rose up to 0.08m deep to the south-east, where the bowl was situated. The bowl was 0.4m wide. The kiln was filled with five shallow deposits, with one layer of burning, indicating a single firing of the kiln. The kiln was shallow and may have been truncated by plough action.

Two stake-holes were identified south-west of the bowl and may represent a windbreak. A further two pits lay directly west and south-west of the kiln; both were shallow and contained a single fill of orange/brown silt clay with occasional charcoal inclusions. The relationship between the post-hole/pit and the kiln remains unclear. No finds were recovered from the site.

### **007:760 - BALLYVASS, Kildare**

County: Kildare Site name: BALLYVASS

Sites and Monuments Record No.: N/A Licence number: E002996

Author: Tara Doyle, Headland Archaeology Ltd.

Site type: Ringfort - rath, Souterrain and Ring-ditch

Period/Dating: Multi-period

ITM: E 676804m, N 687852m

This site was excavated as part of the N9/N10 Kilcullen to Waterford scheme, Phase 3: Kilcullen to Carlow. The majority of this site was situated on a southern slope of a gravel ridge. A ring-ditch was located at the base of the ridge in the south-west corner of the site. Directly over the brow of the gravel ridge hill, a ringfort was situated on a northern slope. To the east lay Burrow Hill and a working gravel quarry. Extensive testing was carried out in 2006 by CRDS Ltd. These investigations revealed a curvilinear ditch and a straight section of ditch, a possible souterrain. An area measuring 9092m<sup>2</sup> was stripped of topsoil.

Excavation revealed approximately 75% of the ditch enclosure within the proposed road corridor. Ten cuttings through the ditch revealed it was subcircular, possibly D-shaped in plan, with an external diameter of 37m. The southern part of the ditch was rounded and gradually curved to the west. It had an average width of 4m and a depth of 1.8m. To the west the ditch became narrow and deep, with an average width of 3.5m and a depth of 2m. At the northernmost part, the ditch turned sharply to the east, where it rose to an average depth of 1.5m. This section of the enclosure was cut into an area of fine sand and gravels. Here the ditch was recut several times to prevent silting. There was no evidence of an entrance to the enclosure. A number of linear features were identified extending west from the ditch and several levelling deposits were recorded above them. These deposits may represent the remains of a bank that was ploughed out. Finds from the ditch include two bone pins, bone fragments with butchery marks, corroded metal and medieval pottery sherds recovered from the upper three fills of the ditch.

The earth-cut souterrain was located to the south of the enclosure and was orientated north-west/south-east; c. 11m of the souterrain lay within the road corridor. It had an average width of 3.5m and a depth of 3.5m. The souterrain was linear, with a rounded terminus at the north-west end. Here, the remains of a burnt wooden structure lay at the base. Full analysis of the structure has yet to be undertaken; evidence in the form of charred planks of wood, carbonised barley/oats, charred straw and carbonised sacking cloth suggests the possible remains of a cereal-drying kiln. The souterrain was backfilled with distinct phases of fine gravels, and pits

filled with organic rich and red oxidised deposits. Several of the pits were recut by later pits; all contained similar organic deposits. The souterrain was backfilled to match the internal ground level of the enclosure.

Two large pits were located c. 5m from the souterrain. The first was a square-shaped pit; it measured 1.75m by 1.75m and was 1.4m deep and contained similar deposits to the souterrain pits. The second pit was subcircular in shape and was truncated by a linear drain. It measured 1.5m by 1.09m and was 1.33m deep. Several shallow pits were identified to the southern end of the interior of the enclosure. There was no evidence of buildings or structures within the ringfort. Almost 100 finds were recovered from pits and deposits within the souterrain. They included polished and butchered bone, heavily corroded metal blades, knives, nails and pins, some corroded copper fragments and various possible stone tools. The more interesting finds include a silver-plated zoomorphic terminal of a drinking horn, c. 7th/8th century, a metal spearhead, an ornate corroded silver-plated possible pinhead or clasp, a complete bone pin and two fragmented composite bone combs.

The ring-ditch was not identified by geophysical survey or the testing mentioned above. It was located c. 85m south of the ringfort. It was circular in plan had an external diameter of 2.6m. There was no evidence of a bank or mound. The average width of the ditch was 0.9m; the depth varied from 0.44m to 0.76m. Excavation of the ditch fills revealed a well-stratified sequence of deposits and included several charcoal and burnt-bone cremation layers. Each cremation appeared to be sealed by a redeposited natural layer. Post-excavation analysis of the burnt bone and charcoal-rich deposits is ongoing. Finds from the ditch include six corroded copper fragments from the same context. These were found together and may have once formed a single object or pin.

Several archaeological features were identified outside the main enclosure, including two possible truncated cereal-drying kilns, a charcoal-rich area of surface burning with a nearby post-hole containing metal slag and several random post-holes located near the ring-ditch. Two spindle-whorls were recovered from one of these post-holes.



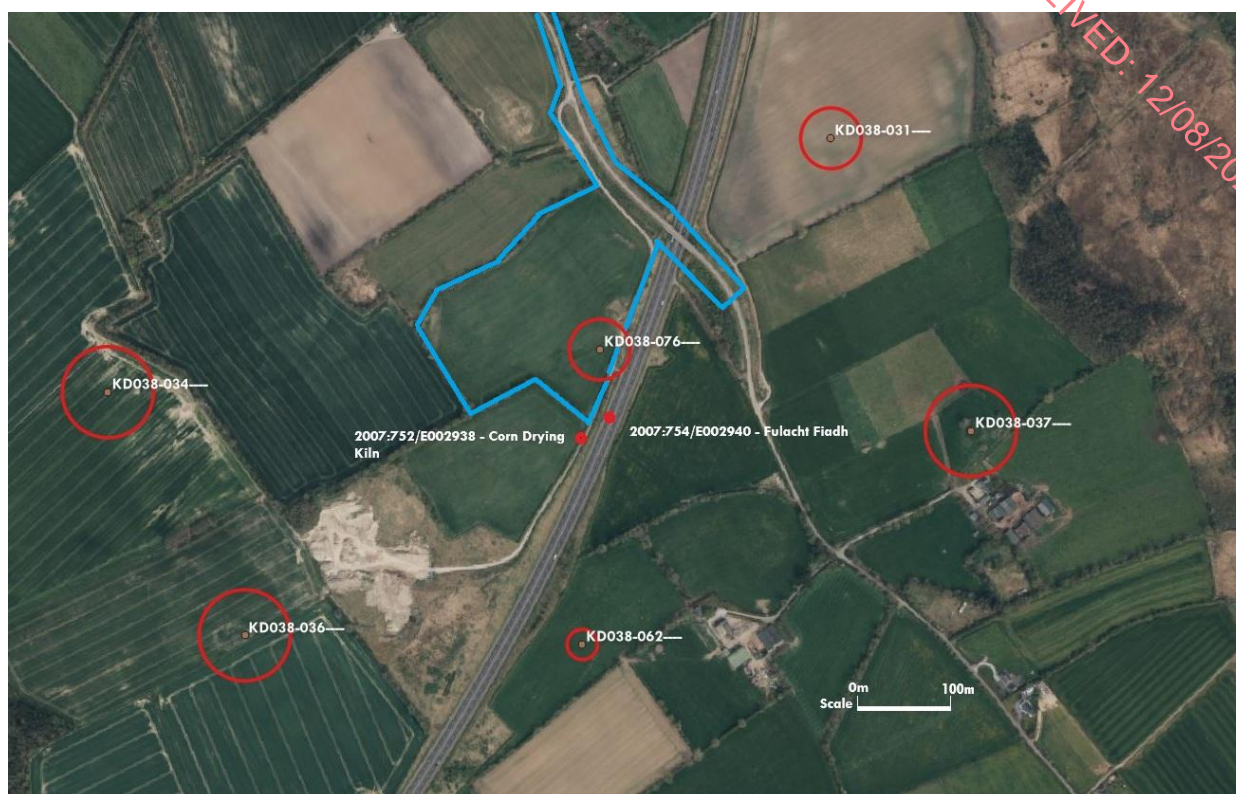


Figure 13.4: Nearby recorded monuments.

#### 13.2.3.4.1 Map Regression

A review of available historic maps was carried out. Little has changed since the earliest 1st edition OS maps other than field boundaries and modern road developments. To the south, Burrow Well and a related watercourse are depicted.

#### 13.2.3.4.2 Aerial Photography

A review of available aerial photographs was undertaken to identify any previously unrecorded anomalies of historical potential. Inspection of the aerial photographic coverage of the area held by the Ordnance Survey (1995-2013), Google Earth (2002-2020) and Bing Maps was completed. Nothing of archaeological significance was noted.

#### 13.2.3.4.3 LiDAR Review

A review of the Geological Survey Ireland Open Topographic Data Viewer was carried out. There is no available data for the subject site.

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

A review of the online resource [www.heritagemaps.ie](http://www.heritagemaps.ie) was completed. No finds are recorded in the vicinity of the subject site. Due to current company policy regardless indoor spaces and COVID 19 the topographical files in the NMI were not inspected. It should be noted that not all recorded finds in the Topographical Files are included in [www.heritagemaps.ie](http://www.heritagemaps.ie). The review of [www.heritagemaps.ie](http://www.heritagemaps.ie) indicates that there are no relevant files in the immediate vicinity.



### **13.2.3.5 Folklore, Other Cultural Heritage Features and Areas of Potential**

#### **13.2.3.5.1 Rivers, Streams, Wetlands**

Rivers and streams are important cultural as well as physical features of the landscape, and archaeological sites and features are often related with waterways including features such as fulachtaí fia, fords, bridges, and mills. Riverbanks have been favoured for human occupation since prehistoric times for their proximity to food sources and fresh water and they served as routeways, boundaries, defences and as a focus for ritual. No watercourse will be affected by the works.

#### **13.2.3.5.2 Townland Boundaries**

No townland boundary will be directly impacted by the Proposed Development.

#### **13.2.3.5.3 Folklore Commission**

A review of the National Folklore Collection was completed on [www.Dúchas.ie](http://www.Dúchas.ie). No specific reference to Ballyvass was noted.

### **13.2.3.6 Protected Structures/National Inventory of Architectural Heritage**

A review of the National Inventory of Architectural Heritage was undertaken.

A review of the National Inventory of Architectural Heritage (NIAH) identified several recorded structures within approximately 2.5 km of the proposed development site.

The closest structure is a disused freestanding cast-iron "cow tail" water pump (Reg. No. 11903808), extant by 1962, located approximately 1.4 km to the south.

Woodlands House (Reg. No. 11903807), a detached three-bay two-storey house extant in 1908, is situated approximately 2.0 km south of the site.

Kilkea Demesne and Castle is located approximately 1.5 km to the west. Nearby, Kilkea House (Reg. No. 11903718), a detached three-bay (two-bay deep) two-storey over basement farmhouse built in 1837, lies around 2.1 km west of the site.

Several other heritage structures are located approximately 2.4 km to the northwest, including Kilkea Castle Gate Lodge (Reg. No. 11903719), a detached two-bay single-storey rubble stone lodge with a half-dormer attic dating to c.1870; Kilkea Lodge Farm (Reg. No. 11903723), a detached three-bay single-storey rubble stone former estate worker's cottage with dormer attic dating to c.1820; Kilkea National School (Reg. No. 11903722), a detached four-bay single-storey former school with dormer attic dated 1863; and Kilkea Church (Reg. No. 11903721), a detached four-bay double-height rubble stone Gothic-style Church of Ireland church dating to c.1850.

These recorded structures provide important context to the architectural and historical setting of the surrounding area.

The proposed development will not impact the visual amenity of the built or architectural heritage resource, curtilage or setting. Please refer to **EIAR Chapter 11: Landscape and**

RECEIVED: 12/08/2025

**Visual Impact** for a further assessment of landscape visual impacts.

#### **13.2.4 Site Inspection**

A field inspection was carried out on the 18<sup>th</sup> of March 2025 which entailed walking the Proposed Development Area (PDA), noting and recording the terrain type and land usage, the presence of features of archaeological or historical significance and visually investigating any suspect anomalies observed to determine their nature and provenance where possible. The site could be fully accessed and was inspected throughout. The site is low lying and comprises arable agricultural land which is currently under crop. The boundaries of the subject site are demarcated by semi-mature trees and hedgerows. The subject site is bounded by greenfield to the north and west, by the M9 to the south.

### **13.3 Potential Effects**

#### **13.3.1 Potential Direct Effects**

Direct negative impacts may occur where sites of archaeological and Cultural Heritage significance are located within the footprint of the Proposed Development, which would potentially be impacted upon by ground disturbances.

In relation to the Proposed Development, direct, physical impacts on the archaeological and Cultural Heritage can manifest themselves in the following ways:

- Where an archaeological or Cultural Heritage site, structure, monument, or feature is located within an area where works takes place and the works either intentionally or unintentionally entail the alteration or removal of all or part of the site, structure, monument or feature a direct, physical impact will occur.
- Direct, physical impacts can also occur in gaining access to the site. Where archaeological, architectural, or Cultural Heritage sites, structures, monuments, or features are intentionally or unintentionally removed or altered when transporting and/or facilitating access for machinery, equipment and/or materials to or from site a direct physical impact will occur; and
- There is the potential for direct, physical impacts on previously unrecorded archaeological and architectural sites, structures, monuments, or features.

If these effects cannot be remediated, for example if archaeological deposits are destroyed during excavations, then the impacts will be permanent.

##### **13.3.1.1 Potential Direct Effects on Recorded Archaeological Monuments**

The proposed development will have no direct physical effect on known archaeological sites and monuments.

##### **13.3.1.2 Potential Direct Effects on Unrecorded Archaeological Monuments or Features**

There is a moderate to high potential to impact on previously unknown archaeological sites given the known presence of sites in the immediate vicinity.

##### **13.3.1.3 Potential Direct Impacts Architectural Sites**

The proposed development will have no direct physical effect on the surrounding built heritage.

#### **13.3.2 'Do Nothing Scenario'**

If the proposed works were not to proceed, there would be no effect upon the archaeological, architectural, or cultural heritage resource.

#### **13.3.3 Potential Effects on the Setting/Operational Effects**

Impacts on Setting can be reduced with sensitive site development and screening. The impact

of the development is usually proportional to the extent to which that development is visible to and from the extant recorded monuments and features.

#### **13.3.3.1 Archaeological Sites**

The proposed development will not impact the visual amenity of any known monuments.

#### **13.3.3.2 Architectural Sites**

The proposed development will not impact the visual amenity of the built or industrial heritage resource.

RECEIVED: 12/08/2025

## 13.4 Mitigation Measures and Residual Effects

### 13.4.1 Mitigation Measures

The mitigation strategies outlined in this section detail the measures to be adopted to ameliorate the effects that the proposed works may have on features of archaeological, architectural, or Cultural Heritage within the study area during both the construction and operational phases of the scheme. The residual effects that will remain once these mitigation measures have been implemented are also identified.

- It is recommended that a programme of archaeological testing of the subject site be carried out well in advance of construction. 'Test excavation is that form of archaeological excavation where the purpose is to establish the nature and extent of archaeological deposits and features present in a location which it is proposed to develop (though not normally to fully investigate those deposits or features) and allow an assessment to be made of the archaeological impact of the proposed development. It may also be referred to as archaeological testing' (DAHGI 1999a, 27).
- A suitably qualified archaeologist should be appointed to advise the design team on archaeological matters, liaise with the relevant authorities, prepare an archaeological licence application and method statement, and complete the archaeological testing work.
- Monitoring should be carried out under licence to the National Monuments Service at the DHLGH of subsequent excavation work. The application for such a licence requires a detailed method statement, outlining the procedures to be adopted to monitor, record, and recover material of archaeological interest during such work. Archaeological Monitoring is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons within a specified area or site on land or underwater, where there is possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive, (IFA, 1994, 1). Archaeological monitoring involves an archaeologist being present in the course of the carrying-out of the development works (which may include conservation works), so as to identify and protect archaeological deposits, features or objects which may be uncovered or otherwise affected by the works' (DAHGI 1999a, 28).
- Should archaeological material be uncovered at any location, the feature will be summarily investigated to determine the form, age, nature, depth, and extent of the feature. The feature will be planned, photographed, and recorded to best professional standards. Adequate funds to cover excavation, post-excavation analysis, and any testing or conservation work required should be made available if required. Upon completion of the works dissemination of the results will take the form of a stratigraphic report and full report to publishable standard lodged with the licensing section (NMS) and the Planning Section (NMS) and the National Museum of Ireland. A summary of the report will also be submitted to the Excavations Bulletin within six weeks of the end of fieldwork. Should results warrant it, wider dissemination in the form of a full publication may be recommended.
- In addition, the report on the results of the test excavation and an impact statement will be submitted to the planning authority to inform the archaeological site strategy. Where archaeological material is identified, the developer will submit an archaeological mitigation strategy and a detailed method statement for written agreement with the planning authority detailing proposed mitigation including, preservation in situ by way of avoidance or

redesign, and/or archaeological excavation under a Section 26 licence in advance of development.

- The agreed archaeological mitigation (preservation in situ/full excavation) shall take place under licence prior to the commencement of development. The developer shall make provision for excavation, post excavation, interpretation, and publication of the results. A preliminary report detailing the findings of the agreed resolution shall be submitted to the planning authority within four weeks of the licence expiry and a full and final report shall be submitted to the planning authority within 1 year of the licence expiry date.

The above recommendations are subject to approval by the National Monuments Service at the DHLGH and other relevant authorities.

### **13.4.2 Residual Impact Assessment**

This section assesses potential significant impacts which remain after mitigation measures have been implemented.

#### **13.4.2.1 Construction Phase**

There will be no significant residual impacts on the archaeological resource.

#### **13.4.2.2 Operational Phase**

Not applicable to the archaeological and architectural resource.

#### **13.4.2.3 Summary of Post-Mitigation Effects**

If the above-described mitigation is implemented there are no predicted residual impacts on the archaeological and architectural resource.

#### **13.4.2.4 Cumulative Residual Effects**

No cumulative impacts have been identified upon the archaeological and architectural resource and as such there will be no residual cumulative effects.

## Appendix 13.1 – References & Bibliography

- Cleary, R.M., Hurley, M.F. and Twohig, E.A. (eds) 1987 Archaeological excavations on the Cork-Dublin gas pipeline (1981-82). Cork Archaeological Studies No. 1. Department of Archaeology. University College, Cork.
- Gregory N. 1999 Results of an archaeological excavation of a fulacht fia site in advance of Bord Gáis Eireann pipeline extension at Ballyvass, Co. Kildare. Licence No. 99E0453. Margaret Gowan & Co. Ltd.
- Grogan, E. and Roche, H. 2010 The prehistoric pottery assemblage from Ballyvass, Co. Kildare (E2944). N9/N10 Kilcullen to Waterford Scheme: Phase 3; Kilcullen to Carlow. Unpublished Report Headland Archaeology (Ireland) Ltd.
- Joyce, P.W., 1913. Irish Names of Places. Vol. III. Dublin.
- Lewis, S., 1937. A Topographical Dictionary of Ireland. 2 Vols. Lewis & Co., London.
- Waddell, J., 1998. The Prehistoric Archaeology of Ireland. Galway University Press, Galway.

### Other Sources Referenced

- Dept. of Culture, Heritage, and the Gaeltacht, 1999. Frameworks and Principles for the Protection of the Archaeological Heritage, Government publications, Dublin.
- Dept. of Culture, Heritage, and the Gaeltacht, 1999. Policy and Guidelines on Archaeological Excavation. Government Publications, Dublin.
- Department of Environment, Heritage, and Local Government (DEHLG). 2008. National Policy on Town Defences. Dublin: Stationery Office.
- Department of Housing, Planning and Local Government, 2018. Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment.
- Department of the Communications, Climate Action, and Environment. 2000. Landscape and landscape assessment. Guidelines for planning authorities.
- EPA, 2022. Guidelines on the information to be contained in Environmental Impact Assessment Reports. EPA, Dublin.
- European Commission, 2017 Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report.
- Landscape Institute and Institute of Environmental Management & Assessment, 2013; Guidelines for Landscape and Visual Impact Assessment (third edition), Routledge, 170pp.



- The Heritage Council, 2000. Archaeology & Development: Guidelines for Good Practice for Developers. The Heritage Council of Ireland Series, Kilkenny.
- The National Monuments Section of the Department of Housing, Local Government and Housing. Sites and Monuments Record, County Dublin.
- National Monuments Acts 1930-1994.

RECEIVED: 12/09/2025

## Appendix 13.2 – Conventions, Directives and Legislation

### Conventions

Ireland has ratified several European and international conventions in relation to the protection of its cultural heritage. This section summarises Ireland's obligations as a signatory to several International and European conventions relating to the protection and conservation of Cultural Heritage sites. Also included is a synopsis of existing national legislation governing the care and protection of our Cultural Heritage resources.

#### **ICOMOS Xi'an Declaration, 2005**

Ireland is a signatory to an international declaration sponsored by International Council on Monuments and Sites (ICOMOS), the Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas, 2005, that endeavours to ensure the safeguard and conservation of the World's Cultural Heritage as part of its sustainable and human development.

#### **EIA Directive 85/337/EEC as amended.**

To assist planning and other consent authorities in deciding if significant effects on the environment are likely to arise in the case of development below the national mandatory EIS thresholds, the DHLGH published a Guidance document in August 2003.

#### **The European Landscape Convention 2000**

In 2002 Ireland ratified the European Landscape Convention - also known as the Florence Convention, which promotes the protection, management and planning of European landscapes and organises European co-operation on landscape issues. It is the first international treaty to be exclusively concerned with all dimensions of European landscape.

#### **Valletta Convention, 1997**

In 1997 the Republic of Ireland ratified the Council of Europe, European Convention on the Protection of the Archaeological Heritage (the 'Valletta Convention'). Obligations under the Convention include provision for statutory protection measures, including the maintenance of an inventory of the archaeological heritage and the designation of protected monuments and areas.

#### **Granada Convention, 1997**

Under the European Convention on the Protection of the Architectural Heritage (Granada Convention), 1997, the Republic of Ireland is obliged to maintain inventories of architectural heritage, to protect the architectural heritage and adopt conservation policies as integrated planning objectives.

#### **UNESCO World Heritage Convention, 1972**

This Convention provides for the identification, conservation, and preservation of cultural and natural sites of outstanding universal value for inclusion in a world heritage list. The World Heritage status is a non-statutory designation, and no additional statutory controls result from this designation. However, the impact of Proposed Development upon a World Heritage Site will be a key material consideration in determining planning applications.

RECEIVED: 12/08/2025

## Legislation

### **The Planning and Development (Strategic Infrastructure) Act 2006**

The Planning and Development (Strategic Infrastructure) Act 2006 ensures the protection of the archaeological heritage resource by requiring that all applications under this Act are accompanied by an EIAR including information on material assets, including the architectural and archaeological heritage, and the cultural heritage.

### **The National Monuments Act 1930 to 2004**

Irish legislation for the protection of archaeological heritage is based on the National Monuments Acts 1930 and amendments of 1954, 1987, 1994 and 2004. These acts are the principal statutes governing the care of monuments in Ireland. They provide for the protection of national monuments using preservation orders. The overall state archaeological service is provided by the DHLGH and delivered through the Planning and Heritage Section of the DHLGH and the National Museum of Ireland (Irish Antiquities Division) on behalf of the Minister.

Monuments are protected under the National Monuments Acts in several ways:

- National Monuments in the ownership or guardianship of the Minister or a local authority.
- National Monuments, which are subject to a preservation order.
- Historic monuments or archaeological areas recorded in the Register of Historic Monuments; and
- Monuments recorded in the Record of Monuments and Places (RMP).

### **The Planning and Development Act 2000**

Under arrangements which came into operation on 1 January 2000 (The Planning and Development Act 2000), the system of listing buildings was replaced with strengthened procedures for the preservation of protected structures and structures in architectural conservation areas (ACA).

### **The Architectural Heritage and Historic Properties Act, 1999**

This Act provides for the establishment of a national inventory of architectural heritage which forms the basis for recommendation from the Minister to local authorities of sites for inclusion in the local authorities Record of Protected Structures