

MWP

**Chapter 11 Archaeological,
Architectural and Cultural Heritage
Newtown Transmission Gas Pipeline and
Associated Above Ground Infrastructure**

Gas Networks Ireland

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11. Archaeological, Architectural and Cultural Heritage

11.1 Introduction

This chapter presents the findings of an archaeological, architectural and cultural heritage impact assessment on the site of the proposed Newtown Gas Transmission Pipeline, Newtown Above Ground Installation (AGI) compound and Kilshane Block Valve (BV) extension, located in Kilshane townland, Finglas, Co. Dublin (ITM 710390, 742630). The site is located c. 9km northwest of Dublin City Centre and to the west of the M2 Motorway. The site is within the existing Kilshane BV station, the footprint of Kilshane Road (L3120) and Bay Lane. It also traverses two green fields.

The site lies within a sensitive area with previously unknown monuments and features of archaeological significance identified as a result of previous investigations. The eastern portion of the site was subject to a geophysical survey carried out under licence no. 22R0092 (Leigh 2022), and subsequently, test trenching and excavation under licence no. 22E0348 (Lynn and Long 2022) identified and excavated features of archaeological significance.

This chapter considers the potential effects on relevant cultural heritage assets arising from the Proposed Development, including the nature and probability of such effects. The assessment comprises:

- A review of the existing receiving environment;
- Prediction and characterisation of likely impacts;
- Evaluation of effects significance; and
- Consideration of mitigation measures, where appropriate.

The proposal for the site comprises the construction of a new pipeline that will connect the Kilshane BV with the proposed Gas Turbine Power Generation Station. A full description of the proposed development, development lands and all associated project elements is provided in **Chapter 02 Description of the Proposed Development** of this EIA.

11.1.1 Competency of Assessor

The assessment was completed by Donald Murphy and Magda Lyne of Archaeological Consultancy Services Unit Ltd (ACSU).

Donald Murphy holds a Master's Degree in Archaeology from University College Dublin (NFQ Level 9) and is excavation licence eligible since 1993. In 2018, he received an NFQ Level 6 award in Co-ordinating Construction Stage Health & Safety. He is a Member of the Institute of Archaeologists of Ireland.

Donald is the founder and Managing Director of ACSU and has over 30 years post-graduate experience that includes carrying out Environmental Impact Assessments, archaeological assessments and excavations. In addition, he is skilled in archaeological and geophysical surveying and has undertaken many magnetic gradiometry and topographic surveys. He has also completed excavations on behalf of the National Monuments Service at Knowth, the Hill of Tara, Clonmacnoise, Mellifont Abbey and Newgrange. As Project Manager/Senior Archaeologist, Donald has also led on some of the largest infrastructural schemes undertaken in Ireland, including road projects such as the N52 Nenagh Bypass Link Road (2000); M1 Northern Motorway Project (2001–2002); N22 Ballincollig Bypass (2001); M4 Kinnegad–Enfield–Kilcock PPE Motorway (2001–2004); N25 Waterford Bypass

(2003–2007); M3 Clonee to North of Kells PPE Motorway (2005–2010); M7/M8 Motorway (2005–2008) and the N5 Westport to Turlough (2015–2020).

Magda Lyne holds a Master’s Degree in Archaeology from the University of Adam Mickiewicz in Poznan, Poland (NFQ Level 9) and is excavation licence eligible since 2019. She is a Member of the Institute of Archaeologists of Ireland. Magda specialises in archaeological desktop assessments and Environmental Impact Assessments and has over 12 years of post-graduate experience and has worked in Poland, Ireland, Denmark and Norway. She excavated sites for her home University and then worked as a curator’s assistant in the Archaeological Museum in Poznan. Her career in Ireland began in 2006 working on a variety of large-scale infrastructure projects (e.g. M3, N9/10, N18 and N22 road projects), as well as with the School of Archaeology in University College Dublin. Between 2011 and 2017 she worked as an archaeologist for governmental institutions in both Denmark and Norway, including works on behalf of the Museum of Copenhagen (Copenhagen Metro Project) and the Norwegian Institute for Cultural Heritage Research (Tonsberg). Magda has worked with ACSU since 2019.

11.1.2 Legislation and Guidelines

This chapter’s methodology is guided by a legislative framework that governs how aspects of archaeological, cultural and architectural heritage are protected. It has been prepared in compliance with all relevant EIAR legislation and guidance, including the published guidelines by the Environmental Protection Agency (EPA, 2022).

In Ireland, the principal legislative measures protecting cultural heritage are the National Monuments (Amendments) Acts 1930 to 2014, the Heritage Act 1995, the relevant provisions of the National Cultural Institutions Act 1997, the Architectural Heritage, National Inventory and Historic Monuments (Miscellaneous Provisions) Act 1999 and the Planning and Development Act 2000. This chapter was also prepared to have regard to the guidelines expressed in *Framework and Principles for the Protection of the Archaeological Heritage* (Department of Arts, Heritage, Gaeltacht and the Islands 1999) and *Architectural Heritage Protection Guidelines for Planning Authorities* (Department of Arts, Heritage and the Gaeltacht 2011).

11.2 Methodology

The methodology used for this study included desk-based research of published and accessible information and site visits to assemble information on the local receiving environment.

The following sources were consulted in order to identify and map archaeological, architectural and cultural heritage sites within and adjacent to the proposed development:

- National Monuments;
- Sites and Monuments Record (SMR);
- Record of Monuments and Places (RMP);
- National Monuments Service Historic Environment Viewer;
- National Inventory of Architectural Heritage (NIAH);
- Current list of Protected Structures (*Fingal Development Plan 2023–2029*);
- Topographical Files of the National Museum of Ireland;
- Database of Irish Excavation Reports; and
- Historic mapping and aerial photography.

National Monuments

List of Monuments covered by Preservation Orders and List of National Monuments in the ownership/guardianship of the Minister for Housing, Local Government and Heritage are listed on the Department's website by county (<https://www.archaeology.ie/national-monuments/>).

The term 'National Monument' is defined by the National Monuments Act (1930) as being '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 aforementioned Act states that the consent of the Minister is required for archaeological works at or near a National Monument in the ownership or guardianship of the Minister or a local authority, or to which a preservation order applies. The Minister is required to consult with the Director of the National Museum of Ireland in relation to such an application for consent.

Record of Monuments and Places (RMP) and Sites and Monuments Record (SMR)

A primary cartographic source and base-line data for the assessment was the consultation of the Sites and Monuments Record (SMR) and Record of Monuments and Places (RMP) for County Dublin. All known recorded archaeological monuments are indicated on 6-inch Ordnance Survey (OS) maps and are listed in this record. The SMR and RMP paper archives are not a complete record of all monuments, however, as newly discovered sites may not appear in the lists or accompanying maps. Accordingly, in conjunction with consultation of the SMR and RMP, the digital database of recorded monuments (Historic Environment Viewer), which may be accessed through the National Monuments Service (NMS) website, was also consulted. This database of SMR records is updated daily.

The county SMR forms the basis for the statutory RMP (established under Section 12 of the National Monuments (Amendment) Act 1994). Accordingly, all sites included in the RMP are protected under the National Monuments Acts (1930–2004).

Protected Structures and National Inventory of Architectural Heritage sites

Protected Structures are structures that the planning authority considers to be of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social, or technical point of view. These are protected under Part IV of the Planning and Development Acts 2000 and listed in Volume 4 Record of Protected Structures in the *Fingal Development Plan 2023–2029*.

Heritage Structures are also recorded by the National Inventory of Architectural Heritage (NIAH), a state initiative established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999. The list forms the basis for the recommendations for inclusion to the Record of Protected Structures (RPS).

The Topographical Files of the National Museum of Ireland

The topographical files of the National Museum of Ireland contain information pertaining to archaeological finds (mainly artefactual) and excavations in numerous townlands throughout the country which were reported to the museum since the 1920s. While many of these find spots are not recorded monuments, they can provide an indication of past activity in a townland and consequently add to our understanding of the archaeological potential of an area.

Cartographic Sources and Aerial Imagery

Potential archaeological or cultural heritage features can be marked on maps or be visible on aerial photography as cropmarks, soilmarks and low earthworks. These provide a useful resource in identifying sites, particularly if they no longer have any above ground remains.

Several cartographic sources were consulted as part of the assessment, namely the 1760 survey of the county of Dublin by John Rocque and the first (surveyed 1836 – published 1843) and third edition (surveyed 1906 – published 1909) Ordnance Survey (OS) maps, as well as the Cassini edition (1935–38) OS map. Aerial photographs dating between 1995 and 2018 from the Ordnance Survey of Ireland (OSi) were also examined, as was Google Earth imagery dating between 2007 and 2023.

Excavations Bulletins and Excavations Database

The Database of Irish Excavation Reports (also referred to as the Excavations Database) is an annual account of all investigations carried out under an excavation licence and includes excavations undertaken from 1970 to the present. This database was consulted as part of the desktop research for this assessment, to establish if any archaeological investigations under excavation licence had been carried out on or near to the Proposed Development.

Other documentary research

- The Irish Placename Database (<https://www.logainm.ie/en/>) was consulted for the meaning of the placenames within and surrounding the proposed development site. The database was created by Gaois, Fiontar & Scoil na Gaeilge in collaboration with The Placenames Branch of the Department of Housing, Local Government and Heritage. It contains archival records and placenames research conducted by the State. Many of Ireland’s geographical names are of Irish origin, while others derive from English, with a small number from Old Norse. The anglicisation process included name standardisation, which was largely carried out in the 19th century and recorded in the Ordnance Survey’s work. Toponyms can provide useful historical and cultural heritage data, such as information on administrative divisions, natural and archaeological features that may have disappeared, and the ownership or character and origins of a settlement.
- The following archaeological reports were also consulted in order to inform the assessment of all aspects of the archaeological resource within the Proposed Development and to ensure that the assessment is cognisant of all relevant policies and objectives:
 - Archaeological Excavations on the Northeastern Pipeline, Phase 2, 1988 (E440, Gowen 1988). Report prepared by Margaret Gowen and Co. Ltd for Bord Gáis Eireann;
 - Archaeological Assessment and Monitoring. Kilshane, Co. Dublin (Ballough to Bownsbarne Gas Pipeline) (99E0220, Conway 1999). Report prepared by Margaret Gowen and Co. Ltd for Bord Gáis Eireann;
 - Geophysical Survey Report, Kilshane, County Dublin (22R0092, Leigh 2022). Report prepared by J.M. Leigh Surveys Ltd for Gahan and Long Archaeological Services on behalf of Kilshane Energy;
 - Geophysical Survey at Kilshane Rd., Kilshane, Co. Dublin (22R0269, Murphy 2022). Report prepared by Archaeological Consultancy Services Unit for Environmental Impact Services;
 - Geophysical Survey at Kilshane, Co. Dublin (22R0201, Dowling 2022). Report prepared by Ger Dowling for Archaeological Management Solutions;
 - Report on Proposed Development in Kilshane, North County Dublin (22R0059, Nicholls 2022). Report prepared by Target Archaeological Geophysics for Enngine Node Ltd;
 - Archaeological Test Excavations Report: Kilshane Energy, Co. Dublin (22E0348, Lynn and Long 2022). Report prepared by Gahan and Long Archaeological Services for Kilshane Energy; and
 - Chapter 15 – Archaeology and Cultural Heritage in Environmental Impact Assessment Report for Kilshane Energy Project (Environmental Impact Services 2023). Report prepared by

Archaeological Consultancy Services Unit for Kilshane Energy. The chapter includes the results of non-intrusive desktop research and a site inspection designed to identify at an early stage any potential constraints to the development and the effect that the proposal would have on the cultural heritage. It includes the results of assessments (geophysical survey and test excavations) carried out up to that time and offers recommendations for the mitigation of any potential effects.

Non-Invasive Field survey

The purpose of the site visit was to assess whether the site contained any visible evidence of any previously unrecorded areas or features of historical or archaeological significance. This was completed in March 2024.

11.2.1 Study Area

The proposed development site consists of an area of two green fields subject to permission for the Kilshane Energy Project (ABP PL06F.317480; Planning Ref. FW22A/0204 by Fingal County Council) on the lands immediately adjacent, and the footprints of two roads, Kilshane Road and Bay Lane, and an area at the location of the existing Kilshane BV station.

The study area under review includes a c. 1km radius from the proposed development site.

11.2.2 Scope of Assessment

The proposed development site consists of two green fields, a road footprint and the existing Kilshane BV. The site is divided into three main elements, as detailed in **Chapter 02 Description of the Proposed Development**:

- 1 Proposed Kilshane BV extension;
- 2 Construction of Newtown AGI; and
- 3 Proposed Pipeline GNI139.

Refer to **Figure 11-1** for the aerial view of the proposed development site and the permitted Kilshane Energy facility, and **Figure 11-2** for further details. The proposed Kilshane BV extension will have no effect on the archaeological, architectural and cultural environment as it is on a previously developed area of ground within an area of the existing Kilshane BV.

This assessment will therefore focus on the remaining elements of the proposed development, the pipeline GNI139 and the Newtown AGI. Both will require groundworks within green field areas and the footprints of existing roads. For the purpose of this assessment, the proposed development was divided into two areas. The western extent of the proposed pipeline route is within the footprint of the existing roads (Kilshane Road and Bay Lane) and will be referred to as Area 1. The green field areas within the eastern portion of the site, where the remaining portion of the pipeline will be, along with the proposed Newtown AGI, will be referred to as Area 2.

Area 1: It is proposed that the western section of the pipeline be constructed under the existing road surfaces. Both roads, now known as Kilshane Road and Bay Lane, are depicted at least since the Rocque map of 1760. This suggests ground disturbances have taken place in relation to their construction and since, during repair, service insertion and resurfacing. Archaeological investigations were carried out previously to the north and south. The results of these investigations suggest this is a highly sensitive area, with a number of significant monuments dating between the prehistoric and medieval periods uncovered. Archaeological remains might therefore survive in these areas at depths that were not disturbed previously, and it is possible that undisturbed ground might also exist in this area. Where groundworks and earthmoving are involved, there is always the possibility that archaeological material will be uncovered and impacted upon; this requires mitigation.

Area 2: It is proposed that the eastern section of the pipeline and a new Newtown AGI will be constructed within green fields. This area is shown as two fields and has remained undeveloped since the Rocque map of 1760, and up until the present has been agricultural land. A portion of the current site was previously subject to an archaeological assessment that included a non-invasive geophysical survey and test trenching. Subsequently, monuments and features of archaeological significance, including an enclosure, were subject to excavation, with further monitoring requirements. This was in advance of and in relation to the proposed development, subject to permission for the Kilshane Energy Project (ABP PL06F.317480; Planning Ref. FW22A/0204 by Fingal County Council), on the lands immediately adjacent, with an EIAR prepared. In line with the recommendations expressed, further monitoring is required as isolated archaeological remains might survive in the areas that were not tested. Where groundworks and earthmoving are involved, there is always the possibility that archaeological material will be uncovered and impacted upon; this requires mitigation.

Accordingly, the scope of this assessment is made with respect to these two areas and considers the effects of the construction, operation and decommissioning of the proposed development in terms of how the proposal could affect cultural heritage assets.

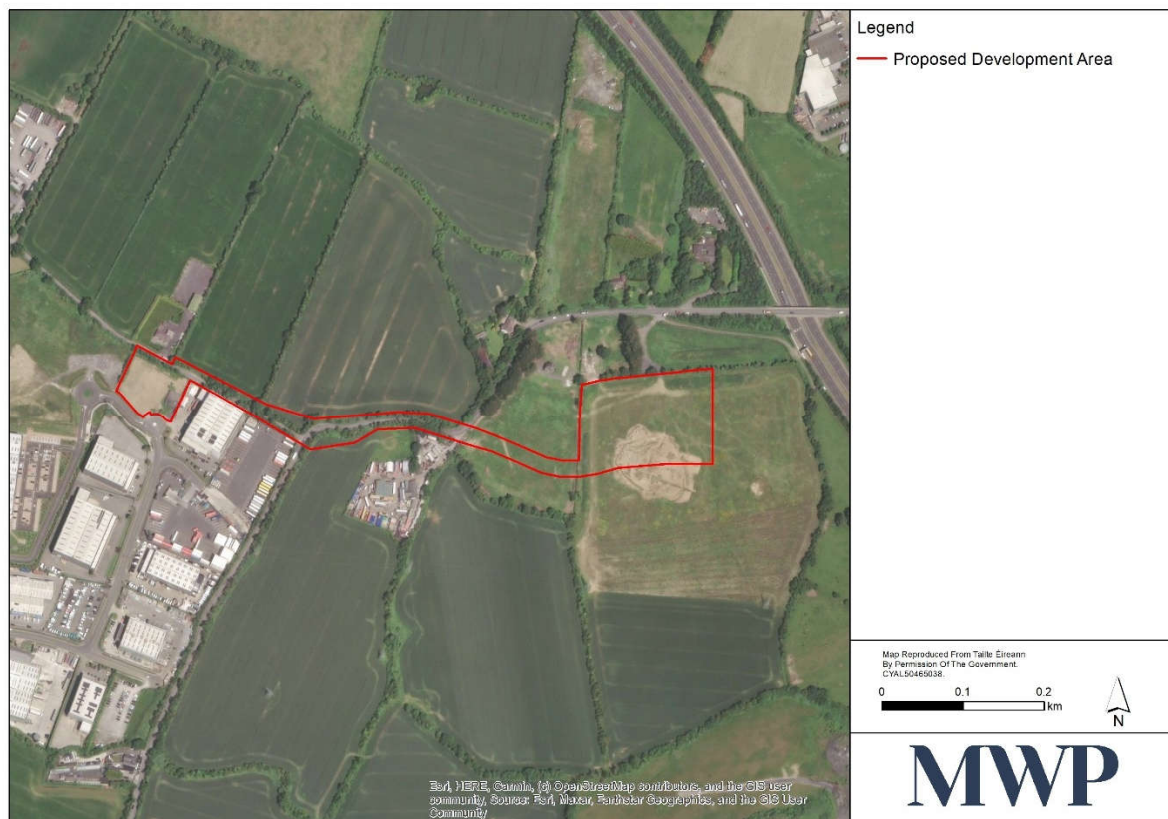


Figure 11-1: Aerial View of the Site

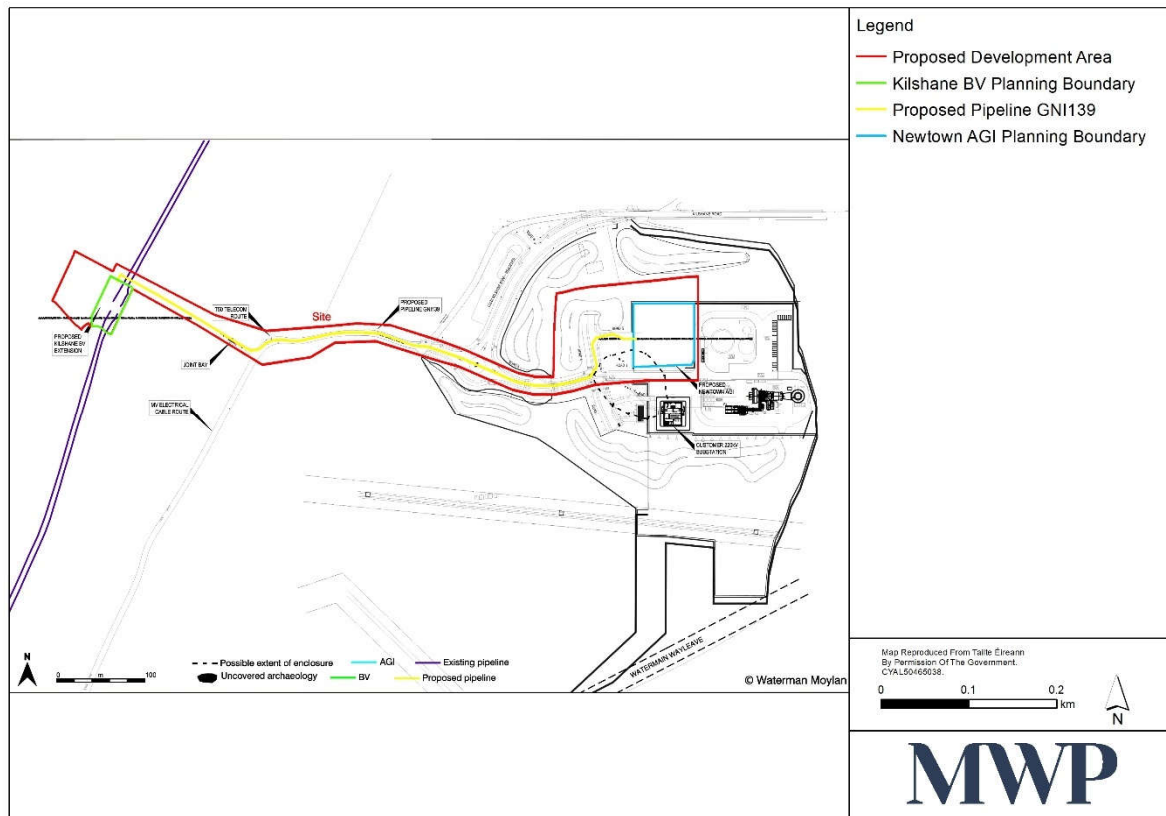


Figure 11-2: Details of Proposed Development Site and Permitted Kilshane Energy Facility

11.2.2.1 Effect Significance

The main purpose of this chapter is to identify, describe and present an assessment of the likely significant effects of the proposed development on archaeological and architectural remains (known and unknown if present). This chapter aims to present a precise, concise, accurate and credible description of the likely and significant effects on archaeological, architectural and cultural heritage and offer mitigation measures. The effect may result from the construction and operation/existence of the project.

11.2.2.2 Scoped out from Further Assessment

There will be no significant effects during the operation/existence phase of the proposed development. Therefore archaeological, architectural and cultural heritage has been scoped out from further assessment of the operation phase. The only impact on archaeological, architectural and cultural heritage assets, if present, will be in relation to the construction phase, particularly during associated groundworks.

11.2.3 Statement on Limitations and Difficulties Encountered

No difficulties were encountered during the compilation of this chapter.

11.3 Baseline Environment

Archaeological cultural heritage is considered here to include all recorded monuments listed in the Record of Monuments and Places (RMP) and in the Sites and Monuments Record (SMR), National Monuments (i.e. those in the ownership/guardianship of the state), previously unrecorded sites, sites reported in the Excavations Database

if not included in the SMR/RMP and find spots or sites listed in the NMI Topographical Files. Architectural cultural heritage is considered here to include all recorded buildings and associated features, memorials and historic street furniture that is listed in the National Inventory of Architectural heritage (NIAH), Record of Protected Structures (RPS) and previously unrecorded.

11.3.1 National Monuments

As detailed in **Section 11.2**, the term ‘National Monument’ is defined by the National Monuments Act (1930), which also states that the consent of the Minister is required for archaeological works at or near a national monument in the ownership or guardianship of the Minister or a local authority or to which a preservation order applies. The Minister is required to consult with the Director of the National Museum of Ireland in relation to such an application for consent.

No National Monuments are located on or within close proximity to the proposed development site.

Dunsoghly Castle (DU014-005001-), located c. 0.9 kilometres (km) to the northeast, is the nearest National Monument (No. 230) and it is also in state ownership.

11.3.2 Record of Monuments and Places and Sites and Monuments Record

There are no monuments as listed in the *Record of Monuments and Places* or in the *Sites and Monuments Record* located within the site boundary.

The nearest monument to the site is a Burial ground (DU014-048----) that was identified during monitoring of the gas pipeline in 1988, with excavation subsequently uncovering 123 skeletons (E000440; Gowen 1988). Later test trenching (99E0220; Conway 1999) in the adjacent area revealed a single linear feature of likely post-17th-century date. The site is located within the fields adjacent and north of Bay Lane. The monument was subject to further assessments in more recent years, including geophysical surveys (22R0059, Nicholls 2022; 22R0201, Dowling 2022; 23R0112, after Hardy 2023; 22R0269, Murphy 2022), test trenching and monitoring (22E0536, Hardy 2022; 2023). The presence of three major enclosing ditches was identified. These were initially recorded during geophysical surveys (22R0059, Nicholls 2022; 22R0201, Dowling 2022) and where subsequently subject to test excavation, the ditches were found to be substantial. The outer ditch measures c. 110m in diameter, 3.1–4.2m in width and up to 1.53m in depth, the middle enclosure is 90m in diameter and defined by a ditch that is 3m wide and up to 1.2m deep, while the inner enclosure ditch is 78m in diameter, 1.63–3m wide and 0.73m deep. Several radial, possible annexe ditches containing animal bone, shell and occasional charcoal inclusions, were also identified. These measure 25–35m in length, between 0.4m and 3.42m in width between 0.13m and 1.16m in depth. Skeletal human remains were also discovered to the west of the recorded burial ground. These were exposed c. 0.2–0.38m below the current ground level. The results of these investigations suggest that the burial ground extends to the west of the area recorded previously. Preliminary results would indicate a possible multi-phased early medieval (AD 400–1099) enclosure settlement site, with evidence for agricultural activity, field systems, metalworking and burials.

To the far south of the site, there are three monuments located within a field. These consist of Church DU014-012001- with associated Burial ground DU014-012002- and Ritual site – holy well DU014-012003-, however these are not scheduled for inclusion in the next revision of the Record of Monuments and Places and are located within an area that was extensively quarried and part of the Huntstown Quarry. Furthermore, these monuments are not visible at ground level and archaeological monitoring of the area in relation to water-mains infrastructure adjacent and south of the current site did not identify any features of archaeological interest (21E0090, Slaughter and Mulraney 2021).

Another monument, enclosure DU014-093----, is located c. 275m to the north-east of the site is scheduled for inclusion in the next revision of the Record of Monuments and Places. Enclosures are one of the most common field monuments in Ireland and they are defined by an enclosing element such as a bank, wall, fosse and/or scarp. Some enclosures have no surface expression, with the upstanding elements often removed in the past as a result of land reclamation/farming; some can be indicated on cartographic sources or manifest as a cropmark on aerial imagery, while others remain unknown and are only identified as a result of archaeological investigations, such as the monument located within the current site (see **Section 11.3.3**). Enclosures can be of various shapes and sizes and date from prehistory onwards. Enclosure DU014-093---- was identified in 2004 during investigations (03E1359; Moore 2004) in advance of the N2 Finglas–Ashbourne Road Scheme. The enclosure was dated to the Neolithic period, with later activity dating to the Bronze Age and expressed in a series of deposits and features, including a hearth and cremation pits. The enclosure consisted of an irregular ditch measuring between 1.9m and 3.8m in width and it was recorded surrounding an egg-shaped area measuring 38.5m by 27.5m.

Table 11-1 presents a list of monuments located within a 1km radius of the site (**Figure 11-3**). The entry below is derived from the National Monuments Service Archaeological Survey Database.

Table 11-1: Recorded Monuments within 1km of the Centre of the Development Site

| RMP/SMR | Classification | Townland | ITM E | ITM N |
|---------------|----------------------------|-----------------------------------|--------|--------|
| DU014-005001- | Castle - tower house | DUNSOGHLY | 711764 | 743185 |
| DU014-005002- | Chapel | DUNSOGHLY | 711765 | 743172 |
| DU014-005003- | Castle - motte and bailey | DUNSOGHLY | 711656 | 743051 |
| DU014-005004- | House - indeterminate date | DUNSOGHLY | 711806 | 743202 |
| DU014-005005- | Crucifixion plaque | DUNSOGHLY | 711762 | 743175 |
| DU014-005006- | House - 16th/17th century | DUNSOGHLY | 711748 | 743211 |
| DU014-006001- | Ringfort - unclassified | NEWTOWN (Coolock By., Finglas ED) | 711962 | 742457 |
| DU014-006002- | Ringfort - unclassified | NEWTOWN (Coolock By., Finglas ED) | 711827 | 742447 |
| DU014-012001- | Church | KILSHANE | 710876 | 742260 |
| DU014-012002- | Burial ground | KILSHANE | 710975 | 742277 |
| DU014-012003- | Ritual site - holy well | KILSHANE | 710869 | 742258 |
| DU014-013---- | Castle - motte and bailey | NEWTOWN (Coolock By., Finglas ED) | 711319 | 742325 |
| DU014-048---- | Burial ground | KILSHANE | 710300 | 742841 |
| DU014-089---- | House - 16th/17th century | BAY | 709171 | 743001 |
| DU014-093---- | Enclosure | KILSHANE | 710927 | 742924 |
| DU014-100---- | Ring-ditch | NEWTOWN (Coolock By., Finglas ED) | 711913 | 742603 |
| DU014-134---- | Ring-ditch | NEWTOWN (Coolock By., Finglas ED) | 711929 | 742619 |
| DU014-135---- | Ring-ditch | NEWTOWN (Coolock By., Finglas ED) | 711916 | 742790 |

11.3.4 Previous Archaeological Investigations

In addition to the work previously undertaken within the site, as detailed in **Section 11.3.3**, the area south of the site was subject to archaeological investigations in 2021. This was in relation to the upgrading of the water-mains infrastructure between Ballycoolen and Kingstown townlands (21E0090, Slaughter and Mulraney 2021). No archaeological features were exposed during the monitoring, however.

The wider area is, however, rich in previously unknown monuments that were identified as a result of archaeological investigations. These include enclosure DU014-093---- (03E1359, Moore 2004); an unenclosed cemetery, now Burial ground DU014-048----(E000440, Gowen 1988; 99E0220; Conway 1999); investigations of Castle - motte and bailey DU014-013---- that identified additional features (01E1214, Fitzpatrick 2002; 04E0807, Keith 2004); excavation of a burnt spread (03E1450, Schweitzer 2004), and several enclosures identified via geophysical survey 21R0134 and subsequently subject to further investigations (21E0398, Garahy 2021; 21E0580, McLoughlin 2022a; 22E0045, McLoughlin 2022b).

Table 11-2 details these investigations (**Figure 11-3**), which are derived from the Excavations Database (www.excavations.ie).

Table 11-2: Previous Archaeological Investigations Carried Out

| Excavations.ie reference | Licence No. | Site Type | Investigation Type |
|---|-------------|--|--------------------------------------|
| 2023:469 - Kilshane, Dublin | 22E0536 | No archaeological significance | Test Trenching and Monitoring |
| 2022:519 - Kilshane, Dublin | 22E0536 | Three possible early medieval enclosures. Early Medieval (AD 400–1099) | Test Trenching and Monitoring of GSI |
| 2021:237 - Ballycoolen/Cloghran/Grange/Huntstown/Kilshane/Newtown/St. Margaret's/Millhead/Kingstown, Dublin | 21E0090 | Small pit | Monitoring |
| 2004:0612 - Kilshane, Dublin | 03E1359 | Neolithic segmented enclosure, Early Bronze Age activity | Excavation |
| 1999:253 - Kilshane, Dublin | 99E0220 | Unenclosed cemetery | Monitoring |
| 2001:456 - Newtown, Dublin 2002:0636 - Newtown, Dublin | 01E1214 | Site of motte and bailey | Test Trenching |
| 2008:481 - Newtown, Dublin | 08E0043 | No archaeological significance | Monitoring |
| 2021:352 - Kilshane, Dublin | 21E0398 | Bronze Age | Test Trenching |
| 2022:045 - Kilshane, Dublin | 21E0580 | Rectilinear ditched enclosure | Excavation |
| 2022:120 - Kilshane, Dublin | 22E0045 | Three ditched enclosures, prehistoric and early medieval | Excavation |
| 2024:521 - Bloomburn Cottage and Kilmonan Lodge, Kilshane, Dublin | 24E0729 | No archaeological significance | Archaeological testing |

Although no archaeological features were exposed during the monitoring of an area to the south of the site in 2021 (21E0090, Slaughter and Mulraney 2021), a single sherd of medieval Leinster Cooking Ware was recovered from topsoil.

The enclosure (DU014-093----) located c. 275m to the north-east of the site, that was identified and partially excavated (03E1359, Moore 2004) in advance of the N2 road scheme, was identified as a Neolithic (later 4th millennium BC) segmented enclosure. Extensive study of the cattle remains from this enclosure ditch have identified this as an important feasting site where the earliest evidence for cattle traction has also been observed (Pigièrè et al. 2022; Pigièrè and Smyth 2023). This site also included cremation pits and a single crouched inhumation in the centre of the enclosure, as well as Early Bronze Age activity.

An unenclosed cemetery, now Burial Ground DU014-048----, was identified during gas pipeline monitoring in 1988 under licence no. E000440 (McGowen 1988). The site is located in the fields adjacent to and north of Bay Lane. The area to be impacted upon by the pipeline was excavated, revealing the remains of 123 individuals. Subsequent test trenching carried out under licence 99E0220 (Conway 1999) suggested the burials did not extend eastwards. More recently, the cemetery site and fields adjacent were subject to further assessments including geophysical surveys (22R0059, Nicholls 2022; 22R0201, Dowling 2022; 23R0112 after Hardy 2023; 22R0269, Murphy 2022), test trenching and monitoring, including of Geotechnical Site Investigations (22E0536, Hardy 2022; 2023). This work has confirming the presence of three major enclosing ditches, defining areas measuring c. 110m, 90m and 78m in diameter, as well as a series of radial ditches likely representing associated annexes (see **Section 11.3.2** for details). Additional inhumation burials were also discovered, suggesting that the cemetery extends to the west of the previously recorded burial ground.

Investigations of the Castle - motte and bailey DU014-013----, located to the southeast of the site, included archaeological monitoring of engineering test pits and boreholes (01E1214, Fitzpatrick 2002). Subsequently, the site was subject to a geophysical survey and test trenching (04E0807, Keith 2004) was carried out in order to define an appropriate buffer zone. Archaeological deposits associated with enclosing elements of the motte were identified (ditches C3, C4 and C5), as well as a likely prehistoric burnt mound (C15). Preservation *in situ* was recommended.

The remains of additional burnt mounds were also excavated in advance of the N2 road scheme, c. 0.75km to the east of the site (03E1450; Schweitzer 2004). Two areas c. 15m apart were excavated. One comprised a burnt stone spread measuring 10m by 3.5m by 0.15m thick and associated with two pits and a sub-circular trough. The other consisted of a small and shallow deposit of burnt mound material, perhaps displaced from the site to the south.

A large area measuring 12 hectares adjacent to the site, to the west of Bay Lane, was subject to a geophysical survey (21R0134, from Garahy 2021) and indications of several enclosures were recorded. This area was also subject to subsequent investigations that confirmed the presence of features of archaeological significance. Test trenching under licence 21E0398 (Garahy 2021) identified a rectilinear enclosure (Site A), a D-shaped enclosure, a sub-circular enclosure (Site B), a second larger rectilinear enclosure (Site C), and two additional sites represented by a ditch with a charcoal-rich fill and a burnt pit, likely representing a former field system (Site D), and a linear ditch, two possible curvilinear ditches, a pit and a post-hole (Site E). Sites C, D and E were subsequently excavated under licence 21E0580 (McLoughlin 2022a). The enclosure in Site C measured 44m by 37m, with a ditch ranging from 2.5m to 4m in width and 0.8m to 2.4m in depth. The entrance was recorded at the southern side. The ditch at its deepest was just to the west of the entrance; it was suggested that this area also functioned as well. Pits, gullies and disturbed areas of burning were also preserved by record. Associated artefacts included a fragment of lignite bracelet, a fragment of a polished stone axe and several flint artefacts. The site was provisionally dated to the early medieval period and is awaiting radiocarbon dating. Site D comprised two pits, a shallow ditch and a large and deep pit. The pit was interpreted as a waterhole and measured 7.62m by 6.05m and was 1.68m deep.

Both smaller pits contained charred cereal grains and one was interpreted as a cereal-drying kiln. These were provisionally dated to the later Iron Age/early medieval period. Site E was relatively modern in date and consisted of linear ditches, gullies and drains forming part of a field system. The remaining sites were excavated under a separate licence (22E0045, McLoughlin 2022b). These consisted of three enclosures. One was a sub-rectangular ditched enclosure measuring 45m by 39m with a 2.13m wide ditch that was 0.66m deep. The other two enclosures were located to the east and consisted of a D-shaped enclosure and a sub-circular enclosure. The D-shaped enclosure measured 27m internally, with a 1.17m wide and 0.58m deep ditch and an entrance to the east, towards the sub-circular enclosure. The latter measured 26m in diameter, with a 1.65m wide and 0.52m deep ditch and two entrances, one facing west and the other facing east. The monument was dated to the later Bronze Age based on the pottery retrieved.

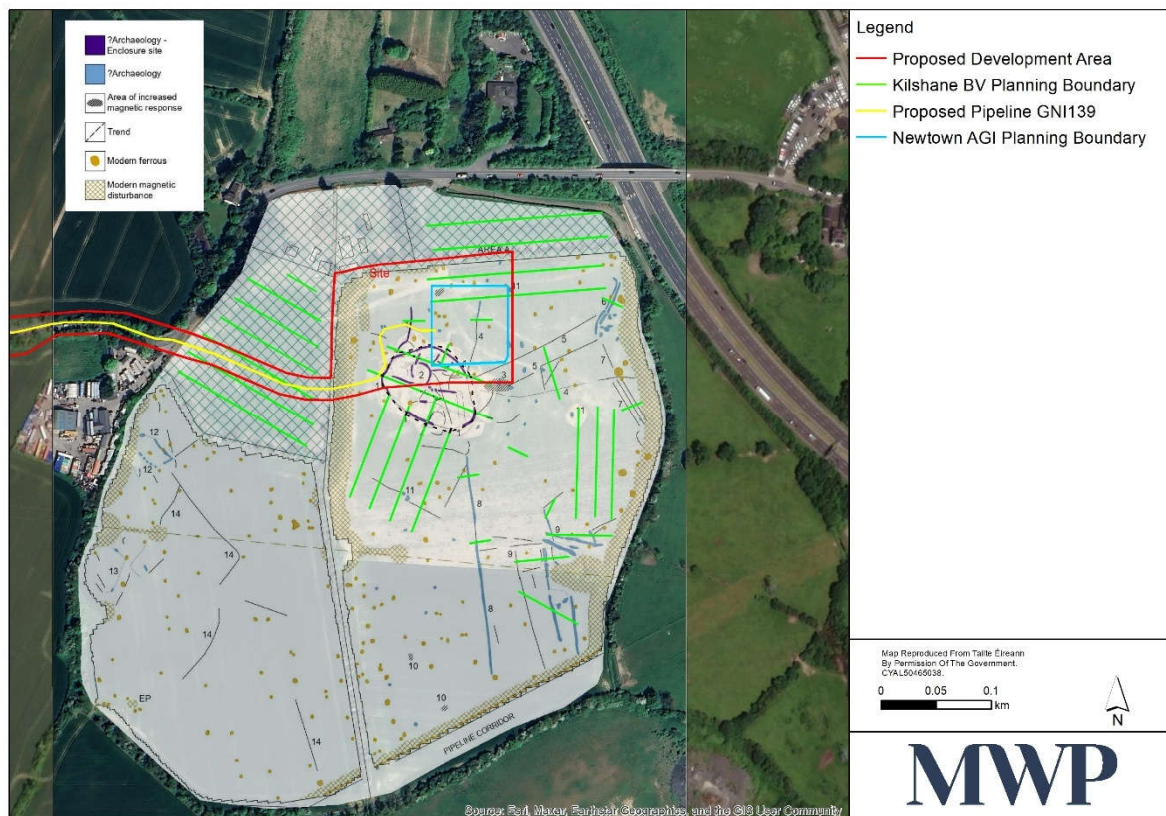


Figure 11-4: Showing Interpretation of Geophysical Survey Results (22R0092) and Excavated Test Trenches (22E0348)

Geophysical Survey (22R0092, Leigh 2022)

The geophysical survey that the current site (Area 2) lies within (**Figure 11-4**) was conducted in April/May 2022 by Joanna Leigh of J.M. Leigh Surveys Ltd. under licence no. 22R0092 (Leigh 2022) issued by the Department of Housing, Local Government and Heritage. A detailed gradiometer survey was undertaken of an area measuring c. 18 hectares across two fields. As relevant to the current site, only the eastern of the two fields was subject to survey, while the field to the west, through which the pipeline GNI139 will pass, was found not to be suitable for geophysical survey.

The survey was undertaken using a Bartington GRAD 601-2 instrument and it identified the presence of an enclosure measuring 86m by 66m, several linear and curvilinear responses, and a possible internal sub-circular enclosure c. 17m in diameter that is located just outside and to the south of the current site.

Anomalies recorded within the current site consist of Anomalies 4 and 11 (**Figure 11-4**). See extract below from the survey report:

5.3 *Linear trends and responses (4) appear to extend from the enclosure (1). These may represent associated ditched features. Linear trends (5) appear to extend from the enclosure to the east and lead to a series of responses (6) of interest.*

(...)

5.9 *Numerous isolated responses are located throughout Area A. Although some of these may represent more deeply buried ferrous debris, they may equally represent archaeological isolated pit-type features. The responses (11) are considered to be of clear archaeological potential.*

Test Trenching and Excavation (22E0348, Lynn and Long 2022)

Following this geophysical survey, the site was subject to a programme of archaeological testing (22E0348, Lynn and Long 2022) and subsequently excavation under the same licence. The area tested included both of the green fields, with the footprint of the proposed development site under discussion here also tested. The western greenfield, which was not subject to geophysical survey, was deemed suitable for testing.

Test trenching confirmed the presence of the enclosure complex at the location of the geophysical anomaly, with associated features and additional deposits in an area adjacent and to the south of the site (**Figure 11-4**).

Trenches and portions of trenches excavated within the current site include Trench 13 at the location of the proposed Newtown AGI, and Trenches 3 and 12 and the western portion of Trench 17 traversing the route of the proposed pipeline. Most of these were excavated to a depth of between 0.32m and 0.54m, with nothing of archaeological significance identified. Trench 17, however, was excavated up to a depth of 0.5–1.4m, with traces of a palaeochannel, enclosure ditch, internal features and curvilinear slot-trench identified in the eastern extent of the trench.

Preservation by record (excavation) of features identified and monitoring was recommended and agreed upon with the Department of Housing, Local Government and Heritage. Completion of the excavation report is currently in progress. Monitoring is also due to be carried out during the construction phase.

11.3.5 Sites Reported in The Excavations Database

As detailed in **Section 11.3.4**, several sites are reported in the excavations database, including prehistoric enclosure DU014-093---- (03E1359, Moore 2004); an early medieval cemetery, now Burial ground DU014-048--- (E000440, Gowen 1988; 99E0220, Conway 1999), along with three possible early medieval enclosures (22E0536, Hardy 2022; 2023), investigations around medieval Castle - motte and bailey DU014-013----, which identified additional features (01E1214, Fitzpatrick 2002; 04E0807, Keith 2004); a prehistoric burnt mound (03E1450, Schweitzer 2004), and several enclosures identified via geophysical survey 21R0134 (after Garahy 2021) and subsequently subject to test trenching and excavation (21E0398, Garahy 2021; 21E0580, McLoughlin 2022a; 22E0045, McLoughlin 2022b).

11.3.6 Record of Protected Structures

The *Fingal Development Plan 2023–2029* was consulted to determine if any protected structures were present within the proposed development site. No such structures were listed within the site boundary.

Three such sites are located in the environs of the site, including:

- 875m to north-east: Motte and Bailey (RPS 865; DU014-005003-); Dunsoghly, St. Margaret's, Co. Dublin' Archaeological site of man-made mound, forming part of an Anglo-Norman defended residence known as a motte and bailey castle (excludes modern house and outbuildings on the motte);
- 935m to north-east: Dunsoghly Castle (RPS No. 623; DU014-005001-; National Monument No. 230 (State Ownership)); Dunsoghly, St. Margaret's, Co. Dublin' Intact four-storey 15th-century square Tower House with large square corner towers. It has retained a substantial amount of its original roof timbers. Adjoining the tower house is a small single-storey chapel with inscribed stone with 1573 date; and
- 1.2km to south-west: Cloghran Church (in ruins) & Graveyard (RPS 674, DU013-008001; DU013-008002-); Cloghran Church (in ruins) Blanchardstown Corporate Park 2, Cloghran, Blanchardstown, Dublin 15. Remains of footings of medieval church in ruins within square graveyard that is now sited on the edge of a Business Park.

11.3.7 National Inventory of Architectural Heritage

There are no buildings or other features within the site that are listed in the National Inventory of Architectural Heritage (NIAH), nor in the townland of Kilshane generally.

11.3.8 Historic Cartographic Evidence and Aerial Imagery

A review of available cartographic sources and aerial imagery was undertaken as part of this assessment.

Potential archaeological or cultural heritage features are often marked on historic maps, which can provide a useful resource in identifying sites, particularly if they no longer have any above-ground remains. Unrecorded archaeological sites can also often be identified in aerial photographs as cropmarks or differential growth in a field and on LiDAR imagery as subsurface anomalies.

Cartographic Sources

A review of available historic mapping for the area was carried out to include *An actual survey of the county of Dublin - southwest sheet* (1760) by John Rocque (**Figure 11-5**), along with the 6-inch 1836 (**Figure 11-6**), the 25-inch 1906 (**Figure 11-7**) and the Cassini 6-inch 1935-38 (**Figure 11-8**) editions of the Ordnance Survey maps.

The 1760 map shows the eastern portion of the site as pastureland consisting of two fields to the south of the road that runs within the footprint of the current Kilshane Road, with a road roughly within the footprint of the current Bay Lane also shown. The latter leading towards a building complex labelled as 'Bay'. At the junction of Kilshane Road and Bay Lane is a building complex labelled 'Hunts Town'. Two settlements are depicted to the south of the site; 'Hunts Town' and 'Newtown', and one to the northwest, 'Bay'. There is no indication of the ecclesiastical enclosure.

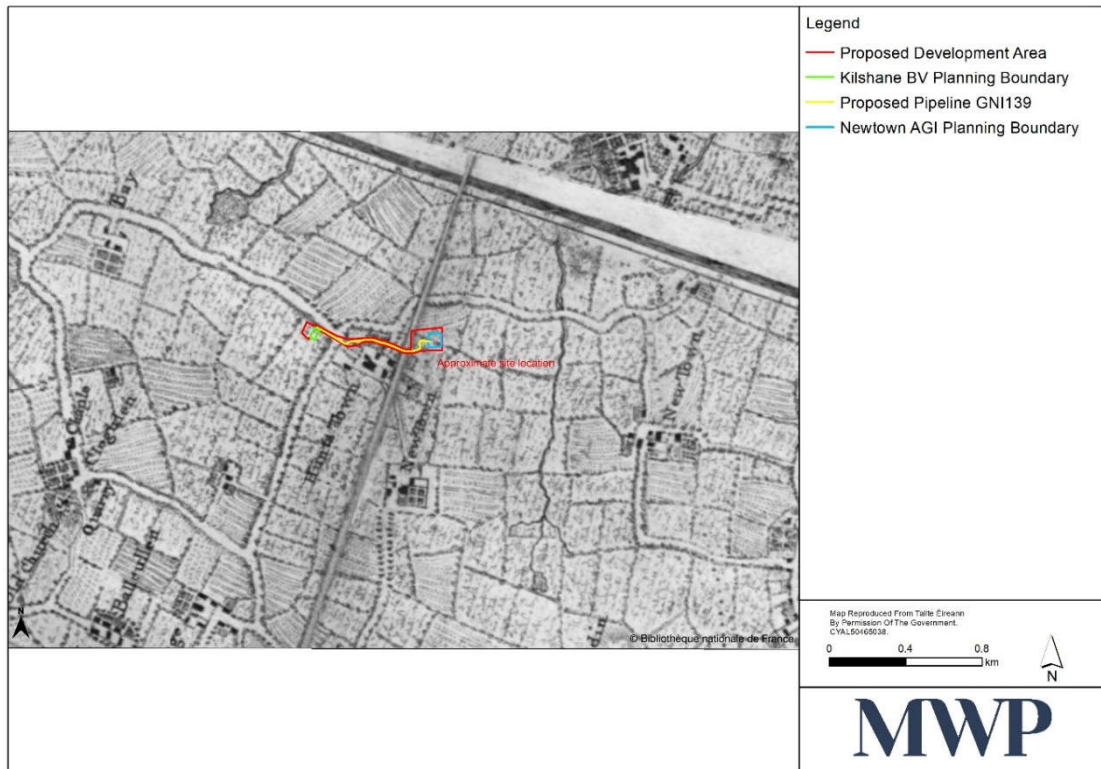


Figure 11-5: Extract from an Actual Survey of the County of Dublin by John Rocque - Southwest Sheet (1760), showing Approximate Location of Site

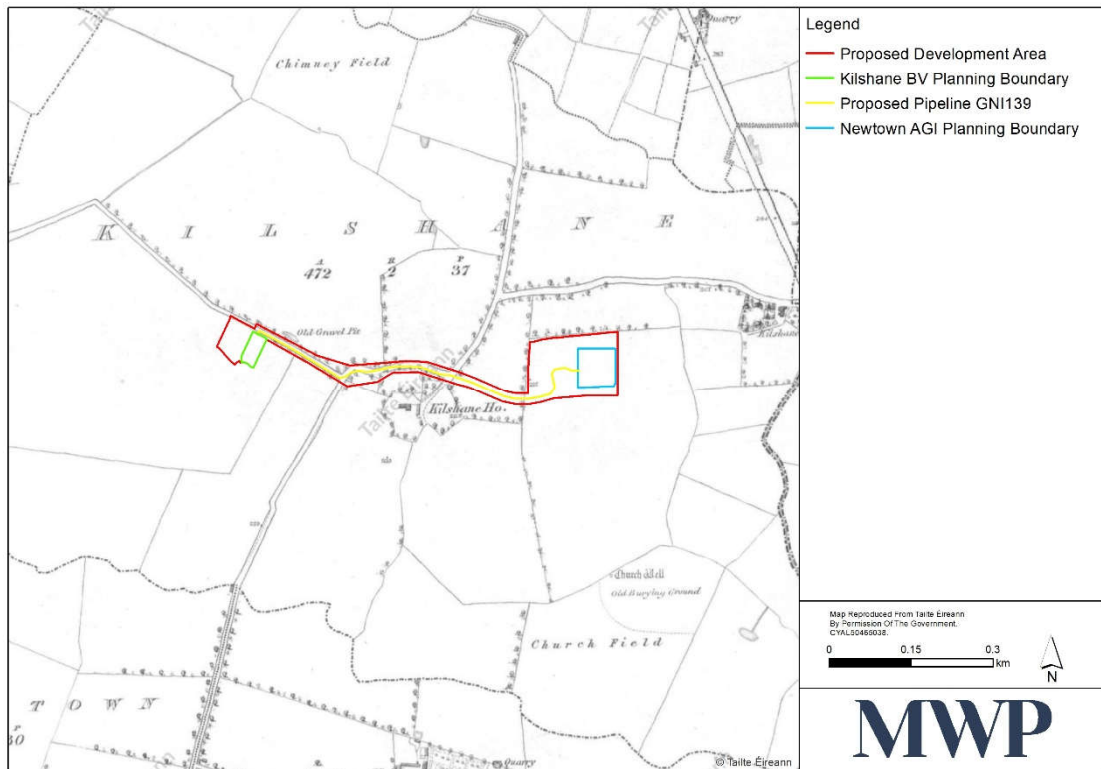


Figure 11-6: Extract from First Edition OS 6-inch Map (Surveyed 1836 – Published 1843), showing Location of Site

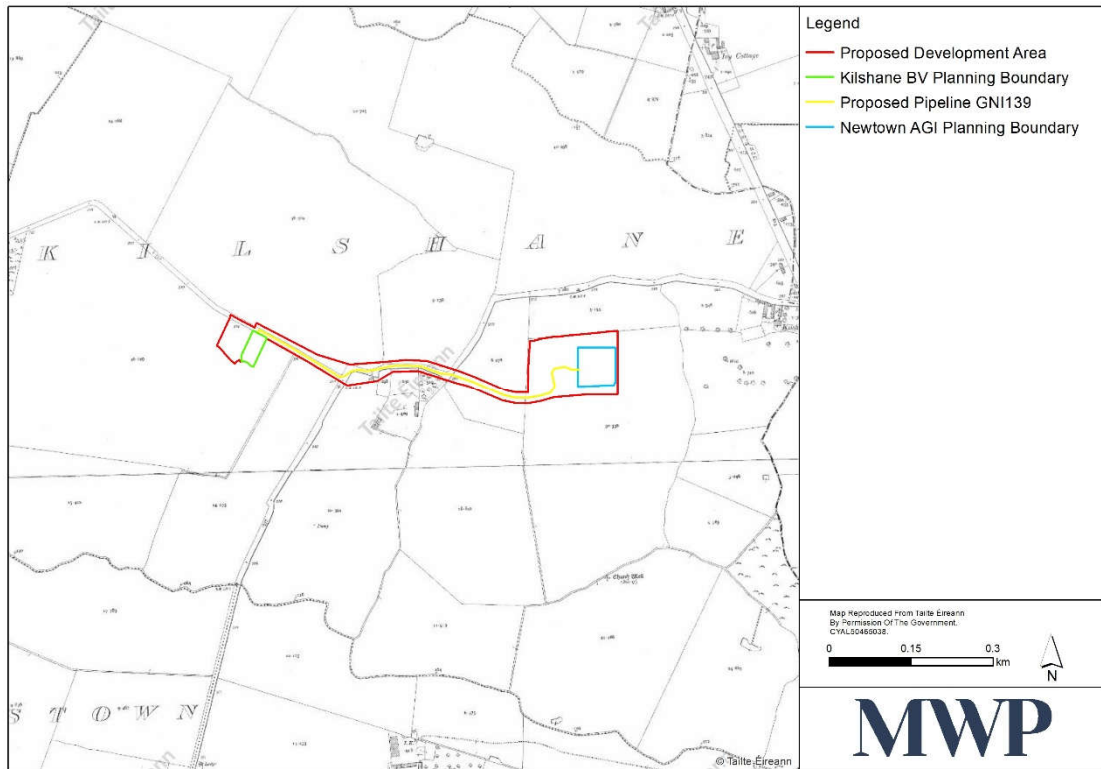


Figure 11-7: Extract from Third Edition OS 25-inch Map (Surveyed 1906 – Published 1909), showing Location of Site

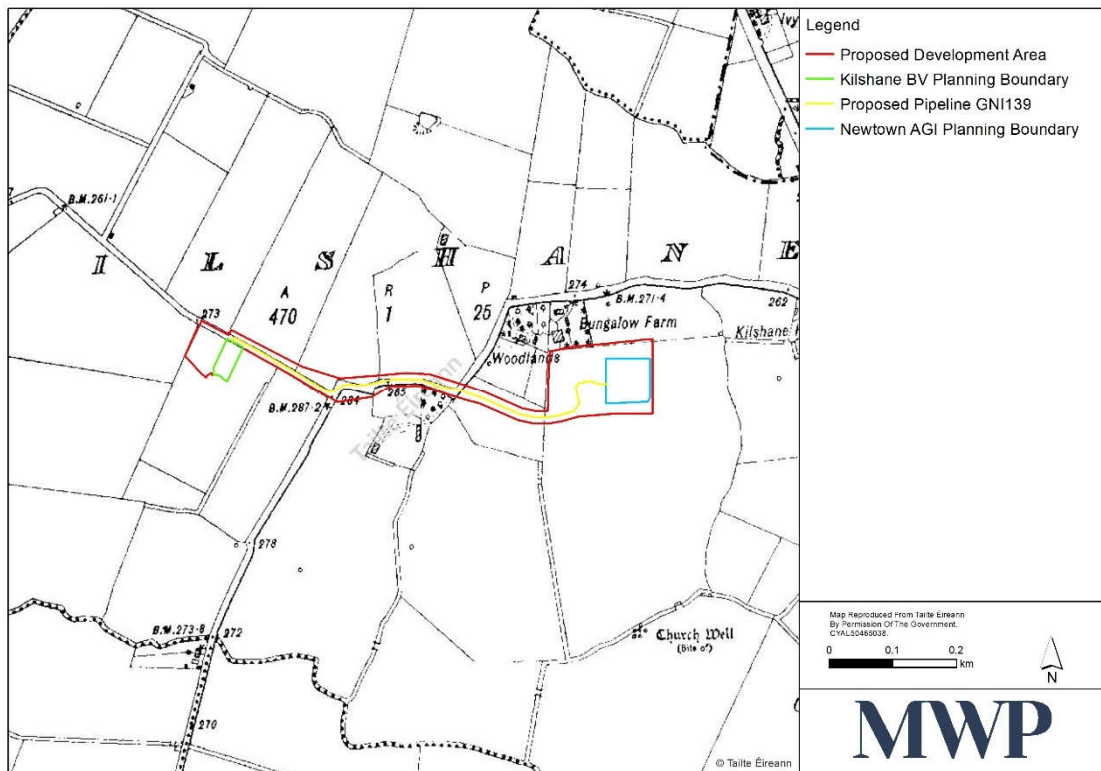


Figure 11-8: Extract from Cassini Edition OS 6-inch Map (1935–38), showing Location of Site

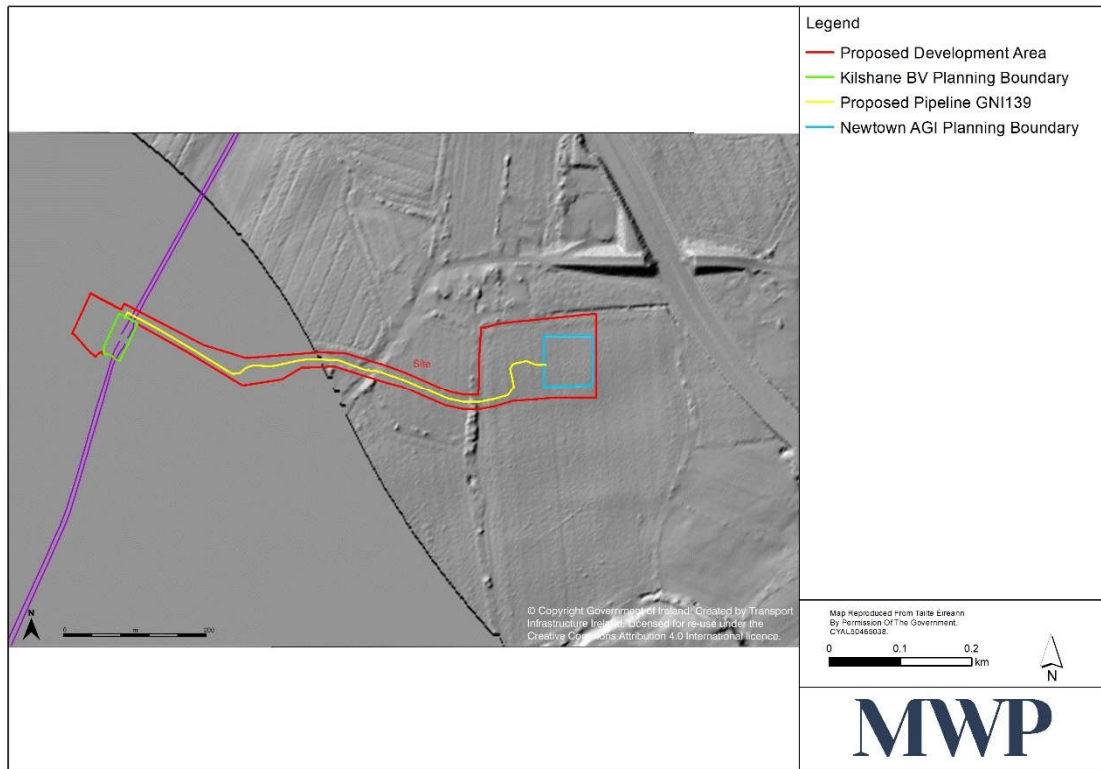


Figure 11-9: LiDAR (Multi Hillshading), showing Location of Site

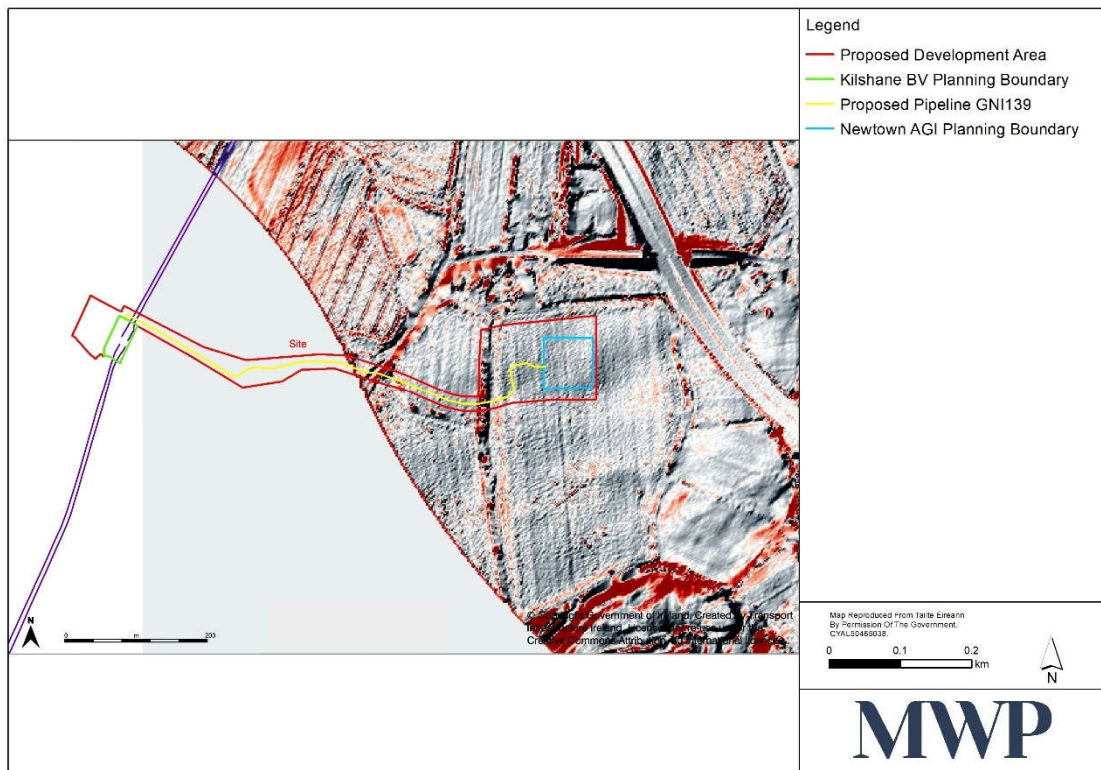


Figure 11-10: LiDAR (Principal Component Analysis of Hillshading), showing Location of Site

The Ordnance Survey (OS) maps of 1836, 1906 and 1935–38 do not depict any buildings within the site. The 1836 map shows the site within three fields and the footprint of the existing roads, which are depicted as tree lined, perhaps related to landscaping associated with Kilshane House.

Overall, while it appears that the north–south aligned boundary between the two green fields may have been depicted since the 1760 map, its alignment seems changed. A portion of the boundary to the south appears to be compromised during drainage works and is shown as a wet ditch by the time of the 1906 map.

Aerial Imagery

Aerial photographs dating between 1995 and 2018 from the Ordnance Survey of Ireland (OSi) were examined, as was Google Earth imagery dating between 2007 and 2023.

The eastern extent of the site (Area 2) is shown as being within two large agricultural fields, both roads are visible, while the northwest extent of the site (Area 1) is still undeveloped by the time of 1995 aerial image. By the time of the 1996–2000 aerial imagery, groundworks associated with gas pipeline development and the Kilshane BV are visible. By 2008, the M2 motorway to Ashbourne, located to the east of the site, and road improvements associated with Kilshane Road to the north of the site were complete.

In 2021, earthworks from a linear scheme can be seen running roughly northeast–southwest outside and to the south of the site. These were associated with the upgrading of the water mains and were archaeologically monitored but no features were identified (see **Section 11.3.4**). By the time of the 2022/2023 imagery (**Figure 11-1**) test trenches and excavation carried out within the eastern extent of the site can be seen, with test trenches excavated to the north of the site under licence 22E0536 (Hardy 2022; 2023) and areas excavated to the west under licences 21E0580 and 22E0045 (McLoughlin 2022a; 2022b).

Furthermore, LiDAR imagery, including multihillshade (**Figure 11-9**) and PCA (**Figure 11-10**), were examined. The anomalies visible appear ephemeral, and as the site was since subject to archaeological assessment, these are not of archaeological significance.

11.3.9 Site Walkover

A site inspection was conducted by Billy Sines of ACSU in March 2024. The site is located to the west of the M2 Motorway. The eastern portion of the site is within two grassed fields (Area 2), while the remaining area is along the northern extent of Kilshane Road and Bay Lane and terminates at the existing Kilshane BV (Area 1). The locations of the test trenches previously excavated in the eastern extent of the site are still noticeable, along with the area of the easternmost field that was subject to excavation, with spoil still visible (**Figure 11-11**). Kilshane Road is wider, while Bay Lane is narrower, both are bounded by mature hedges (**Figure 11-12**).



Figure 11-11: View of the Easternmost Field showing Previous Excavation Area (22EE0348)



Figure 11-12: View of Kilshane Road facing East and Bay Lane facing southeast, with Kilshane BV to the North

11.4 Assessment of Impacts and Effects

Any impact or effect, if present, of the proposed development on archaeological, architectural and cultural heritage assets will only be relevant during the construction phase as there are no upstanding/above-ground remains within the site. If such unknown sites are present, the effect will be negative, permanent and profound. This impact will be offset by appropriate mitigation measures proposed in **Section 11.5**.

11.4.1 Archaeological Heritage

The proposed development will have **no effect, indirect or otherwise**, on known archaeological monuments as no such features are present within the proposed development site.

The eastern extent of the site (Area 2) within the green fields was previously subject to assessments in the form of geophysical survey, test excavation and excavation, with features of archaeological significance identified and excavated (final report by Gahan and Long is currently in progress). The western section of the site (Area 1) within the existing roadway (Kilshane Road, Bay Lane and Kilshane BV) consists of previously disturbed ground.

A potential effect on previously unknown archaeological assets therefore lies in the uncovering of sub-surface archaeological features during topsoil stripping and groundworks associated with the construction phase of the proposed development. These may be located within the undisturbed areas of the site, between previously excavated test trenches and in the footprint of the road at depths that were not previously exposed, and it is possible that undisturbed ground might also exist in the latter area. This is because several archaeological

features, including enclosures and a burial ground, were previously identified during archaeological investigations in the surrounding area, and because some portions of the site were not previously subject to archaeological investigations. Should archaeological features be present, the proposed development will have a **negative, permanent and profound effect** on such remains.

11.4.2 Architectural and Cultural Heritage

There will be no effects on architectural heritage as no Protected Structures, sites listed within the National Inventory of Architectural Heritage (NIAH), or vernacular structures, are located within the proposed development site.

There will also be no effects on any other tangible or intangible cultural heritage as no such assets were identified within the site. Although the existing roads (Kilshane Road and Bay Lane) have some antiquity based on their depiction on Rocque's map of 1760, they have also been subject to repair, service insertion and resurfacing, suggesting considerable alteration of and disturbance to the original roads.

11.4.3 Indirect Effects

Indirect effects are those where the proposed development may have a negative (or positive) effect on the wider archaeological landscape or surrounding architectural heritage. Indirect effects may include a visual impact on the surrounding archaeological landscape.

The introduction of the proposed development to the area will not result in a change to the general setting of any monuments or protected structures, as none are present within or in the immediate environs of the site. Furthermore, the majority of the proposed development, when complete will have no surface expression. The proposed locations of Kilshane BV extension and Newtown AGI are within areas already developed or proposed for development. The proposed development will therefore have **no indirect effects**, either **temporary** or **permanent**, on the wider cultural heritage of the area.

11.4.4 Operational Phase

No direct significant operational effects on archaeology, architecture and cultural heritage as a result of the operation of the proposed development are envisaged. This represents a **neutral, imperceptible, long-term** effect.

11.4.5 Do-Nothing

The western extent of the site is within the existing Kilshane BV and the footprint of Kilshane Road (L3120) and Bay Lane, the eastern extent traverses two green fields. Should the proposed development not proceed, the existing archaeological, architectural and cultural heritage landscape will remain as it is currently.

11.4.6 Cumulative Impacts and Effects

There are no known archaeological, architectural or cultural heritage sites within the proposed development site. The proposed development will, however, have a **negative, permanent, profound effect** on any unknown archaeological material that may survive between test trenches and/or in potentially undisturbed areas of ground, if such exist.

The site is part of the Kilshane Energy Project, which similarly had the potential to have a negative, permanent, profound effect on previously unknown archaeological features identified as a result of associated geophysical

survey and test trenching, consisting of an enclosure complex and associated features, as well as a charcoal-rich pit. This effect was subsequently mitigated through preservation by record (excavation) with future archaeological monitoring also scheduled. The site adjacent and to the west of the existing Kilshane BV is also currently being developed and will similarly be subject to archaeological assessment.

The direct effects arising from this development site and nearby projects have been or will be dealt with through suitable mitigation measures and accordingly there will be no cumulative effects.

11.5 Mitigation Measures

11.5.1 Archaeological Heritage

The predicted effect on known archaeological heritage is regarded as being none. No effects on the recorded archaeological resource (RMP, SMR, National Monuments) were identified, and no indirect or visual effects on the nearest recorded monument outside the proposed development site boundary were noted.

The predicted effect on unknown archaeological features is regarded as **negative, permanent, and profound**.

Accordingly, the following mitigation measures are required to offset the impact on any unknown archaeological features if present. These will be carried out subject to the approval of the National Monuments Service (NMS) of the Department of Housing, Local Government and Heritage (DHLGH) and further mitigation may be sought by the NMS.

- Monitoring of all groundworks including topsoil stripping during the construction phase will be carried out to establish whether previously unknown archaeological features or deposits are present. If features of archaeological significance are exposed, then further mitigation measures will be implemented following consultation with the National Monuments Service. This will be carried out by experienced, licence-eligible archaeologists working under licence from the Department of Housing, Local Government and Heritage;
- Adequate time and resources will be provided by the developer for the resolution of any archaeology identified within the development site and which will be directly impacted by groundworks. Time and resources will also be allowed for any post-excavation work and specialist analysis necessary following any archaeological excavation that takes place; and
- A report is required to be compiled on completion of any archaeological excavation and will be submitted to the relevant authorities.

11.5.2 Architectural and Cultural Heritage

The predicted effect on known architectural and cultural heritage are regarded as being none. No effects on the recorded architectural resource (Protected Structures, NIAH) were identified, and no indirect or visual effects on the nearest such site outside the proposed development site boundary was noted.

11.6 Residual Effects

The residual effects are likely to be **neutral, imperceptible** if the proposed mitigation measures are implemented. **Table 11-3** summarises the residual effects of the proposed development on the archaeological landscape. Residual impacts are defined as the overall effect of the development on archaeology, on the basis of implementing the mitigation measures outlined in this report.

Table 11-3: Residual Effects

| Potential Effect | Mitigation Strategy | Residual Effects |
|---|---|------------------------|
| Construction Effects | | |
| Topsoil removal associated with development. Groundworks and service trenches, etc. | Archaeological Monitoring of the groundworks associated with the proposed development, including within the area already developed. Consultation with Licensing Section of National Monuments Service should archaeological sites or features be uncovered. Excavation and recording of any archaeological features identified, thus preserving them by record. | Neutral, Imperceptible |
| Effects to recorded monuments, known features, - none | No mitigation required. | Neutral, Imperceptible |
| Effects to Protected Structures, cultural heritage sites - none | No mitigation required. | Neutral, Imperceptible |
| Operational Effects | | |
| Nearby Recorded Monuments and Protected Structures are screened from view. | No mitigation required. | Neutral, Imperceptible |

11.7 Cumulative Effects

The EPA 2022 guidelines define cumulative impact as ‘The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects’. **Section 1.6 of EIAR Chapter 01 Introduction** identifies the developments considered in the cumulative assessment of the project.

A number of previous developments have taken place in the overall environs of the site, and permission for others has been granted by the local authority. The site lies within a sensitive archaeological landscape, with a number of monuments present. These are mostly represented by remains that were previously unknown, with no surface expression and therefore identified as a result of archaeological investigations. In such cases, if preservation *in situ* is not possible, preservation by record (full excavation) mitigates the impact of the development on archaeological remains and is carried out in consultation with the Department of Housing, Local Government and Heritage.

In terms of cumulative impacts, on lands adjacent to the site, the proposed development, subject to permission, relates to the Kilshane Energy Project. This includes the construction of an Open Cycle Gas Turbine Power Generation Station (OCGT), a 220kV Gas Insulated Switchgear (GIS) Substation and Underground 220kV Transmission Line Connection to the Existing Cruiserath 220kV Substation and Above Ground Installation (AGI), and associated carparks, access roads, services and landscaping. The proposed site was previously subject to archaeological assessment, including geophysical survey, test trenching and excavation, with monitoring of groundworks recommended in ‘Chapter 15 Archaeology and Cultural Heritage’ of the associated Environmental Impact Assessment Report (Environmental Impact Services, 2023). An Archaeological Impact Assessment was also previously carried out for the GIS and Grid connection (Lyne 2022), where archaeological monitoring of groundworks was proposed for an area of increased potential along Bay Lane, in the environs of a known archaeological monument, Burial ground DU014-048----. The proposed Kilshane BV extension, Newtown AGI and proposed gas pipeline GNI139 was assessed in this chapter.

The direct effects arising from other nearby projects have been or will be dealt with through mitigation measures that include archaeological monitoring. As a result, there will be no cumulative effects as suitable mitigation

measures have already or will be employed. Consequently, there will be no increase in direct or indirect cumulative effects on the archaeological and cultural heritage resource from these projects when considered together with the proposed development.

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