CHAPTER 4 ARCHAEOLOGY, ARCHITECTURE AND CULTURAL HERITAGE

4.0 ARCHAEOLOGY, ARCHITECTURE AND CULTURAL HERITAGE

4.1 INTRODUCTION

4.1.1 General

IAC Archaeology (IAC) has prepared this chapter in order to assess the impact, if any, on the archaeological, architectural and cultural heritage resource of the proposed development at Donaghcumper and Ballyoulster, Celbridge, County Kildare (Figure 4.1, ITM 698269 / 732979). This chapter was prepared by Faith Bailey (MA, BA (Hons), MIAI, MCIfA). Faith has over 18 years' experience in archaeological and cultural heritage consultancy, responsible for the production of EIAR and assessments for all aspects of development nationwide.



Figure 4.1: Site location

This study determines, as far as reasonably possible from existing records, the nature of the archaeological, architectural and cultural heritage resource in and within the vicinity of the application area using appropriate methods of study. Desk-based assessment is defined as a programme of study of the historic environment within a specified area or site that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance and the character of the study area, including appropriate consideration of the settings of heritage assets (Chartered Institute for Archaeologists 2014). This leads to the following:

- Determining the presence of known archaeological and built heritage sites that may be affected by the proposed development;
- Assessment of the likelihood of finding previously unrecorded archaeological remains during the construction programme;
- Determining the impact upon the setting of known cultural heritage sites in the surrounding area;
- Suggested mitigation measures based upon the results of the above research.

4.1.2 Definitions

In order to assess, distil and present the findings of this study, the following definitions apply:

'Cultural Heritage' where used generically, is an over-arching term applied to describe any combination of archaeological, architectural, and cultural heritage features, where –

- the term 'archaeological heritage' is applied to objects, monuments, buildings or landscapes of an (assumed) age
 typically older than AD 1700 (and recorded as archaeological sites within the Record of Monuments and Places)
- the term 'architectural heritage' is applied to structures, buildings, their contents and settings of an (assumed) age typically younger than AD 1700
- the term 'cultural heritage', where used specifically, is applied to other (often less tangible) aspects of the landscape such as historical events, folklore memories and cultural associations.

4.1.3 Significance of Effects

Impact definitions (description of effects) are as per the most recent EPA guidelines (2022):

Imperceptible

An effect capable of measurement but without noticeable consequences

Not significant

An effect which causes noticeable changes in the character of the environment but without significant consequences

Slight

An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.

Moderate

An effect that alters the character of the environment in a manner that is consistent with existing or emerging baseline trends.

Significant

An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.

Very Significant

An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment

Profound

An effect that obliterates sensitive characteristics.

4.1.4 Consultations

Following the initial research, a number of statutory and voluntary bodies were consulted to gain further insight into the cultural background of the background environment, receiving environment and study area, as follows:

- Department of Housing, Local Government and Heritage (DoHLGH) the Heritage Service, National Monuments: Record of Monuments and Places; Sites and Monuments Record; Monuments in State Care Database and Preservation Orders;
- National Museum of Ireland, Irish Antiquities Division: topographical files of Ireland;
- South Dublin County Council: Planning Section;

Trinity College Dublin, Map Library: Historical and Ordnance Survey Maps

4.1.5 Guidance and Legislation

The following legislation, standards and guidelines were consulted as part of the assessment.

- National Monuments Act, 1930 to 2014;
- The Planning and Development Acts, 2000 (as amended);
- Heritage Act, 1995 (as amended);
- Draft Advice Notes on Current Practice (in the preparation of Environmental Impact Statements), 2015, EPA;
- Guidelines on the Information to be Contained in Environmental Impact Assessment Report, 2022, EPA;
- Frameworks and Principles for the Protection of the Archaeological Heritage, 1999, (formerly) Department of Arts, Heritage, Gaeltacht, and Islands; and
- Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act, 2000 and the Local Government (Planning and Development) Act 2000.

4.2 ASSESSMENT METHODOLOGY

Research has been undertaken in four phases. The first phase comprised a paper survey of all available archaeological, architectural, historical, and cartographic sources. The second phase involved a field inspection of the proposed development area. The third phase comprised of geophysical survey and the fourth phase comprised a programme of archaeological testing.

4.2.1 Paper Survey

- Record of Monuments and Places for County Kildare;
- Sites and Monuments Record for County Kildare;
- National Monuments in State Care Database;
- Preservation Orders List;
- Topographical files of the National Museum of Ireland;
- · Cartographic and written sources relating to the study area;
- Kildare County Development Plan 2017-2023;
- Celbridge Local Area Plan 2017-2023;
- Place name analysis;
- Aerial photographs;
- Excavations Bulletin (1970-2022); and
- National Inventory of Architectural Heritage (NIAH).

Record of Monuments and Places (RMP) is a list of archaeological sites known to the National Monuments Section, which are afforded legal protection under Section 12 of the 1994 National Monuments Act and are published as a record.

Sites and Monuments Record (SMR) holds documentary evidence and field inspections of all known archaeological sites and monuments. Some information is also held about archaeological sites and monuments whose precise location is not known e.g. only a site type and townland are recorded. These are known to the National Monuments Section as 'un-located sites' and cannot be afforded legal protection due to lack of locational information. As a result, these are omitted from the Record of Monuments and Places. SMR sites are also listed on a website maintained by the Department of Housing, Local Government and Heritage (DoHLGH) – www.archaeology.ie.

National Monuments in State Care Database is a list of all the National Monuments in State guardianship or ownership. Each is assigned a National Monument number whether in guardianship or ownership and has a brief description of the remains of each Monument.

The Minister for the DoHLGH may acquire national monuments by agreement or by compulsory order. The state or local authority may assume guardianship of any national monument (other than dwellings). The owners of national monuments (other than dwellings) may also appoint the Minister or the local authority as guardian of that monument if the state or local authority agrees. Once the site is in ownership or guardianship of the state, it may not be interfered with without the written consent of the Minister.

Preservation Orders List contains information on Preservation Orders and/or Temporary Preservation Orders, which have been assigned to a site or sites. Sites deemed to be in danger of injury or destruction can be allocated Preservation Orders under the National Monuments Act 1930. Preservation Orders make any interference with the site illegal. Temporary Preservation Orders can be attached under the National Monuments (Amendment) Act 1954. These perform the same function as a Preservation Order but have a time limit of six months, after which the situation must be reviewed. Work may only be undertaken on or in the vicinity of sites under Preservation Orders with the written consent, and at the discretion, of the Minister.

The topographical files of the National Museum of Ireland are the national archive of all known finds recorded by the National Museum. This archive relates primarily to artefacts but also includes references to monuments and unique records of previous excavations. The find spots of artefacts are important sources of information on the discovery of sites of archaeological significance.

Cartographic sources are important in tracing land use development within the development area as well as providing important topographical information on areas of archaeological potential and the development of buildings. Cartographic analysis of all relevant maps has been made to identify any topographical anomalies or structures that no longer remain within the landscape.

Documentary sources were consulted to gain background information on the archaeological and cultural heritage landscape of the proposed development area.

Development Plans contain a catalogue of all the Protected Structures and archaeological sites within the county. The Kildare County Development Plan 2017-2023 and Celbridge Local Area Plan 2017-2023 were consulted to obtain information on cultural heritage sites in and within the immediate vicinity of the proposed development.

Place Names are an important part in understanding both the archaeology and history of an area. Place names can be used for generations and in some cases have been found to have their root deep in the historical past.

Aerial photographic coverage is an important source of information regarding the precise location of sites and their extent. It also provides initial information on the terrain and its likely potential for archaeology. A number of sources were consulted including aerial photographs held by the Ordnance Survey and Google Earth.

Excavations Bulletin is a summary publication that has been produced every year since 1970. This summarises every archaeological excavation that has taken place in Ireland during that year up until 2010 and since 1987 has been edited by Isabel Bennett. This information is vital when examining the archaeological content of any area, which may not have been recorded under the SMR and RMP. Summary records are available online from 1970-2022.

The National Inventory of Architectural Heritage is a state initiative established under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999 tasked with making a nationwide record of significant local, regional, national and international structures, which in turn provides county councils with a guide as to what structures to list within the Record of Protected Structures. The NIAH have also carried out a nationwide desk-based survey of historic gardens, including demesnes that surround large houses.

4.2.2 Field Inspection

Field inspection is necessary to determine the extent and nature of archaeological 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.

The field inspection entailed -

- Walking the proposed development and its immediate environs.
- Noting and recording the terrain type and land usage.
- Noting and recording the presence of features of archaeological or historical significance.
- Verifying the extent and condition of any recorded sites or structures.
- Visually investigating any suspect landscape anomalies to determine the possibility of their being anthropogenic in origin.

4.2.3 Geophysical Survey

Geophysical survey is used to create 'maps' of subsurface archaeological features. Features are the non-portable part of the archaeological record, whether standing structures or traces of human activities left in the soil. Geophysical instruments can detect buried features when their electrical or magnetic properties contrast measurably with their surroundings. In some cases, individual artefacts, especially metal, may be detected as well. Readings, which are taken in a systematic pattern, become a dataset that can be rendered as image maps. Survey results can be used to guide excavation and to give archaeologists insight into the pattern of non-excavated parts of the site. Unlike other archaeological methods, the geophysical survey is not invasive or destructive.

A geophysical survey was undertaken within the proposed development in 2021 to inform the overall development of the lands (Nicholls 2021, Licence Ref.: 21R0270). A summary of the geophysical report is presented in this chapter and the full report is included in Appendix 4.1.

4.2.4 Archaeological Testing

Archaeological Test Trenching can be defined as 'a limited programme... of intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land or underwater. If such archaeological remains are present test trenching defines their character and extent and relative quality' (CIfA 2020a, 4).

A programme of archaeological testing based on the results of the geophysical survey was carried out within the proposed development in November 2021 and May 2022. This was undertaken by Marc Piera of IAC under licence 21E0816 (Piera 2022). Detailed results of the archaeological testing are included in this chapter and Appendix 4.2 of this report.

4.3 EXISTING RECEIVING ENVIRONMENT (BASELINE SCENARIO)

4.3.1 Archaeological and Historical Background

The proposed development area is located at Celbridge within the townlands of Ballyoulster and Donaghcumper, Barony of South Salt, and Parish of Donaghcumper, County Kildare. The development area comprises a greenfield site located on the edge of the existing built-up area of Celbridge. The site includes sections of Dublin Road, with Donaghcumper Cemetery and the Ballyoulster Park housing estate to the north, the Willow housing estate to the south, agricultural lands to the east and a section of Shinkeen Road to the west. There are no archaeological sites located within the development area; however, there are three recorded monuments within 300m (Figure 4.1). The nearest of these sites consists of a ring-ditch (KD011-074), located c. 85m to the east-southeast. The archaeological zone of potential for the historic town of Celbridge (KD011-012001) is located c. 417m to the west. There are two protected structures located within 300m of the development area. The closest is a medieval church (RPS B11-02) located c. 185m west-northwest of the site. This is also a recorded monument (RMP KD011-013)

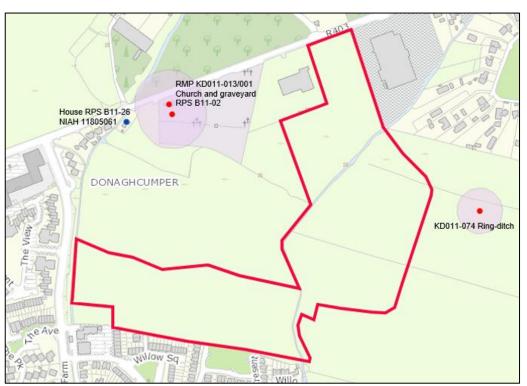


Figure 4.2: Site location showing surrounding recorded archaeological and architectural heritage site

Prehistoric Period

Mesolithic Period (8000-4000 BC)

The earliest extant evidence suggests that Ireland was first occupied during the Mesolithic period by communities that subsisted on hunting, fishing and foraging. Due to the presence of the River Liffey, it is likely that the area of the proposed development was frequently visited by Mesolithic communities who may have used it as a route way to the coast and as a food and material resource. This has been illustrated by archaeological discoveries. During an excavation in 1995 Mesolithic material consisting of a large flint assemblage (DU017-079) was unearthed from within the body of a mound, which was previously thought to be Bronze Age in date (DU017-075001) (Bennett 1995:052). This site is located c. 3.7km northeast of the proposed development area and is adjacent to the River Liffey. The mound itself was subsequently identified as an 18th-century landscape folly, which had disturbed Mesolithic material when it was constructed. A similar assemblage of flints also dating to the Mesolithic period was also found in 1997 during monitoring of ground works for a new clear water tank at the Leixlip Water Treatment Plant (Bennett 1997:091), which is located c. 5km to the northeast of the development area.

Archaeological testing and plough soil inspection as part of a proposed extension to Leixlip Water Works in 2005 resulted in the discovery of approximately 330 flint artefacts, a significant portion of which dated to the early Mesolithic period (Bennett 2005:410). Neolithic and Bronze Age flint artefacts were also present, along with a prehistoric burial cairn. In 2006 further investigations were carried out at the site (Bennett 2006:585). This confirmed the presence of two prehistoric burial monuments, which were investigated and then preserved in-situ.

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Neolithic Period (4000-2500 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. This afforded the development of agriculture which demanded an altering of the physical landscape. Forests were rapidly cleared and field boundaries constructed. Pottery was also being produced, possibly for the first time.

The advent of the Neolithic period also provided the megalithic tomb. There are four types of tomb; court cairn, portal, passage and wedge. The court, portal and passage style tombs are of pure Neolithic date, while the wedge tomb straddles the Neolithic to Bronze Age transition. Archaeological remains dating to this period have also been discovered recently at the site of the water treatment works at Cooldrinagh, c. 3.8km northeast of the development. Two adjacent burial monuments were identified (DU017–075 and DU017–079), consisting of a denuded passage tomb on the western side, flanked to the east by a circular, kerbed feature containing two cist burials and covered by cairn material (Bennett 2006:585). Due to the significance of the site, all investigations were carried out under ministerial consent, as they were judged to be National Monuments (Ref.: CO14, E2034). Some human remains were identified during the excavations, although both sites had suffered heavily from disturbance. It is likely that the Neolithic passage tomb established a tradition for burial in the area, which led to the construction of the circular cairn with cist burials. This later site is likely to be Bronze Age in date.

As with the Mesolithic period, the topographic location and proximity to a water source may have made the area attractive for settlement during this period.

Bronze Age (2500-800 BC)

This period is marked by the use of metal for the first time. As with the transition from Mesolithic to Neolithic, the transition into the early Bronze Age was accompanied by changes in society. Megaliths were replaced in favour of individual, subterranean cist or pit burials that were either in isolation or in small cemeteries. These burials contained inhumed or cremated remains and were often, but not always, accompanied by a pottery vessel. A ring ditch of possible Bronze Age date is recorded c. 85m east-southeast of the proposed development area. A further ring ditch was recorded in the northern portion of the proposed development area during the course of the geophysical survey carried out as part of this assessment.

The most common Bronze Age site within the archaeological record is the burnt mound or *fulacht fiadh*. Over 7000 *fulachta fiadh* 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. The closest recorded site of this type to the development area is located c. 1.6km to the northeast (KD011-062) discovered during soil stripping in advance of development of the Liffey Valley Business Park and subsequently archaeologically excavated (Licence: 95E0264).

In 2010, during archaeological monitoring (Licence: 10E0414) within Castletown Demesne c. 1.2km to the north, a prehistoric site was discovered traversing the front lawn of the Castletown House. The site contained a crouched inhumation burial (KD011-060001) and a crushed prehistoric vessel. They appear to fit with the 'Bowl Tradition' of Bronze Age burial of the later 3rd Millennium BC. The test trench had truncated at least six other pit burials (KD011-060002-, KD011-060003, KD011-060004-, KD011-060005, KD011-060006 and KD011-060007). Four sherds of prehistoric pottery were also found. Their morphologies and fills have a similar character to crouched inhumations which represented a cemetery of pit burials.

Iron Age (800 BC-AD 500)

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.

Early Medieval Period (AD 500-1100)

The early medieval period, with a new religious culture and evolving technologies, saw significant woodland clearance and the expansion of grassland. A new type of plough and the horizontal mill were two innovations that improved agriculture and allowed for the population to increase. Consequently, from c. AD 500 onwards, the landscape as a whole became well settled, as evidenced by the profuse distribution of ringforts, a dispersed distribution of enclosed settlements, normally associated with various grades of well-to-do farming and aristocratic classes in early medieval Ireland (Aalen et al. 1997, 20).

The early medieval period is depicted in the surviving sources as entirely rural characterised by the basic territorial unit known as *túath*. Byrne (1973) estimates that there were probably at least one hundred and fifty kings in Ireland at any given time during this period, each ruling over his own *túath*. Ringforts represent individual defended family homesteads and primarily date to the period 500 - 1000 AD (Lynn 1975, 30). Although there are no recorded monuments of this type within the vicinity of the proposed development area, it is likely that such sites existed within the area when considering the proximity of Dublin and the importance of the River Liffey for trade and resources. The closest consists of KD011-074 located c. 46m to the southeast of the development area, visible on the 1837 edition OS 6-inch map and Google Earth orthophoto taken in 2018.

It is thought that an early ecclesiastical site, traditionally associated with St. Mo-chúa of Clondalkin (Killanin and Duignan, 1967, 159), may have existed in the area from the 5th century, from which the town of Celbridge originated. The site of this foundation is thought to have been situated on or near the site of the later medieval church (KD011-021005). A curved boundary to the north of this church and its associated graveyard (KD011-012006) may be indicative of an early ecclesiastical enclosure (KD011-012004). This church of Kildroch comprised a nave of probable 14th-century date, with a rectangular fortified tower added in the 15th/16th centuries. It was granted to St Thomas' Abbey, Dublin, and is noted as being in good repair in the royal visitation of 1615.

Medieval Period (AD 1100-1600)

The coming of the Anglo-Normans in the late 12th and early 13th centuries brought about further change in the appearance of the landscape with the development of town boroughs and manorial villages, underpinned by the presence of castles and monastic orders newly arrived from Britain and the Continent.

Strongbow granted Celbridge, as part of the 'cantred of Offelan nearest Dublin' to Adam DeHereford, before 1176. Then known as 'Kildroch', Celbridge was subsequently granted to John De Hereford, then to his son Thomas, and thence to the son-in-law of the latter, Milo de Rochford, by whose family it was held until the mid-14th century. The earliest definitive evidence for a borough here occurs in 1401, although a significant settlement had existed by the early 13th century, by which time Thomas De Hereford had erected a castle, monastery and mill at Kildrought. D'Alton (1838) says that Kildrought was amongst the manors granted to Maurice, 4th Earl Kildare, in 1386. In 1409, part of the manor of Lucan and the entire manor of Kildrought were granted by Henry the Fifth to John, son of Sir John Talbot (D'Alton 1838, 658).

The church of Donaghcumper (KD011-013) located c. 185m to the west-northwest of the development area, together with lands along the River Liffey, was granted to the First Prior of St. Wolstan's Abbey (KD011-014) on its foundation in 1202 (Kirkpatrick 1896, 283). The 'donagh' element of the church name suggests an earmy medieval foundation, of which there is no obvious visible evidence. The remains consist of a fairly poorly preserved medieval parish church. The interiors are overgrown and partially covered with collapsed rubble. Below the window, there is a flat-headed relieving arch and on the chapel floor is the burial vault of the Allen family, where William Allen was buried c. 1558. The associated graveyard (KD011-013001) located south of the church provides the earliest legible grave markers which date to the 18th century.

St Wolstan's, located c. 1km to the northeast, known as 'Scala Caeli' - 'Steps of Heaven', was founded by Richard, the first prior, and Adam de Hereford c. 1205 for the Augustinian canons of St Victor (KD011-014). The priory was suppressed in 1536 when Richard Weston, the last prior, was seized of the site (with gardens, orchards, cottages, etc) and the property was granted to John Allen, Lord Chancellor (Gwynn and Hadcock 1970, 193). The very poorly preserved remains are very similar in layout to the Augustinian Priory at Athassel, County Tipperary (TS068-013), founded slightly earlier, c. 1200. No ecclesiastical buildings survive and the upstanding remains comprise the defensive, enclosing elements of the priory.

Recorded on the Down Survey (1655-6) as a substantial house and orchard named 'Castletonne Orchard' is located within the immediate vicinity of Castletown House, c. 950m to the northeast (KD011-023). According to Bradley et al. (1986, Vol. 2, 130), the earliest reference to the castle of Celbridge is in 1403, because of the absence of earlier references, it is likely that the castle was constructed after the Earl of Kildare gained possession of Celbridge in 1397-9. The castle stood to the north of Celbridge in Castletown townland and was described as 'a hall built after the Irish or country manner, covered with straw' (13 PRI rep. DK, 211 no. 4181). A 2003 architectural report commissioned by the OPW (SMR file) contains the following details: "By 1787 Lady Louisa Connolly was involved in supervising the construction of the extensive and spacious farm buildings". It would appear that part of the farm buildings at Castletown is built on the site of the earlier tower house which gave its name to the estate. On Rocque's map, there appears to be a building located to the west of the house on the site of the medieval castle and at the present location of the home farm buildings. The site is referred to locally as the 'Dongon Castle'.

Post-Medieval Period (AD 1600-1800)

The 17th century saw a dramatic rise in the establishment of large residential houses around the country. The large country house was only a small part of the overall estate of a large landowner and provided a base to manage land that could be located nationwide. During the late 18th and early 19th centuries, lands immediately associated with the large houses were generally turned over into a parkland estate (demesne). Although the creation of a parkland landscape involved working with nature, rather than against it, considerable constructional effort went into its creation. Earth was moved, field boundaries disappeared, streams were diverted to form lakes and quite often roads were completely diverted to avoid travelling anywhere near the main house or across the estate. Whilst the designed landscapes possessed an ornamental form, they still retained a valuable function; providing grazing for livestock and habitats for game.

During the 19th century, the landscape surrounding the proposed development area was dominated by houses and demesnes of varying sizes that were associated with the landed gentry. The area was attractive as it was considered to be rural but was still within easy distance of Dublin City. The River Liffey was also considered to be an excellent addition to a demesne landscape, as it could be designed into an aesthetically pleasing body of water. Some of the larger houses and demesnes in the surrounding area include Castletown, Backweston Park, Leixlip Demesne and St. Wolstan's. During this period the proposed development area was situated close to a demesne landscape associated with Donaghcumper, bound to the immediate north.

A. Walter Dongan was created a Baronet by King James, and in 1616 passed patent for the manor of Kildrought (Castletown). His son, Sir John Dongan, who took up residence at Castletown upon the death of his father, was a member of the Irish parliament in 1634 (D'Alton 1855, 259). William Dungan, son of John, was endowed with the title

of First Earl Limerick. His brother Walter Dongan, 3rd Baronet, fell at the Battle of the Boyne, and subsequently, the manor of Castletown-Kildrought was amongst his property confiscated by Cromwellian forces (D'Alton 1855, 264). The Down Survey of 1641 and 1670 records the townlands of Castletown, Celbridge and Aghards as the property of Dame Mary Dongan of Castletowne, a Catholic. However, by 1670, some of the townlands previously recorded as being in her possession were had passed into the ownership of Sir John Dungan, a Protestant. Thomas Dongan, who was born at Castletown in 1634, spent some time in America, serving as Governor of New York for a period. He returned to England in 1691, becoming Earl of Limerick on his return (his title restored to him but without his lands and possessions), following the death of his brother William (Browne 1934, 499).

The Civil Survey of 1654 records the presence of 'Tyrrells Mill', the property of 'Irish Papist' Mrs Mabel Aylmer. Aylmer also owned two acres of land, on which a castle stood, to the south of the town. A 'corne mill' (KD011-037) and a cloth mill are recorded (KD011-019).

With the development of Castletown Demesne in the early 18th century, the modern form of the town came into being. It was purchased by William Conolly, Speaker of the House of Commons, in 1709. The village of Kildrought had become decayed. When Conolly acquired the Dongan estate, he granted new leases on land on the condition that 'substantial stone houses with gable ends and two chimneys be built' (Celbridge LAP, 84).

Those on the south side of the street were designed to address both the main street, and with formal gardens, the River Liffey to the rear. Conolly renamed it 'Cell-bridge' in 1714. Castletown House was built between 1722 and 1729, to designs by Alessandro Galilei and Edward Lovett Pearce. It is notable as being Ireland's earliest and most prominent example of the Palladian style. Conolly, who had become exceedingly wealthy through land transactions in the period following the Williamite wars, had Castletown built as a symbol of his stature. The construction of a number of notable town houses adjacent to Castletown is indicative of the growing prosperity of Celbridge in the 17th and 18th centuries. Kildrought House, designed by Joseph Rotheny, typifies domestic Georgian architecture of the period and was the residence of Robert Baillie, a Dublin upholsterer. It was later employed by John Begnall's Academy (1782) a cholera hospital (1830) and a local police barracks (1831-41).

The early 18th Celbridge Collegiate School (NIAH Ref. 11901104), a former royal charter school, is another early example of the Palladian style being utilised in Ireland. Built to designs by Thomas Burgh, it was commenced in 1733. To the south of the town, Oakley Park (now St. Raphaels, NIAH Ref. 11805044) was built contemporaneously with Castletown House, also to designs by Thomas Burgh, for Arthur Price, vicar of Celbridge. Later it was a residence for Sarah Napier, sister of Lady Louisa Connolly. Its balanced proportions are emblematic of the Classical influences employed in architecture in the early 18th century.

It is likely that Celbridge was the birthplace of Arthur Guinness, founder of the Guinness brewery, c.1725.

4.3.2 Field Inspection, Geophysical Survey and Archaeological Testing (2021/2022)

The proposed development area occupies parts of five level fields currently under arable production. Some denuded hedgerows survive across the site and a watercourse that is well vegetated runs across the site from the south to the northeast. Modern residential developments are located to the immediate south, west and northeast. Open lands occupy the area to the east and southeast. To the north and west of the site is the remains of Donaghcumper Church (KD011-013), which is surrounded by mature trees and a graveyard with a modern cemetery to the immediate east and south of the church. The northern most boundary of the proposed development area is formed by hedgerow that seperates the site from the R403. To the immediate north of the road is a masonry demesne wall associated with Donaghcumper House. This section of walling also contains a recessed entrance to the demesne, with ashlar gate pillars. A gate lodge is located to the immediate north of the entrance, although this is well screened by mature trees, including coniferous and deciduous species. No previously unrecorded sites or areas of archaeological potential were noted during the course of the field inspection. No above ground remains associated with the archaeological areas identified during the geophysical survey and archaeological testing described below, were apparent.

In 2021 a geophysical survey was carried out across the proposed development area in order to assess the potential of archaeological remains (Licence Ref.: 21R0270). A number of potential archaeological anomalies were identified within the site, apparent in fields 1-5 (Figure 4.3, Appendix 4.1).

The results of the geophysical survey identified the location of part of a large, possible medieval settlement, located within the northern part of the site. This archaeological site occupies c.1ha of land within the proposed development. The remains extend to the southwest beyond the site boundary and may represent a settlement associated with church and graveyard KD011-013/KD011-013001 which is situated c. 185m west—northwest of the proposed development. The geophysical survey has also recorded the location of a well-defined ring-ditch and associated linear remains in the northern part of the site. Remnants of a possible early field system are also indicated throughout Field 1. Responses from past and present cultivation, former/suspected former boundaries and natural soil/geological variation are also evident in the results of this survey.

A programme of archaeological testing (Licence Ref.: 21E0816, Piera 2022), was conducted within the proposed development area in 2021 and 2022 (Figure 4.4, Appendix 4.2). The topsoil recorded across the site was a midbrown silty clay around 0.4m in depth. A plough soil layer was observed under the topsoil, consisting of a firm light brown clay of around 0.1-0.2m depth, covering the natural subsoil.



Figure 4.3 Results of geophysical survey carried out within the proposed development area in 2021

The trenches targeted geophysical anomalies and open green space. Testing revealed 12 areas of archaeological significance, which have been designated as Archaeological Areas AA1-AA12. These comprise:

AA1-a medieval enclosure/settlement with multiple ditches and pits:

AA2-a ring ditch of probable prehistoric date,

AA3-a possible field boundary ditch,

AA4-a cluster of pits and ditches of medieval date,

AA5-a cluster of pits and ditches of medieval date

AA6-a medieval ditch, AA7-a medieval ditch and two pits

AA8-AA13- isolated pits and hearth/kilns of unknown date.

Due to changes in the extent of the proposed development area, AA8 and AA9 are no longer within the development area. AA1 is the largest of the archaeological sites, representing a probable deserted medieval settlement. A large amount of medieval pottery sherds were retrieved from the features in this area, which were characterised by ditches, pits and hearths (Figure 4.5).

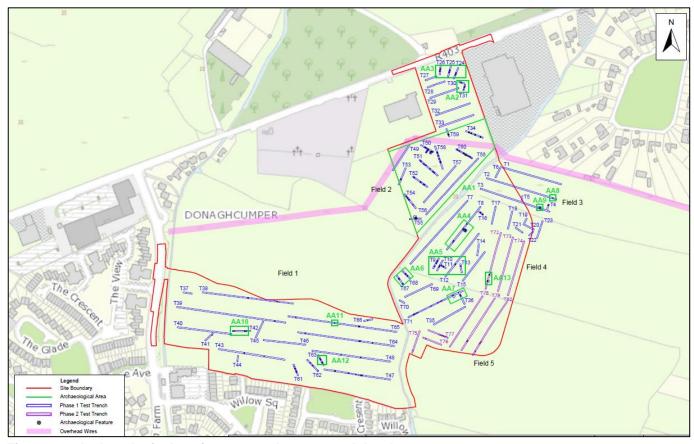


Figure 4.4: Archaeological testing across the proposed development area

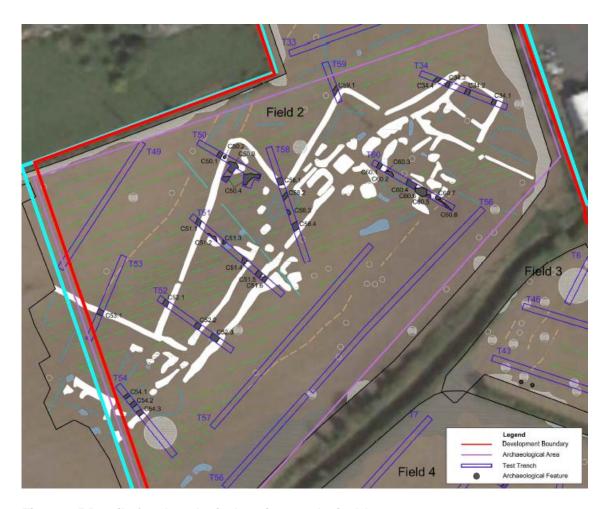


Figure 4.5 Detail of archaeological testing results in AA1

4.3.3 Summary of Previous Archaeological Fieldwork

A review of the Excavations Bulletin (1970–2022) has revealed that a number of additional investigations have been carried out within the surrounding environs, which are summarised below.

Test excavations were undertaken at a Donaghcumper graveyard, c.185m to the west-northwest in 2010. The present 'old' graveyard (excluding a modern extension) is a shrunken version of its medieval extent. Testing was preceded by a geophysical survey that indicated potential archaeological features, the majority of which were found to be geological when test-excavated, apart from a cobbled surface c. 70m south of the church. The key discovery from the testing was a section of a ditch that is probably part of an enclosure that surrounded the church. Such ditches in the vicinity of an early medieval church site generally define the monastic precincts termini and were often double or triple concentric enclosures that characterised internal areas of sanctity that decreased outwards from the central sanctissimus. A sherd of medieval pottery from the fill of a recut indicated a medieval date. No human skeletal remains were found and it is probable that a farmyard which occupied much of the site until quite recently had removed any remains that may have formerly been present. The only other archaeological activity recorded was an 18th–19th-century cobbled surface, probably a stable yard (Licence E004187, Bennett 2010:399).

Testing was carried out in two large fields within Donaghcumper Demense, c. 300m to the north in 2008. A geophysical survey of the site identified two circular enclosures or barrows and a series of associated features (08R235). The truncated remains of two prehistoric barrows were uncovered on the central and eastern parts of the site, defined by a ditch. A central inhumation burial was partially exposed within the test trench excavated through the monument. A series of ditch and pit features were also uncovered in proximity to these barrows and it is likely

that at least some of these represent contemporary activity. A broken flint flake was recovered from topsoil on the western end of the site and its recovery is indicative of prehistoric activity in the vicinity. Later activity is represented by a metalled laneway of uncertain date which was uncovered on the southern end of the site and post-medieval agricultural features on the western end of the site. Several aboveground features were also evident within the field, including a ditch to the north of and parallel to the Dublin Road which corresponds to a laneway illustrated on Taylor's map of 1783. A tree ring on the western end of the site is illustrated on the 1907-edition OS map. A deep linear ditch with a high bank on either side was evident to the east of the tree ring. It ran northwards from the Dublin Road and could mark a former field boundary but is not illustrated on Rocque or the first edition OS map (Licence 08E0829, Bennett 2008:661).

Test excavation was carried out c. 202m to the northwest in 2012 but failed to reveal any finds or features of archaeological significance (Licence 12E266, Bennett 2012:323).

4.3.4 Cartographic Analysis

Sir William Petty, Down Survey Map, 1654-56, Baronies of Salt South and Newcastle

The development area is placed within the barony of Salt and Straffan, close to the town of Lexlip with the location of the Liffey River also depicted directly to the north. Celbridge is depicted as Killdrough and shown adjacent to a bridge over the River Liffey. Several townlands in the vicinity are represented, including Castletown (Caftletonne) to the north and Griffenrath to the west, and Simmonstown (Simmonstonne) and Donaghcumper (Dono-compar) to the east of the river.

Noble and Keenan's Map of County Kildare, 1752

This map shows a more detailed depiction of the development area and its surroundings. The town of 'Cellbridge' is found to the northwest, with Castletown and demesne located to the north. The main street of Celbridge has also been developed, with several houses having formal gardens constructed on each side.

Alex Taylor's Map of the County of Kildare, 1783

This map provides further detail of the development area and its surroundings which is placed within Donacomper and the Barony of South Salt. Castletown Park and demesne are demarked to the north, not far from the site with a number of roads leading to the house. Dublin Road is bound to the north and runs from Celbridge to Lucan. A road runs through the development area towards the Liffey River with a single structure placed at the centre.

First Edition Ordnance Survey Map, 1837, scale 1:10,560 (Figure 4.6)

This is the first accurate historic mapping coverage of the area containing the proposed development area, which lies within parts of six fields within the townland of Donaghcumper. Donaghcumper Demesne is marked to the immediate northwest beyond the Dublin Road with the position of the church and graveyard depicted to the west-northwest. A stream is marked running through the eastern part of the site and a small, linear area of planted trees is also present. No indication is given within the mapping of the archaeological sites identified during geophysical survey and archaeological testing.

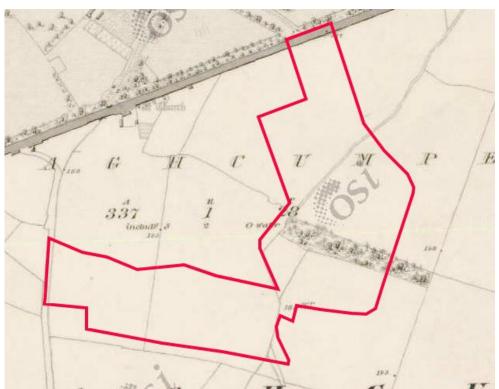


Figure 4.6 First Edition Ordnance Survey Map, 1837 showing the proposed development area

Ordnance Survey Map, 1911, scale 1:2500

There has been relatively little change from the previous mapping. The eastern portion of the proposed development area is now located within the newly formed Ballyoulster townland, with the boundary formed by the stream that was previously marked as crossing the site. The fields within the development area have been enlarged, with a number of boundaries removed.

4.3.5 County Development Plan

4.3.5.1 Record of Monuments and Places

The Kildare County Development Plan 2017-2023 and Celbridge Local Area Plan 2017-2023 recognise the statutory protection afforded to all Record of Monuments and Places (RMP) sites under the National Monuments Legislation (1930–2014). The development plans list a number of aims and objectives in relation to archaeological heritage (Appendix 4.5).

There are no previously recorded archaeological sites located within the development area; however, there are three monuments within 300m. The nearest of these sites consists of a ring-ditch (KD011-074), located c. 85m to the east-southeast. The archaeological zone of potential for the historic town of Celbridge (KD011-012001) is located c. 417m to the west. All three sites are scheduled for inclusion in the next revision of the RMP (Table 4.1; Figure 4.2; Appendix 4.3).

Table 4.1: Recorded Archaeological Sites

RMP NO.	LOCATION	CLASSIFICATION	DISTANCE TO SITE
KD011-074	Ballyoulster	Ring-Ditch	c. 85m east-southeast
KD011-013001	Donaghcumper	Graveyard	c. 185m west-northwest
KD011-013	Donaghcumper	Church	c. 185m west-northwest

4.3.5.2 Record of Protected Structures

The Kildare County Development Plan 2017-2023 and Celbridge Local Area Plan 2017- 2023 recognises the value of the built heritage and is committed to the protection and enhancement of this heritage by providing measures for the protection of architectural heritage. These include the establishment of a Record of Protected Structures (RPS) and the designation of Architectural Conservation Areas (ACAs) which are detailed in Appendix 4.6.

There are two structures included on the RPS within 300m of the proposed development, all situated within the townland of Donaghcumper (Table 4.2; Figure 4.2; Appendix 4.4). The nearest of these is Donaghcumper Medieval Church Ruins (B11-02) which is also listed as a recorded monument (KD011-013). Of the two protected structures, Donaghcumper House is listed on both the RMP and the NIAH Survey.

Table 4.2: Protected Structures

RPS NO.	NAME	DISTANCE TO SITE	DESIGNATION
B11-02	Donaghcumper Medieval Church Ruins	c. 185m west-northwest	RPS and RMP
B11-26	Donaghcumper House	c. 220m north-northwest	RPS and NIAH

4.3.5.3 Architectural Conservation Areas (ACAs)

An Architectural Conservation Area is defined as 'A place, area, group of structures or townscape, taking account of building lines and heights, that is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or that contributes to the appreciation of a protected structure, and whose character it is an objective of a development plan to preserve.' (Architectural Heritage Protection Guidelines 2011, 40). Chapter II of Part IV of the Planning and Development Act 2000 states that that all development plans must now include objectives for preserving the character of ACAs.

ACAs are subject to statutory protection and are a key architectural heritage constraint. There are no ACAs within the development area or the 300m study area.

4.3.6 National Inventory of Architectural Heritage

4.3.6.1 Built Heritage Survey

A review of the architectural survey was undertaken as part of this assessment and included buildings within 300m of the proposed development. Whilst inclusion in the survey does not result in statutory protection, these buildings may be added to the RPS by Kildare County Council in the future. There is one structure listed on the NIAH building survey within the study area, Donaghcumper House (NIAH 11805061), c. 220m north-northwest (Table 4.3; Figure 4.2, Appendix 4.4). The house is also included on the RPS for County Kildare (RPS B11-26).

Table 4.3: NIAH Structures

RPS NO.	NAME	DISTANCE TO SITE	DESIGNATION
11805061	Donaghcumper House	c. 209m northwest	RPS and NIAH

4.3.6.2 Garden Survey

The first edition Ordnance Survey map of County Kildare (1837) shows the extent of demesne landscapes as shaded portions of land within the study area. These were established as a naturalised landscaped setting for the large houses of the landed gentry. Not all demesne landscapes are subject to statutory protection. However, where a demesne exists in association with a protected structure (dependant on the preservation of the landscape), this can be considered to be part of the curtilage and as such falls within the remit of the Planning and Development Act 2000.

There are no demesne landscapes within the proposed development area included within the Garden Survey for County Kildare. The only demesne situated within the study area belongs to Donaghcumper (NIAH Garden 1925), located to the immediate north. The demesne is visible on the first, second, and third edition OS maps. Today the footprint of the demesne and its principal buildings are still extant.

4.3.7 Topographical Files

Information on artefact finds from the study area in South Dublin County has been recorded by the National Museum of Ireland since the late 18th century. Location information relating to these finds is important in establishing prehistoric and historic activity in the study area.

Two stray finds are recorded from within 500m of the development area.

MUSEUM NO	1948:71			
FIND	Brass Shoe Buckle			
FIND PLACE	Newcastle Farm			
DESCRIPTION	-			
REFERENCE	NMI Topographical Files			

MUSEUM NO	-
FIND	Flint Axehead
FIND PLACE	Newcastle North
DESCRIPTION	-
REFERENCE	NMI Topographical Files

4.3.8 Aerial Photographic Analysis

Inspection of the aerial photographic coverage of the proposed development area held by the Ordnance Survey (1995–2013), Google Earth (2008–2022) and Bing Maps revealed that the site area remains largely unchanged since 1995 which remains within four, undeveloped fields. Dublin Road and Shinkeen Road have remained unchanged since 1995. The ring ditch KD011-074 located c. 86m to the east-southeast, is visible on Google Earth coverage from 2018. None of the archaeological sites identified during the course of geophysical survey or archaeological testing were visible within the aerial photographic coverage.

4.3.9 Cultural Heritage

The term 'cultural heritage' can be used as an over-arching term that can be applied to both archaeology and architectural sites; however, it also refers to more ephemeral aspects of the environment, which are often recorded in folk law or tradition or possibly date to a more recent period. The archaeological sites discussed above should also be considered cultural heritage and the townlands and placename analysis detailed below are also of cultural heritage significance.

4.3.9.1 Townlands

The townland is an Irish land unit of considerable longevity as many of the units are likely to represent much earlier land divisions. However, the term townland was not used to denote a unit of land until the Civil Survey of 1654. It bears no relation to the modern word 'town' but like the Irish word *baile* refers to a place. It is possible that the word is derived from the Old English *tun land* and meant 'the land forming an estate or manor' (Culleton 1999, 174). The proposed development area is within two townlands.

Gaelic land ownership required a clear definition of the territories held by each sept and a need for strong, permanent fences around their territories. It is possible that boundaries following ridge tops, streams or bog are more likely to be older in date than those composed of straight lines (ibid. 179).

The vast majority of townlands are referred to in the 17th century, when land documentation records begin. Many of the townlands are mapped within the Down Survey of the 1650s, so called as all measurements were carefully 'laid

downe' on paper at a scale of forty perches to one inch. Therefore, most are in the context of pre-17th century landscape organisation (McErlean 1983, 315).

In the 19th century, some demesnes, deer parks or large farms were given townland status during the Ordnance Survey and some imprecise townland boundaries in areas such as bogs or lakes, were given more precise definition (ibid.). Larger tracks of land were divided into a number of townlands, and named Upper, Middle or Lower, as well as Beg and More (small and large) and north, east, south, and west (Culleton 1999, 179). By the time the first Ordnance Survey had been completed a total of 62,000 townlands were recorded in Ireland.

The proposed development area is located within the townlands of Ballyoulster and Donaghcumper. These two townlands are located within the Barony of South Salt, and Parish of Donaghcumper, County Kildare. The townland boundary between Ballyoulster and Donaghcumper extends through the proposed development, delineated by a watercourse, which continues to the Liffey River to the north. This boundary was established relatively recently, being marked first on the 1911 OS map. As such, the boundary does not possess the antiquity that many boundaries do in terms of cultural heritage significance.

4.3.9.2 Place Name Analysis

Townland and topographic names are an invaluable source of information on topography, land ownership and land use within the landscape. They also provide information on history; archaeological monuments and folklore of an area. A place name may refer to a long-forgotten site and may indicate the possibility that the remains of certain sites may still survive below the ground surface. The Ordnance Survey surveyors wrote down townland names in the 1830s and 1840s when the entire country was mapped for the first time. Some of the townland names in the study area are of Irish origin and through time have been anglicised. The main references used for the place name analysis are Irish Local Names Explained by P.W Joyce (1870) and www.logainm.ie.

A description and a possible explanation of each townland name in the environs of the proposed development area are provided in Table 4.4.

Table 4.4: Placename Analysis

NAME	DERIVATION	POSSIBLE MEANING
Ballyoulster	Baile Ualstair	Town of Ualstair/Alistair
Donaghcumper	Dhomhnach Comair	Small Church
St. Wolstans	Naomh Wulfstan	Named for Saint Wolstan
Celbridge	Cill Droichid	Church by the bridge

4.3.9.3 Cultural Heritage Sites

The term 'cultural heritage' can be used to refer to more ephemeral aspects of the environment, which are often recorded in folk law or tradition or possibly date to a more recent period. No specific cultural heritage features have been identified in relation to the proposed development area or its study area.

4.3.10 Conclusions

A full assessment of the archaeological, architectural and cultural heritage baseline has been carried out, which has included geophysical survey and archaeological testing. This allows for the assessment of potential impacts on sites, areas and structures of significance to be carried out.

There are no recorded archaeological sites located within the development area; however, there are three recorded monuments within 300m. The nearest of these sites consists of a ring ditch (KD011-074), located c. 85m to the east-southeast. This site was identified as a cropmark and possesses no upstanding remains. The archaeological zone of potential for the historic town of Celbridge (KD011-012001) is located c. 417m to the west. There are two protected structures within 300m of the proposed development area. The nearest of these is Donaghcumper Church Ruins (B11-02) which is also listed as a recorded monument (KD011-013), located c. 185m to the west-northwest. No specific cultural heritage features have been identified in relation to the proposed development area or its surrounding

environs, with the exception of the townland boundary between both Ballyoulster and Donaghcumper that extends through the proposed development area. This boundary was established relatively recently and does not possess the antiquity usually associated with similar boundaries.

In 2021 the proposed development area was subject to a field inspection, followed by geophysical survey. Whilst no previously unrecorded archaeological remains were identified during the course of the field inspection, the geophysical survey identified the location of a large probable medieval settlement and the location of a well-defined ring ditch with associated linear remains and a possible early field system. The settlement and ring ditch are located in the northern section of the proposed development area.

Geophysical survey was followed by archaeological testing in 2021 and 2022, which revealed 13 areas of archaeological significance, including medieval and prehistoric settlement features. AA1 was the most significant site and the initial interpretation of the medieval settlement was confirmed during testing, where a large amount of medieval pottery was retrieved from the site.

Analysis of cartographic sources has revealed that the proposed development area itself has remained relatively unchanged from the post-medieval to modern periods. Historically the site is placed within open fields. By the early 20th century, part of the development area, which is placed to the east of the river, was located within Ballyoulster townland. The river demarks the boundary between both Ballyoulster and Donaghcumper townland.

4.4 'DO-NOTHING' IMPACT

If the proposed development were not to proceed there would be no negative impact on the archaeological, architectural or cultural heritage resource of the proposed development area.

4.5 CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

The proposed development area measures c. 13.4 hectares and is located in Ballyoulster and Donaghcumber, Celbridge, Co. Kildare. The lands are in agricultural use at present and bound by the Dublin Road to the north and the Shinkeen Road to the west. The Hazelhatch stream is located on the western boundary of the property and the Shinkeen stream is located centrally within the property.

The application is for a seven year permission for a Strategic Housing Development comprising of 344 no. residential units (comprising 54 no. 1 beds, 30 no. 2 beds, 210 no. 3 beds and 50 no. 4 beds), a childcare facility, communal and public open space, landscaping, car and cycle parking spaces, provision of an access road from Dublin Road and Shinkeen Road, associated vehicular accesses, internal roads, pedestrian and cycle paths, bin storage, pumping station and all associated site and infrastructural works.

A full project description of the development is presented in Chapter 2 of this EIAR.

4.6 POTENTIAL IMPACT (EFFECTS) OF THE PROPOSED DEVELOPMENT

4.6.1 Construction Phase

Archaeology

No construction impacts are predicted upon any previously recorded archaeological sites.

Archaeological investigations as part of this assessment have revealed 13 Archaeological Areas, of which AA8 and AA9 are now located outside of the development area, due to changes in the proposed boundary. Neither of these sites will be affected by construction associated with the development. AA1 is the largest of the sites, representing the remains of part of the medieval settlement. Due to the scale and extent of the site, it is proposed to preserve a large portion (c. 90%) of it in-situ within greenspace. An attenuation pond will be located to the northwest of the site and housing and car parking to the immediate southeast of the site. Small portions of ditches associated with the site

to the north and east will be directly impacted by ground works associated with the proposed development. This represents a direct, negative impact of moderate significance.

Due to the required layouts and density of the proposed development the remaining archaeological sites (AA2-7 and 9-12) will be directly impacted by ground works associated with the proposed development. These impacts represent a direct, significant negative impact upon the archaeological resource.

Whilst the proposed development area has been subject to a detailed programme of archaeological testing, it is possible that small or isolated archaeological features may survive beneath the current ground level, outside of the footprint of the excavated test trenches. Groundworks associated with the development may have a direct negative impact on these remains. Impacts may range from moderate to significant, depending on the nature, extent and significance of the archaeological remains that may be present.

Architecture

No construction impacts are predicted upon any sites of architectural heritage significance.

Cultural Heritage

The watercourse and townland boundary between Ballyoulster and Donaghcumper, which runs through the proposed development area will be retained, although it is proposed to cross the watercourse at three locations. Ground disturbances associated with the crossing points may have an impact on previously unrecorded archaeological remains or artefacts that may survive within the channel of the watercourse. Impacts may range from moderate to significant, depending on the nature, extent and significance of the archaeological remains that may be present.

4.6.2 Operational Phase

Archaeology

No operational impacts are predicted upon any previously recorded archaeological sites.

AA1 will be preserved in-situ as part of the proposed development. As such, at operation stage the site may be inadvertently negatively impacted by future groundworks or maintenance that may be required, which may be carried out without due regard to the archaeological resource. Any such impacts would be direct and negative and may be very significant in scale.

Architectural

No operational impacts are predicted upon any sites of architectural heritage significance.

Cultural Heritage

In relation to the townland boundary and watercourse that crosses the site, no operation impacts are predicted upon this cultural heritage feature.

4.7 AVOIDANCE, REMEDIAL, AND MITIGATION MEASURES

4.7.1 Construction Phase

Archaeology

The following mitigation measures are recommended:

ARCH CONST 1: Preservation

A large portion of AA1 (c. 90%) will be preserved in-situ during construction in order to retain the area of greenfield. Small sections of ditches in the north and east of the site will be affected by ground works. The archaeological exclusion area (Figure 4.7) will be established at construction stage in order to prevent inadvertent construction impacts. The small portions of the site to be impacted will be preserved by record. This will be carried out under licence to the National Monuments Service of the DoHLGH. Full provision will be made available for the resolution of the archaeological remains, both on site and during the post-excavation process.

ARCH CONST 2: Archaeological Preservation by Record

Whilst it is acknowledged that the preservation in-situ of archaeological remains is indeed the best manner in which to conserve the archaeological resource, the required layout of the development means that the archaeological features and deposits within AA2-13 (excluding AA8 and 9) will be subject to archaeological preservation by record (prior to the commencement of construction). This will be carried out under licence to the National Monuments Service of the DoHLGH. Full provision will be made available for the resolution of the archaeological remains, both on site and during the post-excavation process. The design rationale examining why the archaeological areas cannot be avoided is included in Appendix 4.9 of this EIAR.

ARCH CONST 3: Topsoil Stripping

All topsoil stripping associated with the development will be subject to archaeological monitoring by a suitably qualified archaeologist. Should any archaeological remains be identified, consultation will be required with the National Monuments Service of the DoHLGH as to whether preservation by record or in-situ is carried out.

Architecture

No mitigation is required for the architectural heritage resource during construction.

Cultural Heritage

CH CONST 1: Underwater Assessment

An underwater archaeological assessment will be carried out along the path of the watercourse, where it will be affected by new crossing points. This will be carried out under licence to the National Monuments Service of the DoHLGH. Should any archaeological remains be identified, consultation will be required with the National Monuments Service of the DoHLGH as to whether preservation by record or in-situ is carried out.

4.7.2 Operational Phase

Archaeology

ARCH OPERA 1: Archaeological conservation / management plan

An archaeological conservation/management plan will be developed in order to inform future operations of the development within AA1 and ensure the area is managed appropriately. The plan will be compiled by a suitably qualified archaeologist and contain a list of proscribed activities and policies on future site maintenance.

Architecture

No mitigation is required.

Cultural Heritage

No mitigation is required

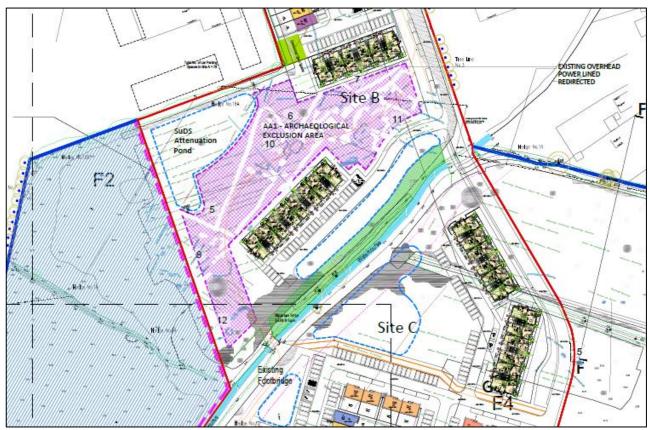


Figure 4.7: Exclusion area designated as part of the development around AA1

4.7.3 'Worst-Case' Scenario

Under a worst-case scenario, the proposed development would disturb previously unrecorded and unidentified archaeological deposits and artefacts without proper excavation and recording being undertaken.

4.8 PREDICTED IMPACT OF THE PROPOSAL

4.8.1 Archaeology

Following implementation of mitigation measures, no significant negative impacts are predicted upon the archaeological resource. As a large portion of AA1 will be incorporated into the proposed development and preserved in-situ, this represents a significant indirect positive residual impact on the archaeological site.

4.8.2 Architecture

No negative impacts are predicted upon the architectural resource.

4.8.3 Cultural Heritage

As the townland boundary will be incorporated into the development, this represents a residual indirect moderate positive impact on this cultural heritage site.

4.9 MONITORING

The mitigation measures detailed above would also function as a monitoring system to allow the further assessment of the scale of the predicted impacts and the effectiveness of the mitigation measures.

4.10 REINSTATEMENT

The proposed development does not include a decommissioning or reinstatement phase. Therefore, reinstatement is not applicable to this assessment.

4.11 POTENTIAL CUMULATIVE IMPACTS

No cumulative impacts (from surrounding permitted or proposed developments) are predicted upon the archaeological, architectural or cultural heritage resource during the construction or operational phase as AA1 will be preserved in-situ and all other archaeological remains will be preserved by record. The townland boundary will be retained and will form part of the development.

4.12 INTERACTIONS

There are interactions between this chapter and the landscape and visual chapter in view of the visual impacts on the settings of archaeological and cultural heritage sites and the potential for landscaping to mitigate such impacts, and with the water chapter and the drainage / SUDs design.

4.13 DIFFICULTIES ENCOUNTERED IN COMPILING INFORMATION

No difficulties were encountered during the compilation of this chapter.

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Ordnance Survey Map, 1907Ordnance Survey maps of County Dublin 1837-1909

Electronic Sources

www.excavations.ie - Summary of archaeological excavation from 1970-2022.

www.archaeology.ie – DoHLGH website listing all SMR sites.

www.heritagemaps.ie – The Heritage Council web-based spatial data viewer which focuses on the built, cultural and natural heritage.

www.googleearth.com - Satellite imagery of the proposed development area.

www.bing.com- Satellite imagery of the proposed development area

www.logainm.ie - Placenames Database of Ireland launched by Fiontar agus Scoil na Gaelige and the DoHLGH.

www.osiemaps.ie - Ordnance Survey aerial photographs dating to 1995-2013 and 6-inch/25-inch OS maps.

APPENDIX 4.1 - GEOPHYSICAL SURVEY REPORT (2021)

Geophysical Survey Report

Proposed development in Donaghcumper & Ballyoulster townlands, Celbridge, County Kildare

Client IAC Ltd.

Detection License 21R0270

TAG Project **2021IE29**

Date **December 2021**



TARGET Archaeological Geophysics Ltd.

1

TARGET REPORT 2021IE29 PROPOSED DEVELOPMENT IN DONAGHCUMPER & BALLYOULSTER TOWNLANDS, CELBRIDGE, COUNTY KILDARE

PROJECT BACKGROUND

Geophysical survey was undertaken in connection with a proposed development in Donaghcumper & Ballyoulster townlands, at the eastern perimeter of Celbridge, in Co. Kildare, immediately to the S of the R403 Dublin Road, to the W of Loughlinstown Road. Encompassing c.11.5ha of arable land subdivided into 5 adjacent fields the site of proposed development lies directly E of Shrinkeen Road, to the N & E of the Primrose Gate residential estate. A total 11.25ha of high-resolution magnetometry was undertaken in 5 locations (fields 1-5) examining all available lands within the proposed development boundary.

This geophysical survey was commissioned by IAC Ltd. as part of a pre-planning archaeological investigation prior to proposed development of the site. The survey was carried out under license (21R0270) from the National Monuments Service, Department of Housing, Local Government & Heritage with the following aims:

- to identify any geophysical anomalies of possible archaeological origin within the proposed development boundary
- accurately locate these anomalies and present the findings in graphical format
- describe the anomalies and discuss their likely provenance in a written report

ITM central coordinates: 698231 732920 Townlands: Donaghcumper, Ballyoulster

County: Kildare Landuse: Tillage

Landscape, soils, geology

The geophysical survey extended 5 arable fields located either side of deep drainage ditch and stream which join the River Liffey c. 0.6 km to the NE. Soils of the locality are predominantly fine loamy drift of the Straffan 700d association with limestone and gravel inclusions, overlying bedrock geology (100k) of Lucan formation dark limestone and shale (Irish National Soils Map, 1:250,000k, V1b, 2014, Geological Survey of Ireland Spatial Resources, Public Data Viewer Series).

Archaeology

No recorded monuments and places (RMPs) are contained within the site boundary. KD011-013 (church), KD011-013001 (graveyard) and KD011-074 (ring-ditch) are, however, located within c.200m of site to the NE and NW, and further RMPs are also situated within a c.1km radius. The following extract from the National Monuments Service SMR database provides summary details of all RMPs within a 1km radius of the proposed development:

SMR No.	Class	Townland	ITM East	ITM North
KD011-012001-	Historic town	Castletown, Celbridge, Celbridge Abbey (Celbridge Ed), Donaghcumper, Oakleypark	697305	733115
KD011-013	Church	Donaghcumper	698024	733185
KD011-013001-	Graveyard	Donaghcumper	698030	733168
KD011-014	Religious house -	St. Wolstans	698686	733727
KD011-016	Castle - unclassified	Simmonstown	697561	732000
KD011-023	Castle - unclassified	Castletown	697785	734091
KD011-028	House - 17th century	St. Wolstans	698861	733750

KD011-029	Enclosure	Simmonstown	697410 73	32037
KD011-030	Enclosure	Simmonstown	697600 73	32127
KD011-060	Burial mound	Castletown	697895 73	34195
KD011-060001-	Pit-burial	Castletown	697895 73	34196
KD011-060002-	Pit-burial	Castletown	697895 73	34196
KD011-060003-	Pit-burial	Castletown	697895 73	34196
KD011-060004-	Pit-burial	Castletown	697895 73	34196
KD011-060005-	Pit-burial	Castletown	697895 73	34196
KD011-060006-	Pit-burial	Castletown	697895 73	34196
KD011-060007-	Pit-burial	Castletown	697895 73	34196
KD011-063	Enclosure	Simmonstown	697288 73	32263
KD011-070	Enclosure	Ballyoulster	698910 73	33188
KD011-071	Ring-ditch	Ballyoulster	699075 73	33426
KD011-072	Ring-ditch	Ballyoulster	699072 73	33375
KD011-074	Ring-ditch	Ballyoulster	698564 73	33000

Fieldwork1st & 2nd November 2021Report issue15th December 2021AuthorJohn Nicholls MSc.

Detection license no.21R0270ClientIAC Ltd.

Geophysical technique High-resolution magnetometry (fluxgate gradiometry)

1 SURVEY METHODOLOGY

1.1 Methodology

- 1.1.1 A total 11.25 hectares of high-resolution magnetometry was completed in fields 1-5, examining all available lands within the site boundary.
- 1.1.2 The survey employed an advanced multichannel fluxgate gradiometer system combined with cm precision GPS, recording magnetometer and GPS data simultaneously at rates of 50Hz and 1Hz respectively. The geophysical data was recorded along parallel instrument traverses 3.3m in width throughout each survey location, with the instrumentation installed in 'tow configuration' for use with an ATV.

1.2 Instrumentation

1.2.1 The following instrumentation was employed for this geophysical survey:

Technique	Sensor spacing	Sample rate	Instrumentation	Sensitivity/precision	No. of data recorded
Magnetometry (fluxgate gradiometry)	0.3m	50Hz	Multi-channel fluxgate gradiometer array	<75pT/√Hz @ 1Hz (1000mm baseline)	739,867
GPS	3.6m	1Hz	Trimble R10 GPS (operating in VRS mode)	<0.1m	11,678

1.2.2 The instrumentation and software employed for this geophysical survey were configured to apply a spatial resolution of c.80-100 magnetometer measurements per m.² This spatial resolution meets with ease the 'Level 3 – Characterisation' EAC Guidelines recommendation for geophysical survey in archaeology (Schmidt et al, 2016).

1.3 Data processing

1.3.1 Post fieldwork geophysical data processing was performed as follows:

Process	Description
i	Positioning of magnetometer data based on real-time GPS measurements
ii	Zero median transect processing for multi-sensor magnetometer data collected along parallel transects
iii	Gridding (nearest neighbor interpolation)
iv	Export of georeferenced greyscale images at optimum range to project CRS (ITM)

1.3.2 To ensure integrity of the processed geophysical data, and maintain close correlation with the original raw on-site measurements, no further processing, filtering or 'smoothing' of the data was undertaken proceeding steps i-iv.

1.4 Data display

- 1.4.1 Figure 1 presents a site location diagram (scale 1:12,500), highlighting the extent of the proposed development and location of RMPs within a 1km radius.
- 1.4.2 Figure 2 presents a summary greyscale of the results from geophysical survey in fields 1-5 at a scale of 1:2500, with greyscales plots of the data also presented at a scale of 1:1500 in figures 3-4.
- 1.4.3 Figure 5 presents a summary interpretation diagram of the results from geophysical survey in fields 1-5 at a scale of 1:2500, with interpretations also presented at a scale of 1:1500 in figures 6-7. Numbers included on figures 6-7 refer to notable anomalies recorded from this geophysical survey, and these are discussed in tabular format in the results section of this report.

2 GENERAL CONSIDERATIONS

2.1 Access & ground conditions

2.1.1 The geophysical survey of the proposed development extended through level and accessible W-SW facing stubble fields located either side of a deep drainage and stream. The investigation area was accessed from the E via the Loughlinstown Road, and almost entirely suitable for survey with few obstructions present to impede the progress of fieldwork.

2.2 Modern interference

- 2.2.1 The survey results from fields 1-5 highlight an abundance of small-scale ferrous responses in the data. These are a common occurrence in magnetometer survey, and in most cases represent modern metallic debris contained within the topsoil. Broader areas of modern ferrous disturbance are also present in the results, and represent modern disturbance to instrumentation caused by post and wire fencing, existing boundaries, as well as buildings, private dwellings and ferrous debris at the perimeter of survey.
- 2.2.2 Magnetic disturbance to the S in field 2 and W-NW in fields 3-4 is expected to derive from modern landuse, perhaps associated with clearance of the stream/drainage ditch which traverses the site NE-SW.
- 2.2.3 As a precautionary measure the data acquisition parameters were adjusted from a sample rate of 75Hz to 50Hz in order to engage the 50-60Hz filter for mains rejection, thereby avoiding any possible interference to instrumentation from overhead power lines or buried cables.

2.3 Former landuse & cultivation

- 2.3.1 Remnants of former land divisions/suspected former land divisions are indicated extending roughly N-S, NE-SW, and NW-SE through fields 1- 5.
- 2.3.2 Closely spaced parallel linear responses also visible in the results from fields 1-5 highlight past and present cultivation regimes on both NE-SW, NW-SE alignments.

2.4 Natural soil/geological variation

2.4.1 Weakly magnetic banding in the data from fields 1-5 is visible NE-SW, and this is indicative of natural soil/geological variation.

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3 GEOPHYSICAL SURVEY RESULTS

N.B. Read this section of the report with the greyscale/interpretation diagrams provided.

3.1 General overview

- 3.1.1 The results from magnetometer survey in fields 1-5 display the effects of past landuse across the site of proposed development in the form of abundant small-scale ferrous, disused land divisions/suspected former boundaries and past cultivation. Background variation across fields 1-5 lies within the range of +/- 1.5nT, and as would be expected, this is significantly distorted in proximity to large-scale ferrous debris and modern surfaces at the perimeter of survey.
- 3.1.2 Natural soil/geological variations occur in the results, and are visible as linear banding oriented NE-SW across fields 1-5. This variation above background is very limited in terms of magnetic contrast.
- 3.1.3 Concentrations of definite archaeological activity have been recorded within the site of proposed development, and these are apparent in field 2 to the S of the R403 Dublin Road. These remains highlight part of a substantial archaeological settlement extending from survey centre in field 2 to the SW, occupying an area c.160m NE-SW by 60m NW-SE in size. Part of a ring-ditch c.11m in diameter has also been located to the NE with adjacent linear responses to the N-NW.
- 3.1.4 Further responses of potential archaeological significance have also been recorded within the investigation area, including a possible early field system in field 1, and a poorly defined linear response to the NW in field 5. Small-scale positives and weak trends are also evident in the results from fields 1-5. These display no clear concentration of response or patterning to warrant a definite archaeological interpretation, and the majority are expected to derive from a combination of recent landuse, modern ferrous debris and natural soil/geological variation.
- 3.1.5 Potentially significant anomalies recorded from survey in fields 1-5 are discussed in tabular format in Sections 3.2-3.6 below.

Table 3.2

Geophysical survey area		Figure(s)	Hectares	Terrain & landuse
Field 1		3, 6	4.89	Part of large level sub-rectangular stubble field immediately E of Shrinkeen Rd.
Response(s)	Location from survey centre	Interpretation	Description	
1-4	E-W of survey centre	? Early field system	Poorly defined linear responses aligned N/S, NE/SW and NW/S suggesting remnants of an early field system.	

Table 3.3

Geophysical survey area		Figure(s)	Hectares	Terrain & landuse
Field 2		4, 7	2.61	Part of level sub-rectangular stubble field immediately S of Dublin Rd.
Response(s)	Location from survey centre	Interpretation	Description	
5-8	Survey centre to S	Archaeology	Substantial ditched enclosure remains (160m x 60m), highlighting the north-eastern limit of a large settlement extending W-SW beyond the site boundary. These remains may form part of a medieval settlement attached to church and graveyard KD011-013/KD011-013001 c.200m to the W-NW.	
9-11	Throughout anomalies 5-8	Archaeology ? Archaeology Trend	Multiple large and smallscale positive/negative magnetic responses indicating internal enclosure/ditch remains, pits, postholes and possible hearths. The shallow negative sub-rectangular form of a number of these responses suggests building foundations in proximity to anomalies 6-8.	
12	S/SW	? Archaeology Trend	Probable small ditched enclosure adjacent to existing field boundary. Magnetic disturbance across this portion of F2 may have masked the location of any further significant features.	
13	NE	Archaeology	Large ring-ditch visible as a broad and well-defined circular ditch c.2m in width and c.11m in diameter.	
14	N	? Archaeology Trend	Parallel linear responses possibly indicating outer settlement boundary associated with KD011-013/KD011-013001. These responses intersect with ring-ditch 13 to the E-SE.	

Table 3.4

Geophysical survey area		Figure(s)	Hectares	Terrain & landuse
Field 3		4, 7	0.84	Part of narrow rectangular stubble field descending gently to the W-NW, with private residences N-NE.
Response(s)	Location from survey centre	Interpretation	Description	
NA	NA	NA	No responses of archaeological character or clear archaeological potential have been recorded in field 3. The results highlight an abundance of small-scale modern ferrous, natural soil/geological variation to the W, cultivation trends, and weak linear trends of uncertain origin.	

Table 3.5

Geophysical survey area		Figure(s)	Hectares	Terrain & landuse
Field 4		4, 7	1.8	Part of large rectangular stubble field descending gently to the W-NW.
Response(s)	Location from survey centre	Interpretation	Description	
15	NE	? Archaeology Trend	Small-scale positives and weak trends of potential note. A landuse, modern ferrous and/or natural soil/geological explanation for responses 15 should not be ignored.	
16	SW	? Archaeology Trend	Small-scale positives and weak trends of potential note. A landuse, modern ferrous and/or natural soil/geological explanation for responses 16 should not be ignored.	

Table 3.6

Geophysical survey area		Figure(s)	Hectares	Terrain & landuse
Field 5		4, 7	0.95	Part of large sub-rectangular stubble field descending gently to the W-NW.
Response(s)	Location from survey centre	Interpretation	Description	
17	NW, W	? Archaeology Trend	Well-defined positive linear response and trends expected to derive from recent landuse.	

4 CONCLUSIONS

- 4.1 The results from geophysical survey in fields 1-5 of the proposed development have identified the location of part of a large settlement enclosure which extends through field 2. This archaeological site occupies c.1ha of land within the site of proposed development. These remains extend to the SW beyond the site boundary and are expected to be associated with church and graveyard KD011-013/KD011-013001 which is situated c.200m W-NW of the proposed development. The geophysical survey of the site has also recorded the location of a well-defined ring-ditch and associated linear remains in field 2 to the NE. Remnants of a possible early field system are also indicated throughout field 1.
- 4.2 Elsewhere, the results from geophysical survey within the proposed development highlight occasional linear responses, trends and small-scale positives in fields, the majority of which are deemed to be of limited significance.
- 4.3 Responses from past and present cultivation, former/suspected former boundaries and natural soil/geological variation are also evident in the results from this survey.

BIBLIOGRAPHY

Schmidt A, (2002), Archaeology Data Service. Geophysical Data in Archaeology. A guide to good practice. Schmidt A, Linford P, Linford N, David A, Gaffney C, Sarris A, and Fassbinder J, (2016), EAC Guidelines for the Use of Geophysics in Archaeology.

ONLINE RESOURCES

Archaeological Survey of Ireland SMR Database: http://webgis.archaeology.ie/historicenvironment/

Bing Maps: https://www.bing.com/maps

Geological Survey of Ireland Spatial Resources, Public Data Viewer Series:

https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228

Google Maps: https://www.google.com/maps

Irish National Soils Map, 1:250,000k, V1b (2014). Teagasc, Cranfield University (jointly funded by the EPA STRIVE Research Programme 2007-2013 & Teagasc): http://gis.teagasc.ie/soils/map.php

LIST OF FIGURES

Fig. 1	Site location diagram	1:12,500
Fig. 2	Summary greyscale fields 1-5	1:2500
Fig. 3	Greyscale 1	1:1500
Fig. 4	Greyscale 2	1:1500
Fig. 5	Summary interpretation fields 1-5	1:2500
Fig. 6	Interpretation 1	1:1500
Fig. 7	Interpretation 2	1:1500

APPENDIX

Technical Information: Magnetometry

Technical Information M1

MAGNETOMETRY

Introduction

Magnetometry represents one of a suite of geophysical techniques employed in archaeological prospection to inform invasive work such as trial trenching and excavation.

Frequently used to determine the often non-visible boundaries of archaeological remains, magnetometer surveys enable archaeologists to identify the location, form and extent of a diverse array of archaeological features no longer visible at the surface.

Buried archaeological remains successfully identified using magnetometry include sites such as enclosure systems and deserted villages, hillforts and military encampments, henges and tumuli, villa/castle foundations, ecclesiastical settlements and formal gardens.

Background to application

The basis for use of magnetometry in archaeological prospection derives from the abundance of natural iron oxides in most soils, and our ability to measure subtle variations in the magnetic properties of these iron oxides caused by human activity. Discrete variations in soil magnetism associated with buried archaeological remains derive typically from in situ burning and organic enrichment of the soil, through activities such as cooking and heating; pottery manufacture and metal working; as well as use of fired building materials such as ceramic tiles and brick. These burnt, fired and organic rich deposits create subtle magnetic contrasts visible as discrete magnetic anomalies superimposed on the earth's geomagnetic field.



1. Magnetometer survey data in greyscale format 2. Burnt-fired debris uncovered during excavation of the highlighting pit remains SE of an enclosure and Roman villa. highlighted area SE of the same enclosure and Roman villa.

Magnetometer surveys conducted in both commercial and research archaeological investigations enable determination of the location, form and extent of buried archaeological remains. Data acquired from these surveys can be quickly generated into georeferenced images and interpretation layers to inform subsequent trial trenching and excavation.

Technology

TARGET provides precise mapping and characterization of buried archaeological remains by employing an array of highly stable and sensitive fluxgate gradiometers, combined with an advanced data logging system and cm precision GPS. This state-of-the-art geophysical instrumentation, which is capable of collecting extremely dense data sets, permits detailed high-resolution survey of archaeological sites from as small as 1ha in size, to larger scale investigation of sites up to 150ha or more.

Technical Information M2

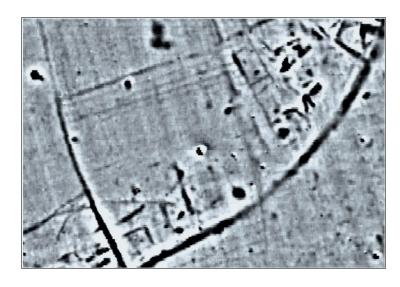
High resolution magnetometer surveys are undertaken as standard, recording data at c.5cm intervals with probe separations of 0.3m for precise measurement and characterization of buried archaeological remains. This spatial resolution meets with ease the 'Level 3 – Characterisation' EAC Guidelines recommendation for geophysical survey in archaeology (Schmidt et al, 2016).

Instrumentation is used in combination with cm precision GPS and data collected along parallel traverses with the system installed in 'tow configuration' for use with an ATV or in push mode.

Data Display

Greyscale plots are the most common format for displaying magnetometer data. This display format assigns a cell to each datum according to its location on the grid. The display of each data point is conducted at very fine increments, allowing the full range of values to be displayed within a given data set. This display method also enables the identification of discrete responses barely visible above natural 'background' magnetic variation on site.

6. Greyscale from survey at the site of a deserted medieval village.



XY trace plots provide a near-perspective representation of measurements along individual lines of data recorded from each magnetometer sensor. The XY trace format is used as a conventional method for identifying responses of modern ferrous debris, and also as an aid in identifying locations of potential industrial features, such kilns and metal working.

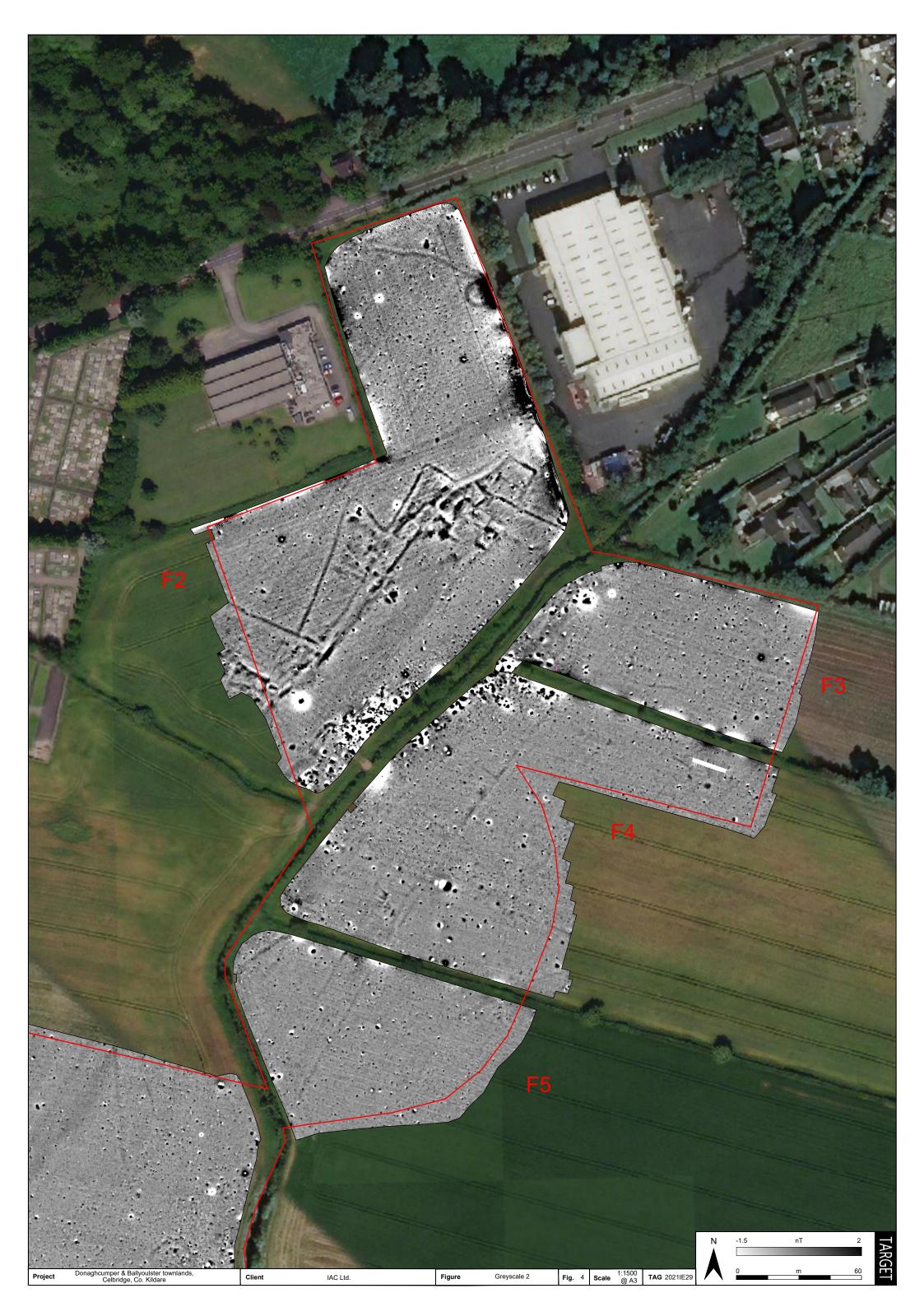
7. XY trace from survey at the site of a deserted medieval village.



















APPENDIX 4.2 - ARCHAEOLOGICAL TESTING REPORT (2021/22)



ARCHAEOLOGICAL ASSESSMENT AT BALLYOULSTER & DONAGHCUMPER, CELBRIDGE, COUNTY KILDARE

LICENCE: 21E0816

ON BEHALF OF:

KIERAN CURTIN, RECEIVER OVER CERTAIN ASSETS OF MAPLEWOOD DEVELOPMENTS UNLIMITED COMPANY (IN LIQUIDATION AND IN RECEIVERSHIP)

I.T.M.: 698300, 73333305

LICENCEE & AUTHOR: MARC PIERA

REPORT STATUS: FINAL REPORT
JUNE 2022

IAC PROJECT REF.: J3861

DOCUMENT CONTROL SHEET

DATE	DOCUMENT TITLE		PREPARED BY	REVIEWED BY	APPROVED BY
13.06.22	Archaeological Assessment at Ballyoulster, Celbridge, County Kildare. Preliminary Report		M. Piera	M. Ní Cheallacháin	F. Bailey

ABSTRACT

IAC Archaeology has prepared this report on behalf of Kieran Curtin, receiver over certain assets of Maplewood Developments Unlimited Company (in liquidation and in receivership), to study the impact, if any, on the archaeological and historical resource of a proposed residential development, which is located at Ballyoulster and Donaghcumper, Celbridge, County Kildare (ITM 698300, 733305; Figure 1). The assessment was carried out by Marc Piera under licence 21E0816 as part of a preplanning archaeological investigation. Two phases of testing followed on from a geophysical survey of the site, which was carried out by Target Archaeological Geophysics Ltd. in 2021 (Licence 20R0270). The survey identified responses indicative of a large settlement enclosure that occupies c.1ha of land within the proposed development area. The geophysical survey also recorded a ring-ditch, remnants of a possible early field system, responses from past and present cultivation and former field boundaries.

There are no recorded monuments within the proposed development area and three sites are recorded within a 300m radius of the site. The proposed development area is contained within five agricultural fields that are located on the edge of the existing built-up area of Celbridge.

Two phases of test trenching were undertaken using a 13 tonne 360 degree tracked excavator equipped with a flat, toothless bucket under strict archaeological supervision. A total of 80 trenches were excavated measuring c. 4,094 linear metres. The trenches targeted geophysical anomalies and open green space to fully investigate the archaeological potential of the site. Any investigated deposits were preserved by record. This was by means of written, drawn and photographic records.

Testing revealed 13 areas of archaeological significance, which have been designated as Archaeological Areas AA1-AA13. These comprise:

AA1-a medieval enclosure/settlement with multiple ditches and pits,

AA2-a ring ditch of probable prehistoric date,

AA3-a possible field boundary ditch,

AA4- a cluster of pits and ditches of medieval date,

AA5-a cluster of pits and ditches of medieval date

AA6-a medieval ditch,

AA7-a medieval ditch and two pits

AA8-AA13- isolated pits and hearth/kilns of unknown date.

Testing revealed 13 Archaeological Areas, of which AA8 and AA9 are now located outside of the development area, due to changes in the proposed boundary. Neither of these sites will be affected by construction associated with the development. AA1 is the largest of the sites, representing the remains of part of the medieval settlement. Due to the scale and extent of the site, it is proposed to preserve a large portion (c. 90%) of it in-situ within greenspace. An attenuation pond will be located to the northwest of the site and housing and car parking to the immediate southeast of

the site. Small portions of ditches associated with the site to the north and east will be directly impacted by ground works associated with the proposed development. This represents a direct, negative impact of moderate significance.

An archaeological exclusion area around AA1 will be established at construction stage in order to prevent inadvertent construction impacts. The small portions of the site to be impacted will be preserved by record. This will be carried out under licence to the National Monuments Service of the DoHLGH. Full provision will be made available for the resolution of the archaeological remains, both on site and during the post-excavation process.

Due to the required layouts and density of the proposed development the remaining archaeological sites (AA2-7 and 9-12) will be directly impacted by ground works associated with the proposed development. These impacts represent a direct, significant negative impact upon the archaeological resource.

Whilst it is acknowledged that the preservation in-situ of archaeological remains is indeed the best manner in which to conserve the archaeological resource, the required layout of the development means that the archaeological features and deposits within AA2-13 (excluding AA8 and 9) will be subject to archaeological preservation by record (prior to the commencement of construction). This will be carried out under licence to the National Monuments Service of the DoHLGH. Full provision will be made available for the resolution of the archaeological remains, both on site and during the post-excavation process.

Whilst the proposed development area has been subject to a detailed programme of archaeological testing, it is possible that small or isolated archaeological features may survive beneath the current ground level, outside of the footprint of the excavated test trenches. Groundworks associated with the development may have a direct negative impact on these remains. Impacts may range from moderate to significant, depending on the nature, extent and significance of the archaeological remains that may be present. As such, all topsoil stripping associated with the development will be subject to archaeological monitoring by a suitably qualified archaeologist. Should any archaeological remains be identified, consultation will be required with the National Monuments Service of the DoHLGH as to whether preservation by record or in-situ is carried out.

The watercourse and townland boundary between Ballyoulster and Donaghcumper, which runs through the proposed development area will be retained, although it is proposed to cross the watercourse at three locations. Ground disturbances associated with the crossing points may have an impact on previously unrecorded archaeological remains or artefacts that may survive within the channel of the watercourse. Impacts may range from moderate to significant, depending on the nature, extent and significance of the archaeological remains that may be present.

An underwater archaeological assessment will be carried out along the path of the watercourse, where it will be affected by new crossing points. This will be carried out

under licence to the National Monuments Service of the DoHLGH. Should any archaeological remains be identified, consultation will be required with the National Monuments Service of the DoHLGH as to whether preservation by record or in-situ is carried out.

During the operational phase, AA1 will be preserved in-situ as part of the proposed development. As such, at this stage the site may be inadvertently negatively impacted by future groundworks or maintenance that may be required, which may be carried out without due regard to the archaeological resource. Any such impacts would be direct and negative and may be very significant in scale.

An archaeological conservation/management plan will be developed in order to inform future operations of the development within AA1 and ensure the area is managed appropriately. The plan will be compiled by a suitably qualified archaeologist and contain a list of proscribed activities and policies on future site maintenance.

CONTENTS

Α	BSTRAC	CT		l
C	List of	Figures		V
1	1.1 1.2	General	ONelopment	1
2	2.1 2.2 2.3 2.4 2.5 2.6	Introduc Summar Cartogra Aerial Ph Summar	tion y of Previous Archaeological Fieldwork notographic Analysis y of Geophysical Results phical Files	2 8 9
3	RES 3.1 3.2 3.3	GULTS OF General Testing F	ARCHAEOLOGICAL TESTING Results ons	11 11
4	1MF 4.1 4.2	Impact A	Assessmenton	16
5	REF	ERENCES		19
A	Apper Apper Apper Apper Apper Apper Apper	ndix 1 ndix 2 ndix 3 ndix 4 ndix 5	Trench Results Contexts RMP Sites within the Surrounding Area Legislation Protecting the archaeological Resource Impact Assessment & the Cultural Heritage Resource Mitigation Measures & the Cultural Heritage Resource	i xii xx xxii
FI	GURES			

PLATES

LIST OF FIGURES

- Figure 1 Site location
- Figure 2 Plan of proposed development
- Figure 3 Site showing nearby recorded monuments
- Figure 4 Extract from the first edition 6-inch OS map (1837) above; Extract from the third edition 25-inch OS map (1943) below, showing the proposed development area
- Figure 5 Lidar image (Open Topographic Data) of the proposed development area
- Figure 6 Geophysical Survey results
- Figure 7 Location of excavated test trenches showing archaeological areas
- Figure 8 Detail of test trench results in Field 2
- Figure 9 Detail of test trench results in Fields 3–5
- Figure 10 Detail of test trench results in Field 1
- Figure 11 Geophysical survey results with test trench results overlaid in Field 2
- Figure 12 Geophysical survey results with test trench results overlaid in Fields 3–5
- Figure 13 Geophysical survey results with test trench results overlaid in Field 1
- Figure 14 Plan of proposed development showing archaeological areas
- Figure 15 Detail of AA1 showing geophysical survey and testing results and proposed exclusion zone

LIST OF PLATES

- Plate 1 Trench 2, facing north
- Plate 2 Pit C2.1 (AA8) in Trench 2, facing west
- Plate 3 Pit/kiln C3.1 (AA9) in Trench 3, facing north
- Plate 4 Trench 4, facing north
- Plate 5 Trench 8, facing south
- Plate 6 Large pit C8.7 (AA4) in Trench 8, facing south
- Plate 7 Ditch C9.2 (AA5) in Trench 9, facing east
- Plate 8 Linear feature C12.1 (AA5) in trench 12, facing south
- Plate 9 Linear feature C13.1 (AA5) in Trench 13, facing east
- Plate 10 Trench 20, facing east
- Plate 11 Ditch C25.1 (AA3) in Trench 25, facing northwest
- Plate 12 Trenches 30-31, facing east
- Plate 13 Ring ditch C31.1 (AA2), facing southeast
- Plate 14 Trench 34 (AA1), facing southeast
- Plate 15 Ditch C38.1 in Trench 38, facing south
- Plate 16 Trench 40, facing west
- Plate 17 Hearth/kiln C42.1 (AA10), facing south
- Plate 18 Trench 48, facing east
- Plate 19 Trench 50 (AA1), facing northwest
- Plate 20 Ditch C52.2 (AA1) in Trench 52, facing southwest
- Plate 21 Ditch C53.1 (AA1) in Trench 53, facing northwest
- Plate 22 Pit C55.1 (AA1), facing east
- Plate 23 Trench 60 (AA1), facing northwest
- Plate 24 Ditch C61.1, facing west
- Plate 25 Hearth/kiln C63.1 (AA12), facing south

Hearth/kiln C65.2 (AA11), facing east
Ditch C67.1 (AA6) in Trench 67, facing southeast
Hearth/kiln C71.2 (AA7) in Trench 71, facing east
Pit C72.1 (AA13) in Trench 72, facing east
Pit C72.2 (AA13) in Trench 72, facing south
Trench 75, facing north
Trench 78, facing south

1 INTRODUCTION

1.1 GENERAL

The following report details the results of two programmes of archaeological testing undertaken at Ballyoulster and Donaghcumper, Celbridge, County Kildare, prior to proposed residential development. This assessment has been carried out to ascertain the potential impact of the proposed development on the archaeological resource that may exist within the proposed development area. The assessments were undertaken by Marc Piera of IAC Archaeology (IAC), on behalf of Kieran Curtin, receiver over certain assets of Maplewood Developments Unlimited Company (in liquidation and in receivership) and under licence 21E0816, as issued by the National Monuments Service of the Department of Housing, Local Government and Heritage (DoHLGH).

Test trenching commenced at the site on the 7th of December and continued for eight days. This was carried out using a 13 tonne 360 degree tracked excavator, with a flat, toothless bucket, under strict archaeological supervision. A total of 71 trenches were mechanically investigated across the test area which measured 3420 linear metres in total. A second phase of testing consisting of 9 trenches measuring 674 linear metres, was carried out over one day in early June. This report follows on from a geophysical survey carried out by Target Archaeological Geophysics Ltd in November 2021 (Nicholls 2021).

Testing revealed 13 areas of archaeological significance, which have been designated as Archaeological Areas AA1-AA13. These comprise a medieval enclosure/settlement with multiple ditches and pits (AA1), a ring ditch (AA2), a slightly curved ditch (AA3), two clusters of pits and ditches of medieval settlement (AA4-AA5), a medieval ditch (AA6), a medieval ditch and two pits (AA7) and pits or kilns (AA8-AA13).

1.2 THE DEVELOPMENT

The proposed development area measures c. 13.4 hectares and is located in Ballyoulster and Donaghcumber, Celbridge, Co. Kildare. The lands are in agricultural use at present and bound by the Dublin Road to the north and the Shinkeen Road to the west. The Hazelhatch stream is located on the western boundary of the property and the Shinkeen stream is located centrally within the property.

The application is for a seven year permission for a Strategic Housing Development comprising of 344 no. residential units (comprising 54 no. 1 beds, 30 no. 2 beds, 210 no. 3 beds and 50 no. 4 beds), a childcare facility, communal and public open space, landscaping, car and cycle parking spaces, provision of an access road from Dublin Road and Shinkeen Road, associated vehicular accesses, internal roads, pedestrian and cycle paths, bin storage, pumping station and all associated site and infrastructural works (Figure 2).

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 INTRODUCTION

The proposed development area is located at Celbridge within the townlands of Ballyoulster and Donaghcumper, barony of South Salt, and parish of Donaghcumper, County Kildare. The development area comprises a greenfield site located on the edge of the existing built-up area of Celbridge. The site is bound by Dublin Road, Donaghcumper Cemetery and the Ballyoulster Park housing estate to the north, the Willow housing estate to the south, agricultural lands to the east and Shinkeen Road to the west. There are no archaeological sites located within the development area; however, there are three recorded monuments within 300m (Figure 3). The nearest of these sites consists of a ring-ditch (RMP KD011-074), located c. 85m to the east-southeast. There are two protected structures located within 300m of the development area. The closest is a medieval church (RPS B11-02) located c. 185m west-northwest of the site. This is also a recorded monument (RMP KD011-013).

Prehistoric Period

Mesolithic Period (c. 7000–4000BC)

The earliest extant evidence suggests that Ireland was first occupied during the Mesolithic period by communities that subsisted on hunting, fishing and foraging. Due to the presence of the River Liffey c. 550m to the west, it is likely that the area of proposed development was frequently visited by Mesolithic communities who may have used it as a route way to the coast and as a food and material resource. This has been illustrated by archaeological discoveries. During an excavation in 1995 Mesolithic material consisting of a large flint assemblage (DU017-079) was unearthed from within the body of a mound, which was previously thought to be Bronze Age in date (DU017-075001) (Bennett 1995:052). This site is located c. 3.7m northeast of the proposed development area and is adjacent to the River Liffey. The mound itself was subsequently identified as an 18th century landscape folly, which had disturbed Mesolithic material when it was constructed. A similar assemblage of flints also dating to the Mesolithic period were also found in 1997 during monitoring of ground works for a new clear water tank at the Leixlip Water Treatment Plant (Bennett 1997:091), which is located c. 5km to the northeast of the development area.

Neolithic Period (c. 4000–2500BC)

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. This afforded the development of agriculture which demanded an altering of the physical landscape. Forests were rapidly cleared, and field boundaries constructed. Pottery was also being produced, possibly for the first time.

The advent of the Neolithic period also provided the megalithic tomb. There are four types of tomb: court cairn, portal, passage and wedge. The court, portal and passage

style tombs are of pure Neolithic date, while the wedge tomb straddles the Neolithic to Bronze Age transition. Archaeological remains dating to this period have also been discovered recently at the site of the water treatment works at Cooldrinagh, c. 3.8km northeast of the development. Two adjacent burial monuments were identified (DU017–075 and DU017–079), consisting of a denuded passage tomb on the western side, flanked to the east by a circular, kerbed feature containing two cist burials and covered by cairn material (Bennett 2006:585). Due to the significance of the site, all investigations were carried out under ministerial consent, as they were judged to be national monuments (Ref.: CO14, E2034). Some human remains were identified during the excavations, although both sites had suffered heavily from disturbance. It is likely that Neolithic passage tomb established a tradition for burial in the area, which led to the construction of the circular cairn with cist burials. This later site is likely to be Bronze Age in date.

Bronze Age Period (c. 2500–800BC)

This period is marked by the use of metal for the first time. As with the transition from Mesolithic to Neolithic, the transition into the early Bronze Age was accompanied by changes in society. Megaliths were replaced in favour of individual, subterranean cist or pit burials that were either in isolation or in small cemeteries. These burials contained inhumed or cremated remains and were often, but not always, accompanied by a pottery vessel.

The most common Bronze Age site within the archaeological record is the burnt mound or *fulacht fiadh*. Over 7000 *fulachta fiadh* 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 practiced from the Mesolithic to the present day, those noted in close proximity to a trough are generally interpreted as Bronze Age cooking/industrial sites. *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. The closest recorded site of this type to the development area is located c. 1.6km to the northeast (KD011-062) discovered during soil stripping in advance of development of the Liffey Valley Business Park and subsequently archaeologically excavated (Licence: 95E0264).

In 2010, during archaeological monitoring (Licence: 10E0414) within Castletown Demesne, c. 1.2km to the north, a prehistoric site was discovered traversing the front lawn of the Castletown House. The site contained a crouched inhumation burial (KD011-060001) and a crushed prehistoric vessel. They appear to fit with the 'Bowl Tradition' of Bronze Age burial of the later 3rd Millennium BC. The test trench had truncated at least six other pit burials (KD011-060002-, KD011-060003, KD011-060004-, KD011-060005, KD011-060006 and KD011-060007). Four sherds of prehistoric pottery were also found. Their morphologies and fills have a similar character to crouched inhumations which represented a cemetery of pit burials.

Iron Age Period (c. 800BC – AD400)

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 proposed development area or its immediate environs.

Early Medieval Period (AD400–1100)

The early medieval period, with a new religious culture and evolving technologies, saw significant woodland clearance and the expansion of grassland. A new type of plough and the horizontal mill were two innovations that improved agriculture and allowed for the population to increase. Consequently, from c. AD 500 onwards, the landscape as a whole became well settled, as evidenced by the profuse distribution of ringforts, a dispersed distribution of enclosed settlements, normally associated with various grades of well-to-do farming and aristocratic classes in early medieval Ireland (Aalen et al. 1997, 20).

The early medieval period is depicted in the surviving sources as entirely rural characterised by the basic territorial unit known as *túath*. Byrne (1973) estimates that there were probably at least one hundred and fifty kings in Ireland at any given time during this period, each ruling over his own *túath*. Ringforts represent individual defended family homesteads and primarily date to the period 500 - 1000 AD (Lynn 1975, 30). Although most excavated ringforts have been dated to this period, some have earlier origins and may have been originally constructed during the Iron Age, or even earlier. Although there are no recorded monuments of this type within the vicinity of the proposed development area, it is likely that such sites existed within the area when considering the proximity of Dublin and the importance of the River Liffey for trade and resources.

It is thought that an early ecclesiastical site, traditionally associated with St. Mo-chúa of Clondalkin (Killanin and Duignan, 1967, 159), may have existed in the area from the 5th century, from which the town of Celbridge originated. The site of this foundation is thought to have been situated on or near the site of the later medieval church (KD011-021005). A curved boundary to the north of this church and its associated graveyard (KD011-012006) may be indicative of an early ecclesiastical enclosure (KD011-012004). This church comprised a nave of probable 14th century date, with a rectangular fortified tower added in the 15th/16th centuries. It was granted to St Thomas' Abbey, Dublin, and is noted as being in good repair in the royal visitation of 1615.

Medieval Period (AD1100–1600)

The coming of the Anglo-Normans in the late 12th and early 13th centuries brought about further change in the appearance of the landscape with the development of

town boroughs and manorial villages, underpinned by the presence of castles and monastic orders newly arrived from Britain and the Continent.

Strongbow granted Celbridge, as part of the 'cantred of Offelan nearest Dublin' to Adam De Hereford, before 1176. Then known as 'Kildroch', Celbridge was subsequently granted to John De Hereford, then to his son Thomas, and thence to the son-in-law of the latter, Milo de Rochford, by whose family it was held until the mid-14th century. The earliest definitive evidence for a borough here occurs in 1401, although a significant settlement had existed by the early 13th century, by which time Thomas De Hereford had erected a castle, monastery and mill at Kildrought. D'Alton (1838) states that Kildrought was amongst the manors granted to Maurice, 4th Earl Kildare, in 1386. In 1409, part of the manor of Lucan and the entire manor of Kildrought were granted by Henry the Fifth to John, son of Sir John Talbot (D'Alton 1838, 658).

The church of Donaghcumper (KD011-013), located c. 185m west-northwest of the development area, together with lands along the River Liffey, was granted to the First Prior of St. Wolstan's Abbey (KD011-014) on its foundation in 1202 (Kirkpatrick 1896, 283). The 'donagh' element of the church name suggests an Early Christian foundation, of which there is no obvious visible evidence. The remains consist of a poorly preserved medieval parish church. The interiors are overgrown and partially covered with collapsed rubble. Below the window there is a flat-headed relieving arch and in the chapel floor the burial vault of the Allen family, where William Allen was buried c. 1558. The associated graveyard (KD011-013001) located south of the church provides the earliest legible grave markers which date to the 18th century. The church is also a protected structure (RPS B11-02).

St Wolstan's, located c. 1km to the northeast, known as 'Scala Caeli' - 'Steps of Heaven', was founded by Richard, the first prior, and Adam de Hereford c. 1205 for the Augustinian canons of St Victor (KD011-014). The priory was suppressed in 1536 when Richard Weston, the last prior, was seized of the site (with gardens, orchards, cottages, etc) and the property was granted to John Allen, Lord Chancellor (Gwynn and Hadcock 1970, 193). The very poorly preserved remains are very similar in layout to the Augustinian Priory at Athassel, County Tipperary (TS068-013), founded slightly earlier, c. 1200. No ecclesiastical buildings survive, and the upstanding remains comprise the defensive, enclosing elements of the priory.

Recorded on the Down Survey (1655-6) as a substantial house and orchard named 'Castletonne Orchard' is located within the immediate vicinity of Castletown House, c. 950m to the northeast of the proposed development area (KD011-023). According to Bradley et al. (1986, Vol. 2, 130), the earliest reference to the castle of Celbridge is in 1403, because of the absence of earlier references, it is likely that the castle was constructed after the Earl of Kildare gained possession of Celbridge in 1397-9. The castle stood to the north of Celbridge in Castletown townland and was described as 'a hall built after the Irish or country manner, covered with straw' (13 PRI rep. DK, 211 no. 4181). A 2003 architectural report commissioned by the OPW (SMR file) contains the following details: "By 1787 Lady Louisa Connolly was involved in supervising

the construction of the extensive and spacious farm buildings". It would appear that part of the farm buildings at Castletown are built on the site of the earlier tower house which gave its name to the estate. On Rocque's map there appears to be a building located to the west of the house on the site of the medieval castle and at the present location of the home farm buildings. The site is referred to locally as the 'Dongon Castle'.

Post-medieval Period (AD1600-1900)

The 17th century saw dramatic rise in the establishment of large residential houses around the country. The large country house was only a small part of the overall estate of a large landowner and provided a base to manage land that could be located nationwide. During the late 18th and early 19th centuries, lands immediately associated with the large houses were generally turned over into a parkland estate (demesne). Although the creation of a parkland landscape involved working with nature, rather than against it, considerable constructional effort went into their creation. Earth was moved, field boundaries disappeared, streams were diverted to form lakes and quite often roads were completely diverted to avoid travelling anywhere near the main house or across the estate. Whilst the designed landscapes possessed an ornamental form, they still retained a valuable function, providing grazing for livestock and habitats for game.

During the 19th century the landscape surrounding the proposed development area was dominated by houses and demesnes of varying sizes that were associated with the landed gentry. The area was attractive as it was considered to be rural but was still within easy distance of Dublin City. The River Liffey was also considered to be an excellent addition to a demesne landscape, as it could be designed into it as an aesthetically pleasing body of water. Some of the larger houses and demesnes in the surrounding area include Castletown, Backweston Park, Leixlip Demesne and St. Wolstan's. During this period the proposed development area was situated to the immediate southeast of the demesne landscape associated with Donaghcumper. The principal structure remains present today and is a protected structure located outside the study area, c. 310m to the northwest of the proposed development area.

A. Walter Dongan was created a Baronet by King James, and in 1616 passed patent for the manor of Kildrought (Castletown). His son, Sir John Dongan, who took up residence at Castletown upon the death of his father, was a member of the Irish parliament in 1634 (D'Alton 1855, 259). William Dungan, son of John, was endowed with the title of First Earl Limerick. His brother Walter Dongan, 3rd Baronet, fell at the Battle of the Boyne, and subsequently the manor of Castletown-Kildrought was amongst his property confiscated by Cromwellian forces (D'Alton 1855, 264). The Down Survey of 1641 and 1670 records the townlands of Castletown, Celbridge and Aghards as the property of Dame Mary Dongan of Castletowne, a Catholic. However, by 1670, some of the townlands previously recorded as being in her possession were had passed into the ownership of Sir John Dungan, a Protestant. Thomas Dongan, who was born at Castletown in 1634, spent some time in America, serving as Governor of New York for a period. He returned to England in 1691, becoming Earl of

Limerick on his return (his title restored to him but without his lands and possessions), following the death of his brother William (Browne 1934, 499).

The Civil Survey of 1654 records the presence of 'Tyrrells Mill', the property of 'Irish Papist' Mrs Mabel Aylmer. Aylmer also owned two acres of land, on which a castle stood, to the south of the town. A 'corne mill' (KD011-037) and a cloth mill are recorded (KD011-019).

With the development of Castletown Demesne in the early 18th century the modern form of the town came into being. It was purchased by William Conolly, Speaker of the House of Commons, in 1709. The village of Kildrought had apparently become decayed. When Conolly acquired the Dongan estate, he granted new leases on land on the condition that 'substantial stone houses with gable ends and two chimneys be built' (Celbridge LAP, 84).

Those on the south side of the street were designed to address both the main street, and with formal gardens, the River Liffey to the rear. Conolly renamed it 'Cell-bridge' in 1714. Castletown House was built between 1722 and 1729, to designs by Alessandro Galilei and Edward Lovett Pearce. It is notable as being Ireland's earliest and most prominent example of the Palladian style. Conolly, who had become exceedingly wealthy through land transactions in the period following the Williamite wars, and had Castletown built as a symbol of his stature. The construction of a number of notable town houses adjacent to Castletown is indicative of the growing prosperity of Celbridge in the 17th and 18th century. Kildrought House, designed by Joseph Rotheny, typifies domestic Georgian architecture of the period and was the residence of Robert Baillie, a Dublin upholsterer. It was later employed by John Begnall's Academy (1782) a cholera hospital (1830) and a local police barracks (1831-41).

2.2 SUMMARY OF PREVIOUS ARCHAEOLOGICAL FIELDWORK

A review of the Excavations Bulletin (1970–2021) and the SMR database (National Monuments Service) has revealed that no investigations have been carried out within the proposed development area; however, three archaeological investigations have been undertaken within c. 300m of the proposed site which are summarised below:

Test excavations were undertaken at a Donaghcumper graveyard, c.146m to the west-northwest, in 2010. The present 'old' graveyard (excluding a modern extension) is a shrunken version of its medieval extent. Testing was preceded by a geophysical survey that indicated potential archaeological features, the majority of which were found to be geological when test-excavated, apart from a cobbled surface 70m south of the church. The key discovery from the testing was a section of a ditch that may form part of an enclosure that surrounded the church. A sherd of medieval pottery from the fill of a recut indicated a medieval date. No human skeletal remains were found, and it is probable that a farmyard which occupied much of the site until quite recently removed any remains that may have formerly been present. The only other archaeological activity recorded was an 18th–19th century cobbled surface (Licence E004187, Bennett 2010:399).

Testing was carried out in two large fields within Donaghcumper Demesne, c. 300m to the north in 2008. A geophysical survey of the site identified two circular enclosures or barrows and a series of associated features (08R235). The truncated remains of two prehistoric barrows were uncovered on the central and eastern parts of the site, defined by a ditch. A central inhumation burial was partially exposed within the testtrench excavated through the monument. A series of ditch and pit features were also uncovered in proximity to these barrows, and it is likely that at least some of these represent contemporary activity. A broken flint flake was recovered from topsoil on the western end of the site and its recovery is indicative of prehistoric activity in the vicinity. Later activity is represented by a metalled laneway of uncertain date which was uncovered on the southern end of the site and post-medieval agricultural features on the western end of the site. Several aboveground features were also evident within the field, including a ditch to the north of and parallel to the Dublin Road which corresponds to a laneway illustrated on Taylor's map of 1783. A tree ring on the western end of the site is illustrated on the 1907-edition OS map. A deep linear ditch with a high bank on either side was evident to the east of the tree ring. It ran northwards from the Dublin Road and could mark a former field boundary but is not illustrated on Rocque or on the first-edition OS map (Licence 08E0829, Bennett 2008:661).

Test excavation was carried out c. 202m to the northwest in 2012 failed to reveal any finds or features of archaeological significance (Licence 12E266, Bennett 2012:323).

2.3 CARTOGRAPHIC ANALYSIS

Sir William Petty, Down Survey Map, 1654–56, Baronies of Salt South and Newcastle

The development area is placed within the barony of Salt and Straffan, close to the town of Lexlip with the location of the Liffey River also depicted directly to the north. Celbridge is depicted as Killdrough and shown adjacent to a bridge over the River Liffey. Several townlands in the vicinity are represented, including Castletown (Caftletonne) to the north and Griffenrath to the west, and Simmonstown (Simmonstonne) and Donaghcumper (Dono-compar) to the east of the river.

Noble and Keenan's Map of County Kildare, 1752

This map shows a more detailed depiction of the development area and its surroundings. The town of Cellbridge is found to the northwest, with Castletown and demesne located to the north. The main street of Celbridge has also been developed, with several houses having formal gardens constructed to each side.

Alex Taylor's Map of the County of Kildare, 1783

This map provides further detail of the development area and its surroundings which is placed within Donacomper and the Barony of South Salt. Castletown Park and demesne is clearly marked to the north, not far from the site with a number of roads leading to the house. Dublin Road is bound to the north which runs from Celbridge to

Lucan. A road runs through the development area towards the Liffey River with a single structure placed at the centre.

First Edition Ordnance Survey Map, 1837, scale 1:10,560 (Figure 4)

This is the first accurate historic mapping coverage of the area containing the proposed development area, which lies within parts of six fields within the townland of Donaghcumper. Donaghcumper Demesne is marked to the immediate northwest beyond the Dublin Road with the position of the church and graveyard depicted to the west-northwest. A stream is marked running through the eastern part of the site and a small, linear area of planted trees are also present.

Ordnance Survey Map, 1911, scale 1:2500 (Figure 4)

There has been relatively little change from the previous mapping. The eastern portion of the proposed development area is now located within the newly formed Ballyoulster townland, with the boundary formed by the stream that was previously marked as crossing the site. The fields within the development area have been enlarged, with a number of boundaries removed.

2.4 AERIAL PHOTOGRAPHIC ANALYSIS

Inspection of the aerial photographic coverage of the proposed development area held by the Ordnance Survey (1995–2013), Google Earth (2008–2020) and Bing Maps revealed that the proposed development area has remained largely unchanged since 1995. The ring-ditch (KD011-074) located c. 46m to the southeast, is visible on Google Earth coverage from 2018.

Lidar imagery in the Open Topographic Data Viewer was inspected for any evidence of archaeological features evident on the surface. The LIDAR imagery was aligned with the results from the geophysical survey (Figure 5). A possible ditch which follows adjacent to the filed boundary was identified in the southern field. A depression in field 2 (northern field) was noted which may be associated with a ditched enclosure identified during Geophysical Survey. However, the Lidar imagery did not pick up the areas of intense geophysics activity (see below).

2.5 SUMMARY OF GEOPHYSICAL RESULTS

A geophysical survey was undertaken in October 2021 at the proposed development site by Target Archaeological Geophysics Ltd. The survey investigated all available lands within the proposed development boundary completing a total 11.25ha of high resolution magnetometry (fluxgate gradiometry) in 5 adjacent fields (Fields 1-5) situated directly east of Shrinkeen Road, to the north and northeast of the Primrose Gate housing estate (Figure 6).

The results of the geophysical survey in Fields 1–5 of the proposed development area have identified the location of part of a large settlement enclosure which extends into Field 2. This archaeological site occupies c.1ha of land within the proposed development. These remains extend to the southwest beyond the site boundary and are expected to be associated with church and graveyard KD011-013/KD011-013001

which is situated c.200m west—northwest of the proposed development. The geophysical survey has also recorded the location of a well-defined ring-ditch and associated linear remains in field 2 to the northeast. Remnants of a possible early field system are also indicated throughout Field 1. Responses from past and present cultivation, former/suspected former boundaries and natural soil/geological variation are also evident in the results from this survey.

2.6 TOPOGRAPHICAL FILES

Information on artefact finds from the study area in County Kildare have been recorded by the National Museum of Ireland since the late 18th century. Location information relating to these finds is important in establishing prehistoric and historic activity in the study area. Two stray finds are recorded from the surrounding area:

NMI REGISTER NO	1963: 84
MUSEUM IA FILE NO	IA/84/1963
TOWNLAND	Donaghcumper
PARISH	Donaghcumper
BARONY	South Salt
FIND	Roofing Slate
FIND PLACE	N/A
DESCRIPTION	Perforated
REFERENCE	NMI Topographical Files

NMI REGISTER NO	1974: 223
MUSEUM IA FILE NO	1A/223.1974
TOWNLAND	Donaghcumper
PARISH	Donaghcumper
BARONY	South Salt
FIND	Carved Stone Head
FIND PLACE	N/A
DESCRIPTION	N/A
REFERENCE	NMI Topographical Files

3 RESULTS OF ARCHAEOLOGICAL TESTING

3.1 GENERAL

Two phases of test trenching were undertaken in December 2021 and June 2022 using a 13 tonne 360 degree tracked excavator equipped with a flat, toothless bucket under strict archaeological supervision. A total of 80 trenches were excavated measuring c.4,094 linear metres. Any investigated deposits were preserved by record. This was by means of written, drawn and photographic records.

The first phase of test trenching took place over the course of eight days from the 7th of December 2021, where a total of 71 trenches were excavated across the site measuring 3,420 linear metres. The second phase took place over the course of one day in June 2022, and a total of 9 trenches were excavated measuring 674 linear metres (Figures 7–15, Plates 1-32, Appendix 1). The proposed development site consists of five adjacent fields of arable land.

- 18 test trenches (T37-48 and T61-66) were excavated within Field 1 located at the southwest of the site, targeting geophysical anomalies n.1-4 (Figures 6 & 7)
- 23 test trenches (T24-34 and T49-60) were excavated within Field 2 located at the north of the site, targeting geophysical anomalies n. 5–14 and open green space (Figures 6 & 7)
- 6 test trenches (T1-6) were excavated within Field 3 located at the northeast of the site, targeting linear geophysical trends (Figures 6 & 7)
- 17 test trenches (T7-23) were excavated within Field 4 located at the west of the site, targeting geophysical anomalies n.15-16 (Figures 6 & 7)
- 7 test trenches (T35-36 and T67-71) were excavated within Field 5 located at the southeast of the site, targeting geophysical anomaly n.17 (Figures 6 & 7).
- 9 Phase 2 test trenches (T72–80) were subsequently excavated to the east of phase 1 trenches in Fields 4 and 5. No geophysical survey was undertaken in this eastern portion of Fields 4 and 5 (Figure 7).

All trenches were fully excavated with the exception of Trench 59 which was shortened slightly due the overhead powerline at the southern end.

The test trenches were excavated to determine, as far as reasonably possible, the location, extent, date, character, condition, significance and quality of any surviving archaeological remains threatened by the proposed development. Test trenching was also carried out to clarify the nature and extent of existing disturbance and intrusions and to assess the degree of archaeological survival in order to formulate further mitigation strategies. These are designed to reduce or offset the impact of the proposed development scheme.

3.2 TESTING RESULTS

The topsoil recorded across the site is a mid-brown silty clay around 0.4m of depth. A plough soil layer was observed under the topsoil, consisting of a firm light brown clay

of around 0.1-0.2m depth, covering the natural subsoil. The depths vary slightly in each trench (see Appendix 1).

The natural subsoil consists of a hard grey stony and gravelly clay with bands of a light brown silty clay and shale bedrock.

Archaeological Features

Testing revealed 13 areas of archaeological significance, which have been designated as Archaeological Areas 1–13 (AA1-AA13). All archaeological features have been grouped together based on their physical proximity and have called Archaeological Areas in order to provide structure and to facilitate the description and discussion of the features. Boxes have been placed around the Archaeological Areas for illustrative purposes only and to allow the reader easily locate them within the overall site (Figures 11–15). See Appendix 1 for detailed trench results and archaeological contexts are described in detail in Appendix 2.

Archaeological Area 1 (Figures 11 & 15), Plates 14, 19–23)

Ten trenches (T50-55, T58-60 and T34) targeting geophysical anomalies n. 5-12 in the south of Field 2 confirmed the presence of multiple interconnecting ditches (25 recorded sections), 9 pits and 2 hearths. Archaeological Area 1 is interpreted as a complex medieval settlement site which occupies an area measuring c.170m long by 50m wide. Trench 34 confirmed the north-eastern extent of a large rectangular enclosure as identified in the geophysical survey at the northeast end of the area. It measures 23m long and between 15-23m wide. The entrance of the enclosure is located at the southeast corner of the enclosure and an internal ditch with a gap on the centre divides the internal space in two. A cluster of irregular ditches and pits are located directly to the south of the enclosure and they are indicative of further features associated with the enclosure. Trenches 50-53, 58,59 and 34 confirmed the presence of a perimetral ditch running in zig-zag alignment that appears to delimit the enclosure and associated features/structures at the west and northwest. A substantial amount of medieval pottery was recorded in the fills of these features indicating a Archaeological medieval chronology. Area represents medieval enclosure/settlement area consisting of ditches, pits and hearths.

Archaeological Area 2 (Figure 11, Plates 12, 13)

Trenches 30 and 31 confirmed the presence of a ring-ditch as identified in the geophysical survey. The ring ditch (C30.1, C31.1) measures c. 11m in diameter, between 2.4–2.6m in width and 1.1m in depth. Prehistoric pottery was recovered from the ring-ditch fill suggesting a Bronze Age/Iron Age chronology. A small pit (C31.2) was also recorded at the southwest end of Trench 31.

Archaeological Area 3 (Figure 11, Plate 11)

Trenches 24–26 confirmed the presence of two parallel ditch features as identified in the geophysical survey (response n.14). The southern ditch (C24.1, C25.1 and C26.1) is slightly curved and orientated northwest –southeast. It measures c. 50m in length, between 1.43–1.9m in width and 0.9m in depth. Animal bone, charcoal and snail shell were recorded in the fills. The northern ditch (C24.2, C25.2 and C26.2) follows the

same curving alignment and consists of a shallow ditch filled by a mid-brown silty clay with substantial stone and snail shell inclusions. The larger ditch (C24.1, C25.1 and C26.1) may represent a former field boundary while the small ditch to the north (C24.2, C25.2 and C26.2) may be a drainage feature associated with the field boundary.

Archaeological Area 4 (Figure 12, Plate 6)

Archaeological Area 4 consists of five pits (C8.1–C8.3, C8.6 & C8.7) and two short ditches (C8.4 & C8.5) which extended across Trench 8. Frequent sherds of medieval pottery were observed in the fills of the pits. AA4 is being interpreted as part of a small medieval settlement made up of pits and ditches. Trench 8 targeted a geophysical trend interpreted as a possible early field system and open green space.

Archaeological Area 5 (Figure 12, Plates 7–9)

Archaeological Area 5 consists of four ditches (C9.1–C9.4) identified in Trench 9, and three linear features -C10.1, C12.1 and C13.1 identified in Trenches 10, 12 and 13. The four ditches identified in Trench 9 are orientated east—west, while a linear feature (C10.1) in Trench 10 runs perpendicular to them to the east. Their distribution may in part represent a possible rectangular structure (7.5m x 7.5m) which was a targeted geophysical trend at this location. Some of these features contain frequent animal bone, charcoal and sherds of medieval pottery in their fills. Archaeological Area 5 is interpreted as part of a small medieval settlement, probably formed by a rectangular structure with isolated external features.

Archaeological Area 6 (Figure 12, Plate 27)

Trenches 67 and 68 confirmed the presence of a linear ditch (C67.1 and C68.1) as identified in the geophysical survey at the northwest corner of Field 5. The ditch is orientated northwest-southeast and measures c.30m long, 2m wide and 0.5m deep. A sherd of green glazed medieval pottery was recorded within the fill which indicates a probable medieval chronology. The ditch may represent a medieval field boundary.

Archaeological Area 7 (Figure 12, Plate 28)

Archaeological Area 7 consists of a ditch C36.1 identified in Trench 36 and a pit (C71.1) and a kiln (C71.2) identified in Trench 71 at the northeast side of Field 5. These trenches targeted a natural soil/geological variation geophysical trend and open green space. The ditch (C36.1) is orientated northeast-southwest and aligns with the targeted geophysical trend. The geophysical survey shows the trend extending from the northeast side of Field 3 into Field 4 to a total length of c. 50m. The ditch is 1.9m wide and 0.8m deep and some medieval pottery was observed in the fill suggesting a medieval chronology. A pit (C71.1) and kiln (C71.2) were identified 7m and 10m respectively meters to the north and northwest of the ditch. The pit and kiln are located 10m apart and along with the ditch may be interpreted as part of a possible small medieval settlement and medieval field boundary with potential archaeological significance.

Archaeological Area 8 (Figure 12, Plate 2)

Trench 2 confirmed the presence of an isolated pit (C2.1) as identified in the geophysical survey at the west end of Field 3. Pit C2.1 has a well-defined circular shape in plan with substantial flecks of charcoal in the fill. Archaeological Area 8 is interpreted as an isolated pit with potential archaeological significance.

Archaeological Area 9 (Figure 12, Plate 3)

Trench 3 confirmed the presence of an archaeological feature as identified in the geophysical survey at the southwest corner of Field 3. An isolated kiln (C3.1) was recorded 27m from the pit recorded in AA8 to the northeast. Kiln C3.1 has a rectangular shape in plan and measures 2.1m long by 1.15m wide, with remnants of scorched red burnt clay on the base. Archaeological Area 9 is interpreted as an isolated kiln of unknown date

Archaeological Area 10 (Figure 13, Plate 17)

Trench 42 confirmed the presence of two hearth/kiln features (C42.1 &C42.2) as identified on the geophysical survey as circular anomalies at the centre of Field 1. The hearth/kiln features are located 18m apart and contain remnants of scorched red burnt clay on the base and are filled by rich charcoal fills. Archaeological Area 10 is interpreted as isolated hearth/kiln features of unknown date.

Archaeological Area 11 (Figure 13, Plate 26)

Trench 65 confirmed the presence of an isolated hearth/kiln (C65.2) as identified in the geophysical survey at the northeast of Field 1. Hearth/kiln C65.2 has scorched red burnt clay on the base and contains a charcoal rich fill. Archaeological Area 11 is interpreted as an undated hearth/kiln feature.

Archaeological Area 12 (Figure 13, Plate 25)

Trench 63 identified an isolated hearth/kiln (C63.1) at the southeast of Field 1. Hearth/kiln (C63.1) has scorched red burnt clay on the base and contains a charcoal rich fill. Archaeological Area 12 is interpreted as hearth/kiln feature of unknown date.

Archaeological Area 13 (Figure 12, Plates 29 & 30)

Trench 72 confirmed the presence of two pits (C72.1 and C72.2) located 10m apart at the east of Field 4. The two pits contained occasional charcoal inclusions and Archaeological Area 13 is interpreted as undated pit features.

Non-Archaeological Features

Many of the trenches identified field drains and confirmed the presence of ditches of varying size interpreted as former/probable former field boundaries and early field system ditches in the geophysical survey (See appendix 1).

3.3 CONCLUSIONS

There are no recorded monuments within the proposed development area, which is located in the townland of Ballyoulster and Donaghcumper, Co. Kildare and three sites are recorded within a 300m radius of the site. The proposed development area is

contained within five agricultural fields and a review of the historic mapping and the aerial photographic resource show that the proposed development area has remained relatively unchanged from the post-medieval to the modern periods.

A geophysical survey of the site was carried out by Target Archaeological Geophysics Ltd. in 2021 under Licence 20R0270. The high resolution magnetometry survey identified responses indicative of a large settlement enclosure that occupies c.1ha of land within the proposed development area. The geophysical survey also recorded a ring-ditch, remnants of a possible early field system, responses from past and present cultivation and former field boundaries.

A total of 80 trenches were excavated across the proposed development site measuring 4,094 linear meters. The trenches targeted geophysical anomalies and open green space.

Testing revealed 13 areas of archaeological significance, which have been designated as Archaeological Areas AA1-AA13. These comprise:

AA1-a medieval enclosure/settlement with multiple ditches and pits,

AA2-a ring ditch of probable prehistoric date,

AA3-a possible field boundary ditch,

AA4- a cluster of pits and ditches of medieval date,

AA5-a cluster of pits and ditches of medieval date

AA6-a medieval ditch,

AA7-a medieval ditch and two pits

AA8-AA13- isolated pits and hearth/kilns of unknown date.

4 IMPACT ASSESSMENT AND MITIGATION STRATEGY

Impacts can be identified from detailed information about a project, the nature of the area affected, and the range of archaeological resources potentially affected. Archaeological sites can be affected adversely in a number of ways: disturbance by excavation, topsoil stripping; disturbance by vehicles working in unsuitable conditions; and burial of sites, limiting access for future archaeological investigation.

The proposed development comprises the construction of residential units along with all ancillary site development works above and below ground.

4.1 IMPACT ASSESSMENT

- A total of 13 Archaeological Areas (of which AA8 and AA9 are now located outside of the development area, due to changes in the proposed boundary), have been identified. Neither AA8 or AA9 will be affected by construction associated with the development. AA1 is the largest of the sites, representing the remains of part of the medieval settlement. Due to the scale and extent of the site, it is proposed to preserve a large portion (c. 90%) of it in-situ within greenspace. An attenuation pond will be located to the northwest of the site and housing and car parking to the immediate southeast of the site. Small portions of ditches associated with the site to the north and east will be directly impacted by ground works associated with the proposed development. This represents a direct, negative impact of moderate significance.
- AA1 will be preserved in-situ as part of the proposed development. As such, at
 operation stage the site may be inadvertently negatively impacted by future
 groundworks or maintenance that may be required, which may be carried out
 without due regard to the archaeological resource. Any such impacts would be
 direct and negative and may be very significant in scale.
- Due to the required layouts and density of the proposed development the remaining archaeological sites (AA2-7 and 9-12) will be directly impacted by ground works associated with the proposed development. These impacts represent a direct, significant negative impact upon the archaeological resource.
- Whilst the proposed development area has been subject to a detailed programme of archaeological testing, it is possible that small or isolated archaeological features may survive beneath the current ground level, outside of the footprint of the excavated test trenches. Groundworks associated with the development may have a direct negative impact on these remains. Impacts may range from moderate to significant, depending on the nature, extent and significance of the archaeological remains that may be present.

• The watercourse and townland boundary between Ballyoulster and Donaghcumper, which runs through the proposed development area will be retained, although it is proposed to cross the watercourse at three locations. Ground disturbances associated with the crossing points may have an impact on previously unrecorded archaeological remains or artefacts that may survive within the channel of the watercourse. Impacts may range from moderate to significant, depending on the nature, extent and significance of the archaeological remains that may be present.

4.2 MITIGATION

- A large portion of AA1 (c. 90%) will be preserved in-situ during construction in order to retain the area of greenfield. Small sections of ditches in the north and east of the site will be affected by ground works. The archaeological exclusion area will be established at construction stage in order to prevent inadvertent construction impacts. The small portions of the site to be impacted will be preserved by record. This will be carried out under licence to the National Monuments Service of the DoHLGH. Full provision will be made available for the resolution of the archaeological remains, both on site and during the post-excavation process.
- An archaeological conservation/management plan will be developed in order to inform future operations of the development within AA1 and ensure the area is managed appropriately. The plan will be compiled by a suitably qualified archaeologist and contain a list of proscribed activities and policies on future site maintenance.
- Whilst it is acknowledged that the preservation in-situ of archaeological remains is indeed the best manner in which to conserve the archaeological resource, the required layout of the development means that the archaeological features and deposits within AA2-13 (excluding AA8 and 9) will be subject to archaeological preservation by record (prior to the commencement of construction). This will be carried out under licence to the National Monuments Service of the DoHLGH. Full provision will be made available for the resolution of the archaeological remains, both on site and during the post-excavation process.
- All topsoil stripping associated with the development will be subject to archaeological monitoring by a suitably qualified archaeologist. Should any archaeological remains be identified, consultation will be required with the National Monuments Service of the DoHLGH as to whether preservation by record or in-situ is carried out.
- An underwater archaeological assessment will be carried out along the path of the watercourse, where it will be affected by new crossing points. This will be carried out under licence to the National Monuments Service of the DoHLGH. Should any archaeological remains be identified, consultation will be required

with the National Monuments Service of the DoHLGH as to whether preservation by record or in-situ is carried out.

It is the developer's responsibility to ensure full provision is made available for the resolution of any archaeological remains, both on site and during the post excavation process, should that be deemed the appropriate manner in which to proceed.

Please note that all recommendations are subject to approval by the National Monuments Service of the Heritage and Planning Division, Department of Housing, Local Government and Heritage.

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www.googleearth.com – Satellite imagery of the proposed development area.

www.bing.com – Satellite imagery of the proposed development area

www.logainm.ie –Placenames Database of Ireland launched by Fiontar agus Scoil na Gaelige and the DoHLGH.

www.osiemaps.ie – Ordnance Survey aerial photographs dating to 1995-2013 and 6-inch/25-inch OS maps.

APPENDICES

APPENDIX 1 TRENCH RESULTS

TRENCH	LENGTH (m)	WIDTH (m)	DEPTH (m)	Field	ORIENTATION	DETAILS
1	100	1.8	0.35	3	West–East	No Archaeology found. The natural ground changed from mid-greyish brown silty clay to slate bedrock.
2	120	1.8	0.3-0.8	3	West–East	(AA8). An isolated pit (C2.1) is located at the eastern end of the trench that has a well-defined circular shape in plan. The natural subsoil consists of a stony greyish brown silty clay at the western half of the trench and bands of slate bedrock were recorded at the eastern end.
3	120	1.8	0.4	3	West–East	(AA9). A rectangular hearth/kiln (C3.1) was identified at the eastern end of the trench. It has scorched orangish red burnt clay at base and is filled by four layers. Two of them are dark black in colour and charcoal rich. The natural subsoil consists of a greyish stony silty clay and bands of slate bedrock were recorded at the eastern end of the trench.
4	10	1.8	0.3	3	North–South	No Archaeology found. A ditch running west—east was identified within the trench. It measures 1.1m wide, 0.25m deep and is filled by sterile mid brown silty clay. Interpreted as agricultural and it may represent a drainage ditch. The natural subsoil consists of bands of mid brown silty clay and bedrock.
5	10	1.8	0.4	3	North–South	No Archaeology found. The natural subsoil consists of light brown stony clay and bedrock.
6	20	1.8	0.75- 0.9	3	North–South	No Archaeology found. Modern disturbance was observed at the centre of the trench with frequent iron, wires, wood and plastic objects. The natural subsoil consists of a light grey stony clay. A thick layer of subsoil was identified reaching the natural subsoil at 0.75–0.9m of depth.
7	140	1.8	0.6	4	Northeast— Southwest	No Archaeology found. Two ditches were identified within the trench. They measure 1.5m wide and 0.4mdeep and are filled by mid brown sandy silt layers with frequent snail shell and stone inclusions. A sherd of Black ware pottery was observed in one of the ditches

TRENCH	LENGTH (m)	WIDTH (m)	DEPTH (m)	Field	ORIENTATION	DETAILS
						suggesting a modern chronology. Interpreted as agricultural in nature. The natural subsoil consists of a grey stony clay.
8	90	1.8	0.4-0.5	4	Northeast– Southwest	(AA4). A cluster of pits (C8.1–C8.3/C8.6/C8.7) and two linear ditches (C8.4/C8.5) were identified at the centre of the trench. Several fragments of medieval pottery were observed within the fills of the pits. Interpreted as part of medieval settlement. The natural ground consists of a light brown silty clay with moderate stone inclusion.
9	20	1.8	0.5	4	North–South	(AA5). Four linear ditches (C9.1–C9.4) were recorded running across the trench on an east—west alignment. Fragments of medieval pottery were observed within the fills of all the ditches. Interpreted as part of medieval settlement. The natural ground consists of a light brown stony silty clay.
10	20	1.8	0.5	4	North–South	(AA5). A shallow linear feature (C10.1) was identified in the centre of trench running north—south for 4.7m. Interpreted as part of a medieval settlement. The natural ground consists of light brown orangey clay with moderate stone inclusions.
11	10	1.8	0.5	4	East–West	No Archaeology found. Two linear ditches (C11.1–C11.2) were identified within the trench. Ditch C11.1 measures0.8m wide and 0.22m deep, with steep sides and a concave base. Ditch C11.2 measures 1.2m wide and 0.25m deep, with sloping sides and flat base. Both ditches are filled by sterile light brown silty clays and are being interpreted as agricultural ditches. The natural ground consists of a light grey stony clay with frequent stone inclusions.
12	90	1.8	0.45- 0.6	4	North–South	(AA5). A linear feature (C12.1) running northwest–southeast was identified at the southern end of the trench. Animal bone and charcoal inclusions were observed within the fill. Interpreted as part of a medieval settlement. The natural ground consists of a light grey stony clay with frequent stone inclusions.
13	15	1.8	0.45	4	Northwest – Southeast	(AA5). A linear feature (C13.1) running east—west was identified at the northern side of the trench. Frequent animal bone

TRENCH	LENGTH (m)	WIDTH (m)	DEPTH (m)	Field	ORIENTATION	DETAILS
						was observed within the fill. Interpreted as part of a medieval settlement. The natural ground consists of a mid-grey stony clay with frequent stone inclusions.
14	20	1.8	0.5	4	North–South	No Archaeology found. The natural ground consists of soft light brown clay changing to a dark grey clay.
15	20	1.8	0.5	4	Northeast— Southwest	No Archaeology found. The natural ground consists of a hard light grey stony clay with frequent stone inclusions and patches of orangey brown clay.
16	10	1.8	0.4-0.6	4	East–West	No Archaeology found. Two ditches (C16.1, C16.2) running north—south was identified at the centre of the trench. They measure 1.2—1.4m wide and 0.1—0.15m deep; and are filled by sterile light brown silty clay layers. Interpreted as possible field boundaries or drainages ditches. The natural ground consists of a stony grey clay at the eastern half of the trench changing to a light brown clay to the west.
17	30	1.8	0.4-05	4	North–South	No Archaeology found. The natural ground consists of bedrock with patches of orangey brown clay.
18	30	1.8	0.2-0.4	4	North–South	No Archaeology found. The natural ground consists of bedrock with patches of orangey brown clay.
19	10	1.8	0.4-0.5	4	North–South	No Archaeology found. The natural ground consists of bedrock.
20	20	1.8	0.3-0.5	4	East–West	No Archaeology found. It was targeting a geophysical anomaly (response n. 15). The natural consists of bedrock with patches of orangey brown clay.
21	20	1.8	0.4-0.6	4	East–West	No Archaeology found. The natural consists of bedrock with patches of orangey brown clay.
22	10	1.8	0.3-0.4	4	Northeast – Southwest	No Archaeology found. The natural consists of bedrock with patches of orangey brown clay.
23	30	1.8	0.3-0.5	4	North–South	No Archaeology found. The natural consists of bedrock with patches of orangey brown clay.
24	20	1.8	0.5	2	Northeast— Southwest	(AA3). A ditch (C24.1) running northwest—southeast was recorded across the centre of the trench. It has a nearly V-shaped profile, with steep sides and a concave base. Filled by a stony mid orange brown clay with occasional shells and animal bone inclusions. Interpreted as a potential archaeological ditch. A

TRENCH	LENGTH (m)	WIDTH (m)	DEPTH (m)	Field	ORIENTATION	DETAILS
						second ditch (C24.2) was observed running in parallel. It is shallow and filled by a mid-brown clay, with small stone and occasional bone inclusion. Interpreted as agricultural in nature The natural consists of bedrock with patches of orangey brown clay.
25	20	1.8	0.4-0.6	2	Northeast— Southwest	(AA3). A ditch (C25.1) running northwest—southeast was recorded across the centre of the trench. It has a nearly V-shaped profile, with steep sides and a concave base. It measures 0.9m deep and is filled by two fills. Interpreted as a potential archaeological ditch. A second ditch(C25.)2 was observed running in parallel. It is shallow and filled by a mid-brown clay, with snail shell and occasional small stone inclusion. Interpreted as agricultural in nature The natural consists of bedrock with patches of orangish brown clay.
26	15	1.8	0.5-0.7	2	North–South	(AA3). A ditch (C26.1) running west—east was recorded at the centre of the trench. It has a nearly V-shaped profile, with steep sides and a concave base. It measures 0.9m deep and is filled by two fills. Interpreted as a potential archaeological ditch. A second ditch (C26.2) was observed running in parallel. It is shallow and filled by a mid-brown clay, with snail shell and occasional small stone inclusions. Interpreted as agricultural in nature. The natural consists of bedrock with patches of orangey brown clay.
27	20	1.8	0.5	2	East–West	No Archaeology found. The natural ground consists of bedrock with patches of orangey brown clay.
28	30	1.8	0.45	2	East–West	No Archaeology found. The natural consists of bedrock with patches of orangey brown clay.
29	50	1.8	0.4-0.6	2	East–West	No Archaeology found. The natural consist of bedrock with patches of orangey brown clay.
30	10	1.8	0.4	2	West–East	(AA2). A curving ditch (C30.1) was recorded at the centre of the trench. Interpreted as the western extent of a ring-ditch of probable prehistoric date. The natural ground consists of bedrock with patches of orangey brown clay.
31	10	1.8	0.4	2	North–South	(AA2). A curving ditch (C31.1) was recorded at the centre of the trench. Interpreted as the western extent of a

TRENCH	LENGTH (m)	WIDTH (m)	DEPTH (m)	Field	ORIENTATION	DETAILS
						ring-ditch. A few sherds of prehistoric pottery were observed within the fill, suggesting a prehistoric chronology. The natural ground consists of bedrock with patches of orangey brown clay.
32	60	1.8	0.4	2	West–East	No Archaeology found. The natural ground consists of bedrock with patches of orangey brown clay.
33	60	1.8	0.4	2	West–East	No Archaeology found. The natural ground consists in bedrock with patches of orangish brown clay.
34	30	1.8	0.4	2	Northwest– Southeast	(AA1). Four linear ditches (C34.1–C34.4) were identified across the trench. Three of the ditches align with the ditched enclosure identified in the geophysical survey. A few fragments of medieval pottery were observed within the fills of the ditches. Interpreted as being part of a medieval enclosure/settlement complex. The natural ground consists of a light brown stony clay and bedrock.
35	60	1.8	0.4	5	Southwest – Northeast	No Archaeology found. The natural ground consists of a light brown clay and hard stony grey clay.
36	20	1.8	0.4	5	Northwest – Southeast	(AA7). A ditch (C36.1) was recorded at the northern end of the trench. It has a V-shaped profile and measures 0.8m deep. A few sherds of medieval pottery were observed within the fills. Interpreted as a potential medieval ditch. The natural ground consists of a light brown clay and hard stony grey clay.
37	15	1.8	0.4-0.6	1	West–East	No Archaeology found. The natural ground consists of a light brown clay and hard stony grey clay.
38	150	1.8	0.4-0.6	1	West–East	No Archaeology found. A ditch (C38.1) running north—south was identified in the centre of the trench. It aligns with a geophysical anomaly interpreted as a possible early field system ditch. It contains two fills in which snail shell and animal bone were observed. A further shallow ditch, 1.35m wide and 0.22m deep, was identified at the western half of the trench. It is filled by frequent medium stone and is interpreted as a drainage ditch. The natural ground consists of a light brown clay and hard stony grey clay.
39	180	1.8	0.4-0.6	1	West–East	No Archaeology found. A drainage ditch was identified at the eastern end of the

TRENCH	LENGTH (m)	WIDTH (m)	DEPTH (m)	Field	ORIENTATION	DETAILS
						trench. It measures 1.5m wide, 0.37m deep and is filled with a firm grey clay with frequent medium stones and snail shells inclusions. The natural ground consists of a light brown clay and hard stony grey clay.
40	90	1.8	0.5	1	West–East	No Archaeology found. The natural ground consists of a light brown and grey stony clay with frequent stone inclusions.
41	20	1.8	0.5	1	Southwest – Northeast	No Archaeology found. A linear feature was noted at the northern end of the trench. It measures 0.54m wide, 0.1m deep and is filled by a dark grey clay. Interpreted as an agricultural furrow. The natural consists of a light brown clay.
42	30	1.8	0.5	1	West–East	(AA10). Two hearths/kilns (C42.1-2) were identified at the centre of the trench. Scorched orange burnt clay was observed on the base of the features and they are filled by dark silty clays with frequent charcoal. A ditch (C42.3) was identified in the eastern half of the trench. It aligns with a geophysical anomaly interpreted as a possible early field system ditch Interpreted as agricultural in nature and may represent a field boundary. The natural consists of a light brown clay and stony grey clay.
43	110	1.8	0.5	1	West–East	No Archaeology found. A ditch (C43.1) was recoded at the centre of the trench. It measures 1.7m wide, 0.5m deep and is filled by a soft brown clay with occasional snail shell and stone inclusions. It aligns with a geophysical anomaly (early field system) also found in Trenches 38 and 42. Interpreted as agricultural in nature and may represent a field boundary. The natural ground consists of a light brown clay changing to a stony grey clay.
44	10	1.8	0.5	1	North–South	No Archaeology found. The natural ground consists of a mid-brown clay with patches of bedrock.
45	30	1.8	0.6	1	North–South	No Archaeology found. The natural ground consists of a mid-brown clay with patches of bedrock.
46	70	1.8	0.5	1	West–East	No Archaeology found. A ditch was observed at the centre of the trench. It measures 2m wide, 0.3m deep and is filled by a sterile light brown silty clay. Interpreted as a drainage ditch. The

TRENCH	LENGTH (m)	WIDTH (m)	DEPTH (m)	Field	ORIENTATION	DETAILS
						natural ground consists of a mid-brown clay with bedrock patches.
47	110	1.8	0.45	1	West–East	No Archaeology found. Two north—south aligned ditches were recorded at the centre of the trench The eastern ditch (C47.2) aligns with a geophysical anomaly (early field system). The two ditches are interpreted as agricultural in nature and may represent former field boundaries. The natural ground consists of an orangey brown clay with patches of firm stony grey clay/bedrock.
48	130	1.8	0.6	1	West–East	No Archaeology found. Two shallow linear features were recorded at the centre of the trench that are filled with brown silty clays with frequent stone inclusions. Interpreted as agricultural drainage ditches. The natural ground consists of a mid-brown clay with patches of firm stony grey clay.
49	50	1.8	0.45	2	Southwest– Northeast	No Archaeology found. The natural consists of bedrock with patches of orangey brown clay.
50	20	1.8	0.4	2	Northwest – Southeast	(AA1). Two ditches (C50.1 & C50.4) and two pits (C50.2 &C50.3) were identified in the trench. Interpreted as being part of a medieval enclosure/settlement. The natural consists of an orangey brown clay with patches of stony grey clay and occasional bedrock.
51	40	1.8	0.5	2	Northwest – Southeast	(AA1). Four linear ditches (C51.1, C51.4–6) and two pits (C51.2 &C51.3) were identified in the trench. Interpreted as being part of a medieval enclosure/settlement. The natural consists of an orangey brown clay with patches of stony grey clay and occasional bedrock.
52	30	1.8	0.5-0.6	2	Northwest – Southeast	(AA1). Three linear ditches (C52.1–C52.3) were identified in the trench. Interpreted as being part of a medieval enclosure/settlement. The natural consists of an orangey brown clay with patches of stony grey clay and occasional bedrock.
53	30	1.8	0.4	2	Northeast— Southwest	(AA1). A ditch (C53.1) was recorded running northwest—southeast across the centre of the trench. Interpreted as being part of a medieval enclosure/settlement. The natural consists of an orangey brown clay with patches of stony grey clay and occasional bedrock.

TRENCH	LENGTH (m)	WIDTH (m)	DEPTH (m)	Field	ORIENTATION	DETAILS
54	30	1.8	0.4	2	Northwest– Southeast	(AA1). Four linear ditches (C54.1–C54.4) were identified across the trench. Interpreted as being part of a medieval enclosure/settlement. A modern disturbance with iron wires was observed in the centre of the trench. The natural consists of an orangey brown clay with patches of stony grey clay and occasional bedrock.
55	15	1.8	0.5	2	West–East	(AA1). A large pit (C55.1) was identified at the centre of the trench. Interpreted as a cistern pit associated with a medieval enclosure/settlement. The natural consists of an orangey brown clay with stony grey clay and occasional bedrock.
56	120	1.8	0.4	2	Southwest – Northeast	No Archaeology found. Modern disturbances were identified across the southwest half of the trench. The natural consists of an orangey brown clay with stony grey clay and occasional bedrock.
57	80	1.8	0.2-0.5	2	Southwest – Northeast	No Archaeology found. The natural consist in orangish brown clay with stony grey clay and occasional bedrock.
58	40	1.8	0.4-0.5	2	North–South	(AA1). Three ditches (C58.1–C58.4) and a pit (C58.3) were identified across the trench. Interpreted as being part of a medieval enclosure/settlement. The natural consists of an orangey brown clay with patches of stony grey clay and occasional bedrock.
59	20	1.8	0.4	2	North–South	(AA1). A ditch (C59.1) was recorded at the centre of the trench. Interpreted as being part of a medieval enclosure/settlement. The trench was slightly shorter due to overhead power lines. The natural consists of an orangey brown clay with patches of stony grey clay and occasional bedrock.
60	30	1.8	0.5	2	Northwest – Southeast	(AA1). Three linear ditches (C60.1, C60.4 & C60.8)-, two hearths (C60.3 & C60.5) and three pits (C60.2, C60.6, C60.7) were identified across the trench. Interpreted as being part of a medieval enclosure/settlement s. The natural consists of an orangey brown clay with patches of stony grey clay and occasional bedrock.
61	20	1.8	0.5	1	Northwest– Southeast	No Archaeology found. Two ditches (C61.1&C61.2) were identified within the trench. Their location aligns with targeted geophysical anomalies (early field system). Interpreted as made

TRENCH	LENGTH (m)	WIDTH (m)	DEPTH (m)	Field	ORIENTATION	DETAILS
						agricultural in nature and may represent former field boundaries or drainage ditches. The natural consists of an orangey brown clay with stony grey clay and occasional bedrock.
62	25	1.8	0.6	1	Northwest— Southeast	No Archaeology found. Two ditches-(C62.1 &C62.2) were identified across the trench. Their location aligns with targeted geophysical anomalies (early field system). Interpreted as agricultural in nature and may represent former field boundaries or drainage ditches. The natural consists of an orangey brown clay with stony grey clay and occasional bedrock.
63	20	1.8	0.5-0.6	2	Northwest– Southeast	(AA12). An isolated hearth/kiln (C63.1) and two ditches (C63.2&C63.3) were identified in the trench. The hearth/kiln (C63.1) has scorched burnt clay on the base and is filled by a dark silty clay with frequent charcoal. The two ditches are interpreted as agricultural in nature and may represent former field boundaries or drainage ditches. The natural consists of an orangey brown clay with stony grey clay and occasional bedrock.
64	160	1.8	0.5	1	West–East	No archaeology found. A narrow linear feature (C64.1) and a linear ditch (C64.2) were identified across the trench. Their location aligns with targeted geophysical anomalies (early field system). Interpreted as agricultural in nature and may represent field boundaries or drainages. The natural consists of an orangey brown clay with patches of stony grey clay and occasional bedrock.
65	180	1.8	0.4	1	West–East	(AA11). An isolated hearth/kiln (C65.2) was identified at the centre of the trench. It has scorched burnt clay on the base and is filled with a dark silty clay with frequent charcoal. A linear feature (C65.)1 and ditch (C65.3) were also identified across the trench. Their location aligns with targeted geophysical anomalies (early field system). Interpreted as agricultural in nature and may represent former field boundaries or drainage ditches. The natural consists of an orangey brown clay with patches of stony grey clay and occasional bedrock.
66	15	1.8	0.6	1	West–East	No archaeology found. A small furrow of no archaeological significance was

TRENCH	LENGTH (m)	WIDTH (m)	DEPTH (m)	Field	ORIENTATION	DETAILS
						observed within the trench. The natural consists of an orangey brown clay with patches of stony grey clay and occasional bedrock.
67	20	1.8	0.3-0.4	5	Northwest– Southeast	(AA6). A ditch (C67.1) was identified at the centre of the trench. Fragments of green glazed medieval pottery were observed within the fills. Interpreted as a medieval ditch. A second ditch (C67.2) running in parallel was identified as a modern ditch. The natural consists of an orangey brown clay with stony grey clay and occasional bedrock.
68	20	1.8	0.3	5	Northwest– Southeast	(AA6). A ditch (C68.1) was identified at the centre of the trench. Fragments of green glazed medieval pottery were observed within the fills. Interpreted as a medieval ditch. A second ditch (C68.2) running in parallel was identified as a modern ditch. The natural consists of an orangey brown clay with stony grey clay and occasional bedrock.
69	50	1.8	0.3	5	Southwest – Northeast	No Archaeology found. Two shallow linear features were observed within the trench. Interpreted as agricultural in nature. The natural consists of an orangey brown clay with stony grey clay and occasional bedrock.
70	10	1.8	0.4-0.6	5	Northwest– Southeast	No Archaeology found. A shallow linear feature was observed within the trench. Interpreted as an agricultural furrow without archaeological significance. The natural consists of an orangey brown clay with patches of stony grey clay and occasional bedrock.
71	100	1.8	0.4-0.5	5	Southwest – Northeast	(AA7). A small circular pit (C71.1) and a hearth/kiln (C71.2) were identified at the northeast of the trench. A ditch (C71.3) was observed at the southwest end of the trench and is interpreted as an agricultural ditch. The natural consists of an orangey brown clay with patches of stony grey clay and occasional bedrock.
72	93	1.8	0.5	4	North–South	(AA13). Two oval pits of unknown function (C72.1 & C72.2) located 10m apart were identified at the southern end of the trench. The natural consist predominantly of bedrock with some orangey brown clay.
73	90	1.8	0.4	4	North–South	No Archaeology found. The natural consists predominantly of bedrock with some orangey brown clay.

TRENCH	LENGTH (m)	WIDTH (m)	DEPTH (m)	Field	ORIENTATION	DETAILS
74	90	1.8	0.5	4	North–South	No Archaeology found. The natural consists predominantly of bedrock with some orangey brown clay.
75	38	1.8	0.5	5	Northeast – Southwest	No Archaeology found. A west—east aligned field drain was noted at the south of the trench The natural consists predominantly of greyish brown clay.
76	32	1.8	0.45	5	Northwest – Southeast	No Archaeology found. A north–south aligned field drain was noted at the west of the trench. The natural consists predominantly of greyish brown clay.
77	34.5	1.8	0.4	5	Northwest – Southeast	No Archaeology found. A west—east aligned field drain was noted at the east of the trench. The natural consists predominantly of greyish brown clay.
78	96.5	1.8	0.3	5	Northeast– Southwest	No Archaeology found. The natural consist predominantly of bedrock with some orangey brown clay.
79	100	1.8	0.45	5	Northeast– Southwest	No Archaeology found. Two field drains were noted at the south of the trench. The natural consist predominantly of bedrock with some orangey brown clay.
80	100	1.8	0.5	5	Northeast– Southwest	No Archaeology found. Two field drains were noted at the south of the trench. The natural consist predominantly of bedrock with some orangey brown clay.

APPENDIX 2 CONTEXTS

CONTEXT NO.	TRENCH NO.	DESCRIPTION
C2.1	2	A pit with a well-defined circular shape in plan, measuring 0.85m in diameter and 0.1m deep. Filled by a mid-brown silty clay with small flecks of charcoal. Interpreted as a potential archaeology in AA8 .
C3.1	3	A rectangular hearth/kiln measuring 2.1m long, 1.15m wide and 0.24m deep. It has vertical sides and a flat base. It contains four fills with scorched orangish red burnt clay at the base. Two layers of black silty clay with frequent charcoal were separated by thin layer of yellow silty clay. A midbrown silty clay with moderate charcoal was recorded on top. Interpreted as a kiln with potential archaeological significance in AA9.
C8.1	8	An oval pit measuring 0.9m long, 0.65m wide and 0.1m deep. Filled by a mid to dark greyish brown silty clay with frequent stones, occasional charcoal and sherds of medieval pottery. Interpreted as being part of a medieval settlement in AA4 .
C8.2	8	A sub-oval pit measuring 0.6m long and 0.5m wide. Filled by a mid-greyish brown silty clay with occasional flecks of charcoal. Interpreted as being part of a medieval settlement in AA4 .
C8.3	8	An elongated oval pit measuring1.15m long and0.6m wide. Filled by a midgrey silty clay with frequent charcoal. Interpreted as being part of a medieval settlement in AA4 .
C8.4	8	A linear feature that measures at least 1.8m long, 0.6m wide and 0.2m deep. Filled by a light greyish brown silty clay with occasional charcoal. Interpreted as being part of a medieval settlement in AA4 .
C8.5	8	Ditch orientated east—west across the trench. Measuring at least 1.8m long, 1.25m wide and 0.42m deep. Filled by a light brown silty clay with occasional charcoal, animal bone, iron fragments and medieval pottery. Interpreted as being part of a medieval settlement in AA4 .
C8.6	8	Rectangular pit measuring 1m long and 0.57m wide. Filled by a mid-grey silty clay with frequent animal bone and charcoal inclusions. Interpreted as being part of a medieval settlement in AA4 .
C8.7	8	Large oval pit/spread measuring 4.2m long by 4m wide and 0.1m deep. Filled by a dark black silty clay with frequent charcoal, animal bone and glazed medieval pottery. Interpreted as being part of a medieval settlement in AA4 .
C9.1	9	Linear ditch that measures at least 1.8m long and 1.2m wide. Filled by a dark grey clayey silt with frequent charcoal and a few medieval sherds of pottery. Interpreted as being part of medieval settlement in AA5 .
C9.2	9	Ditch that measures at least 1.8m long, 0.75m wide and 0.3m deep. It has steep sides, a concave base and is filled by a dark grey silty clay with frequent charcoal and glazed medieval pottery. Interpreted as being part of medieval settlement in AA5 .
C9.3	9	Ditch that measures at least 1.8m long, 0.8m wide and 0.1m deep. Filled by a mid-grey silty clay with occasional charcoal and medieval pottery. Interpreted as being part of medieval settlement in AA5 .
C9.4	9	Ditch that measures at least 1.8m long, 0.6m wide and 0.08m deep. Filled by a mid-grey silty clay with charcoal and occasional medieval pottery. Interpreted as being part of medieval settlement in AA5.
C10.1	10	Linear feature that measures 4.7m long, 0.5m wide and 0.06m deep. It has gradually sloping sides and a flat base. Filled by a mid-grey silty clay with

		frequent charcoal and occasional medieval pottery. Interpreted as being part of medieval settlement in AA5 .
C11.1	11	A ditch that measures at least 1.8m long, 0.8m wide and 0.22m deep. It has steep sides, a concave base and is filled by a light orangey brown silty clay. Interpreted as agricultural in nature and may represent a drainage ditch or former field boundary. Possible associated with Ditch C16.1 in Trench 16.
C11.2	11	A ditch that measures at least 1.8m long, 1.2m wide and 0.25m deep. It has well sloped sides with a flat base and is filled by a sterile mid-brown silty clay. Interpreted as agricultural in nature and may represent a drainage ditch or former field boundary. Possible associated with Ditch C16.2 in Trench 16.
C12.1	12	A linear feature orientated northwest—southwest that extends outside the trench. It has an exposed length of 1.6m long, and measures 0.7m wide and 0.27m deep. It has steep sides, a concave base and is filled by a mid-reddish brown stony sandy clay with charcoal and animal bone inclusions. Interpreted as being part of medieval settlement in AA5 .
C13.1	13	A linear feature orientated east—west extends outside limit of the trench. It has an exposed length of 1.2m long and measures 0.5m wide and 0.2m deep. It has steep sides, a concave base and is filled by a mid-grey clay with frequent animal bone inclusions. Interpreted as being part of medieval settlement in AA5 .
C16.1	16	Ditch that measures 1.8m long, 1.4m wide and 0.15m deep. It has sloping sides, a flat base and is filled by a sterile light orangey brown silty clay. Interpreted as agricultural in nature and may represent a drainage ditch or former field boundary. Possible associated with Ditch C11.1 in Trench 11.
C16.2	16	Ditch that measures 1.8m long, 1.2m wide and 0.1m deep. It has sloping sides, a flat base and is filled by a sterile light brown silty clay. Interpreted as agricultural in nature and may represent a drainage ditch or former field boundary. Possible associated with Ditch C11.2 in Trench 11.
C24.1	24	Ditch = that measures 1.8m long, 1.9m wide and 0.9m deep. It has a nearly V-shaped profile, with steep sides and a concave base. Filled by two fills of which the uppermost consists of a 0.5m thick mid orangey brown clay with occasional animal bone, shell and charcoal. A basal dark greyish brown silty clay fill with frequent stone, animal bone and charcoal inclusions was also recorded. Associated with ditches C25.1 and C26.1. Interpreted as a ditch with potential archaeological significance in AA3.
C24.2	24	Ditch that measures 1.8m long, 1.52m wide and 0.35m deep. It has a, sloping sides and an uneven base. Filled by a mid-brown clay with small stone and occasional bone inclusions. Associated with ditches C25.2 and C26.2. Interpreted as agricultural n nature.
C25.1	25	Ditch that measures 1.8m long, 1.43m wide and 0.9m deep. It has a nearly V-shaped profile, with steep sides and a concave base. Contains two fills the uppermost of which consists of a 0.5m thick mid orangey brown clay with occasional animal bone, shell and charcoal inclusions. A basal dark greyish-brown silty clay with frequent stone, animal bone and charcoal inclusions was also recorded. Associated with ditches C24.1 and C26.1. Interpreted as a ditch with potential archaeological significance in AA3.
C25.2	25	Ditch that measures 1.8m long, 1.6m wide and 0.3m deep. It has a sloping sides and an uneven base. Filled by a mid-brown clay with small stone and occasional animal bone and snail shell inclusions. Associated with ditches C24.2 and C26.2. Interpreted as agricultural in nature.
C26.1	26	Ditch that measures 1.8m long, 1.7m wide and 0.9m deep. It has a nearly V-shaped profile, with steep sides and a concave base. Contains two fills the

		uppermost of which consists of a 0.5m thick mid-orangey brown clay with occasional animal bone, shell and charcoal inclusions. A basal dark greyish brown silty clay with frequent stone, animal bone and charcoal inclusions
		was also recorded. Associated with ditches C24.1 and C25.1. Interpreted as a ditch with potential archaeological significance in AA3 .
C26.2	26	Ditch that measures 1.8m long, 2.7m wide and 0.08m deep. It has sloped sides and an uneven base. Filled by a mid-brown clay with small stone and occasional animal bone and snail shell inclusions. Associated with ditches C24.2 and C25.2. Interpreted as agricultural in nature.
C30.1	30	Ring ditch that has a diameter of 11m and measures 2.6m wide and is filled by a light brown clay. Same as Ringditch C31.1. Interpreted as a ring ditch with archaeological significance in AA2.
C31.1	31	Ring ditch that has a diameter of 11m and measures 2.44m wide and 1.1m deep. It has a U-shaped profile with steep sides and a concave base and contains 6 fills. A sloped layer of greyish brown silty clay was located at the north side of the ditch (internal side of the ring ditch). A stony layer of sandy clay with animal bone and prehistoric pottery was found on the base of the ditch. Two layers of gravely clay with stones and one of silty clay were recorded at the middle and a light brown clay was recorded at the top. Same as Ringditch C30.1. Interpreted as a ring ditch with archaeological significance in AA2.
C31.2	31	Shallow pit that measures 0.8m long, 0.6m wide and 0.08m deep. It has an oval shape in plan, with gently sloped sides and a flat base. Filled by a soft dark brown clay with frequent animal bone and charcoal inclusions. Located a few meters outside of the ring ditch C31.1. Interpreted as a pit and probably associated with the ring ditch in AA2 .
C34.1	34	Ditch that measures 1.26m wide and 0.5m deep. It has well sloped edges and a concave base. Filled by a friable mid-orangey brown silty clay with frequent shell and animal bone inclusions. Interpreted as part of a medieval enclosure/settlement in AA1 .
C34.2	34	Ditch that measures 1.62m wide and 0.22m deep. It has gently sloping sides, an uneven base and is filled by a firm brown clay with frequent snail shell. Interpreted as part of a medieval ditch enclosure/settlement in AA1 .
C34.3	34	Ditch that measures 1.43m wide and 0.45m deep. It has steep sides and a concave base. Filled by a firm mid-brown clay with occasional snail shell and animal bone inclusions. Green glazed medieval pottery was observed within the fill. Interpreted as part of a medieval ditched enclosure/settlement in AA1.
C34.4	34	Ditch that measures 1.2m wide and 0.24m deep. It has gradually sloping sides, a flat base and is filled by a firm light-brown clay. Interpreted as part of a medieval enclosure/settlement in AA1 .
C36.1	36	Ditch that measures 1.9m wide and 0.8m deep. It has steep sides and a V-shaped profile. Filled by a firm light brown clay with frequent snail shell, small stone and medieval pottery inclusions. Interpreted as a medieval ditch in AA7.
C38.1	38	Ditch that measures 1.6 wide and 0.76m deep. It has steep sides and a flat base. Contains two fills, the uppermost of which consists of a friable greyish-brown silty clay with moderate small sub-angular stones, occasional animal bone and frequent snail shell inclusions. The basal fill is a dark grey silty clay with frequent snail shell and occasional small stone. Located at the northwest of field 1, the ditch aligns with a targeted geophysical anomaly (early field system). Interpreted as a former field boundary.
C42.1	42	A hearth/kiln identified on the centre of the trench measures 1.35m long,

		0.8m wide and 0.08m deep. It has gently sloping sides with a flat base. Scorched orange burnt clay was observed on the base and it is filled by a loose dark grey clay with frequent charcoal inclusions. Interpreted as a kiln/hearth within a cluster with potential archaeological significance in AA10.
C42.2	42	A hearth/kiln identified on the western end of the trench measures 1.14m long, 0.58m wide and 0.2m deep. It has well sloping sides with a slightly concave base. Scorched orange burnt clay was observed on the base and it is filled by a greyish brown silty clay with frequent flecks of charcoal. Interpreted as a hearth/kiln with potential archaeological significance in AA10.
C42.3	42	Ditch identified at the eastern side of trench that measures 1.7m wide and is filled by a greyish brown silty clay with frequent snail shell. Located at the centre of field 1, the ditch aligns with a targeted geophysical anomaly (early field system). Interpreted as a former field boundary.
C43.1	43	Ditch identified at the centre of the trench that measures 1.7m wide and 0.5m deep. It has steep sides and a flat base. Filled by a friable mid-orangey brown clay with occasional snail shell and small stone inclusions. Located at the centre of field 1, the ditch aligns with a targeted geophysical anomaly (early field system). Interpreted as a former field boundary.
C47.1	47	Ditch identified at the eastern side of trench that measures 1.8m wide and 0.48m deep. It has steep sides, a concave base and is filled by a friable greyish brown silty clay with occasional shell and stone inclusions. Located at the centre of field 1, the ditch aligns with a targeted geophysical anomaly (early field system). Interpreted as a former field boundary.
C47.2	47	Ditch that measures 1.6m wide and 0.6m deep. It has steep sides, a concave base and is filled by a loose mid-greyish brown silty clay with stone and moderate snail shell inclusions. Interpreted as made agricultural in nature and may represent a former field boundary.
C50.1	50	Ditch that measures 1.46m wide and 0.35m deep. It has steep sides, a flat base and is filled by a firm mid-brown clay with moderate snail shell. Interpreted as part of a medieval enclosure/settlement in AA1 .
C50.2	50	Pit recorded at the eastern side of the trench that is circular in plan and measures 1m in diameter and 0.3m deep. It has near vertical sides, a flat base and is filled with a firm mid-orangey grey clay with frequent charcoal inclusions. Interpreted as a pit associated with a medieval enclosure/settlement in AA1.
C50.3	50	Large oval pit recorded at the centre of the trench that measures 3.9m long, 3.3m wide and 0.11m deep. It has gradually sloping sides, a flat base and is filled by a soft dark grey clay with frequent charcoal and occasional shell and animal bone inclusions. Interpreted as a pit associated with a medieval enclosure/settlement in AA1 .
C50.4	50	Curved ditch with an exposed length of 5.6m, measuring 1.55m wide and 0.24m deep. It has a steep side at the northwest and well sloping side at the southeast and a concave base. Filled by a light brown silty clay with frequent shell, occasional animal bone and charcoal inclusions. A few sherds of medieval pottery were observed within the ditch. Interpreted as part of a medieval enclosure/settlement in AA1 .
C51.1	51	Ditch that measures 1.7m wide, 0.38m deep and is filled by a mid-orangey brown firm clay with frequent stone and occasional snail shell inclusions. It has well sloping sides with a flattish base. Interpreted as part of a medieval enclosure/settlement in AA1 .
C51.2	51	Large shallow pit that extends outside the trench and measures 4.3m long,

		0.9m of exposed width and 0.06m deep. It has imperceptible breaks of slope, very sloped sides and a flat base. Filled with a friable mid-greyish brown clay with occasional animal bone and frequent snail shell inclusions. Interpreted as a pit associated with a medieval enclosure/settlement in AA1.
C51.3	51	An oval pit extends outside the trench and measures 0.92m long, 0.8m wide and 0.2m deep. It has steep sides, an uneven base and is filled by a midgreyish brown clay with frequent stones, moderate charcoal and reddish burnt clay inclusions. Interpreted as a pit associated with a medieval enclosure/settlement in AA1 .
C51.4	51	Ditch that measures 1.4m wide, 0.42m deep and is filled by an orangey brown clay with occasional flecks of charcoal and moderate snail shell inclusions. Interpreted as part of a medieval enclosure/settlement in AA1 .
C51.5	51	Ditch that measures 2.1m wide, 0.6m deep and is filled by a mid-orange brown clay with flecks of charcoal and moderate snail shell inclusions. Interpreted as part of a medieval enclosure/settlement in AA1 .
C51.6	51	Shallow ditch that measures 1.2m wide, 0.1m deep and is filled by a midbrown firm clay with animal bone inclusions. Interpreted as part of a medieval enclosure/settlement in AA1 .
C52.1	52	Ditch that measures 2.7m wide, 0.48m deep and is filled by a mid-orangey brown clay with occasional shell, animal bone and medieval pottery inclusions. It has a steep side to the east and sloped side to the west and an uneven base. Interpreted as part of a medieval enclosure/settlement in AA1.
C52.2	52	Ditch that measures 1.85m wide, 0.9m deep and is filled by a mid-orangey brown clay with occasional stone and shell inclusions. It has near vertical sides and a concave base. Interpreted as part of a medieval enclosure/settlement in AA1 .
C52.3	52	Ditch that measures 1.6m wide, 0.44m deep and is filled by a mid-brown clay with moderate flecks of charcoal, occasional snail shell and medieval pottery inclusions. It has steep sides and a flat base. Interpreted as part of a medieval enclosure/settlement in AA1 .
C53.1	53	A northwest–southeast aligned ditch that measures 1.8m wide, 0.56m deep and is filled by a friable mid-greyish brown clay with frequent animal bone, snail shell and one sherd of medieval pottery was observed within. It has steep sides and a flat base. Interpreted as part of a medieval enclosure/settlement in AA1 .
C54.1	54	Ditch that measures 1m wide, 0.19m deep and is filled by a friable midbrown clay with occasional shell inclusions. It has gently sloping sides and a flat base. Interpreted as part of a medieval enclosure/settlement in AA1 .
C54.2	54	Ditch that measures 1.5m wide, 0.48m deep and is filled by a mid-greyish brown firm clay with occasional small angular stone and shell inclusions. It has steep sides and a flat base. Interpreted as part of a medieval enclosure/settlement in AA1 .
C54.3	54	Ditch that measures 1.65m wide, 0.2m deep and is filled by a greyish brown silty clay with frequent charcoal flecks, shell and occasional animal bone inclusions and a few sherds of medieval pottery were also observed within. It has gently sloping sides and a flat base. Interpreted as part of a medieval enclosure/settlement in AA1 .
C54.4	54	Ditch that measures 0.85m wide, 0.11m deep and is filled by a firm sterile mid-orangey brown clay. It has gently sloping sides and a flat base. Interpreted as part of a medieval enclosure/settlement in AA1 .
C55.1	55	A large pit identified at the centre of the trench that measures 4.1m

		long,3.9m wide and 0.57m deep. It has sharp steep sides with a sloped base and is filled by a mid-greyish brown clay with occasional stone, animal bone and medieval pottery inclusions. Interpreted as a cistern pit associated with a medieval enclosure/settlement in AA1 .
C58.1	58	Ditch that measures 2.28m wide, 0.6m deep and is filled by a firm mid brown clay with moderate shell, animal bone and green glazed medieval pottery inclusions. It has well sloping sides and an uneven base. Interpreted as part of a medieval enclosure/settlement in AA1 .
C58.2	58	Ditch that measures 1.2m wide, 0.58m deep and is filled by a firm midorangey brown clay with moderate stone, shell and glazed medieval pottery inclusions. It has near vertical sides and a flat base. Interpreted as part of a medieval enclosure/settlement in AA1 .
C58.3	58	Oval pit extending outside the trench that measures 1.8m long, 0.66m of exposed width and 0.13m deep. It has an imperceptible break of slope at the top, well sloping sides and a flat base. Filled by a friable mid-brown clay with occasional animal bone inclusions. Interpreted as part of a medieval enclosure/settlement in AA1 .
C58.4	58	Ditch that measures 2.67m wide, 0.6m deep and is filled by a firm greyish brown clay with frequent shell, moderate animal bone and green glazed medieval pottery inclusions. It has well sloping sides and a concave base. Interpreted as part of a medieval enclosure/settlement in AA1 .
C59.1	59	Ditch that measures 1.3m wide, 0.3m deep and is filled by a mid-orangey brown clay with frequent snail shell and occasional medieval pottery inclusions. It has a steep side at the east edge and a well sloped side to the west edge. Interpreted as part of a medieval enclosure/settlement in AA1.
C60.1	60	Ditch that measures 1.33 m wide, 0.35m deep and is filled by a mid-greyish brown clay with frequent snail shell and green glazed medieval pottery inclusions It has a gently sloping side on east edge and steep on the west, with a concave base. Interpreted as part of a medieval enclosure/settlement in AA1 .
C60.2	60	Large pit extending outside the trench that measures 3.06m long, 1.1m of exposed width and 0.15m deep. It has gently sloping sides and s flat base. Filled by a firm mid-grey clay with frequent flecks of charcoal and snail shell. Interpreted as part of a medieval ditched enclosure/settlement in AA1 .
C60.3	60	Small oval heat affected surface that measures 0.26m long and 0.15m wide. It consists of a firm orange burnt clay. Interpreted as a small hearth associated with a medieval ditched enclosure/settlement in AA1 .
C60.4	60	Ditch that measures 3.2m wide, 0.45m deep and is filled by a soft light brown clay with frequent stone, snail shell, flecks of charcoal, moderate animal bone and medieval pottery inclusions. It has well sloping sides and an uneven base. Interpreted as part of a medieval ditched enclosure/settlement in AA1 .
C60.5	60	Oval heat affected surface that extends outside the trench and measures 1.12m long and 0.86m of exposed width. It consists of burnt orange clay with patches of dark grey clay with frequent charcoal. Interpreted as a possible hearth associated with a medieval ditched enclosure/settlement in AA1.
C60.6	60	Large pit that extends outside the trench and measures 4.1m long, 1.8m of exposed width and 0.25m deep. It has imperceptible breaks of slope, well sloping sides and a flat base. Filled by a soft mid-greyish brown clay with snail shell and animal bone inclusions. Interpreted as a pit associated to a medieval ditched enclosure/settlement in AA1 .
C60.7	60	Subcircular pit that extends outside the trench and measures 1.26m long,

and a flat base. Filled by a soft greyish brown silty clay with frequent stones, occasional shell and green glazed medieval pottery inclusions. Interpreted as a pit associated with a medieval dirched enclosure/settlement in AA1. C60.8 60 Linear feature running into the southeast end of the trench. It has an exposed length of 7m and measures 0.5m wide and 0.1m deep. It has sloping sides with a concave base and is filled by a greyish brown silty clay with frequent shell, animal bone and medieval pottery inclusions. Interpreted as a all linear feature associated with a medieval dirched enclosure/settlement in AA1. C61.1 61 Ditch that measures 1.4m wide, 0.5m deep and is filled by a firm mid-brown clay with occasional flecks of charcoal. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C61.2 61 Ditch that measures 2.26m wide, 0.45m deep and is filled by a friable midgreyish brown clay with occasional shell. It has gradual breaks of slope, well sloping sides and a flat base. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C62.1 62 Ditch that measures 1.3m wide and is filled by a mid-brown clay. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C63.1 63 An isolated hearth/kiin that extends outside the trench. It has an exposed length (W-E) of 0.95m and measures 0.8m wide and 0.1m deep. It has gently sloping sides and a flat base with scortched reddened burnt clay at the base. Filled by a dark grey charcoal rich clay. Interpreted as a hearth/kiin with potential archaeological significance in AA12. C63.2 63 Ditch that measures 1m wide, 0.4m deep and is filled by a soft sterile light orangey brown clay. It has near vertical sides and a concave base. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C64.1 64 Linear feature that measures 1.65m wide, 0.45m deep and is filled by a soft light orange bitch. C65.2 65 Ditch			
exposed length of 7m and measures 0.5m wide and 0.1m deep, it has sloping sides with a concave base and is filled by a greyish brown silty clay with frequent shell, animal bone and medieval pottery inclusions. Interpreted as a linear feature associated with a medieval ditched enclosure/settlement in AA1. C61.1 61 Ditch that measures 1.4m wide, 0.5m deep and is filled by a firm mid-brown day with occasional flecks of charcoal. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C61.2 61 Ditch that measures 2.26m wide, 0.45m deep and is filled by a friable mid-greyish brown clay with occasional shell. It has gradual breaks of slope, well sloping sides and a flat base. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C62.1 62 Ditch that measures 1.3m wide and is filled by a mid-brown clay. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C62.2 62 Ditch that measures 1.4m wide and is filled by a light orangey brown clay. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C63.1 63 An isolated hearth/kiln that extends outside the trench. It has an exposed length (W–E) of 0.95m and measures 0.8m wide and 0.1m deep. It has gently sloping sides and a flat base with scorched reddened burnt clay at the base. Filled by a dark grey charcoal rich clay. Interpreted as a hearth/kiln with potential archaeological significance in AA12. C63.2 63 Ditch that measures 1m wide, 0.4m deep and is filled by a soft sterile light orangey brown clay. It has near vertical sides and a concave base. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C64.1 64 Linear feature that measures 0.35m wide and 0.16m deep. It has steep sides and a flat base. Interpreted agricultural in nature and may represent a former field boundary or drainage ditch. C65.1 65 Linear feature that measures 0.44m wide and 0			1.25m of exposed width and 0.11m deep. It has subtle gently sloping sides and a flat base. Filled by a soft greyish brown silty clay with frequent stones, occasional shell and green glazed medieval pottery inclusions. Interpreted as a pit associated with a medieval ditched enclosure/settlement in AA1 .
clay with occasional flecks of charcoal. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C61.2 61 Ditch that measures 2.26m wide, 0.45m deep and is filled by a friable midgreyish brown clay with occasional shell. It has gradual breaks of slope, well sloping sides and a flat base. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C62.1 62 Ditch that measures 1.3m wide and is filled by a mid-brown clay, interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C62.2 62 Ditch that measures 1.4m wide and is filled by a light orangey brown clay, interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C63.1 63 An isolated hearth/kiln that extends outside the trench. It has an exposed length (W–E) of 0.95m and measures 0.8m wide and 0.1m deep. It has gently sloping sides and a flat base with scorched reddened burnt clay at the base. Filled by a dark grey charcoal rich clay. Interpreted as a hearth/kiln with potential archaeological significance in AA12. C63.2 63 Ditch that measures 1m wide, 0.4m deep and is filled by a soft sterile light orangey brown clay. It has near vertical sides and a concave base. Interpreted as a agricultural in nature and may represent a former field boundary or drainage ditch. C64.3 63 Ditch that measures 2m wide, 0.1m deep and is filled by a soft light orangey brown silty clay with occasional stone inclusions. It has very subtle sloping sides and a flat base. Interpreted agricultural in nature and may represent a former field boundary or drainage ditch. C64.1 64 Linear feature that measures 0.35m wide and 0.16m deep. It has steep sides and a flat base. Filled by a soft sterile light brown clay. Interpreted as gricultural in nature and may represent a former field boundary or drainage ditch. C65.1 65 An isolated hearth/kiln identified on the centre of trench. It measures 1 long, 0.5m wide and 0.1m deep.	C60.8	60	Linear feature running into the southeast end of the trench. It has an exposed length of 7m and measures 0.5m wide and 0.1m deep. It has sloping sides with a concave base and is filled by a greyish brown silty clay with frequent shell, animal bone and medieval pottery inclusions. Interpreted as a linear feature associated with a medieval ditched enclosure/settlement in AA1.
greyish brown clay with occasional shell. It has gradual breaks of slope, well sloping sides and a flat base. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C62.1 62 Ditch that measures 1.3m wide and is filled by a mid-brown clay. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C62.2 62 Ditch that measures 1.4m wide and is filled by a light orangey brown clay. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C63.1 63 An isolated hearth/kiln that extends outside the trench. It has an exposed length (W—E) of 0.95m and measures 0.8m wide and 0.1m deep. It thas gently sloping sides and a flat base with scorched reddened burnt clay at the base. Filled by a dark grey charcoal rich clay. Interpreted as a hearth/kiln with potential archaeological significance in AA12. C63.2 63 Ditch that measures 1m wide, 0.4m deep and is filled by a soft sterile light orangey brown clay. It has near vertical sides and a concave base, interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C63.3 63 Ditch that measures 2m wide, 0.1m deep and is filled by a soft light orangey brown silty clay with occasional stone inclusions. It has very subtle sloping sides and a flat base. Interpreted agricultural in nature and may represent a former field boundary or drainage ditch. C64.1 64 Linear feature that measures 0.35m wide and 0.16m deep. It has steep sides and a flat base. Filled by a soft sterile light brown clay. Interpreted as made agricultural in nature and may represent a former field boundary or drainage ditch. C65.1 65 Linear feature that measures 0.44m wide and 0.22m deep. It has, steep sides and a concave base. Filled by a soft light brown clay. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C65.2 65 An isolated hearth/kiln identified on the centre of trench. It measures 1m long, 0.	C61.1	61	Ditch that measures 1.4m wide, 0.5m deep and is filled by a firm mid-brown clay with occasional flecks of charcoal. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch.
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length (W–E) of 0.95m and measures 0.8m wide and 0.1m deep. It has gently sloping sides and a flat base with scorched reddened burnt clay at the base. Filled by a dark grey charcoal rich clay. Interpreted as a hearth/kiln with potential archaeological significance in AA12. C63.2 63 Ditch that measures 1m wide, 0.4m deep and is filled by a soft sterile light orangey brown clay. It has near vertical sides and a concave base. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C63.3 63 Ditch that measures 2m wide, 0.1m deep and is filled by a soft light orangey brown silty clay with occasional stone inclusions. It has very subtle sloping sides and a flat base. Interpreted agricultural in nature and may represent a former field boundary or drainage ditch. C64.1 64 Linear feature that measures 0.35m wide and 0.16m deep. It has steep sides and a flat base. Filled by a soft sterile light brown clay. Interpreted as made agricultural in nature and may represent a former field boundary or drainage ditch. C64.2 64 Ditch that measures 1.65m wide, 0.45m deep and is filled by a greyish brown silty clay with frequent shell inclusions. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C65.1 65 Linear feature that measures 0.44m wide and 0.22m deep. It has, steep sides and a concave base. Filled by a soft light brown clay. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C65.2 65 An isolated hearth/kiln identified on the centre of trench. It measures 1m long, 0.5m wide and 0.1m deep. It has well sloping sides and a concave burnt clay base. Filled by a dark silty clay with frequent charcoal inclusions. Interpreted as a hearth/kiln with potential archaeological significance in AA11.	C62.2	62	Ditch that measures 1.4m wide and is filled by a light orangey brown clay. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch.
orangey brown clay. It has near vertical sides and a concave base. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C63.3 63 Ditch that measures 2m wide, 0.1m deep and is filled by a soft light orangey brown silty clay with occasional stone inclusions. It has very subtle sloping sides and a flat base. Interpreted agricultural in nature and may represent a former field boundary or drainage ditch. C64.1 64 Linear feature that measures 0.35m wide and 0.16m deep. It has steep sides and a flat base. Filled by a soft sterile light brown clay. Interpreted as made agricultural in nature and may represent a former field boundary or drainage ditch. C64.2 64 Ditch that measures 1.65m wide, 0.45m deep and is filled by a greyish brown silty clay with frequent shell inclusions. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C65.1 65 Linear feature that measures 0.44m wide and 0.22m deep. It has, steep sides and a concave base. Filled by a soft light brown clay. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch C65.2 65 An isolated hearth/kiln identified on the centre of trench. It measures 1m long, 0.5m wide and 0.1m deep. It has well sloping sides and a concave burnt clay base. Filled by a dark silty clay with frequent charcoal inclusions. Interpreted as a hearth/kiln with potential archaeological significance in AA11.	C63.1	63	An isolated hearth/kiln that extends outside the trench. It has an exposed length (W–E) of 0.95m and measures 0.8m wide and 0.1m deep. It has gently sloping sides and a flat base with scorched reddened burnt clay at the base. Filled by a dark grey charcoal rich clay. Interpreted as a hearth/kiln with potential archaeological significance in AA12 .
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sides and a flat base. Filled by a soft sterile light brown clay. Interpreted as made agricultural in nature and may represent a former field boundary or drainage ditch. C64.2 64 Ditch that measures 1.65m wide, 0.45m deep and is filled by a greyish brown silty clay with frequent shell inclusions. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C65.1 65 Linear feature that measures 0.44m wide and 0.22m deep. It has, steep sides and a concave base. Filled by a soft light brown clay. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch C65.2 65 An isolated hearth/kiln identified on the centre of trench. It measures 1m long, 0.5m wide and 0.1m deep. It has well sloping sides and a concave burnt clay base. Filled by a dark silty clay with frequent charcoal inclusions. Interpreted as a hearth/kiln with potential archaeological significance in AA11.	C63.3	63	Ditch that measures 2m wide, 0.1m deep and is filled by a soft light orangey brown silty clay with occasional stone inclusions. It has very subtle sloping sides and a flat base. Interpreted agricultural in nature and may represent a former field boundary or drainage ditch.
brown silty clay with frequent shell inclusions. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch. C65.1 65 Linear feature that measures 0.44m wide and 0.22m deep. It has, steep sides and a concave base. Filled by a soft light brown clay. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch C65.2 65 An isolated hearth/kiln identified on the centre of trench. It measures 1m long, 0.5m wide and 0.1m deep. It has well sloping sides and a concave burnt clay base. Filled by a dark silty clay with frequent charcoal inclusions. Interpreted as a hearth/kiln with potential archaeological significance in AA11.	C64.1	64	Linear feature that measures 0.35m wide and 0.16m deep. It has steep sides and a flat base. Filled by a soft sterile light brown clay. Interpreted as made agricultural in nature and may represent a former field boundary or drainage ditch.
sides and a concave base. Filled by a soft light brown clay. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch C65.2 An isolated hearth/kiln identified on the centre of trench. It measures 1m long, 0.5m wide and 0.1m deep. It has well sloping sides and a concave burnt clay base. Filled by a dark silty clay with frequent charcoal inclusions. Interpreted as a hearth/kiln with potential archaeological significance in AA11.	C64.2	64	Ditch that measures 1.65m wide, 0.45m deep and is filled by a greyish brown silty clay with frequent shell inclusions. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch.
long, 0.5m wide and 0.1m deep. It has well sloping sides and a concave burnt clay base. Filled by a dark silty clay with frequent charcoal inclusions. Interpreted as a hearth/kiln with potential archaeological significance in AA11.	C65.1	65	Linear feature that measures 0.44m wide and 0.22m deep. It has, steep sides and a concave base. Filled by a soft light brown clay. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch
C65.3 Ditch that measures 2.1m wide and 0.57m deep. It has gradual breaks of	C65.2	65	An isolated hearth/kiln identified on the centre of trench. It measures 1m long, 0.5m wide and 0.1m deep. It has well sloping sides and a concave burnt clay base. Filled by a dark silty clay with frequent charcoal inclusions. Interpreted as a hearth/kiln with potential archaeological significance in AA11.
	C65.3	65	Ditch that measures 2.1m wide and 0.57m deep. It has gradual breaks of

		slope at top and base, steep sides and a flat base. Contains two fills including an upper firm light brown clay with frequent flecks of charcoal and shell and a basal greyish brown clay with occasional shell. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch.
C67.1	67	Ditch that measures 2.1m wide and 0.45m deep. It has gradual breaks of slope at the top and bottom, steep sides and a flat base. Filled by a firm mid-orangey brown silty clay with frequent stone, occasional shell and animal bone inclusions. Same as ditch C68.1. Interpreted as a medieval ditch in AA6.
C67.2	67	Ditch that measures 1.6m wide and 0.32m deep. It has gradual breaks of slope at the top and bottom, well sloping sides and a flat base. Filled by a loose silty clay with frequent stone, shell and modern pottery inclusions. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch.
C68.1	68	Ditch measuring 1.9m wide and 0.5m deep. It has gradual breaks of slope at the top and base, steep sides and a flat base. Filled by a firm mid-orangey brown silty clay with frequent stone, occasional shell and animal bone inclusions. A sherd of green glazed medieval pottery was observed within. Same as ditch C67.1. Interpreted as a medieval ditch in AA6.
C68.2	68	Ditch that measures 1.4m wide and 0.5m deep. Filled by a loose light brown silty clay with frequent stone and occasional shell inclusions. Interpreted as agricultural in nature and may represent a former field boundary or drainage ditch.
C71.1	71	A circular pit identified at the northeast of the trench that measures 0.54m long, 0.51m wide and 0.23m deep. It is sub-circular in plan, with steep sides and a concave base. Filled by a mid-greyish brown silty clay with occasional flecks of charcoal and snail shell. Interpreted as an archaeological pit in AA7.
C71.2	71	An oval hearth/kiln that measures1.62m long, 1.3m wide and 0.06m deep. It has an irregular oval shape in plan with evidence orange burnt clay on the surface. Filled by a charcoal rich fill and a greyish brown clay with frequent charcoal flecks. Interpreted as a hearth/kiln in AA7.
C71.3	71	Ditch across that measures 1.6m wide and 0.45m deep. It has gradual breaks of slope at the top and base, sloping sides and a concave base. Filled by a light brown soft clay with occasional charcoal inclusions. Interpreted as made agricultural in nature and may represent a former field boundary or drainage ditch.
C72.1	72	An oval pit that measures 1.7m long, 0.89m wide and 0.44m deep. It has a sharp break of slope at the top, gradual to steep sloping sides, a gradual break of slope at the base and a flat base. It is filled by a basal mid brown clayey silt with occasional charcoal and decayed stone inclusions and an upper dark brown silty clay with occasional charcoal inclusions. Interpreted as potential archaeology in AA13 .
C72.2		An oval pit located 10m to the south of C72.1, that measures 2.1m long, 0.77m wide and 0.28m deep. It has a sharp break of slope at the top, steep sloping sides, a gradual break of slope at the base and a flat base. It is filled by a single mid brown clayey silt with occasional charcoal inclusions. Interpreted as potential archaeology in AA13 .

APPENDIX 3 RMP SITES WITHIN THE SURROUNDING AREA

SMR NO.:	KD011-013001
RMP STATUS:	Yes
TOWNLAND:	Donaghcumper
PARISH:	Donaghcumper
BARONY:	South Salt
I.T.M.:	698032, 733166
CLASSIFICATION:	Graveyard
DIST. TO SITE:	c. 185m west-northwest
DESCRIPTION:	Located on the S roadside in level pasture NE of Celbridge village. According to Kirkpatrick (1896, 280-810), 'When the present road from Celbridge was made (c.1725) it was cut right through Donaghcomper churchyard'. The older section of the graveyard survives as a slightly raised rectangular area (dims L c. 33m E-W; Wth c. 30m) defined by a low scarp (H 0.5-0.9m) along its E, S and W sides, and by a modern mortared stone wall along the roadside to the N. It contains a ruined medieval parish church (KD011-013), and the earliest legible grave markers date to the 18th c. The graveyard has been extended to the E and S and occupies a sub-rectangular area (dims. L c. 120m E-W; Wth c. 70m).
REFERENCE:	www.archaeology.ie/ SMR file

SMR NO.:	KD011-013
RMP STATUS:	Yes
TOWNLAND:	Donaghcumper
PARISH:	Donaghcumper
BARONY:	South Salt
I.T.M.:	698027, 733181
CLASSIFICATION:	Church
DIST. TO SITE:	c. 185m west-northwest
DESCRIPTION:	The church, together with lands along the River Liffey, was granted to the First Prior of St. Wolstan's Abbey (KD011-014) on its foundation in 1202 (Kirkpatrick 1896, 283). The 'donagh' element of the church name suggests an Early Christian foundation, of which there is no obvious visible evidence. Stands in the W sector of a roadside graveyard (KD011-013002-). The remains consist of a fairly poorly preserved medieval parish church (Killanin and Duignan 1967, 160). A rectangular structure (int. dims. L 14.7m E-W; max. Wth 5.25m; av. wall T 1m) is comprised of a W-nave (dims. L 8.25m; Wth 5.25m) and a slightly narrower E-chancel (dims. L 5.2m E-W; Wth 3.65m) linked via a now collapsed chancel arch (wall T 1.2m). A later rectangular chapel (int. dims. L 5.15m N-S; Wth 3.3m; wall T 0.9m) extends N from the chancel and is accessed through a well preserved, round archway (Wth 3.3m; H 3m). Both buildings are constructed of rubble limestone masonry although occasional rough coursing is visible. The interiors are overgrown and partially covered with collapsed rubble. A later, well-preserved, gabled porch protects the round-arched entrance doorway (Wth 1.3m; H 1.9m) near the W end of the S wall of the nave. The doorway contains two substantial barring-slot holes on its E side, and a stoup projects from the inner wall face immediately to the E. The nave is lit by a square-headed, single-light window, set in a broadly splaying embrasure in the W gable wall which has substantial external buttressing and is topped by an ivy-clad bellcote. The central portion of the S wall is collapsed and

only the ivy-covered lower courses of the N wall survive. The chancel is lit by a twin-light, cusped-ogee-headed window in E gable wall which may be a later insertion as this wall has been altered and raised as is evidenced by the scar of an older and lower gable-line visible on the outer wall face. There is a single-light, cusped-ogee-headed window at the E end of the S wall. The later chapel is entered from the chancel via a large round arched ope composed of undressed voussoirs which spring from a plain abacus string course the under-part of which is chamfered. A large window in the N gable wall is now broken out but the jambs are hollow-chamfered internally and externally and contain glazing grooves and mortices. Below the window there is a flat-headed relieving arch and in the chapel floor the burial vault of the Allen family, where William Allen was buried c. 1558 (Lyster 1903-5, 98-99). An area of irregular infill at the centre of the E wall may have contained a second window and there is a small piscine which is T-shaped in plan and has a pointed-arched sandstone surround at the S end of the E wall. The S wall contains two small aumbries, at the N and S ends. A wooden post and wire fence encloses the church, coming within 2.5m of it along the S.

REFERENCE:

www.archaeology.ie/ SMR file

APPENDIX 4 LEGISLATION PROTECTING THE ARCHAEOLOGICAL RESOURCE

PROTECTION OF CULTURAL HERITAGE

The cultural heritage in Ireland is safeguarded through national and international policy designed to secure the protection of the cultural heritage resource to the fullest possible extent (Department of Arts, Heritage, Gaeltacht and the Islands 1999, 35). This is undertaken in accordance with the provisions of the *European Convention on the Protection of the Archaeological Heritage* (Valletta Convention), ratified by Ireland in 1997.

THE ARCHAEOLOGICAL RESOURCE

The National Monuments Act 1930 to 2014 and relevant provisions of the National Cultural Institutions Act 1997 are the primary means of ensuring the satisfactory protection of archaeological remains, which includes all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes. A National Monument is described as 'a monument or the remains of a monument the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto' (National Monuments Act 1930 Section 2). A number of mechanisms under the National Monuments Act are applied to secure the protection of archaeological monuments. These include the Register of Historic Monuments, the Record of Monuments and Places, and the placing of Preservation Orders and Temporary Preservation Orders on endangered sites.

OWNERSHIP AND GUARDIANSHIP OF NATIONAL MONUMENTS

The Minister may acquire national monuments by agreement or by compulsory order. The state or local authority may assume guardianship of any national monument (other than dwellings). The owners of national monuments (other than dwellings) may also appoint the Minister or the local authority as guardian of that monument if the state or local authority agrees. Once the site is in ownership or guardianship of the state, it may not be interfered with without the written consent of the Minister.

REGISTER OF HISTORIC MONUMENTS

Section 5 of the 1987 Act requires the Minister 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 on the register is illegal without the permission of the Minister. Two months notice in writing is required prior to any work being undertaken on or in the vicinity of a registered monument. The register also includes sites under Preservation Orders and Temporary Preservation Orders. All registered monuments are included in the Record of Monuments and Places.

PRESERVATION ORDERS AND TEMPORARY PRESERVATION ORDERS

Sites deemed to be in danger of injury or destruction can be allocated Preservation Orders under the 1930 Act. Preservation Orders make any interference with the site illegal. Temporary Preservation Orders can be attached under the 1954 Act. These perform the same function as a Preservation Order but have a time limit of six

months, after which the situation must be reviewed. Work may only be undertaken on or in the vicinity of sites under Preservation Orders with the written consent, and at the discretion, of the Minister.

RECORD OF MONUMENTS AND PLACES

Section 12(1) of the 1994 Act requires the Minister for Arts, Heritage, Gaeltacht and the Islands (now the Minister for Housing, Local Government and Heritage) to establish and maintain a record of monuments and places where the Minister believes that such monuments exist. The record comprises a list of monuments and relevant places and a map/s showing each monument and relevant place in respect of each county in the state. All sites recorded on the Record of Monuments and Places receive statutory protection under the National Monuments Act 1994. All recorded monuments on the proposed development site are represented on the accompanying maps.

Section 12(3) of the 1994 Act provides that 'where the owner or occupier (other than the Minister for Arts, Heritage, Gaeltacht and the Islands) of a monument or place included in the Record, or any other person, proposes to carry out, or to cause or permit the carrying out of, any work at or in relation to such a monument or place, he or she shall give notice in writing to the Minister of Arts, Heritage, Gaeltacht and the Islands to carry out work and shall not, except in case of urgent necessity and with the consent of the Minister, commence the work until two months after giving of notice'.

Under the National Monuments (Amendment) Act 2004, anyone who demolishes or in any way interferes with a recorded site is liable to a fine not exceeding €3,000 or imprisonment for up to 6 months. On summary conviction and on conviction of indictment, a fine not exceeding €10,000 or imprisonment for up to 5 years is the penalty. In addition, they are liable for costs for the repair of the damage caused.

In addition to this, under the *European Communities (Environmental Impact Assessment) Regulations 1989*, Environmental Impact Statements (EIS) are required for various classes and sizes of development project to assess the impact the proposed development will have on the existing environment, which includes the cultural, archaeological and built heritage resources. These document's recommendations are typically incorporated into the conditions under which the proposed development must proceed, and thus offer an additional layer of protection for monuments which have not been listed on the RMP.

THE PLANNING AND DEVELOPMENT ACT 2000

Under planning legislation, each local authority is obliged to draw up a Development Plan setting out their aims and policies with regard to the growth of the area over a five-year period. They cover a range of issues including archaeology and built heritage, setting out their policies and objectives with regard to the protection and enhancement of both. These policies can vary from county to county. The Planning and Development Act 2000 recognises that proper planning and sustainable development includes the protection of the archaeological heritage. Conditions relating to archaeology may be attached to individual planning permissions.

APPENDIX 5 IMPACT ASSESSMENT & THE CULTURAL HERITAGE RESOURCE

POTENTIAL IMPACTS ON ARCHAEOLOGICAL AND HISTORICAL REMAINS

Impacts are defined as 'the degree of change in an environment resulting from a development' (Environmental Protection Agency 2003: 31). They are described as profound, significant or slight impacts on archaeological remains. They may be negative, positive or neutral, direct, indirect or cumulative, temporary or permanent.

Impacts can be identified from detailed information about a project, the nature of the area affected, and the range of archaeological and historical resources potentially affected. Development can affect the archaeological and historical resource of a given landscape in a number of ways.

- Permanent and temporary land-take, associated structures, landscape mounding, and their construction may result in damage to or loss of archaeological remains and deposits, or physical loss to the setting of historic monuments and to the physical coherence of the landscape.
- Archaeological sites can be affected adversely in a number of ways: disturbance by excavation, topsoil stripping and the passage of heavy machinery; disturbance by vehicles working in unsuitable conditions; or burial of sites, limiting accessibility for future archaeological investigation.
- Hydrological changes in groundwater or surface water levels can result from construction activities such as de-watering and spoil disposal, or longer-term changes in drainage patterns. These may desiccate archaeological remains and associated deposits.
- Visual impacts on the historic landscape sometimes arise from construction traffic and facilities, built earthworks and structures, landscape mounding and planting, noise, fences and associated works. These features can impinge directly on historic monuments and historic landscape elements as well as their visual amenity value.
- Landscape measures such as tree planting can damage sub-surface archaeological features, due to topsoil stripping and through the root action of trees and shrubs as they grow.
- Ground consolidation by construction activities or the weight of permanent embankments can cause damage to buried archaeological remains, especially in colluviums or peat deposits.
- Disruption due to construction also offers in general the potential for adversely affecting archaeological remains. This can include machinery, site offices, and service trenches.

Although not widely appreciated, positive impacts can accrue from developments. These can include positive resource management policies, improved maintenance and access to archaeological monuments, and the increased level of knowledge of a site or historic landscape as a result of archaeological assessment and fieldwork.

PREDICTED IMPACTS

The severity of a given level of land-take or visual intrusion varies with the type of monument, site or landscape features and its existing environment. Severity of impact can be judged taking the following into account:

- The proportion of the feature affected and how far physical characteristics fundamental to the understanding of the feature would be lost.
- Consideration of the type, date, survival/condition, fragility/vulnerability, rarity, potential and amenity value of the feature affected.
- Assessment of the levels of noise, visual and hydrological impacts, either in general or site-specific terms, as may be provided by other specialists.

APPENDIX 6 MITIGATION MEASURES & THE CULTURAL HERITAGE RESOURCE

POTENTIAL MITIGATION STRATEGIES FOR CULTURAL HERITAGE REMAINS

Mitigation is defined as features of the design or other measures of the proposed development that can be adopted to avoid, prevent, reduce or offset negative effects.

The best opportunities for avoiding damage to archaeological remains or intrusion on their setting and amenity arise when the site options for the development are being considered. Damage to the archaeological resource immediately adjacent to developments may be prevented by the selection of appropriate construction methods. Reducing adverse effects can be achieved by good design, for example by screening historic buildings or upstanding archaeological monuments or by burying archaeological sites undisturbed rather than destroying them. Offsetting adverse effects is probably best illustrated by the full investigation and recording of archaeological sites that cannot be preserved *in situ*.

DEFINITION OF MITIGATION STRATEGIES

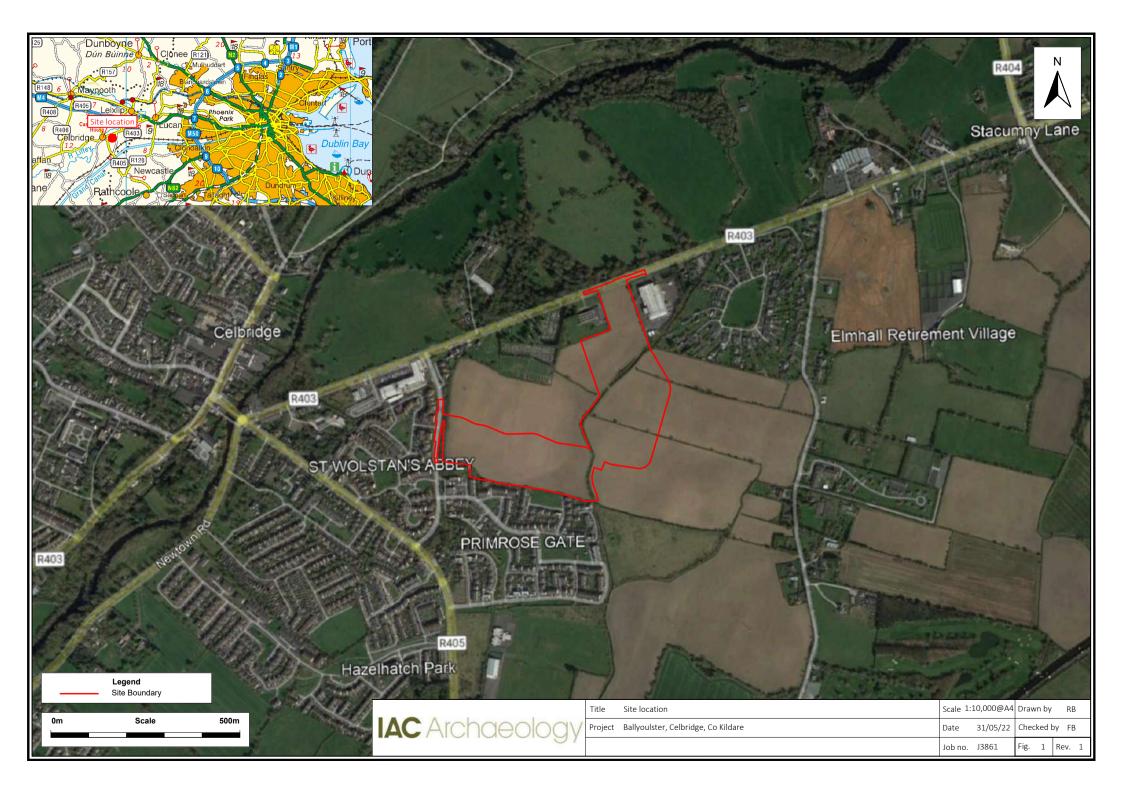
ARCHAEOLOGICAL RESOURCE

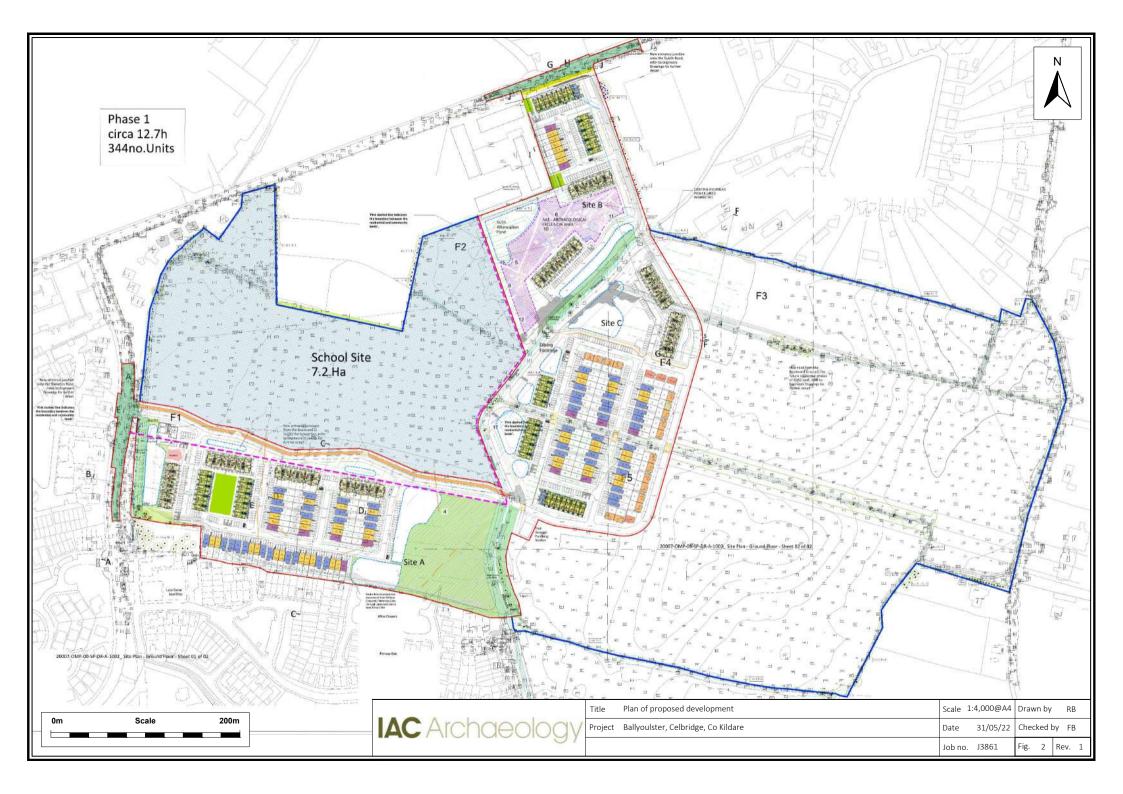
The ideal mitigation for all archaeological sites is preservation *in situ*. This is not always a practical solution, however. Therefore, a series of recommendations are offered to provide ameliorative measures where avoidance and preservation *in situ* are not possible.

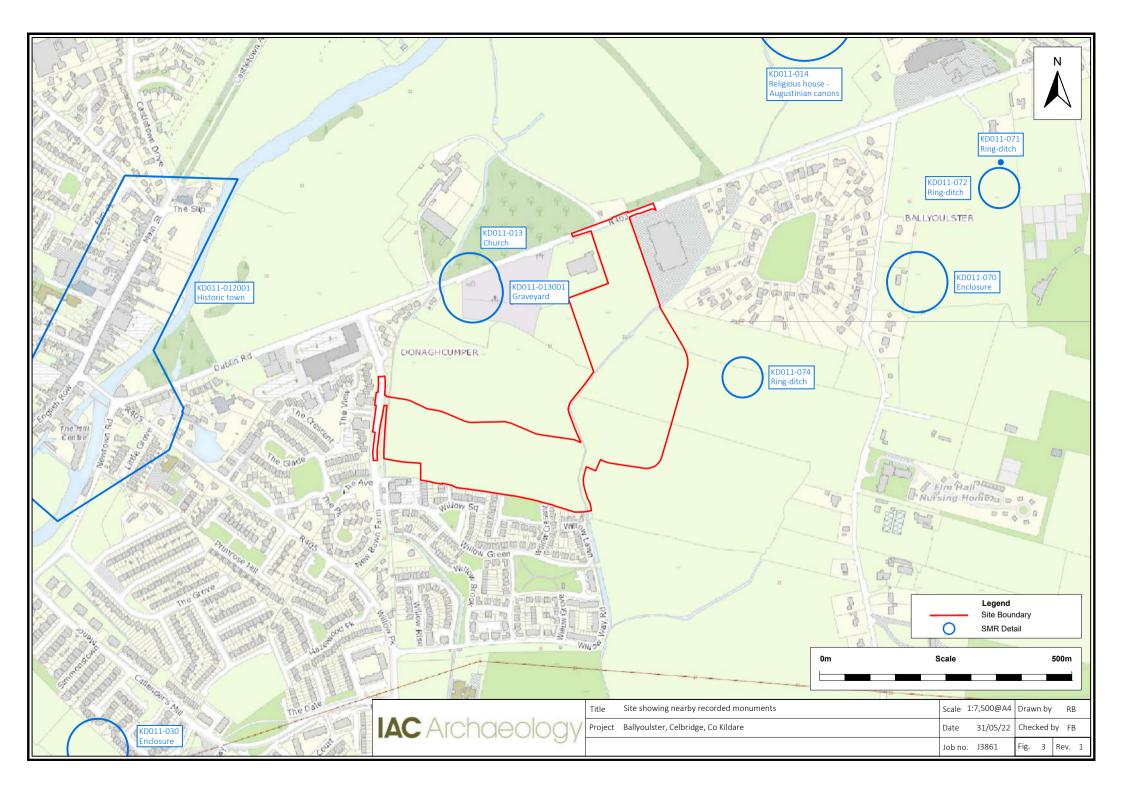
Full Archaeological Excavation involves the scientific removal and recording of all archaeological features, deposits and objects to the level of geological strata or the base level of any given development. Full archaeological excavation is recommended where initial investigation has uncovered evidence of archaeologically significant material or structures and where avoidance of the site is not possible. (CIFA 2020b)

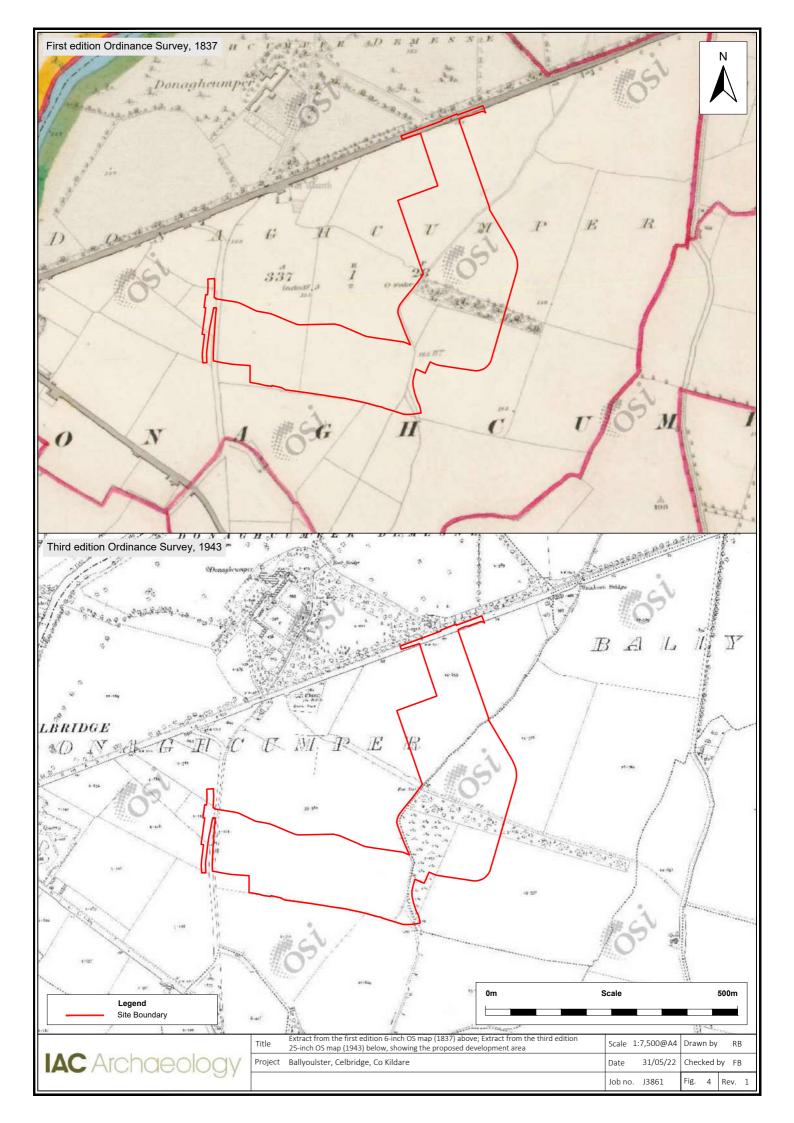
Archaeological Test Trenching can be defined as 'a limited programme... of intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land or underwater. If such archaeological remains are present test trenching defines their character and extent and relative quality.' (CIFA 2020a)

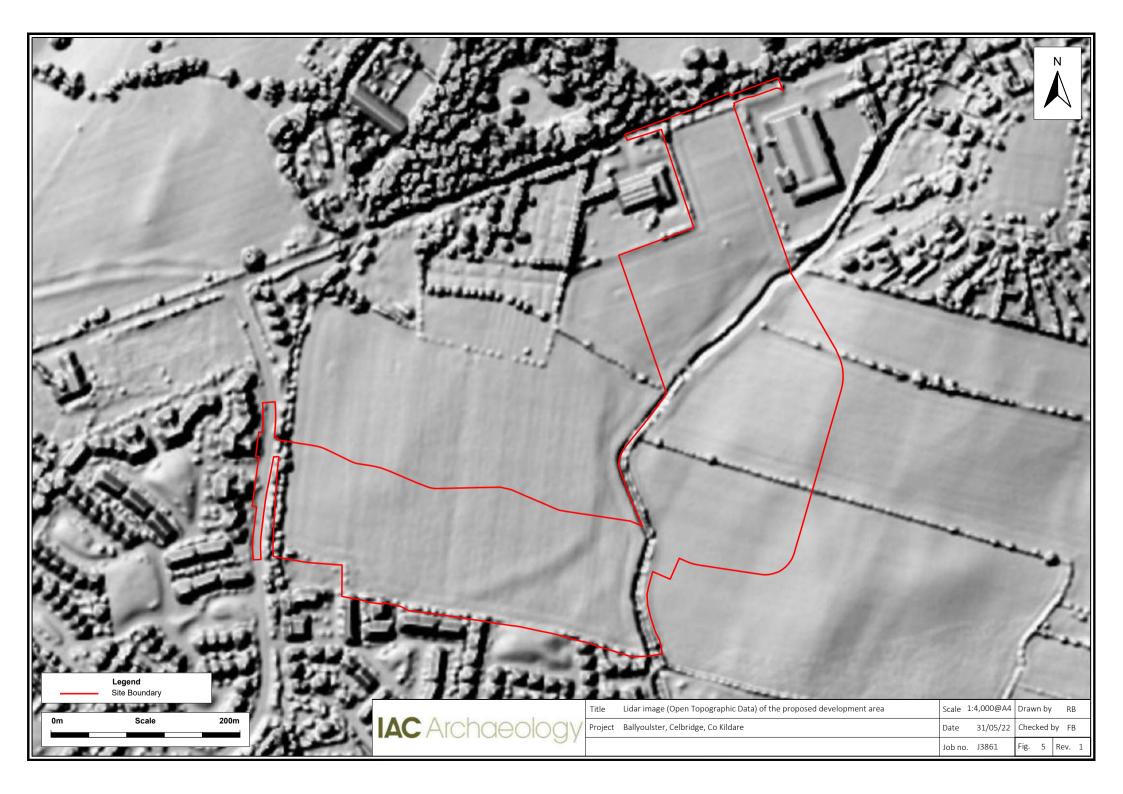
Archaeological Monitoring can be defined as a 'formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons within a specified area or site on land or underwater, where there is possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.' (CIfA 2020c)

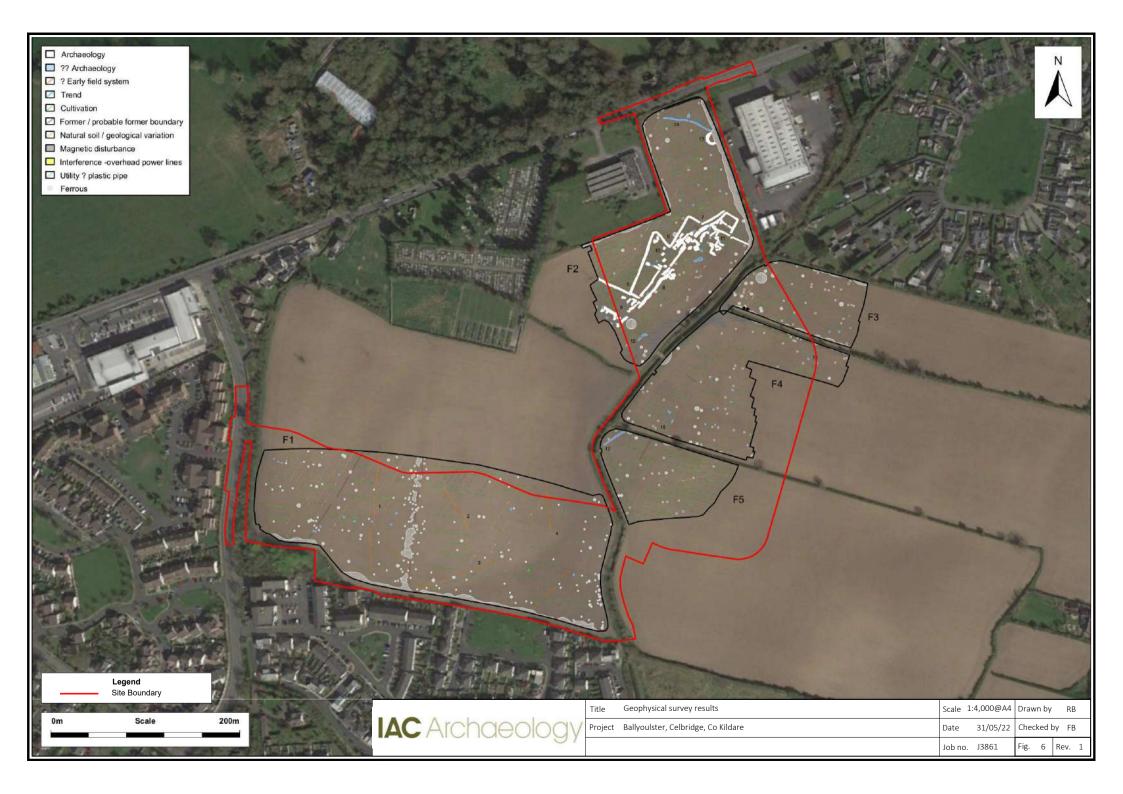


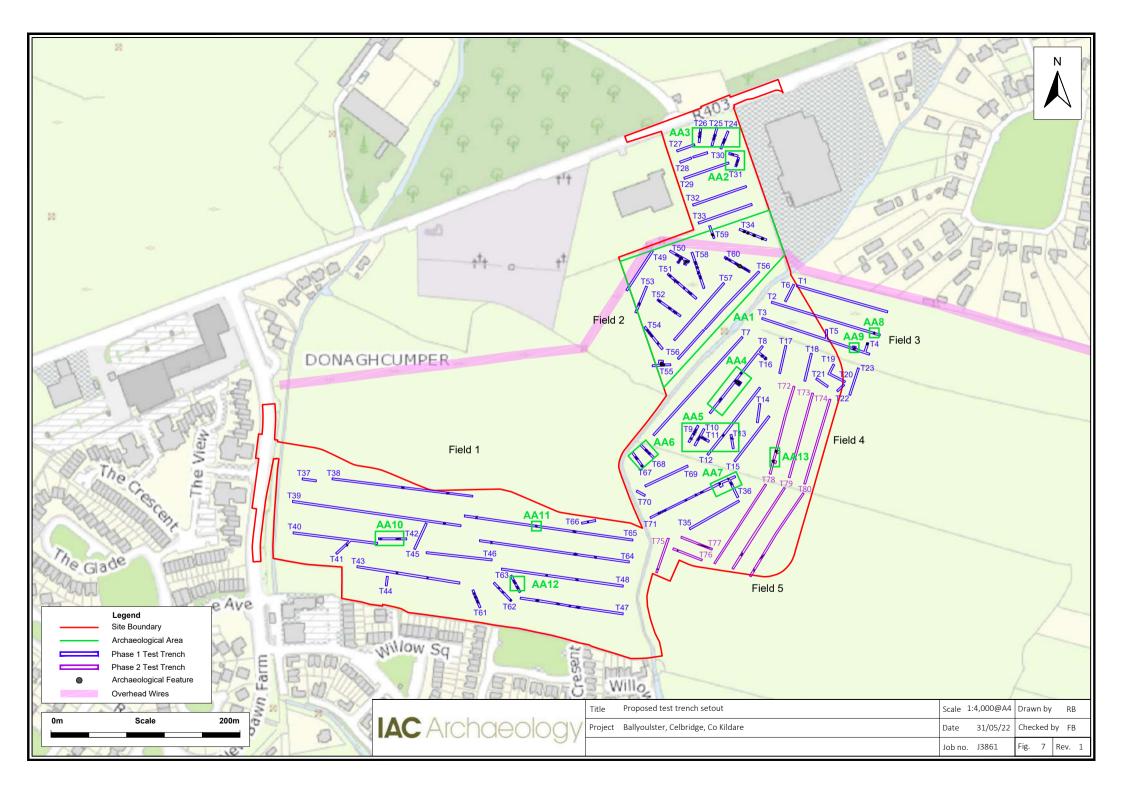


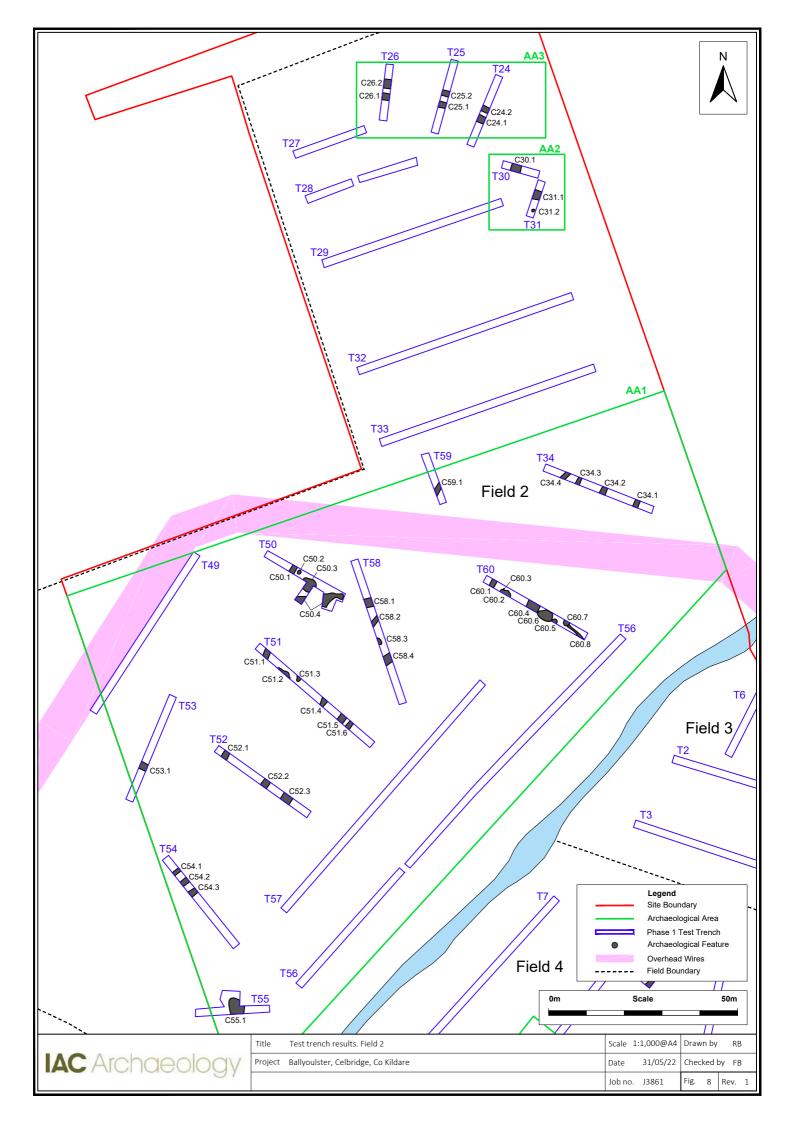


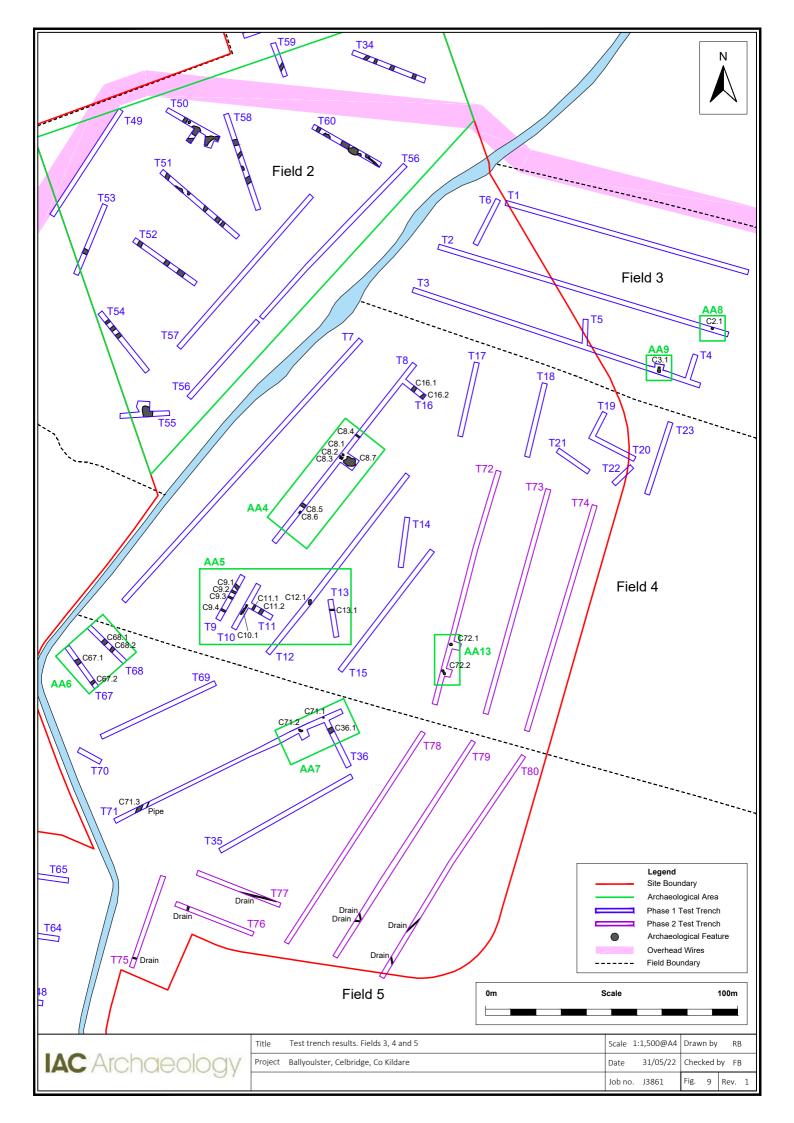


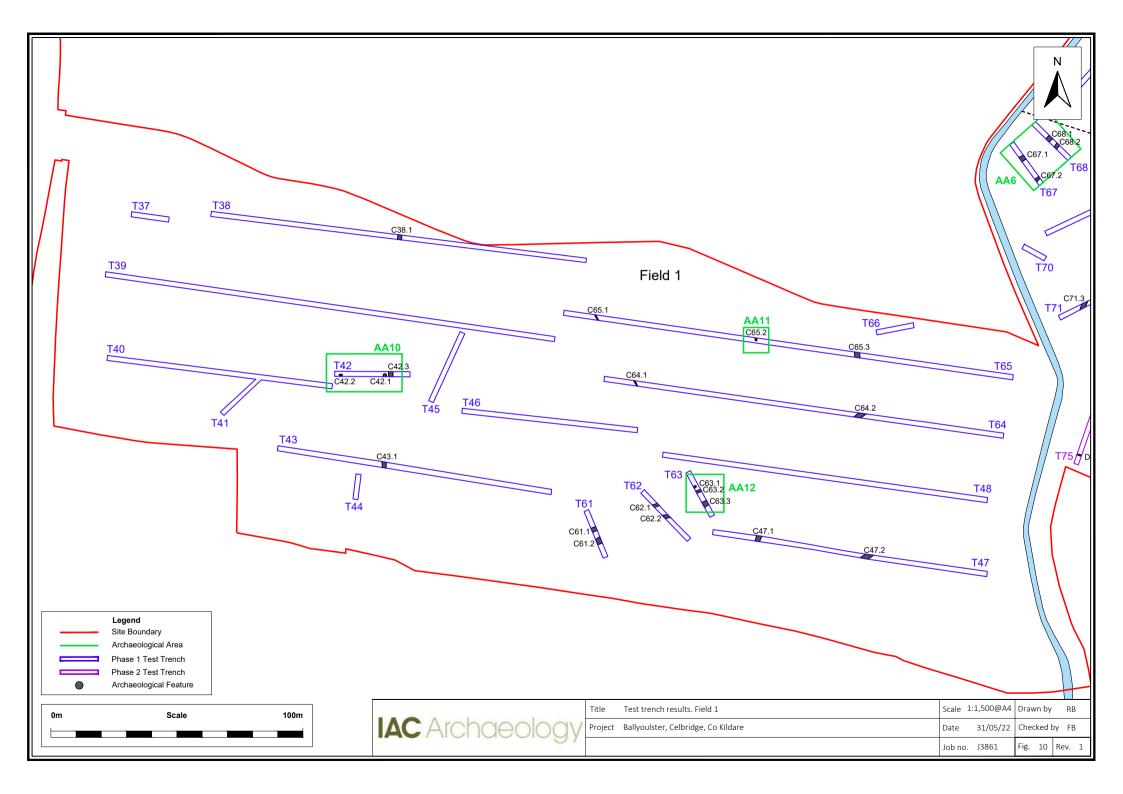


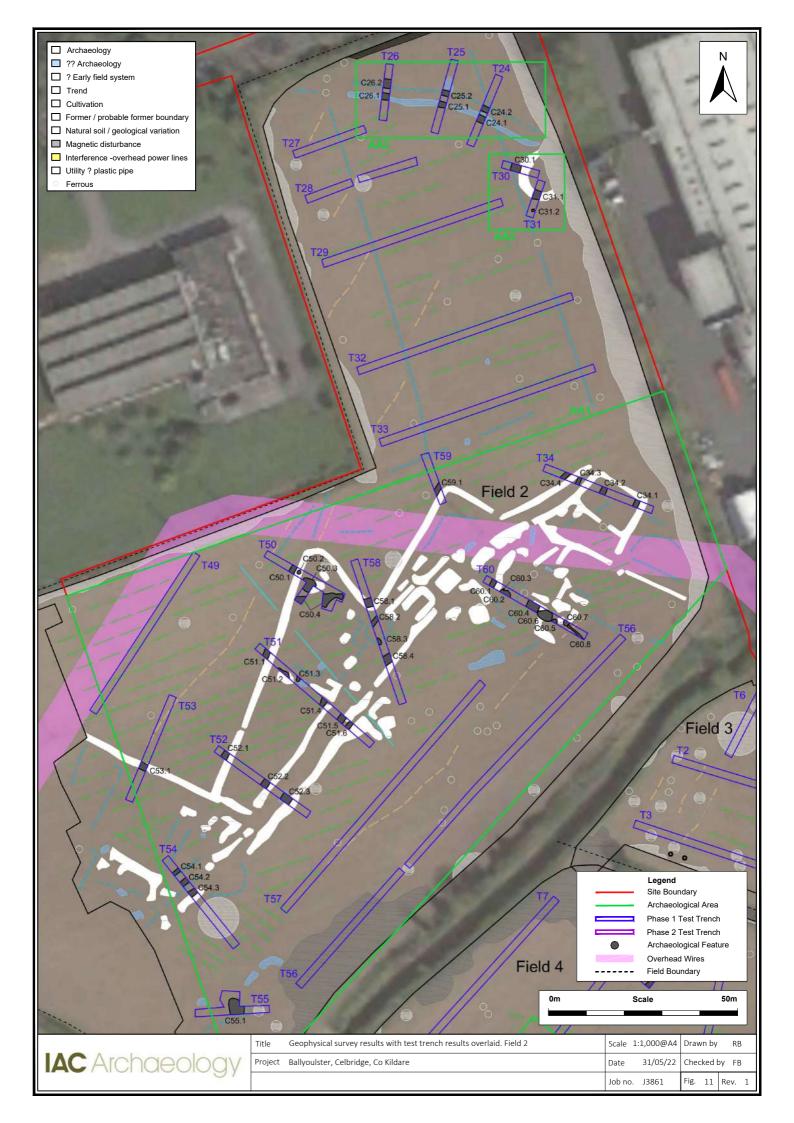


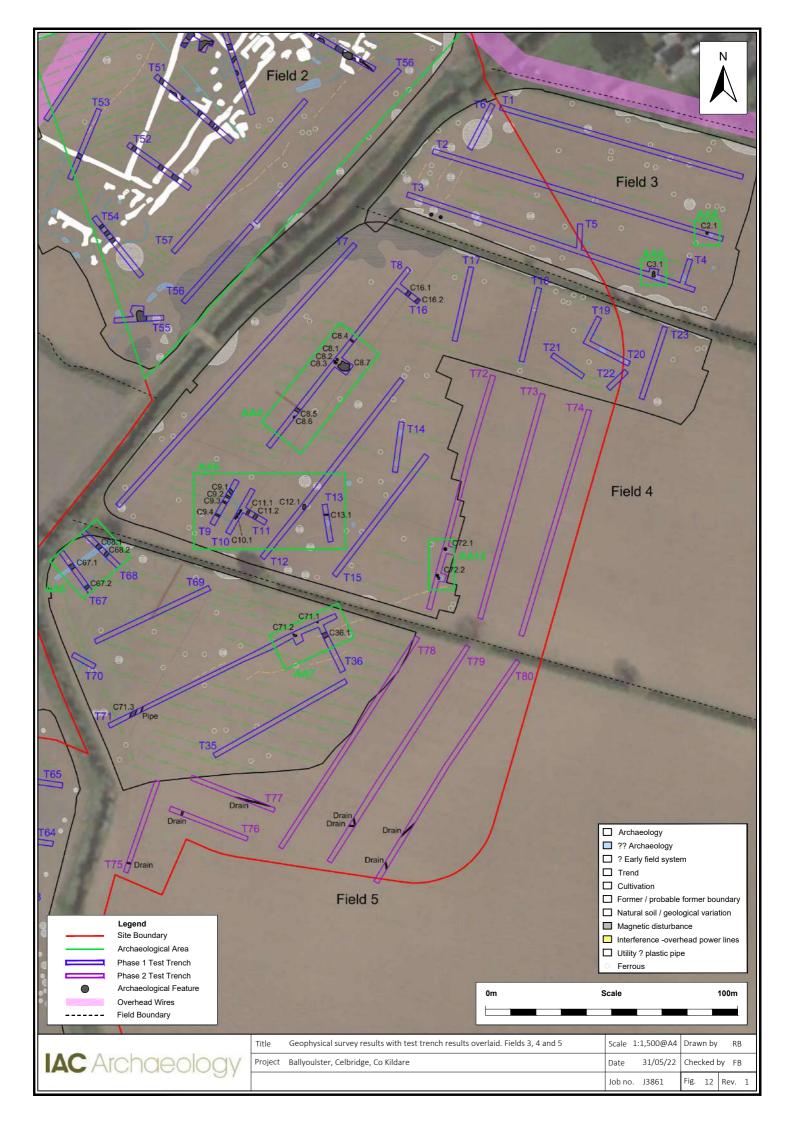


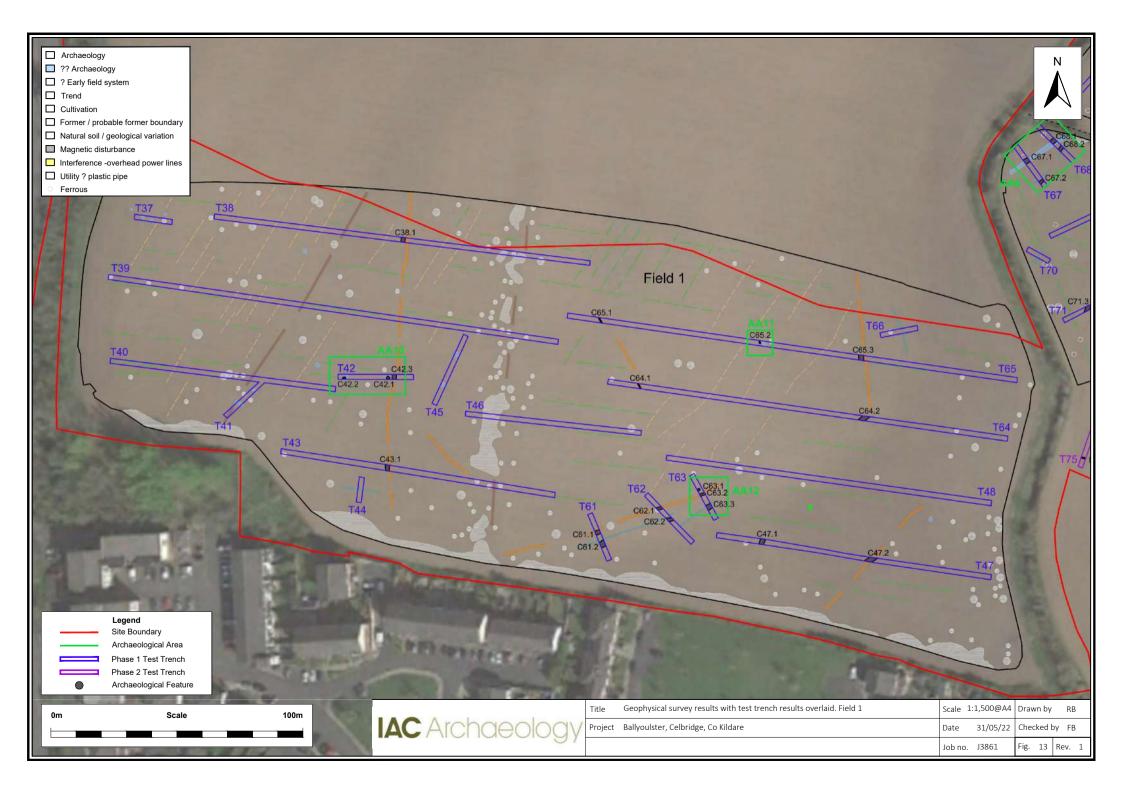


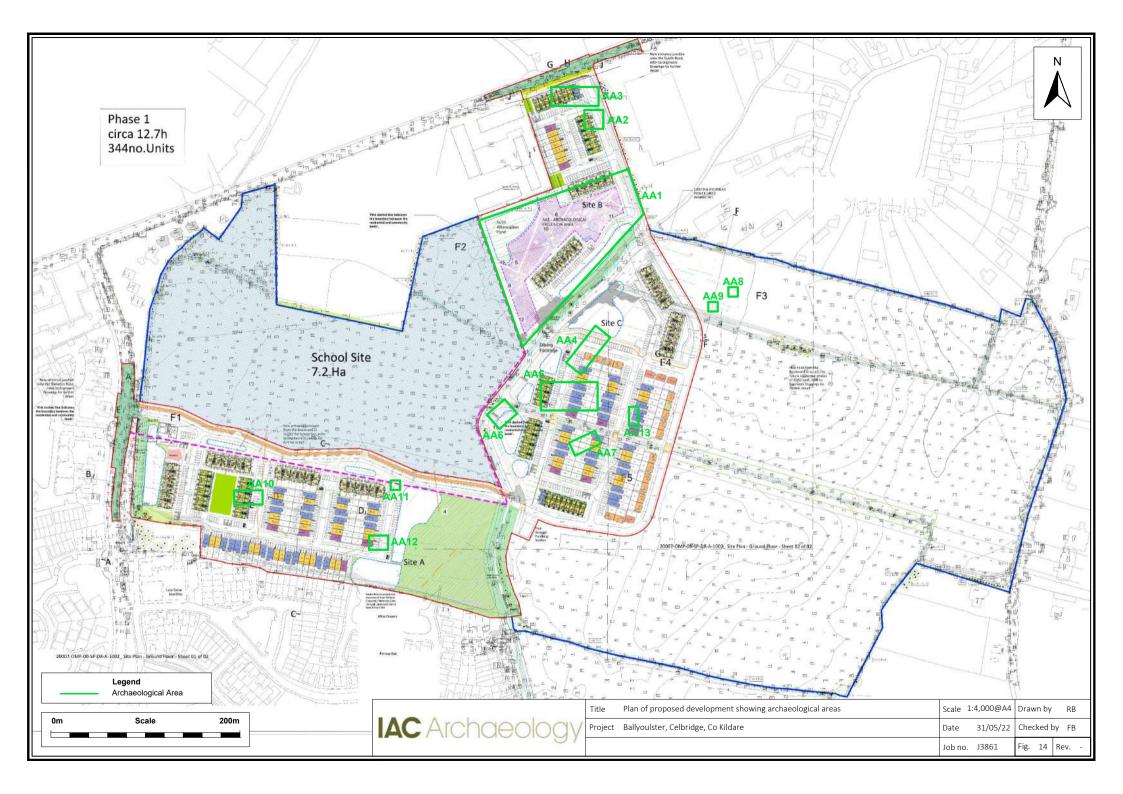












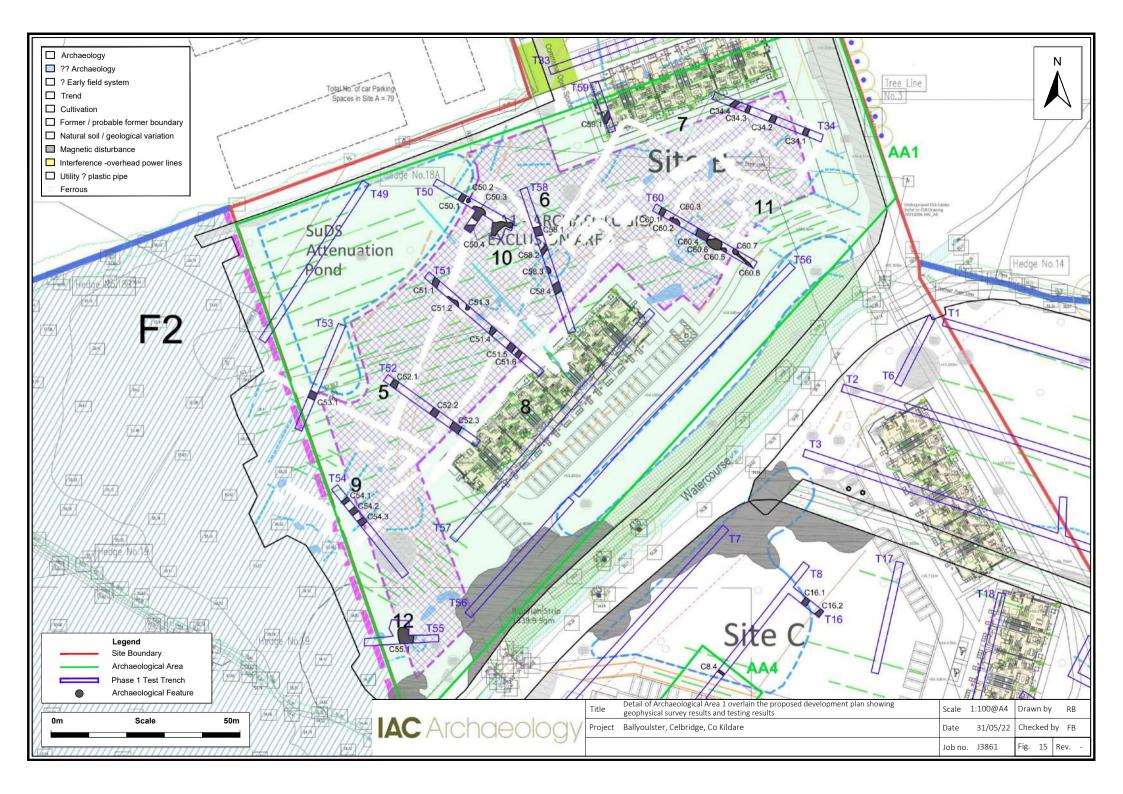




Plate 1 Trench 2, facing north



Plate 3 Pit/kiln C3.1 (AA9) in Trench 3, facing north



Plate 2 Pit C2.1 (AA8) in Trench 2, facing west



Plate 4 Trench 4, facing north



Plate 5 Trench 8, facing south



Plate 7 Ditch C9.2 (AA5) in Trench 9, facing east



Plate 6 Large pit C8.7 (AA4) in Trench 8, facing south



Plate 8 Linear feature C12.1 (AA5) in trench 12, facing south



Plate 9 Linear feature C13.1(AA5) in Trench 13, facing east



Plate 11 Ditch C25.1 (AA3) in Trench 25, facing northwest



Plate 10 Trench 20, facing east



Plate 12 Trenches 30-31, facing east



Plate 13 Ring ditch C31.1 (AA2), facing southeast



Plate 15 Ditch C38.1 in Trench 38, facing south



Plate 14 Trench 34 (AA1), facing southeast



Plate 16 Trench 40, facing west



Plate 17 Hearth/kiln C42.1 (AA10), facing south



Plate 19 Trench 50 (AA1), facing northwest



Plate 18 Trench 48, facing east



Plate 20 Ditch C52.2 (AA1) in Trench 52, facing southwest



Plate 21 Ditch C53.1 (AA1) in Trench 53, facing northwest



Plate 23 Trench 60 (AA1), facing northwest



Plate 22 Pit C55.1 (AA1), facing east



Plate 24 Ditch C61.1, facing west



Plate 25 Hearth/kiln C63.1 (AA12), facing south



Plate 27 Ditch C67.1 (AA6) in Trench 67, facing southeast



Plate 26 Hearth/kiln C65.2 (AA11), facing east



Plate 28 Hearth/kiln C71.2 (AA7) in Trench 71, facing east



APPENDIX 4.3 - SMR/RMP SITES WITHIN THE SURROUNDING AREA

SMR NO.	KD011-074
RMP STATUS	Scheduled for inclusion
	Ballyoulster
PARISH	Donaghcumper
BARONY	South Salt
I.T.M.	698562 733003
CLASSIFICATION	Ring-Ditch
DIST. FROM DEVELOPMENT	c. 85m east-southeast
DIST. I KOW BEVEEST WENT	Situated in the townland of Donaghcumper on the 1837 ed. OSi 6-inch map, however on the revised
DESCRIPTION	Cassini OSi 6-inch map the site is located today in the adjoining townland of Ballyoulster. Cropmark of
	ring-ditch (diam. c. 8m) within subrectangular shaped field or enclosure visible on Google Earth orthophoto taken 24/06/2018.
REFERENCE	www.archaeology.ie/ smr file
SMR NO.	KD011-013001
RMP STATUS	Scheduled for inclusion
TOWNLAND	Donaghcumper
PARISH	Donaghcumper
BARONY	South Salt
I.T.M.	698032 733169
CLASSIFICATION	Graveyard
DIST. FROM DEVELOPMENT	c. 185m west-northwest
DESCRIPTION	Located on the S roadside in level pasture NE of Celbridge village. According to Kirkpatrick (1896, 280-810), 'When the present road from Celbridge was made (c.1725) it was cut right through Donaghcomper churchyard'. The older section of the graveyard survives as a slightly raised rectangular area (dims L c. 33m E-W; Wth c. 30m) defined by a low scarp (H 0.5-0.9m) along its E, S and W sides, and by a modern mortared stone wall along the roadside to the N. It contains a ruined medieval parish church (KD011-013), and the earliest legible grave markers date to the 18th c. The graveyard has been extended to the E and S and occupies a sub-rectangular area (dims. L c. 120m E-W; Wth c. 70m)
REFERENCE	www.archaeology.ie/ smr file
SMR NO.	KD011-013
RMP STATUS	Scheduled for inclusion
TOWNLAND	Donaghcumper
PARISH	Donaghcumper
BARONY	South Salt
I.T.M.	698021 733185
CLASSIFICATION	Church
DIST. FROM DEVELOPMENT	c. 185m west-northwest
DESCRIPTION	The church, together with lands along the River Liffey, was granted to the First Prior of St. Wolstan's Abbey (KD011-014) on its foundation in 1202 (Kirkpatrick 1896, 283). The 'donagh' element of the church name suggests an Early Christian foundation, of which there is no obvious visible evidence. Stands in the W sector of a roadside graveyard (KD011-013002-). The remains consist of a fairly poorly preserved medieval parish church (Killanin and Duignan 1967, 160). A rectangular structure (int. dims. L 14.7m E-W; max. Wth 5.25m; av. wall T 1m) is comprised of a W-nave (dims. L 8.25m; Wth 5.25m) and a slightly narrower E-chancel (dims. L 5.2m E-W; Wth 3.65m) linked via a now collapsed chancel arch (wall T 1.2m). A later rectangular chapel (int. dims. L 5.15m N-S; Wth 3.3m; wall T 0.9m) extends N from the chancel and is accessed through a well preserved, round archway (Wth 3.3m; H 3m). Both buildings are constructed of rubble limestone masonry although occasional rough coursing is visible. The interiors are overgrown and partially covered with collapsed rubble. A later, well-preserved, gabled porch protects the round-arched entrance doorway (Wth 1.3m; H 1.9m) near the W end of the S wall of the nave. The doorway contains two substantial barring-slot holes on its E side, and a stoup projects from the inner wall face immediately to the E. The nave is lit by a square-headed, single-light window, set in a broadly splaying

REFERENCE	(Lyster 1903-5, 98-99). An area of irregular infill at the centre of the E wall may have contained a second window and there is a small piscine which is T-shaped in plan and has a pointed-arched sandstone surround at the S end of the E wall. The S wall contains two small aumbries, at the N and S ends. A wooden post and wire fence encloses the church, coming within 2.5m of it along the S. www.archaeology.ie/ smr file
	embrasure in the W gable wall which has substantial external buttressing and is topped by an ivy-clad bellcote. The central portion of the S wall is collapsed and only the ivy-covered lower courses of the N wall survive. The chancel is lit by a twin-light, cusped-ogee-headed window in E gable wall which may be a later insertion as this wall has been altered and raised as is evidenced by the scar of an older and lower gable-line visible on the outer wall face. There is a single-light, cusped-ogee-headed window at the E end of the S wall. The later chapel is entered from the chancel via a large round arched ope composed of undressed voussoirs which spring from a plain abacus string course the under-part of which is chamfered. A large window in the N gable wall is now broken out but the jambs are hollow-chamfered internally and externally and contain glazing grooves and mortices. Below the window there is a flat-headed relieving arch and in the chapel floor the burial vault of the Allen family, where William Allen was buried c. 1558

APPENDIX 4.4 - ARCHITECTURAL SITES WITHIN THE SURROUNDING AREA

RPS NO.	B11-02
NIAH NO.	-
TOWNLAND	Ballyoulster
PARISH	Donaghcumper
BARONY	South Salt
I.T.M.	698021 733185
CLASSIFICATION	Donaghcumper Medieval Church Ruins
DIST. FROM DEVELOPMENT	c. 158m northwest
DESCRIPTION	Medieval Church Ruins – see KD011-013
REFERENCE	Kildare County Development Plan (B11-02) / NIAH Survey

RPS NO.	B11-26
NIAH NO.	11805061
TOWNLAND	Donaghcumper
PARISH	Donaghcumper
BARONY	South Salt
I.T.M.	697947 733160
CLASSIFICATION	Donaghcumper House
DIST. FROM DEVELOPMENT	c. 220m north-northwest
DESCRIPTION	Detached three-bay single-storey house with half-dormer attic, dated 1905, retaining early fenestration with single-bay single-storey gabled projecting porch to left. Extended, c.1980, comprising single-bay single-storey lean-to return to rear to south-east. Gable-ended roof (continuing over return) with slate (gablet to half-dormer attic window; gabled to porch). Red clay crested ridge tiles. Red brick chimney stacks. Timber eaves and bargeboards. Cast-iron rainwater goods. Roughcast walls to front (north-west) elevation. Painted. Date stone. Rendered walls to remainder. Painted. Square-headed openings. Stone sills. Red brick (painted) block-and-start surrounds. 2/2 and 6/6 timber sash windows. Timber door. Set back from line of road in own grounds. Hedge boundary to front.
REFERENCE	Kildare County Development Plan (B11-26) / NIAH Survey

APPENDIX 4.5 - LEGISLATION PROTECTING THE ARCHAEOLOGICAL RESOURCE

PROTECTION OF CULTURAL HERITAGE

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give notice in writing to the Minister of Arts, Heritage, Gaeltacht and the Islands to carry out work and shall not, except in case of urgent necessity and with the consent of the Minister, commence the work until two months after giving of notice'.

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Kildare County Development Plan 2017-2023

It is the policy of the Council to:

- **AH 1** Manage development in a manner that protects and conserves the archaeological heritage of the county, avoids adverse impacts on sites, monuments, features or objects of significant historical or archaeological interest and secures the preservation in-situ or by record of all sites and features of historical and archaeological interest. The Council will favour preservation in situ in accordance with the recommendation of the Framework and Principals for the Protection of Archaeological Heritage (1999) or any superseding national policy.
- **AH 2** Have regard to the Record of Monuments and Places (RMP), the Urban Archaeological Survey and archaeological sites identified subsequent to the publication of the RMP when assessing planning applications for development. No development shall be permitted in the vicinity of a recorded feature, where it detracts from the setting of the feature or which is injurious to its cultural or educational value.
- **AH 3** Secure the preservation (in-situ or by record) of all sites, monuments and features of significant historical or archaeological interest, included in the Record of Monuments and Places and their settings, in accordance with the recommendations of the Framework and Principles for the Protection of Archaeological Heritage, DAHG (1999), or any superseding national policy document.
- **AH 4** Ensure that development in the vicinity of a site of archaeological interest is not detrimental to the character of the archaeological site or its setting by reason of its location, scale, bulk or detailing and to ensure that such proposed developments are subject to an archaeological assessment. Such an assessment will seek to ensure that the development can be sited and designed in such a way as to avoid impacting on archaeological heritage that is of significant interest including previously unknown sites, features and objects.
- **AH 5** Contribute towards the protection and preservation of the archaeological value of underwater or archaeological sites associated with rivers and associated features.

AH 6 Contribute towards the protection of historic burial grounds within the county and encourage their maintenance in accordance with conservation principles in cooperation with the Historic Monuments Advisory Committee and National Monuments Section of Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs (DAHRRGA).

AH 7 Promote and support in partnership with the National Monuments Section of the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs (DAHRRGA), the concept of Archaeological Landscapes where areas contain several Recorded Monuments.

AH 8 Encourage, where practicable, the provision of public access to sites identified in the Record of Monuments and Places under the direct ownership, guardianship or control of the Council and/or the State.

AH 9 Encourage the provision of signage to publicly accessible recorded monuments.

Celbridge Local Area Plan 2017 - 2023

It is an objective of the Council:

- **BHO1.1**: To protect and preserve those items of archaeological interest listed in Table 10.1 and shown on the Map 10.1 from inappropriate development that would adversely affect and/or detract from the interpretation and setting of these sites.
- **BHO1.2:** To protect the historic core of Celbridge Town and retain where possible the existing street layout, historic building lines and traditional plot widths where these derive from medieval origins.
- **BHO1.3:** To ensure proposals contribute towards the protection and preservation of the archaeological value of sites including underwater sites associated with the River Liffey.
- **BHO1.4:** To provide for the protection of historic burial grounds within Celbridge in co-operation with agencies such as the Office of Public Works and the National Monuments Section of the Department of the Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

APPENDIX 4.6 - LEGISLATION PROTECTING THE ARCHITECTURAL RESOURCE

The main laws protecting the built heritage are the Architectural Heritage (National Inventory) and National Monuments (Miscellaneous Provisions) Act 1999 and the Local Government (Planning and Development) Acts 1963–1999, which has now been superseded by the Planning and Development Act, 2000. The Architectural Heritage Act requires the Minister to establish a survey to identify, record and assess the architectural heritage of the country. The background to this legislation derives from Article 2 of the 1985 Convention for the Protection of Architectural Heritage (Granada Convention). This states that:

For the purpose of precise identification of the monuments, groups of structures and sites to be protected, each member state will undertake to maintain inventories of that architectural heritage.

The National Inventory of Architectural Heritage (NIAH) was established in 1990 to fulfil Ireland's obligation under the Granada Convention, through the establishment and maintenance of a central record, documenting and evaluating the architecture of Ireland (NIAH Handbook 2005:2). As inclusion in the inventory does not provide statutory protection, the survey information is used in conjunction with the Architectural Heritage Protection Guidelines for Planning Authorities to advise local authorities on compilation of a Record of Protected Structures as required by the Planning and Development Act, 2000.

Protection Under the Record of Protected Structures and County Development Plan

Structures of architectural, cultural, social, scientific, historical, technical or archaeological interest can be protected under the Planning and Development Act, 2000, where the conditions relating to the protection of the architectural heritage are set out in Part IV of the act. This act superseded the Local Government (Planning and Development) Act, 1999, and came into force on 1st January 2000.

The act provides for the inclusion of Protected Structures into the planning authorities' development plans and sets out statutory regulations regarding works affecting such structures. Under new legislation, no distinction is made between buildings formerly classified under development plans as List 1 and List 2. Such buildings are now all regarded as 'Protected Structures' and enjoy equal statutory protection. Under the act the entire structure is protected, including a structure's interior, exterior, attendant grounds and also any structures within the attendant grounds.

The act defines a Protected Structure as (a) a structure, or (b) a specified part of a structure which is included in a Record of Protected Structures (RPS), and, where that record so indicates, includes any specified feature which is in the attendant grounds of the structure and which would not otherwise be included in this definition. Protection of the structure, or part thereof, includes conservation, preservation, and improvement compatible with maintaining its character and interest. Part IV of the act deals with architectural heritage, and Section 57 deals specifically with works affecting the character of Protected Structures or proposed Protected Structures and states that no works should materially affect the character of the structure or any element of the structure that contributes to its special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. The act does not provide specific criteria for assigning a special interest to a structure. However, the National Inventory of Architectural Heritage (NIAH) offers guidelines to its field workers as to how to designate a building with a special interest, which are not mutually exclusive. This offers guidance by example rather than by definition:

Archaeological

It is to be noted that the NIAH is biased towards post-1700 structures. Structures that have archaeological features may be recorded, providing the archaeological features are incorporated within post-1700 elements. Industrial fabric is considered to have technical significance, and should only be attributed archaeological significance if the structure has pre-1700 features.

Architectural

A structure may be considered of special architectural interest under the following criteria:

- Good quality or well executed architectural design
- The work of a known and distinguished architect, engineer, designer, craftsman
- A structure that makes a positive contribution to a setting, such as a streetscape or rural setting
- Modest or vernacular structures may be considered to be of architectural interest, as they are part of the history
 of the built heritage of Ireland.
- Well-designed decorative features, externally and/or internally

Historical

A structure may be considered of special historical interest under the following criteria:

- A significant historical event associated with the structure
- An association with a significant historical figure
- Has a known interesting and/or unusual change of use, e.g. a former workhouse now in use as a hotel
- A memorial to a historical event.

Technical

A structure may be considered of special technical interest under the following criteria:

- Incorporates building materials of particular interest, i.e. the materials or the technology used for construction
- It is the work of a known or distinguished engineer
- Incorporates innovative engineering design, e.g. bridges, canals or mill weirs
- A structure which has an architectural interest may also merit a technical interest due to the structural techniques used in its construction, e.g. a curvilinear glasshouse, early use of concrete, cast-iron prefabrication.
- Mechanical fixtures relating to a structure may be considered of technical significance.

Cultural

A structure may be considered of special cultural interest under the following criteria:

- An association with a known fictitious character or event, e.g. Sandycove Martello Tower, which featured in Ulysses.
- Other structure that illustrate the development of society, such as early schoolhouses, swimming baths or printworks.

Scientific

A structure may be considered of special scientific interest under the following criteria:

• A structure or place which is considered to be an extraordinary or pioneering scientific or technical achievement in the Irish context, e.g. Mizen Head Bridge, Birr Telescope.

Social

A structure may be considered of special social interest under the following criteria:

- A focal point of spiritual, political, national or other cultural sentiment to a group of people, e.g. a place of worship, a meeting point, assembly rooms.
- Developed or constructed by a community or organisation, e.g. the construction of the railways or the building of a church through the patronage of the local community
- Illustrates a particular lifestyle, philosophy, or social condition of the past, e.g. the hierarchical accommodation in a country house, philanthropic housing, vernacular structures.

Artistic

A structure may be considered of special artistic interest under the following criteria:

- Work of a skilled craftsman or artist, e.g. plasterwork, wrought-iron work, carved elements or details, stained glass, stations of the cross.
- Well-designed mass-produced structures or elements may also be considered of artistic interest.

(From the NIAH Handbook 2003 & 2005 pages 15–20)

The Local Authority has the power to order conservation and restoration works to be undertaken by the owner of the protected structure if it considers the building to need repair. Similarly, an owner or developer must make a written request to the Local Authority to carry out any works on a protected structure and its environs, which will be reviewed within three months of application. Failure to do so may result in prosecution.

County Kildare Heritage Plan 2019 - 2025

Strategic Objective 2: Promote best practice in the conservation and management of County Kildare's heritage resource.

- 26 Assist community groups and owners/managers of heritage sites to avail of funding for the conservation, management and promotion of heritage sites.
- 27 Create a Buildings at Risk Register for the historic buildings.
- 28 Promote best practice in the management, conservation, and recording of historic graveyards.
- 29 Ensure that structures of significant historic, architectural, cultural, scientific and technical interest in the county are included on the Record of Protected Structures.
- 30 Establish in-house advisory service to provide guidance on the care and maintenance of the local authority historic assets.
- 31 Identify Architectural Conservation Areas in the county and develop and promote Architectural Conservation Statements for such areas.
- 32 Update the Curragh Task Force report and with the support of Department of Defence prepare a conservation, management and interpretation plan for the Curragh, which seeks to promote archaeological, cultural, natural and built heritage of this significant heritage resource.
- 33 Organise traditional skills-building workshops.
- 34 Provide guidance for the owners of heritage sites on the correct management and conservation of the sites.
- 35 Develop links with other Heritage Officers on joint/regional heritage initiatives through Eastern and Midlands Regional Assembly (EMRA) including EU funding opportunities and archaeological landscapes.
- 36 Implement the current County Kildare Biodiversity Plan and draft the new Biodiversity Plan 37 Support communities in the collection of oral histories.
- 38 Support and promote the work of the County Kildare Historic Monuments Advisory Committee

Celbridge Local Area Plan 2017 - 2023

It is an objective of the council:

- **BHO2.1:** to ensure the protection and preservation of all protected structures, (or parts of structures) and their immediate surroundings including the curtilage and attendant grounds of structures contained in the record of protected structures (refer to table 10.2 and map 10.2 and map 10.2a).
- **BHO2.2:** to support the sensitive restoration of protected structures and their attendant ground and operate flexibility with regard to the use of these buildings to facilitate their ongoing use, with particular reference to St. Wolstan's, Donaghcumper house and Celbridge abbey, subject to good conservation principles.
- **BHO2.3:** to raise awareness of the unique built heritage of Celbridge by facilitating research and interpretation projects.
- **BHO2.4:** to address dereliction and vacancy in the town centre and promote appropriate uses and the sensitive restoration of historic buildings.
- **BHO2.5**: to support the implementation of the conservation and management plan for St. Mochua's church and to carry out similar projects in Celbridge as opportunities arise.
- **BHO2.6:** to support the implementation of a conservation and management plan for Donaghcumper medieval church ruins.

APPENDIX 4.7 - IMPACT ASSESSMENT AND THE CULTURAL HERITAGE RESOURCE

POTENTIAL IMPACTS ON ARCHAEOLOGICAL AND HISTORICAL REMAINS

Impacts are defined as 'the degree of change in an environment resulting from a development' (Environmental Protection Agency 2017). They are described as profound, significant or slight impacts on archaeological remains. They may be negative, positive or neutral, direct, indirect or cumulative, temporary or permanent.

Impacts can be identified from detailed information about a project, the nature of the area affected and the range of archaeological and historical resources potentially affected. Development can affect the archaeological and historical resource of a given landscape in a number of ways.

- Permanent and temporary land-take, associated structures, landscape mounding, and their construction may result in damage to or loss of archaeological remains and deposits, or physical loss to the setting of historic monuments and to the physical coherence of the landscape.
- Archaeological sites can be affected adversely in a number of ways: disturbance by excavation, topsoil stripping
 and the passage of heavy machinery; disturbance by vehicles working in unsuitable conditions; or burial of sites,
 limiting accessibility for future archaeological investigation.
- Hydrological changes in groundwater or surface water levels can result from construction activities such as dewatering and spoil disposal, or longer-term changes in drainage patterns. These may desiccate archaeological remains and associated deposits.
- Visual impacts on the historic landscape sometimes arise from construction traffic and facilities, built earthworks
 and structures, landscape mounding and planting, noise, fences and associated works. These features can
 impinge directly on historic monuments and historic landscape elements as well as their visual amenity value.
- Landscape measures such as tree planting can damage sub-surface archaeological features, due to topsoil stripping and through the root action of trees and shrubs as they grow.
- Ground consolidation by construction activities or the weight of permanent embankments can cause damage to buried archaeological remains, especially in colluviums or peat deposits.
- Disruption due to construction also offers in general the potential for adversely affecting archaeological remains. This can include machinery, site offices, and service trenches.

Although not widely appreciated, positive impacts can accrue from developments. These can include positive resource management policies, improved maintenance and access to archaeological monuments, and the increased level of knowledge of a site or historic landscape as a result of archaeological assessment and fieldwork.

PREDICTED IMPACTS

The severity of a given level of land-take or visual intrusion varies with the type of monument, site or landscape features and its existing environment. Severity of impact can be judged taking the following into account:

- The proportion of the feature affected and how far physical characteristics fundamental to the understanding of the feature would be lost;
- Consideration of the type, date, survival/condition, fragility/vulnerability, rarity, potential and amenity value of the feature affected:
- Assessment of the levels of noise, visual and hydrological impacts, either in general or site-specific terms, as may be provided by other specialists

APPENDIX 4.8 - MITIGATION MEASURES AND THE CULTURAL HERITAGE RESOURCE

POTENTIAL MITIGATION STRATEGIES FOR CULTURAL HERITAGE REMAINS

Mitigation is defined as features of the design or other measures of the proposed development that can be adopted to avoid, prevent, reduce or offset negative effects.

The best opportunities for avoiding damage to archaeological remains or intrusion on their setting and amenity arise when the site options for the development are being considered. Damage to the archaeological resource immediately adjacent to developments may be prevented by the selection of appropriate construction methods. Reducing adverse effects can be achieved by good design, for example by screening historic buildings or upstanding archaeological monuments or by burying archaeological sites undisturbed rather than destroying them. Offsetting adverse effects is probably best illustrated by the full investigation and recording of archaeological sites that cannot be preserved in situ.

DEFINITION OF MITIGATION STRATEGIES ARCHAEOLOGICAL RESOURCE

The ideal mitigation for all archaeological sites is preservation in situ. This is not always a practical solution, however. Therefore, a series of recommendations are offered to provide ameliorative measures where avoidance and preservation in situ are not possible.

Archaeological Test Trenching can be defined as 'a limited programme of intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land, inter-tidal zone or underwater. If such archaeological remains are present field evaluation defines their character, extent, quality and preservation, and enables an assessment of their worth in a local, regional, national or international context as appropriate' (CIfA 2020a).

Full Archaeological Excavation can be defined as 'a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site on land, inter-tidal zone or underwater. The records made and objects gathered during fieldwork are studied and the results of that study published in detail appropriate to the project design' (CIfA 2020b).

Archaeological Monitoring can be defined as 'a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, intertidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive (ClfA 2020c).

Underwater Archaeological Assessment consists of a programme of works carried out by a specialist underwater archaeologist, which can involve wade surveys, metal detection surveys and the excavation of test pits within the sea or riverbed. These assessments are able to access and assess the potential of an underwater environment to a much higher degree than terrestrial based assessments.

ARCHITECTURAL RESOURCE

The architectural resource is generally subject to a greater degree of change than archaeological sites, as structures may survive for many years but their usage may change continually. This can be reflected in the fabric of the building, with the addition and removal of doors, windows and extensions. Due to their often more visible presence within the landscape than archaeological sites, the removal of such structures can sometimes leave a discernable 'gap' with the cultural identity of a population. However, a number of mitigation measures are available to ensure a record is made of any structure that is deemed to be of special interest, which may be removed or altered as part of a proposed development.

Conservation Assessment consists of a detailed study of the history of a building and can include the surveying of elevations to define the exact condition of the structure. These assessments are carried out by Conservation Architects and would commonly be carried out in association with proposed alterations or renovations on a Recorded Structure.

Building Survey may involve making an accurate record of elevations (internal and external), internal floor plans and external sections. This is carried out using an EDM (Electronic Distance Measurer) and GPS technology to create scaled drawings that provide a full record of the appearance of a building at the time of the survey.

Historic Building Assessment is generally specific to one building, which may have historic significance, but is not a Protected Structure or listed within the NIAH. A full historical background for the structure is researched and the site is visited to assess the standing remains and make a record of any architectural features of special interest. These assessments can also be carried out in conjunction with a building survey.

Written and Photographic record provides a basic record of features such as stone walls, which may have a small amount of cultural heritage importance and are recorded for prosperity. Dimensions of the feature are recorded with a written description and photographs as well as some cartographic reference, which may help to date a feature.

APPENDIX 4.9 - BRIEFING NOTE: DESIGN RATIONALE PERTAINING TO ARCHAEOLOGICAL PRESERVATION BY RECORD

JSA John Spain Associates Planning & Development Consultants Chartered Town Planners & Chartered Surveyors 39 Fitzwilliam Place, Dublin 2 1. Tel: (01) 6625803 2. E-mail: info@johnspainassociates.com Web: www.johnspainassociates.com Web: www.johnspainassociates.com Re: Ballyoulster KDA SHD- Phase 1 Residential Development – Archaeology Memo

1.0 INTRODUCTION

The purpose of this briefing note is to set out the background and rationale for the preservation by record of archaeological features found during the course of a geophysical survey and archaeological test trenching and investigations relating to lands at Ballyoulster, Celbridge, Co. Kildare, having regard to the potential impact on the layout/design in respect of the development. The application site has an overall area of 13.4 hectares. For ease, the application site is divided into three sites (A, B and C).

2.0 PLANNING CONTEXT

Celbridge Local Area Plan 2017-2023

The local planning policy framework for the subject lands is provided by the Kildare County Development Plan 2017-2023 and the Celbridge Local Area Plan 2017-2023.

The subject land is primarily zoned 'C: New Residential' which seeks 'to provide for new residential development' and partly 'E: Community and Educational' with the objective 'to provide for education, recreation, community and health' as illustrated in Figure 1. The proposed development is consistent with the Celbridge LAP Land Use Zoning Objectives Map and the Land Use Zoning Matrix set out in section 13.4 of the LAP.

The LAP identifies give no. Key Development Areas (KDAs) with capacity to accommodate significant growth over the LAP period and the lands comprise Phase 1 of the key development area 'KDA 2 Ballyoulster'. The proposed development meets the LAP vision for the KDA 2 lands, which is to '*To provide for the development of a new residential neighbourhood, including primary and post primary schools and a local park that integrates with its surroundings whilst having its own unique character and a strong sense of place.*'

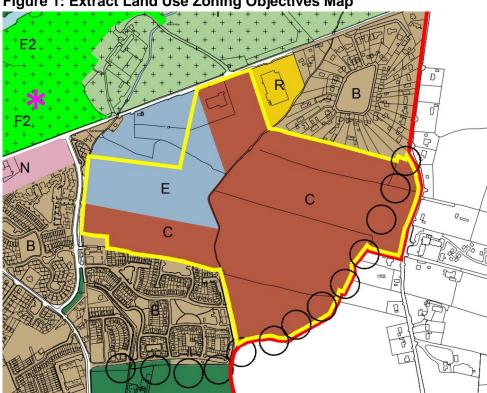


Figure 1: Extract Land Use Zoning Objectives Map

Source: Celbridge LAP

The proposed residential units and public open space are located solely on lands zoned 'C: New Residential' in accordance with the Celbridge Local Area Plan Land Use Zoning Objectives Map. Both residential and park/playgrounds uses are permitted land uses within the 'C - New Residential' land use zone. The proposed childcare facility is located on lands zoned 'E: Community and Educational'. Section 13.4 of the LAP confirms that a 'creche/playschool' use is a permitted in principle use within the zoning objective.

The proposed access road connecting the Dublin Road to the Shinkeen Road, which will provide a local distributor road and is referred to as 'The Boulevard', is located partly on lands zoned 'E: Community and Educational' (north of Site A) and partly on lands zoned 'C: New Residential'.

This proposed access road is considered appropriate and in keeping with the land use zoning. Whilst part of the access road is located on the 'E' zoned lands, the proposed access road will serve both the new residential development (including Phase 1 and future phases), the childcare facility and also provides the access to the lands reserved for the Department of Education in relation to the provision of the 3 no. schools. The proposals include pedestrian and cycle links along the Boulevard to serve the schools and the residential development, and it also includes 2 no. access points to the school lands. The Site Layout Plan also allows for additional landscape buffers / ancillary open space areas (partly on 'E' zoned lands) between the boulevard, the lands reserved for the schools and the proposed residential development in Site A. The road's layout has been agreed in consultation with the Department of Education.

The proposed access also accords with the LAP and the objectives for Ballyoulster KDA, which it states that vehicular access to this KDA should be provided from the Dublin Road, Shinkeen Road and the Loughlinstown Road and should provide for continuous routes through the KDA that connect to surrounding areas.

A mix of housing / apartment types are proposed, ranging from two to three storeys as encouraged by the LAP, and landmark / feature buildings are proposed in appropriate locations to provide for legibility and variety in the urban environment. It is considered the proposed Phase 1 development is in keeping with the LAP vision for the lands to provide a new residential neighbourhood that integrates with its surroundings whilst having its own unique character and a strong sense of place.

Overall, the proposed residential development, in addition to the access road, childcare facility and the public open space accord with the land use zoning objective, the zoning matrix set out in Section 13.4 of the LAP and the objectives for the KDA 2 lands at Ballyoulster.

The zoning objectives for the subject lands and the LAP have influenced the layout of the proposed development, and as discussed further below, the preservation of all the identified archaeological features on the subject site in situ would militate against the realisation of an appropriate layout od development on the subject lands while complying with the zoning objectives pertaining to the subject site.

3.0 REVIEW OF LAYOUT

Location of Archaeological Features

The archaeological features identified during the course of two phases of test trenching are located across the area of the submit site. Testing revealed 13 areas of archaeological significance AA1-AA13. Please note that AA8 and AA9 lie outside the boundary of the current scheme. The largest site identified was AA1 which comprises of a possible medieval enclosure/settlement with multiple ditches and pit, AA2 comprised a ring-ditch of probable prehistoric date. The remaining archaeological areas consisted of pit clusters of possible medieval date as well as isolated pits, kilns and hearths.

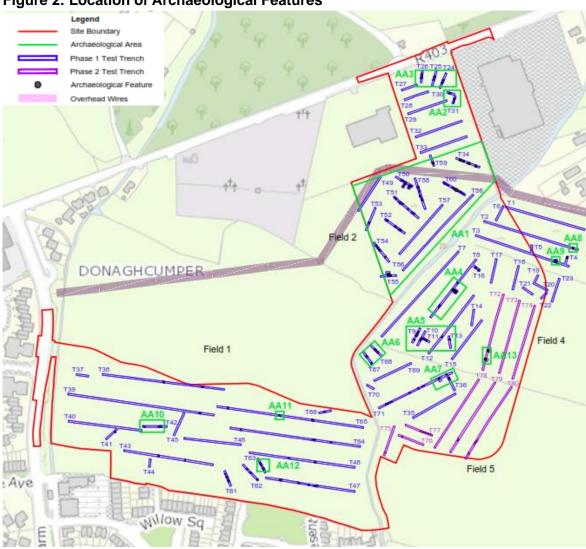


Figure 2: Location of Archaeological Features

Source: IAC

The Design Team noted the following issues:

- 3. The location and spread of the identified features across the subject site would significantly impact on the layout of the forthcoming development and the overall viability of the subject lands for development if preservation in situ for all identified features were to be required, however the design team has sought to preserve in site the majority of the archaeological feature identified in area AA1;
- 4. The preservation in situ for all identified features would lead to a substandard form of development in respect of layout (lack of passive surveillance & potential for antisocial behaviour);
- 5. Archaeology Area 1 [AA1] is the largest and contains the more significant archaeology identified on the site. The Design Team have significantly altered the design and layout of the site to preserve in situ the majority of the archaeology found in AA1. It is intended to create a public open space consisting of wildflower meadow and grassland area to minimise any disturbance to the area. Any trees or landscape features requiring excavation or penetration of the soil are positioned outside this zone. A 3 storey duplex/apartments block are placed outside the exclusion zone to the north and south to enclose the new public open space and to provide passive surveillance. A 3m wide combined pedestrian and cycle path weaves through the new public open space over AA1,

connecting the boulevard in the north to the south via the existing footbridge over the Shinkeen Stream. It is intended that no excavation occurs for this cycle track favouring instead to build up the base for the track protecting the archaeology in place.

- 6. AA2 consists of a ring ditch and small pit containing prehistoric pottery. The boulevard connecting the site and the wider KDA2 lands needs to connect to the Dublin Road as set out in the Local Area Plan. The alignment of the boulevard in Site B was carefully considered to keep the carriageway as far east as possible to minimise any impact on AA1, as result the Boulevard must dissect through AA2, and therefore it is intended that AA2 is excavated, recorded and removed.
- 7. The Design Team discussed the nature of the development adjacent to AA1 and agreed a distance of 5m setback from the edge of the features to be preserved insitu for construction and to ensure that the archaeology in AA1 is protected in place.
- 8. Attenuation features required as part of the drainage strategy for the development have been moved to outside of AA1 subject area and the pipe infrastructure required for the drainage has been minimised and relocated to reduce the excavation within this area.
- 9. Following a review of the archaeological findings and discussions with IAC, given the small and dispersed nature of AA3-AA7 and AA10-it is recommended that the appropriate strategy is to excavate, record and remove to allow the development to process, given the extent and lesser significant nature of the archaeological findings.

Having regard to the location and distribution of the archaeological features across the site and the associated constraints, the design team found it difficult to accommodate preservation in situ for all of the identified features particularly in respect of providing an appropriate density and layout of the development on the subject lands.

The layout has been revised to arrange the open space to preserve *in situ* the majority of the archaeological feature identified in area AA1. However a small portion of the area AA1 needs to be to be preserved by record to allow for a satisfactory arrange in relation to the proposed residential development, open space provision, and for attenuation and associated infrastructure as detailed above.

In terms of then remaining archaeological features across the site, the design team found it difficult to accommodate preservation in site particularly in respect of providing a legible layout, without effectively sterilising a large portion of the site and militating against providing a coherent layout.

4.0 CONCLUSIONS

Following the geophysical surveying, test-trenching and advice from IAC and having regard to the nature of the archaeological resource, Kieran Curtin, Receiver over certain assets of Maplewood Developments Unlimited Company (in liquidation and in receivership) is seeking to preserve in situ the majority of the main archaeological finds within the identified area AA1 and are seeking to 'preserve by record' a small portion of AA1 and the remaining ing underground archaeological features found during testing programme at Ballyoulster, Celbridge, Co. Kildare.

It is acknowledged that preservation in situ of archaeological remains is the preferable option wherever possible, and this has been achieved for the majority of the area identified as AA1. However given the difficulties of redesigning the layout of the development, as outlined above, coupled with the truncated nature of the remains on site and their local significance only, it is considered by the Archaeological Consultant that that preservation by record of the part of area AA1 and the remaining features identified

across the site would be an acceptable from of archaeological mitigation. This should be carried out by a licence eligible archaeologist in consultation with the National Monuments Service of the DoHLGH.