

Archaeological Impact Assessment

**Proposed Strategic Housing Development lands,
Kilmoney, Carrigaline, County Cork**



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1. Introduction

John Cronin & Associates have been commissioned by **Reside Investments Ltd.**, to prepare an archaeological assessment of the lands of a proposed Strategic Housing Development (SHD) at Kilmoney, Carrigaline, County Cork (**Figure 1**). The SHD lands are situated to the west of Main Street, Carrigaline, with the overall ownership area measuring *circa* 3 hectares. The proposed scheme will provide 224 units through a mix of apartments, townhouses and retail.

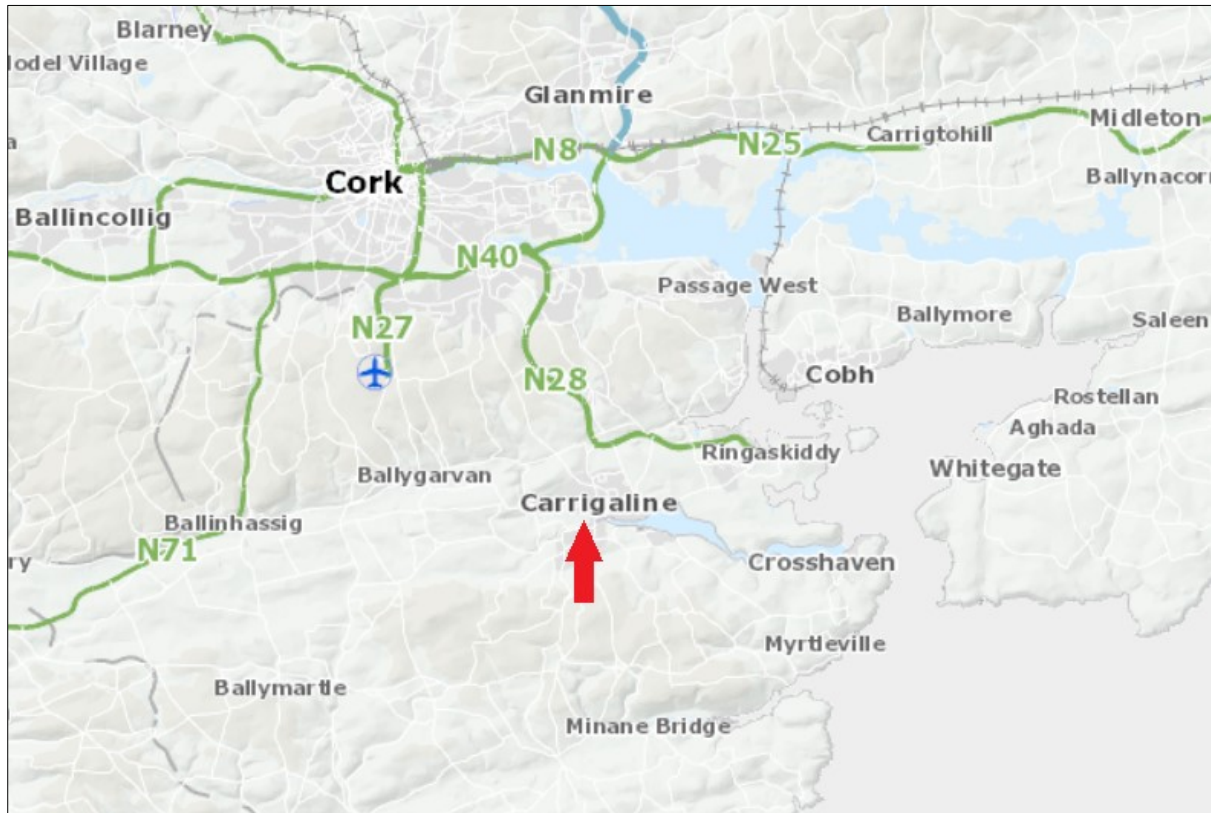


Figure 1: General location of subject site within the wider landscape

There are no recorded archaeological sites (as recorded by the *Archaeological Survey of Ireland (ASI)*) located on the footprint of the proposed development site. Furthermore, the subject site is not located within any archaeological *Zones of Notification (ZON)* or *Zones of Potential (ZAP)*.

This assessment has been compiled in order to examine the potential impacts which development of the subject lands may have on the recorded and potential archaeological heritage resource of the area. The study area for this assessment comprised the proposed works areas along with the lands extending for 500m from their outer limit. The assessment firstly outlines the methodology used in its compilation (**Section 2**) and then provides an archaeological and historical context for the study area, including a summary of the relevant legal and planning framework for the recorded and potential elements of the archaeological resource within its environs (**Section 3**). The results of a site inspection are described in **Section 4**, an assessment of impacts is provided in **Section 5** and conclusions and recommendations are presented in **Section 6**.

2. Methodology

This report is based on a programme of desktop research, site inspection and desk-based assessment. The methodology used for assessing the types and significance of impacts is informed by the EPA (2015) *Draft Advice Notes for Preparing an EIS* and (2017) *Draft Guidelines for Information to be Contained in EIAR*.

Desktop study

A desktop study assessment has been carried out in order to identify all known archaeological sites, designated architectural heritage structures and other undesignated cultural heritage assets within the study area. The principal sources reviewed for this assessment of the known archaeological resource are the Sites and Monuments Record (SMR) and the Record of Monuments and Places (RMP). Between 1984 and 1992, the Archaeological Survey of Ireland (ASI) issued a series of county SMRs which lists known archaeological sites and places and this record formed the basis for the statutory RMP established under Section 12 of the National Monuments (Amendment) Act 1994. Similar in format to the SMRs (comprising a list and set of maps), the RMPs were issued for each county in the State between 1995 and 1998. Archaeological monuments included in the statutory RMP are legally protected and are generally referred to as 'Recorded Monuments'.

The ASI has continued to record and add entries to the SMR and has developed an online database and web viewer known as 'Historic Environment Viewer'. This has been developed to enhance the user's experience by facilitating access to the database of the National Monuments Service's Sites and Monuments Record (SMR) and the National Inventory of Architectural Heritage (NIAH) in a seamless one stop point of access for both data resources (Source: www.archaeology.ie).

In addition, the following sources were consulted as part of the desktop study:

- *Cartographic Sources* - The detail on cartographic sources can indicate past settlement and land use patterns in recent centuries and can also highlight the impact of modern developments and agricultural practices. This information can aid in the identification of the location and extent of unrecorded, or partially levelled, features of archaeological or architectural heritage interest. The cartographic sources examined for the study areas include the 1st edition of the 6-inch Ordnance Survey (OS) maps (surveyed and published in the 1830s-40s) and the 25-inch OS maps (surveyed and published 1887-1913).
- *Aerial photography* - In parallel with the cartographic study, a review of publicly-accessible aerial photographic sources from the Ordnance Survey Ireland (OSI) and Google Earth was undertaken.
- *Development Plans* - The local authority development plans relevant to the study area were consulted as part of this assessment. Both the *Cork County Development Plan (2014-2020)* and the *Draft Cork County Development Plan 2022-2028* were consulted to review the planning authority's policies and objectives designed for the protection of the archaeological resource.

- *Database of Irish Excavation Reports* - The Database of Irish Excavation Reports contains summary accounts of all archaeological excavations carried out in Ireland from 1969 to present.
- *Irish Heritage Council: Heritage Map Viewer* - This online mapping source collates various cultural heritage datasets and includes extracts from the National Museum of Ireland's records of artefact discovery locations as well as datasets provided by, among others, the National Monuments Service, local authorities, the Royal Academy of Ireland and the Office of Public Works. Current data was accessed via www.heritagemaps.ie
- *Literary Sources* - Publications consulted are listed in **Section 7** of this report.
- *UNESCO World Heritage Sites and Tentative List* - UNESCO seeks to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity. There are two world heritage sites in Ireland and a number of other significant sites are included in a Tentative List (2010) that has been put forward by Ireland for inclusion.

Types of impact

Impacts are categorised as either being *direct*, *indirect* or *of no predicted impact*. The criteria for determining the nature of impacts are based on the following:

- **Direct Impact** – where a cultural heritage site is physically located within the footprint of the scheme, which will result in its complete or partial removal.
- **Indirect Impact** – where a cultural heritage site or its setting is located in close proximity to the footprint of the scheme.
- **No predicted impact** – where the potential scheme will not adversely or positively affect a cultural heritage site.

A significance rating for these impacts is then applied; whether *profound*, *significant*, *moderate*, *slight*, or *imperceptible*

- A **profound** impact applies where mitigation would be unlikely to remove adverse effects that arise where a cultural heritage site is completely and irreversibly destroyed by a proposed development.
- A **significant** impact applies when an impact, by its magnitude, duration or intensity, alters an important aspect of the environment. It applies where part of a cultural heritage site would be permanently impacted upon, leading to a loss of character, integrity and data about the feature/site.
- A **moderate** impact applies when a change to a cultural heritage site is proposed that, though noticeable, does not compromise the integrity of the site and which is reversible. This arises where a cultural heritage site can be incorporated into a modern-day development without damage and where all procedures used to facilitate this are reversible.
- A **slight** impact causes changes in the character of the environment which are not significant or profound and do not directly impact or affect a cultural heritage site.
- An **imperceptible** impact applied where an impact is capable of measurement but does not carry noticeable consequences.

Field survey

A suitably qualified archaeologist (David Murphy) carried out an inspection of the proposed development site on Friday 3 September 2021. The site was assessed in terms of historic landscape, land use, vegetation cover, presence and potential for undetected archaeological and architectural heritage sites/features. Weather conditions were dry and bright at the time of survey and this provided excellent landscape visibility. No difficulties were encountered during topographical survey. The results of the site inspection are detailed in **Section 4**, while extracts from the photographic record are presented in **Appendix 1** of this report.

3. Context

Location

The proposed development site (PDS) comprises an undeveloped parcel of agricultural land in the townland of Kilmoney, Carrigaline, County Cork (**Figure 2**). The site, which is located to the west of the southern end of Main Street, Carrigaline and to the east of the new Carrigaline Relief Road (currently under construction), measures *circa* 3 hectares in area. The northern portion of the site is bound by the Owenabue River, while the Dairygold Co-op is situated to the immediate and a number of individual residential dwellings bound the site to the south. The proposed development also includes a greenway link to Main Street along the southern bank of the Owenabue River. The underlying soil profiles of the site largely consist of a mix of river alluvium (north end of site) and coarse loamy drift with siliceous stones (south end of site), while the underlying geology of the area is composed of fluvio-deltaic & basinal marine (turbiditic): shale, sandstone, siltstone & coal.



Figure 2: Aerial image depicting the boundaries of the subject application site (red outline)

Legal & Policy Framework

The management and protection of cultural heritage in Ireland is achieved through a framework of national laws and policies which are in accordance with the provisions of the Valetta Treaty (1995) (formally the *European Convention on the Protection of the Archaeological Heritage*, 1992) ratified by Ireland in 1997; the *European Convention on the Protection of Architectural Heritage* (Granada Convention, 1985), ratified by Ireland in 1997; and the *UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage*, 2003, ratified by Ireland in 2015.

The locations of World Heritage Sites (Ireland) and the Tentative List of World Heritage Sites submitted by the Irish State to UNESCO were reviewed and none are located within the region of the country which contains the study area.

The national legal statutes and guidelines relevant to this assessment include:

- National Monuments Act (1930) (and amendments in 1954, 1987, 1994 and 2004);
- Heritage Act (1995);
- National Cultural Institutions Act (1997);
- Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act (1999);
- Planning and Development Act (2000);
- *Architectural Heritage Protection: Guidelines for Planning Authorities*, Department of Arts, Heritage, and the Gaeltacht (2011); and
- *Framework and Principles for the Protection of the Archaeological Heritage*, Department of Arts, Heritage, Gaeltacht and the Islands, 1999.

Archaeological Heritage

The administration of national policy in relation to archaeological heritage management is the responsibility of the National Monuments Service (NMS) which is currently based in the Department of Culture, Heritage and the Gaeltacht. The National Monuments Act of 1930, and its Amendments, are the primary means of ensuring the satisfactory protection of the archaeological resource. They include a number of provisions that are applied to secure the protection of archaeological monuments. These include the designations of nationally significant sites as National Monuments, the Register of Historic Monuments (RHM), the Record of Monuments and Places (RMP), the Sites and Monuments Record (SMR), and the placing of Preservation Orders and Temporary Preservation Orders on endangered sites.

Section 2 of the National Monuments Act, 1930 defines a National Monument as ‘*a monument or the remains of a monument, the preservation of which is a matter of national importance*’. The State may acquire or assume guardianship of examples through agreement with landowners or under compulsory orders. Archaeological sites within the ownership of local authorities are also deemed to be National Monuments. **There are no National Monuments located within the study area.** The nearest National Monument to the subject site is Spike Island (CO087-065003-), which is in the ownership of Cork County Council, and is located *circa* 7.5km to the northeast of the subject site.

The National Monuments (Amendment) Act, 1994 made provision for the establishment of the RMP, which comprises the known archaeological sites within the State. The RMP, which is based on the earlier Register of Historic Monuments (RHM) and Sites and Monuments Record (SMR), provides county-based lists of all recorded archaeological sites with accompanying maps. All RMP sites receive statutory protection under the National Monuments Act 1994 and the NMS must be given two months’ notice in advance of any work proposed at their locations. **There are no recorded archaeological sites** (as recorded by the *Archaeological Survey of Ireland (ASI)*) **located on the footprint of the proposed development site**, while there are only three recorded sites located within 500m of its boundaries, the nearest of which (CO098-019----; *Ringfort – rath*) is located *circa* 240m to the south-southwest of the southernmost portion of the site. These sites are listed in **Table 1** and mapped in **Figure 3** below.

The Cork County Development Plan 2014 includes the following policies and objectives in relation to the protection of the archaeological resource:

Objective HE 3-1: Protection of Archaeological Sites

a) Safeguard sites and settings, features and objects of archaeological interest generally.

b) Secure the preservation (i.e. preservation in situ or in exceptional cases preservation by record) of all archaeological monuments including the Sites and Monuments Record (SMR) (see www.archeology.ie) and the Record or Monuments and Places as established under Section 12 of the National Monuments (Amendment) Act, 1994, as amended and of sites, features and objects of archaeological and historical interest generally. In securing such preservation, the planning authority will have regard to the advice and recommendations of the Department of Arts, Heritage and Gaeltacht as outlined in the Frameworks and Principles for the Protection of the Archaeological Heritage.

HE3-3: Zones of Archaeological Potential

Protect the Zones of Archaeological Potential (ZAPs) located within historic towns and other urban areas and around archaeological monuments generally. Any development within the ZAPs will need to take cognisance of the potential for subsurface archaeology and if archaeology is demonstrated to be present appropriate mitigation (such as preservation in-situ/buffer zones) will be required.

HE3-4: Industrial and Post-Medieval Archaeology

Protect and preserve the archaeological value of industrial and post-medieval archaeology such as mills, limekilns, bridges, piers, harbours, penal chapels and dwellings proposed for refurbishment, works to or redevelopment/conversion of these sites should be subject to careful assessment

HE 3-6: Archaeology and Infrastructure Schemes

Have regard to archaeological concerns when considering proposed service schemes (including electricity, sewerage, telecommunications, water supply) and proposed roadwork's (both realignments and new roads) located in close proximity to Recorded Monuments and Places and their known archaeological monuments.

Archaeological & historical background

There are no recorded archaeological sites (as recorded by the ASI) located on the footprint of the proposed development site. Furthermore, the subject site is not located within any archaeological Zones of Notification (ZON) or Zones of Potential (ZAP). There are only three recorded archaeological sites located within 500m of the boundaries of the proposed development (see **Table 1** and **Figure 3** below), the nearest of which (CO098-019----; Ringfort – rath) is located

within a housing estate *circa* 240m to the south-southwest of the southernmost portion of the site. The other recorded sites include that of a former 18th/19th century flour mill complex (CO087-033----), which is now occupied by commercial and residential units and an 18th century country house (CO099-095----) named Mount Rivers, which is still occupied and in repair. These sites are located over 300m and 400m from the boundary of the subject site respectively. It must also be noted that three small sites, comprising pit features and burnt spread activity were excavated (14E0370) in Kilmoney townland in advance of the construction of the Relief Road. The earliest activity dated to between 2456-2205 BC which places it in Chalcolithic period (the transitional period between the Neolithic and Early Bronze Age periods). The latest dating activity comprised a shallow pit containing smithing residues, indicative of small-scale iron working, which was dated to 372-45 BC, placing it in the Middle Iron Age. These sites were subject to archaeological excavation and are not recorded on the SMR or RMP.

Table 1: List of recorded archaeological sites located within 500m of the proposed development site

SMR No.	Class	Townland	ITM E, N	Distance
CO087-033----	Mill - unclassified	Carrigaline Middle	573015, 562535	c.300m to NW
CO098-019----	Ringfort - rath	Kilmoney	572478, 561985	c.240m to SSW
CO099-095----	Country house	Kilnaglery	573104, 562045	c.415m to SE

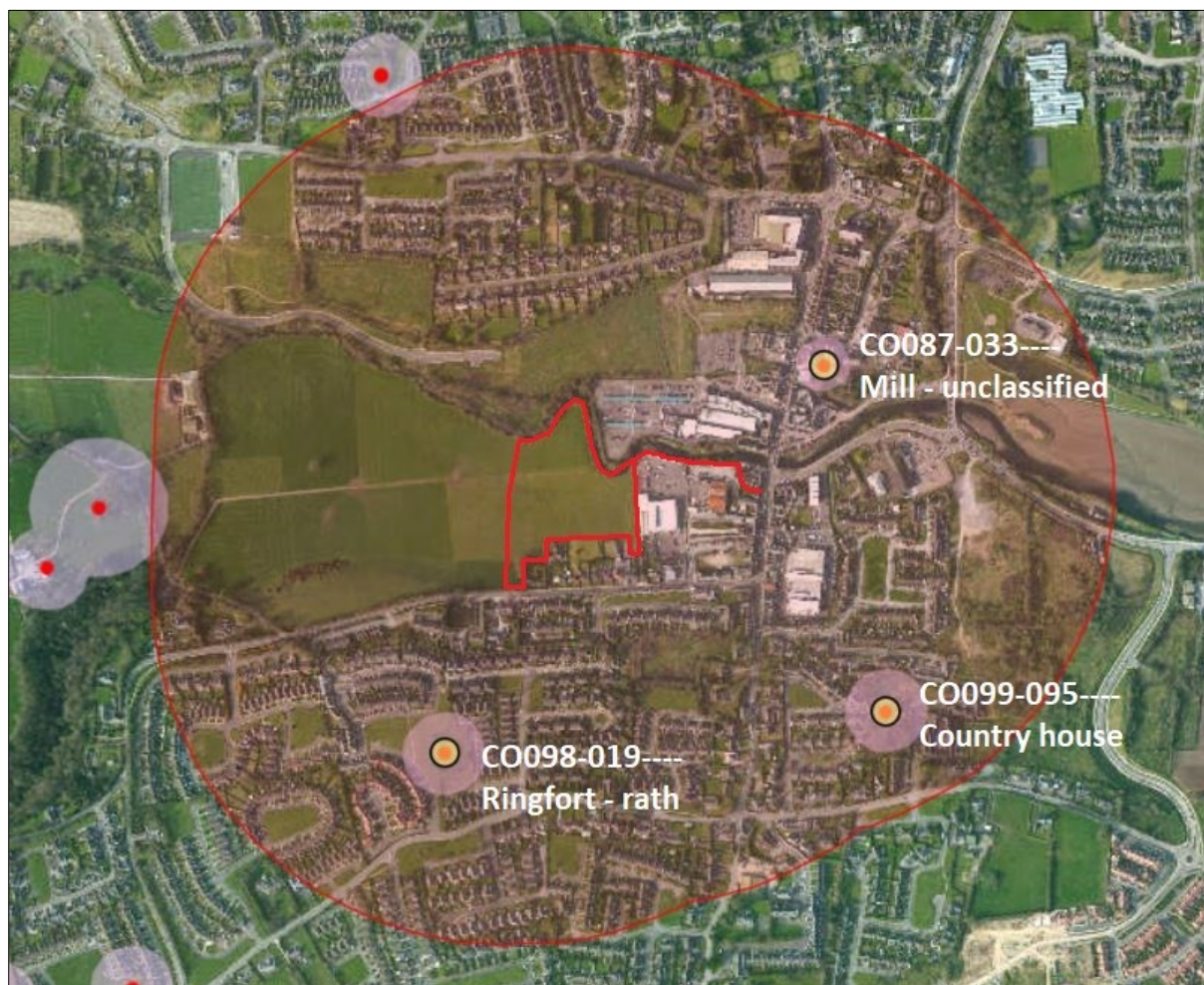


Figure 3: Recorded archaeological sites (as recorded by ASI) within 500m of the subject development site

The following presents summary details of the main periods within the Irish archaeological record with references to the recorded archaeological sites located within the study area. The dating framework used for each period is based on *Guidelines for Authors of Reports on Archaeological Excavations* as published by the National Monuments Service (NMS).

Prehistoric

Traditionally, the earliest recorded evidence for human settlement in Ireland dates to the Mesolithic period (7000–4000 BC) when groups of hunter-gatherers arrived on the island. However, recent evidence in the form of a butchered bear patella found in Alice and Gwendoline Cave near Ennis in Co. Clare now suggests that humans were present in Ireland during the Palaeolithic period between 12,800 to 12,600 cal BC (Dowd and Carden, 2016, 161). While in 2021, re-examination of a reindeer bone fragment discovered in Castlepook Cave near Doneraile, County Cork in 1905 revealed human butchery marks on the bone which was radiocarbon dated to 31,000 BC (Carden, 2021), establishing human activity in Ireland more than 20,000 years earlier than previously thought. While these prehistoric settlers did not construct settlements or monuments that have left any above ground traces, their presence can often be identified by scatters of worked flint in ploughed fields.

The Neolithic period (c.4000-2400 BC) began with the arrival and establishment of agriculture as the principal form of economic subsistence, which resulted in more permanent settlement patterns. As a consequence of the more settled nature of agrarian life, new site-types, such as more substantial rectangular timber houses and various types of megalithic tombs, begin to appear in the archaeological record during this period.

The Irish Bronze Age (c.2400–500 BC) commenced with the arrival of metal-working techniques to the island and this technological advance resulted in the introduction of a new artefactual assemblage into the Irish archaeological record. This period was also associated with the construction of new monument types such as standing stones, stone rows, stone circles, barrows and *fulachta fia*. *Fulacht fia* translates as cooking places of the wild (or of deer), they are often interpreted as the remains of cooking sites and are the most numerous archaeological site type in Ireland, numbering some 7000 recorded examples. Radiocarbon dating of excavated examples has generally produced dates in the Bronze Age (c. 2400-500BC). A number of alternative interpretations have been forwarded as to the function of these archaeological sites, such as their potential uses as bathing, saunas, garment washing and dyeing, leather processing and even brewing sites (Hawkes 2015).

The arrival of iron-working technology in Ireland saw the advent of the Iron Age (600 BC – 400 AD). This period has been traditionally associated with a Celtic ‘invasion’ but this view is no longer widely accepted as recent archaeological evidence points instead to a gradual acculturation of the Irish Bronze Age communities following centuries of contacts with Celtic-type cultures in Europe. Relatively little has been traditionally known about Iron Age settlement and ritual practices until recent decades when the corpus of evidence has been greatly increased by the discovery of Iron Age sites during schemes such as bog-cutting and road construction projects.

Archaeological investigations undertaken in the townlands of Kilmoney and Carrigaline West in advance of the construction of the Carrigaline Relief Road revealed evidence of Bronze Age and Iron Age activity. Three small sites, comprising pit features and burnt spread activity were excavated (14E0370) in Kilmoney townland. The earliest activity dated to between 2456-2205

BC which places it in Chalcolithic period (the transitional period between the Neolithic and Early Bronze Age periods). The latest dating activity comprised a shallow pit containing smithing residues, indicative of small-scale iron working, which was dated to 372-45 BC, placing it in the Middle Iron Age. In Carrigaline West, Late Bronze Age activity (1108-925 BC) in the form of burnt spreads and pits was also revealed and excavated (14E0371).

Medieval and Post-Medieval periods

The early medieval period began with the introduction of Christianity and continued up to the arrival of the Anglo-Normans in the late 12th century (c.400–1169 AD). While the medieval period saw the emergence of the first phases of urbanisation around the larger monasteries and the Hiberno-Norse ports, the dominant settlement pattern was still rural-based and centred around enclosed farmsteads known as ringforts (earth/timber built) and cashels (stone built). Ringforts are one of the most numerous monuments in the Irish landscape, with some 45,000 recorded examples (Stout 1997, 53). These sites comprise broadly circular enclosures delimited by one or more concentric banks and ditches in the case of ringforts and drystone walls in the case of cashels. They were formerly known by the names *ráth/lios/cathair/dún*, which still form some of the most common place-name elements within the Irish landscape. The majority of excavated examples have produced evidence for the remains of timber houses, outbuildings and stockades as well as a variety of agricultural and craft activities such as grain processing and metalworking. A ringfort (CO098-019----) located in Kilmoney townland, *circa* 240m south-southwest of the site entrance provides evidence of early medieval settlement activity within the study area. This ringfort is described as follows in the published 'Archaeological Inventory of County Cork. Volume 2: East and South Cork':

In pasture, on N-facing slope. Heavily overgrown circular area (diam. c. 30m) defined by earthen bank (int. H 1.55m); external fosse SE->N; with second bank (H 0.85m) SE->N.

Further such evidence is provided by the uncovering of early medieval activity during the archaeological mitigation associated with the Relief Road project. A poorly preserved, dumb-bell shaped cereal-drying kiln, which was dated to the late 10th/early 11th century, was revealed in lands adjacent to the PDS in Carrigaline West to the immediate north of the Owenabue River.

The area of the proposed development is located in the Barony of Kerrycurrihy, which in addition to much of east Cork, was part of the ancient territory of the *Uí Liatháin* during the early medieval period. The *Uí Liatháin* were likely originally a branch of the *Corcu Lóegde*, powerful rulers of the Munster region at the beginning of the early medieval period. The *Uí Liatháin* managed to retain considerable power subsequent to the fragmentation of the *Corcu Lóegde*, under pressure from the *Eóganachta Caisil*, from the 7th century onwards. The progenitor of the clan, *Eochu Liatháin*, had six sons, among whose septs his lands were divided (Ó Buachalla 1939, 28). The placename Carrigaline, *Carraig Uí Leighin*, is thought to derive from the area's connection with *Uí Liatháin*, who are said to have had a fortification at the rock outcrop where the 13th century Carrigaline Castle (CO087-037----) would later be built by Philip de Prendergast.

The arrival and conquest of large parts of Ireland by the Anglo-Normans in AD 1169 marks the advent of the late medieval period which continued until approx. AD 1550. This period saw the continuing expansion of Irish urbanisation as many of the port cities developed into international trading centres and numerous villages and towns developed as local or regional market centres.

Following the arrival in Ireland of Henry II to Cork in 1171, Gaelic ruler Diarmuid McCarthy submitted to the Anglo-Normans and a feudal system was introduced into the area. The area surrounding Carrigaline came to be controlled by Milo de Cogan following grant from Henry II in 1177. De Cogan and his descendants had control of Carrigaline Castle until the late 14th century when the castle and surrounding area lands were held by the Fitzgeralds, Earls of Desmond.

The post-medieval period (1550+) saw the development of high and low status stone houses throughout the Irish country. During this period any given settlement cluster is likely to have consisted primarily of single-storey thatched cottages with associated farm buildings while two-storey farmhouses became more common in the 19th-century. The original village settlement at Carrigaline was located adjacent to the castle and remnants of same area evident on the first edition 6-inch Ordnance Survey map. Following abandonment of the castle in the late 17th century, settlement at Carrigaline came to be focused on the bridging point of the Owenabue River. The settlement remained small into the 19th century, with its main focus being the milling of flour at the two mills established by Michael Roberts and Co. These water-powered mills were located to the northeast of the subject site and were fed by two mill races. One of these flour mills (CO087-033----) is a recorded archaeological site and its recorded location is *circa* 300m northeast of the PDS. It is described as follows in the 'Archaeological Inventory of County Cork. Volume 2: East and South Cork':

Late 18th/early 19th century flour mill in Carrigaline town. Shown as L-shaped structure on 1842 OS 6-inch map. Rectangular 4-storey mill (long axis N-S), now used as a store. Roof double-half-hipped. Wooden floor intact; also remains of hoist system and winnower. Courtyard to N enclosed on three sides by additional buildings.

Into the 20th century, the more northerly flour mill complex was transformed into a pottery works, home of the well-known Carrigaline Pottery. The pottery works were founded by Hodder Walworth Blacker Roberts (1878-1952), of Mount Rivers, Carrigaline in 1928. They provided the main source of employment in the village throughout the mid-20th century. Pottery production eventually ceased at the complex in 1979 at which point Carrigaline was developing into a satellite town of Cork City. Mount Rivers House, which is located within the study area, *circa* 420m southeast of the PDS, is a recorded archaeological monument. It is described as follows in the Archaeological Inventory:

On SE side of Carrigaline. According to owner built in 1760s by James Morrison, Entrance front (N) of 4-bays, 3-storeys; central ground floor door set in recess with convex sides containing large window; recess framed by wooden portico with slim doric columns. Rounded corner of front elevation, framed by blocked quoins; windows in curve at same level as front windows but one light wider. Hipped roof with projecting eaves. Elevation weatherslated. Bence Jones (1978, 216) suggest the house originally 'had a front consisting of a centre recessed between two projections with rounded corners. At a later date, the centre in the two upper storeys was filled in'. According to the owner the recess was filled in 1830s when 2nd floor was added. Remains of square 2-storey gate tower in walled garden to S with remains of bellcote on top.

Excavations Database

The Excavation Database (Excavations.ie) contains summary accounts of all licenced archaeological investigations carried out in Ireland (North and South) from 1969 onwards. It has been compiled from the published Excavations Bulletins from 1969 to 2010 and online material only from 2011 onwards, it now provides access to over 30,000 reports that can be browsed or searched using multiple fields, including year, county, site type, grid reference, license number, RMP number and author. The Database records three programmes of licensed archaeological investigation as having been undertaken within the townland of Kilmoney. A programme of archaeological mitigation (14E0370) was undertaken in advance of the construction of the Carrigaline Relief Road. Three small sites, comprising pit features and burnt spread activity were excavated. The earliest activity dated to between 2456-2205 BC which places it in Chalcolithic period (the transitional period between the Neolithic and Early Bronze Age periods). The latest dating activity comprised a shallow pit containing smithing residues, indicative of small-scale iron working, which was dated to 372-45 BC, placing it in the Middle Iron Age. Two other programmes of licensed investigation (02E0823; 19E0208) undertaken within the townland revealed nothing of an archaeological nature.

The Database also records two programmes of archaeological investigation as having been undertaken within the townland of Carrigaline West. Both programmes were undertaken in advance of the construction of the Carrigaline Relief Road. Archaeological testing (13E0006 ext.) of the former Carrigaline Pottery Works uncovered portions of the former mill race, while testing of the route of the road (13E0006) revealed three small sites consisting of a poorly preserved, dumb-bell shaped cereal-drying kiln (Carrigaline West 1) a potential hearth feature (Carrigaline West 2) and Bronze Age spreads and pits (Carrigaline West 3). These sites were subsequently excavated under Excavation Licence 14E0371.

Please consult **Appendix 2** for full Excavations Database summaries.

Cartographic and aerial imagery review

The detail on historic cartographic sources demonstrates the nature of past settlements and land use patterns in recent centuries and can also highlight the impacts of modern developments and agricultural practices. This information can aid in the identification of the location and extent of unrecorded or partially levelled features of archaeological or architectural heritage interest. The cartographic sources examined for the study areas include the 17th century Down Survey mapping (**Figure 4**), the First Edition of 6-inch Ordnance Survey (OS) map (surveyed c.1840) (**Figure 5**) and the 25-inch OS map (surveyed c.1900) (**Figure 6**). The Down Survey map provides little detail but does not show any structures within the area of the subject lands. Of interest, however, is the map's depiction of 'Carrigoline towne' at its previous location adjacent to Carrigaline Castle. There is no nucleated settlement depicted at the bridging point of the Owenabue River as the modern location of the town only developed from the late 17th century onwards following the abandonment of the castle.

The First Edition map depicts the subject site as extending over portions of six separate enclosed agricultural fields. Open demesne lands associated with the mid-18th century Kilmoney House are shown adjoining the western boundary of the site. The ruins of Kilmoney Abbey (CO098-020---), a later medieval Augustinian ecclesiastical establishment, are also contained within these lands, however, they located *circa* 590m to the west of the subject site.

By the time of the production of the 25-inch map, all of the field boundaries that were depicted straddling the subject site in the First Edition map have been removed, with the site taking its modern form as one large field. Neither of the reviewed historic OS map editions depicts any potentially unrecorded archaeological features on the footprint of, or immediately adjacent to, the proposed development site.

However, a review of aerial and satellite imagery detailing the subject site was also undertaken. A number of the aerial images appear to show a *circa* 8m diameter subcircular feature within the subject lands (see **Figure 7** below). This feature could potentially represent an unrecorded barrow type archaeological site. Site inspection (see **Section 4** below) has revealed that the area of this potential feature has been heavily disturbed due to the construction of a hardstanding area associated with the Relief Road project.



Figure 4: Extract from the Down Survey mapping of Kerrycurrihy Barony which depicts 'Carrigoline towne' in the vicinity of Carrigaline Castle. While the bridge over the Owenabue River is depicted, no nucleated settlement has yet developed at this location. Approximate location of subject lands circled

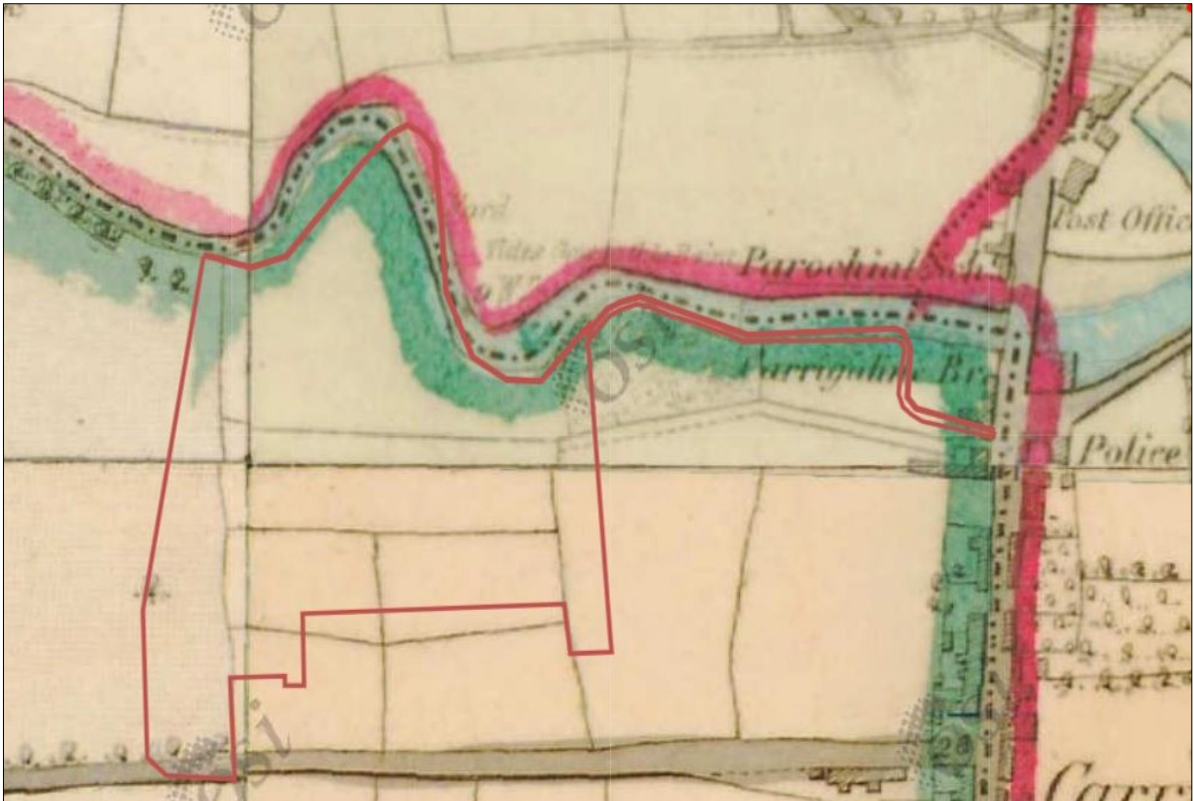


Figure 5: Extract from the First Edition 6-inch OS map with the boundary of the subject site depicted by the thin green line

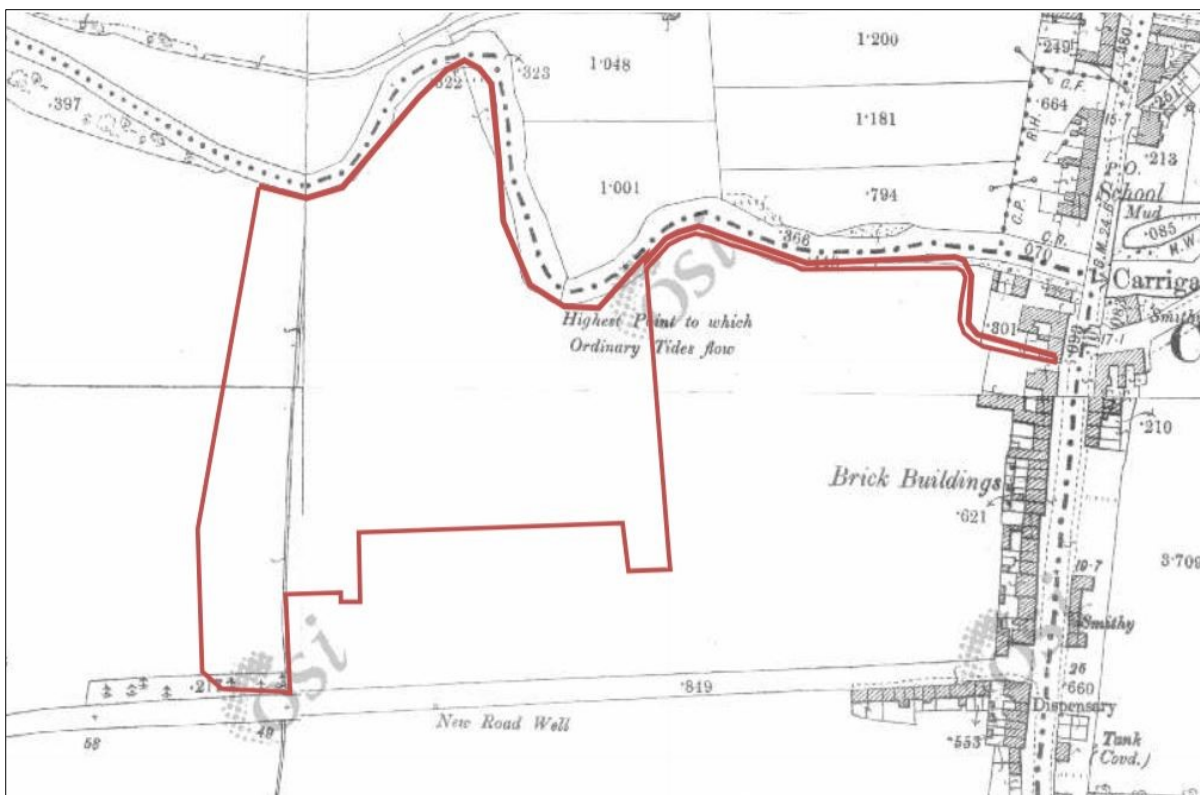


Figure 6: Extract from the 25-inch OS map detailing the subject site and surrounds (Maps reproduced under Ordnance Survey Ireland Licence No. SU 0003320 (© Ordnance Survey Ireland/Government of Ireland))



Figure 7: Recent aerial image (but prior to construction of the Relief Road by Cork County Council) of subject site, potential archaeological feature circled

4. Description of site

An inspection of the subject site was undertaken by David Murphy of John Cronin & Associates on Friday 3 September 2021. The site was assessed in terms of historic landscape, land use, vegetation cover, presence and potential for undetected archaeological and architectural heritage sites/features. Weather conditions were dry and bright at the time of survey and this provided excellent landscape visibility. No difficulties were encountered during topographical survey. Please consult **Appendix 1** of this report for extracts from the photographic record of the site inspection.



Figure 8: Recent aerial image centred over the proposed development site

The subject site comprises a largely fallow, undeveloped parcel of good quality pastural land in the townland of Kilmoney, County Cork. The site, which is located to the west of the southern end of Main Street, Carrigaline and to the east of the new Carrigaline Relief Road (currently under construction), measures *circa* 3 hectares in area. The northern portion of the site, which is bound by the Owenabue River, is the lowest lying and forms a part of the river's flood plain. A greenway pedestrian and cycle link is proposed to extend along the southern bank of the Owenabue River from the north-eastern corner of the site as far as the Main Street of Carrigaline. This route will predominantly traverse existing yard and brownfield areas.

The site slopes gently upwards to the south where it is bound by a number of individual residential dwellings that front onto the R611 regional road. There is a small parcel of fallow land in the south-easternmost corner of the site. The site borders the Dairygold Co-op site to the east and is separated from same by metal palisade fencing, while the new Relief Road defines the western boundary of the site. This is currently fenced off with Harris fencing. A low voltage overhead power line extends over the north-eastern corner of the site, where there is also evidence of modern services having been installed.

A portion of ground that is within the red line boundary of the SHD has been fenced off and a hardstanding surface created within it. These works appear to have been undertaken in conjunction with the Relief Road construction works and are unrelated to the subject application. The relevant area measures *circa* 80m east to west by *circa* 40m north to south (see **Plate 10** in **Appendix 1**). Much of the topsoil across this area has evidently been reduced into the underlying subsoil and a large amount hardcore stone deposited to create a hardstanding area. These works have been undertaken in the exact location where a potential subcircular archaeological feature was noted during a review of aerial imagery (**Figure 7**). This feature was identified at approximate ITM co-ords. 572620 (E), 562350 (N). The location of this potential feature has been heavily truncated by the works. While archaeological testing (13E0006) and subsequent archaeological excavation (14E0370) was undertaken along the route of the Relief Road within Kilmoney townland, it is unclear whether any mitigation was undertaken in the area within the SHD red line boundary that has been impacted by the above-described works.

As previously outlined, the terrain within the site slopes gently upwards from the Owenabue flood plain in the northern portion of the site towards more elevated ground to the south. The northern area is within the loop of a meander of the river and is slightly more uneven underfoot in comparison with areas to the south. While these low undulations may be natural or associated with modern disturbance, an archaeological origin can also not be ruled out.

No evidence of any unrecorded archaeological features was noted during the inspection of the subject site. However, it must be noted that the fallow nature of the majority of the field negated the identification of potential low relief surface undulations across much of the site.

Please consult **Appendix 1** of this report for extracts from the photographic record of the site inspection.

5. Assessment of impact

There are **no recorded archaeological sites** (as recorded by the *Archaeological Survey of Ireland (ASI)*) located on the footprint of the proposed development site. Furthermore, the subject site is not located within any archaeological *Zones of Notification (ZON)* or *Zones of Potential (ZAP)*. There are only three recorded archaeological sites located within 500m of the boundaries of the proposed SHD lands, the nearest of which is the site of a ringfort (C0098-019----) located *circa* 240m to the south-southwest. Given the absence of recorded archaeological sites within the proposed development site or adjacent to its boundary, the construction of the proposed development will, therefore, **have no predicted impact on the recorded archaeological resource**.

There was no definitive evidence identified for the presence of unrecorded archaeological sites or features within the proposed development site during a field survey undertaken as part of this assessment. The field survey revealed that the majority of the site remained largely undisturbed by modern activity.

However, a review of aerial and satellite imagery detailing the subject site revealed the potential presence of a *circa* 8m diameter subcircular feature within the subject lands (approx. ITM co-ords. 572620, 562350) (see **Figure 7** above). This feature could potentially represent an unrecorded barrow type archaeological site. Site inspection revealed that the area of this potential feature has been heavily disturbed due to the construction of a hardstanding area associated with the Relief Road project. These works were not undertaken as part of the present application. The ground levels in the area of the potential feature appear to have been heavily truncated. It is not known whether any archaeological mitigation was carried out in advance of these works within the SHD boundary. The presence of this potential feature, together with those identified along the route of the adjacent Relief Road, as well as the good quality and strategic location of the land parcel, allows a consideration that **the undisturbed portions of the subject site possess a moderate to high archaeological potential**.

As the site is considered to possess a moderate to high archaeological potential, it is recognised that unrecorded subsurface archaeological features may exist within it. As such, without the implementation of appropriate mitigation measures (see **Section 6** below), **there is potential for direct, negative impacts on the unrecorded archaeological heritage resource**.

6. Conclusions and recommendations

Conclusions

This assessment has been compiled in order to examine the potential impacts which the proposed Strategic Housing Development, and associated infrastructure, may have on both the recorded and potential archaeological heritage resource of the study area centred on the subject lands in Kilmoney, Carrigaline, County Cork. The study area for this assessment comprised the lands within the boundary of the proposed development, along with those extending for 500m from its boundary. Following consultation of the available and relevant datasets, historic documentary and cartographic sources and site inspection, this assessment has concluded that the proposed scheme will have **no predicted impact** on the recorded archaeological heritage resource of the area.

The subject site has retained a largely undeveloped greenfield character from at least the early 19th century and is considered to possess a *moderate to high archaeological potential*. As such, it is recognised that unrecorded subsurface archaeological features may exist within it. Consequently, without the implementation of appropriate mitigation measures (see below), there is potential for **direct, negative impacts** on the unrecorded archaeological heritage resource should the proposed development proceed.

Finally, a potential subcircular archaeological feature was identified within the red-line boundary of the SHD lands (approx. ITM co-ords. 572620, 562350) during a review of aerial imagery of the subject site undertaken as part of this assessment. Site inspection revealed that the area of this potential feature has been heavily disturbed due to the construction of a hardstanding area associated with the Relief Road project. These works were not undertaken as part of the present application. The ground levels in the area of the potential feature appear to have been heavily truncated. It is not known whether the developer of the Relief Road undertook any archaeological mitigation in advance of these works within the SHD boundary.

Recommendations

As there are no predicted impacts on the recorded archaeological resource, it is recommended that the following measures be carried out **subsequent** to any grant of planning permission that may be issued by An Bord Pleanála but prior to any construction-related groundworks being undertaken at the subject site.

It is recommended that a programme of **geophysical survey** be undertaken across the undisturbed portions of the subject lands that are proposed for development. Should the geophysical survey reveal evidence of the potential presence of unrecorded archaeological features or deposits within the site, these areas should be further investigated through a subsequent programme of **archaeological testing**.

It is further recommended that should the area of hardstanding that was deposited in the area of the potential subcircular feature be removed at any point during or subsequent to the Relief Road construction works or during any works associated with the subject development, the area be carefully cleaned back and subject to archaeological inspection.

If archaeological features are revealed during the testing programme or during any inspection of the hardstanding area (should it be removed), these features should be recorded in written, drawn and photographic formats and left remain *in-situ* until consultations are undertaken with the National Monuments Service and on the appropriate mitigation strategy.

Should the proposed mitigation measures be followed as recommended, this shall provide for either the avoidance of any revealed archaeological remains or the proper and adequate recording of this resource. As a result, there shall be **no direct residual effects on the archaeological resource** following construction of any future development.

7. References/sources

Published works

Lewis, S. 1837 *A Topographical Dictionary of Ireland*, 2 vols, London: Samuel Lewis & Son.

Power, D. *et al.* 1994 *Archaeological Inventory of County Cork, Vol.2: East and South Cork*. Dublin, Stationery Office.

Internet resources

Cork County Development Plan (2014)

<https://www.corkcoco.ie/cork-county-development-plan-2014>

Cork genealogical and historical website

<https://www.corkgen.org/baronies/kerrycurrihy.html>

Database of Irish archaeological excavations

<http://www.excavations.ie/>

Department of Culture, Heritage and the Gaeltacht's Historic Environment Viewer

<http://webgis.archaeology.ie/historicenvironment/>

Draft Cork County Development Plan

<https://www.corkcoco.ie/en/cork-county-development-plan-2022-2028>

Geohive Mapviewer resource

<http://www.geohive.ie/>

Google Earth Pro

<https://www.google.com/earth/versions>

Heritage Map Viewer - various interactive heritage maps

<https://heritagemaps.ie/WebApps/HeritageMaps/index.html>

Irish heritage website

<https://heritageireland.ie/>

Landed Estates Database

<https://landedestates.nuigalway.ie/LandedEstates>

Teagasc Soil Map

<https://gis.teagasc.ie/soils/map.php>

Appendix 1: Photographic record



Plate 1: View of the subject site, facing northeast



Plate 2: View of the southern margin of the site, facing east



Plate 3: View of fallow area in the south-easternmost corner of the site



Plate 4: View of the eastern margin and boundary of the site



Plate 5: View westwards across subject site towards the Relief Road which is under construction



Plate 6: Evidence of modern services in the eastern margin of the site



Plate 7: View of the Owenabue River which forms the northern site boundary, facing west



Plate 8: View northwards across the fallow site



Plate 9: View of the area within the river meander in the northern flood plain where low surface undulations were noted, facing southwest



Plate 10: View of the hardstanding area constructed within the SHD boundary during the Relief Road works. This is the area of the feature noted on aerial imagery of the site



Plate 11: View westwards across the open former demesne lands to the west of the Relief Road towards the locations of Kilmoney House (CO098-016----) and Kilmoney Abbey (CO098-020----) (beyond tree-line in background)

Appendix 2: Excavations Database entries

<i>Site name</i>	<i>Licence and author</i>	<i>Summary</i>
Kilmoney, Carrigaline, County Cork	02E0823 Sheila Lane	A development of 40 houses was undertaken by Cork County Council at Kilmoney, Carrigaline. The site is within the zone of archaeological potential of a ringfort and a possible souterrain. Monitoring of all ground disturbance was recommended. No finds or features of an archaeological nature were noted during the monitoring. As a result of recommendations from Dúchas, the ringfort was cleared of all overgrowth and debris under archaeological supervision, and it was agreed that regular maintenance of the ringfort would take place
Carrigaline West, Kilmoney, R611 Carrigaline Western Relief Road, Co. Cork	13E0006 ext Rob O'Hara	Testing of the site of the former Carrigaline Pottery Works (Carrigaline West Td.) was carried out in October 2014 as part of the proposed western bypass of Carrigaline. A total of 8 trenches were excavated (139 linear metres, 454 sq m) across the site. Made ground was noted across the area to a depth of 2.5m. The remains of a former millrace were noted in Trench 3. The millrace had been previously noted in the initial assessment of the scheme (Hanley 2014). In Trench 3, the mill race was 1.5m below ground. It was recorded for 14m and was c. 1m wide within the trench, extending beyond the northern limit. It was backfilled with light greyish brown clayey silt and a dry stone (limestone) lining was noted on the southern side. Elsewhere on site the survival of the millrace was severely compromised by the post-medieval buildings associated with the mill complex and pottery works. The best surviving portion of the millrace was noted in Trench 7, adjacent to the property/field boundary. Here, a c. 2m-deep cut was noted in the test trench. This appeared to have been cleaned out at some point and subsequently backfilled with pottery wasters. It was not possible to say with certainty that the millrace survived in Trenches 4 and 6 where the depth of site clearance/fill material ranged from 1.5m to 2.5m. Also, a reinforced concrete floor was noted at 1.5m deep in Trench 4. However, a variation in the clay layer at the base of Trench 5 might indicate the location of the expanded millrace as depicted on the 3rd edition OS map.
Kilmoney, R611 Carrigaline Western Relief Road, Co. Cork	14E0370 Rob O'Hara	<p>Three small sites were excavated in Kilmoney, Carrigaline, Co. Cork as part of advanced archaeological works for the proposed Carrigaline Western Relief Road. Previous testing (13E0006) by Ken Hanley of Cork Road Design Office identified five archaeological sites along the scheme.</p> <p>Kilmoney 1 was a cluster of three pits excavated in the floodplain of the Owenboy River. Each pit contained charcoal and heat-fractured stone. Radiocarbon dating of a sample of alder charcoal collected from the fill of one of these pits indicates that this activity was undertaken in the Chalcolithic period between 2456-2205 BC (D-AMS 010555; 3844±22 BP). A similar site was found at Carrigaline West 3 on the northern side of the river (13E0371), although this site was dated to the late Bronze Age.</p>

<i>Site name</i>	<i>Licence and author</i>	<i>Summary</i>
		<p>Kilmoney 2 (100m to the south) was a disturbed fulacht fia situated on higher ground overlooking the floodplain, but adjacent to a palaeochannel. Below the disturbed spread (c.30m x 15m), 13 pits of various sizes and shapes were identified. Environmental samples contained hazel, oak, alder, holly, willow, pomoideae and birch charcoal. It appeared that the palaeochannel may have directly filled two of the pits and possibly a cluster of 4 interconnected pits, with a possible overflow channel taking water away from the working area. The overflow channel and 2 of the interconnected pits have been radiocarbon dated to the Early Bronze Age. A third pit in this sequence was dated to the Middle Bronze Age. Of the remaining pits across the site, a further two were dated to the Early Bronze Age. A sample of alder charcoal from the disturbed burnt mound was dated to the Early Iron Age in the period 771-519 BC, indicating at least three phases of fulacht fia activity at this site. A shallow pit containing smithing residues was also identified and radiocarbon dating of oak charcoal collected from this feature suggests small-scale iron working in proximity to the fulacht fia in the Middle Iron Age during the period 372-45 BC.</p>
<p>Carrigaline West 1-3, Carrigaline Western Relief Road, Co. Cork</p>	<p>14E0371 Rob O'Hara</p>	<p>Three small sites were excavated in Carrigaline West as part of advanced archaeological works for the proposed Carrigaline Western Relief Road. Previous testing (13E0006) by Ken Hanley of Cork Road Design Office identified five archaeological sites along the scheme. Carrigaline West 1 survived as a badly preserved, dumb-bell shaped cereal-drying kiln truncated by later drains and furrows.</p> <p>A tree bole which pre-dated drain F103 and an isolated stone drain were also recorded. A date of AD 988-1147 (D-AMS 010565; 1001±22 BP) was returned from seeds from the drying chamber in the kiln. A sample of ash charcoal from the fire pit returned a date of AD 893-1014 (D-AMS 010564; 1089±26 BP). A sample of pomoideae charcoal collected from a charcoal deposit displaced from the kiln was dated to AD 901-1025 (D-AMS 010566; 1052±26 BP). The charcoal assemblage from the kiln was dominated by hazel and scrubland taxa with smaller quantities of oak, ash and elm, indicating that the contemporary landscape was an area of open farmland. Large quantities of seeds were also identified in samples collected from the kiln. This assemblage was dominated by oat.</p> <p>Carrigaline West 2 was an isolated potential hearth (or possibly root burning/scrub clearance), and an assortment of early modern furrows and drains. The edge of a late 18th- or early 19th-century millrace was also identified.</p> <p>Carrigaline West 3 survived as shallow spreads and pits containing burnt stone probably reflecting Bronze Age activity and further deposits of oxidised clay and charcoal the date and nature of which were unclear. Charcoal collected from one of the pits with burnt mound material was dated to the late Bronze Age (1108-925 BC; 2847±27 BP; D-AMS 010567).</p>

<i>Site name</i>	<i>Licence and author</i>	<i>Summary</i>
Kilmoney, Carrigaline, County Cork	19E0208 Colm Chambers	Test trenching was carried out on the footprint of a granted housing development at Kilmoney, Carrigaline, Co. Cork. No archaeological features or artefacts were noted in any of the test trenches excavated.