

JOHN CRONIN & ASSOCIATES

ARCHAEOLOGY | CONSERVATION | HERITAGE | PLANNING

Strategic Housing Development, Ardarostig, Cork Archaeological Assessment



Prepared by:

John Cronin & Associates
Unit 3A Westpoint Trade Centre
Ballincollig
Cork

On behalf of:

Ardstone Homes
c/o HW Planning
5 Joyce House
Barrack Square
Ballincollig
Cork

February 2021

Document Control Sheet

Client Representative	HW Planning on behalf of Ardstone Homes				
Project Title	Proposed Housing Development, Ardarostig, Cork				
Document Title	Archaeological assessment				
Document No.					
Document Comprises	DCS	NTS	TOC	Pages	45
	Y	N	Y	Appendices	3

Rev	Status	Author(s)	Reviewed By	Approved By	Office of Origin	Issue Date
01	Draft	CC	JC	JC	Cork	29/01/21
01	Final	CC	JC	JC	Cork	26/02/21

© 2021 Cultural Resource Management and Planning. Ltd. 'John Cronin & Associates; is a trading name of Cultural Resource Management and Planning. Ltd. All Rights Reserved. Cultural Resource Management & Planning Ltd has used reasonable skill, care and diligence in compiling this report and no warranty is provided as to the report's accuracy. Cultural Resource Management & Planning Ltd is not responsible for any errors or omissions, or for the results obtained from the use of information outlined in this report. No part of this report may be copied or reproduced, by any means, without the written permission of Cultural Resource Management & Planning Ltd.

Contents

1. Introduction	1
2. Methodology	2
3. The existing environment	4
4. Description of subject site	12
5. Assessment of impacts	15
6. Mitigation measures	17
7. Conclusions	18
8. References	19
Appendix 1: Archaeological Inventory Entries	20
Appendix 2: Summaries of Archaeological Excavations	24
Appendix 3: Photographic record	34

1. Introduction

John Cronin & Associates have been commissioned by **Ardstone Homes** to assess the potential archaeological impact of a proposed residential development at Ardarostig, Bishopstown, Cork.

The development will consist of a mixed-use residential development with commercial space, crèche, landscaping, road improvement, pedestrian / cycleway and site development works. The proposed development will consist of 137 houses comprising 29 no. 4-bed and 108 no. 3-bed detached, semi-detached and terraced dwellings and 139 no. apartments comprising a mix of 20 no. 3-bed duplex units, 65 no. 2-bed apartments and 54 no. 1-bed apartments over 5 apartment blocks. The proposed development will provide for new vehicular and pedestrian entrances onto Waterfall Road, a two-way cycle track and pedestrian footpath linking to existing shared surface pathway south of the N40, upgrades to this shared surface path to provide two-way cycle track and pedestrian footpath, pedestrian crossings to the east of the site and on waterfall road, infrastructure development works comprising the relocation/undergrounding of ESB powerlines, wastewater treatment proposals, surface water attenuation, water utility services and all ancillary site development.

The development proposes to cover an area approximately 9.95 hectares over one large irregular field with a pedestrian/cycle path connection to the east of the northeast corner. The development site is entirely contained within the townland of Ardarostig, which lies in the parish of Inishkenny, in the barony of Cork and is sited just inside the south west boundary of Cork City, while the footpath/cycle track crosses into the southern margin of Ballinaspig More townland.

The study area for this assessment comprised the internal area of the proposed development combined with the lands extending for c.1km from the outer boundaries of the site. There are 17 recorded archaeological monuments within the study area. The *zone of notification* of a levelled enclosure (RMP no. CO086-134---), located c.30m to the east, partially extends into the development site at the southeast corner.

A geophysical survey of the proposed development site was carried out in September 2018 by TARGET Archaeological Geophysics (Licence 18R0199). This report should be read in conjunction with same.

2. Methodology

Desktop Study

This assessment is based on a desktop survey which identified all recorded archaeological sites within the vicinity of the subject area. The principal source reviewed for the assessment of the known archaeological resource are the files and records of the Archaeological Survey of Ireland (ASI). Between 1984 and 1992, the ASI issued a series of county Sites and Monuments Records (SMRs). These county SMRs, revised in the light of further research and fieldwork, formed the basis for the statutory Record of Monuments and Places (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. Monuments included in the statutory RMP are legally protected and are generally referred to as “Recorded Monuments”.

Since the publication of the original county SMRs and RMPS, the ASI has continued to record and add entries to the Sites and Monuments Record. In addition, the ASI has developed an online database and web viewer known as the “Historic Environment Viewer”; this has been developed to “enhance the user’s experience by facilitating access the databases of the National Monuments Service 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:

- 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).
- Development Plans - The local authority development plans relevant to the study area was consulted as part of this assessment. These plans outline the local authorities’ policies for the conservation of the archaeological and architectural heritage resource and include the Record of Protected Structures (“RPS”) and any designated Architectural Conservation Areas (“ACAs”). Whilst the site is located within the functional area of Cork City Council, it is covered by the policies of the *Cork County Development Plan 2014-2020*.
- Database of Irish Excavation Reports - The Database of Irish Excavation Reports contains summary accounts of all archaeological excavations carried out in Ireland (North and South) from the 1960s to present.
- Placenames Database of Ireland - The Placenames Branch (Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs) provides a comprehensive management system for data, archival records and placenames research conducted by the State. Its primary function is to undertake research in order to establish the correct Irish language forms of the placenames of Ireland and to publish them on a public website (www.logainm.ie).
- *National Inventory of Architectural Heritage* - The function of the National Inventory of Architectural Heritage (“NIAH”) is to record built heritage structures within the Republic of Ireland and to advise local authorities in relation to structures of interest within their

areas. The NIAH commissions surveys of sites of architectural significance to assist in evaluating structures to be included in the RPS. Listing on the NIAH does not necessarily carry any statutory protection but does highlight the culturally significant aspects of the structure which ought to be conserved.

A geophysical survey (Licence 18R0199) of the proposed development site was carried out in September 2018 by TARGET Archaeological Geophysics and the results of this survey have informed the present report.

Types of Impact

Impacts are generally 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

An archaeological inspection of the landholding of the proposed development site was undertaken in May 2018 and again in July 2020 in dry and bright weather conditions that provided excellent landscape visibility. This survey entailed the field walking of the lands that contain the layout of the proposed development and encompassed all areas to be impacted by the proposed development. The entire subject site was accessible and was assessed in terms of landscape, land use, vegetation cover, presence or lack of both known and potential archaeological sites. A photographic record of the site inspections was compiled, and extracts are presented in **Appendix 3** of this report.

3. The existing environment

The proposed development site is located within a semi-rural setting on the expanding edge of Cork City. The site is contained within one large field to the south of the N40 road. The development site is enclosed by the Waterfall road and residential properties to the north and a combination of open fields and woodland everywhere else. The area is a geological region of Devonian sandstone with mudstone and siltstone with soil profiles of coarse loamy drift with siliceous stones.

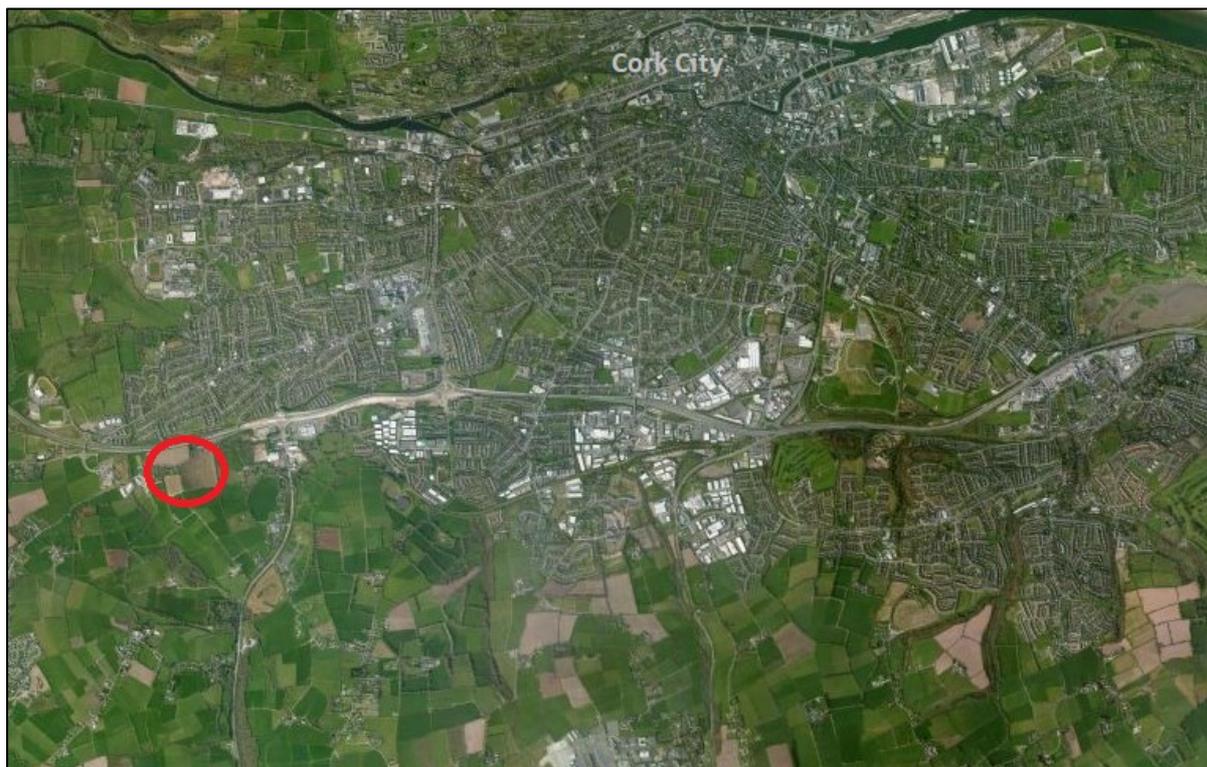


Figure 1: Aerial photograph showing the general location of the proposed development site.

Legal and Policy Context

The management and protection of cultural heritage in Ireland is achieved through a framework of international conventions and national laws and policies (Department of Arts, Heritage and the Gaeltacht 2004, 2011, 35). This framework was established in accordance with the provisions of the 'European Convention on the Protection of the Archaeological Heritage' (the Valletta Convention) and 'European Convention on the Protection of Architectural Heritage' (Grenada Convention). Cultural heritage can be divided loosely into the archaeological resource covering sites and monuments from the prehistoric period until the post-medieval period and the architectural heritage resource, encompassing standing structures and sites of cultural importance dating from the post-medieval and modern period. In addition, local placenames, folklore and traditions are considered part of our cultural heritage. In summary, the national policy statements, guidelines and advice notes 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);
- Policy for the Protection of the Archaeological Heritage (Department of Arts, Heritage, Gaeltacht and the Islands 1999);

- Architectural Heritage (National Inventory) and National Monuments Act (1999);
- Local Government (Planning and Development) Act (2000); and Department of Environment, Heritage, and Local Government's Architectural Heritage Protection: Guidelines for Planning Authorities (2004).

Relevant Archaeological Legislation and Policies

The National Monuments Acts 1930 to 2004, the Heritage Act 1995 and relevant provisions of the National Cultural Institutions Act 1997 are the primary means of ensuring the satisfactory protection of archaeological remains, which are deemed to include 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' (Section 2, National Monument Act, 1930). The Record of Monuments and Places (RMP) was established under Section 12 (1) of the National Monuments (Amendment) Act, 1994 and replaced the earlier Sites and Monuments Record (SMR). It comprises of lists and maps of archaeological monuments and relevant places in respect of each county in the State. All sites recorded on the RMP receive statutory protection under the National Monuments Act 1994 and any work undertaken at these sites must be licenced by the National Monuments Service (NMS). There are no recorded National Monuments within the study area. **The RMP lists 17 archaeological sites within the study area and their descriptions are provided below (Table 1).** The zone of notification of a levelled enclosure (RMP no. CO086-134---), located c.30m to the east, partially extends into the development site at the southeast corner.

Relevant Architectural Heritage Legislation and Policies

Protection of the architectural/built heritage resource is provided through a range of legal and policy instruments. The Heritage Act, (1995) protects all heritage buildings owned by a local authority from damage and destruction. The Architectural Heritage Act, 1999, requires the Minister to establish a survey to identify; record and evaluate the architectural heritage of the country. The function of the National Inventory of Architectural Heritage (NIAH) is to record built heritage structures within the Republic of Ireland and to advise local authorities in relation to structures of interest within their areas. **There are two NIAH structures within the study area and the relevant NIAH entries are provided below (Table 2).**

The Local Government (Planning and Development) Act, 2000, requires all Planning Authorities to keep a 'Record of Protected Structures' (RPS) of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. As of the 1st January 2000, all structures listed for protection in current Development Plans, have become 'protected structures'. Since the introduction of this legislation, planning permission is required for any works to a protected structure that would affect its character. Whilst the site is located within the functional area of Cork City Council, it is covered by the policies of the *Cork County Development Plan 2014-2020*.and that plan lists **no protected structures within the study area.**

Archaeological and Historical Context

There are **no recorded archaeological sites within the lands comprising the proposed development area.** The Historic Environment Viewer records **seventeen archaeological sites** within c.1000m of the proposed site boundary. **The zone of notification for a levelled enclosure (RMP No. CO086-134----), located c.30m to the east, partially extends into the development site at the southeast corner.**



Figure 2: Recorded archaeological sites located within c.1km of proposed development site (Map Source: www.archaeology.ie):

Table 1: List of known archaeological monuments within approximately 1 km of the Application Site.

No. on Map	SMR No	Class	Townland	ITM Reference (E.N)
1	CO073-069---	Ringfort-rath	Ballinaspig More	562728, 568903
2	CO073-111---	Fulacht fia	Ballinaspig More	562518, 569213
3	CO073-112---	Fulacht fia	Ballinaspig More	562598, 569193
4	CO073-113--	Pit-burial	Ballinaspig More	562884, 569028
5	CO073-114---	Building	Ballinaspig More	562634, 569009
6	CO073-115--	Structure	Ballinaspig More	562733, 569033
7	CO073-117--	Excavation-miscellaneous	Ballinaspig More	562631, 569006
8	CO073-125---	Burnt mound	Ballinaspig More	562138, 569203
9	CO074-046---	Kiln-lime	Ballinaspig Beg	563237, 569952
10	CO074-055001-	Designed landscape-belvedere	Ballinaspig More	563069, 569888
11	CO074-055002-	Church	Ballinaspig More	563048, 569855
12	CO074-055003-	Country house	Ballinaspig More	563071, 569856
13	CO074-128---	Burnt mound	Ballinaspig More	563277, 569141

<i>No. on Map</i>	<i>SMR No</i>	<i>Class</i>	<i>Townland</i>	<i>ITM Reference (E.N)</i>
14	CO074-129--	Fulacht fia	Ballinaspig More	563809, 569241
15	CO085-119---	Enclosure	Ballinveltig	562121, 568679
16	CO086-058---	Country house	Chetwynd	564037, 568032
17	CO086-134---	Enclosure	Ardarostig	563535, 568794

Early 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 Paleolithic period between 12,800 to 12,600 cal BC (Dowd and Carden, 2016, 161). While the Mesolithic settlers did not construct any settlements or monuments that leave any above ground traces, their presence in an area can often be identified by scatters of worked flints in ploughed fields or shell middens adjacent to the coastline. **There are no recorded sites dating to the Mesolithic period within the study area.** The Neolithic period (4000-2400 BC) began with the arrival and establishment of agriculture as the principal form of economic subsistence, which resulted in more permanent settlement patterns. As a consequence of the more settled nature of agrarian life, new site-types, such as more substantial rectangular timber houses and various types of megalithic tombs, begin to appear in the archaeological record during this period. **One fulacht fia (RMP No. CO073-122) within the study area has been dated to the Late Neolithic. Other Neolithic activity was recorded during at excavation at Ballinaspig More (RMP No. CO073-117) where a number of pit-like and posthole-like features contained Neolithic finds. Bronze Age activity was also recorded on this site and adjacent sites produced a structure (RMP No.CO073-115---) and a building (RMP No. CO073-114).**

Late Prehistoric periods

Metalworking arrived in Ireland with the advent of the Bronze Age period (c. 2400–500 BC). This period was also associated with the construction of new monument types such as standing stones, stone rows, stone circles 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, 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. The development of new burial practices saw the construction of funerary monuments such as cairns, barrows, boulder burials and cists. The later first millennium BC and the early centuries AD comprise the Irish Iron Age, which is the most obscure period in the Irish archaeological record. While there is general agreement that the introduction of an iron technology was a significant factor in the eventual demise of bronze working on a large scale, but how, why and when this came about in Ireland is far from clear. **Two further fulacht fia's and two burnt mounds are located within c.1km of the proposed development and these most likely date to the Bronze age.**

Early Medieval

This period began with the introduction of Christianity in Ireland and continued up to the arrival of the Anglo-Normans during the 12th-century (c. 400–1169 AD). The establishment of the Irish church was to have profound implications for political, social and economic life and is attested to

in the archaeological record by the presence of church sites, associated places for burial and holy wells. The early medieval church sites were morphologically similar to ringforts but are often differentiated by the presence of features such as church buildings, graves, stone crosses and shrines. This period saw the emergence of the first phases of urbanisation around the large monasteries and the Hiberno-Norse ports. However, the dominant settlement pattern of the period continued to be rural-based in sites such as ringforts, which comprise roughly circular enclosures delimited by roughly circular earthen banks formed of material thrown up from a concentric external ditch. Ringforts are one of the most numerous monuments in the Irish landscape and the early medieval terms for these sites – rath/lios/dun these still form some of the most common place-name elements in the country. Archaeological excavations indicate that the majority of ringforts were early medieval farmsteads with internal timber buildings and were surrounded by associated field systems. **One ringfort and two enclosures located within the study area likely date to the early medieval period. The zone of notification one of the levelled enclosures (RMP No. CO086-134----), likely dating from this period and located c.30m to the east, partially extends into the development site.**

Late and Post Medieval

The arrival and conquest of large parts of Ireland by the Anglo-Normans in the late 12th-century broadly marks the advent of the Irish late medieval period, which continued up until the beginning of the post-medieval period in c.1550. Within the late medieval period, towns, markets, and fairs were established and change and reform was attempted in the Irish church. By the 15th-century the native Irish chieftains and lords began to establish tower houses and smaller castles as centres of territorial control. 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 farm houses became more common in the 19th-century. In the latter half of the 20th-century, there was a radical change in the nature and character of Irish domestic architecture manifested by the replacement of older stone-built structures with modern bungalows of concrete blockwork construction. **Four post-medieval sites consisting of a limekiln, a church, a graveyard and a designed landscape feature are located within the study area.**

The site of the proposed development is located within the civil parish of Inishkenny, described as follows during the 19th century (Lewis 1837);

INNISKENNY, or INCHKENNY, a parish, partly in the barony of BARRETT'S, county of CORK, but chiefly in the county of the city of CORK, and province of MUNSTER, 4 miles (S. W.) from Cork, on the old road to Bandon; containing 1290 inhabitants. It comprises 3810 statute acres, as apportioned under the tithe act; the greater portion of the land is under tillage, though in the part nearest to the city there are some large dairy farms, and there are about 400 acres of waste and bog. The soil of the higher grounds is poor and stony; the system of agriculture, which was previously very backward, has been greatly improved since the opening of the new line of road to Bandon. The seats are Waterfall, the residence of T. Austin, Esq.; and Castle White, of Q. M. White, Esq. It is a rectory, in the diocese of Cork, and the corps of the prebend of Inniskenny in Cork cathedral, in the patronage of the Bishop: the tithes amount to #369. 4. 7. The church, a small plain edifice with a low tower and spire, was built by a gift of #600 from the late Board of First Fruits, in 1809. In the R. C. divisions it forms part of the union of Carrigrohane. About 20 children are taught in the parochial school, which was built and is supported by the present incumbent. About a mile beyond the church, on the old road to Bandon, are the remains of the

abbey of Ballymacadane, founded about the year 1450 by Cormac McCarthy, for nuns of the order of St. Augustine, consisting only of the side walls and gables.

The Excavations Database

The Excavation Database contains summary accounts of all the archaeological excavations carried out in Ireland (North and South) from 1970 to 2014. The database gives access to almost 6000 reports and can be browsed or searched using multiple fields, including year, county, site type, grid reference, license number, Sites and Monuments Record number and author. The following townlands within the study area were reviewed: Ardarostig, Ballinaspig More, Ballymah, Garranedarragh and Rochfordstown. **Sixteen archaeological investigations have been undertaken within the wider study area and have resulted in the identification of archaeological finds, features and deposits dating from the prehistoric to the post-medieval periods.** Summaries of these archaeological excavations can be found in **Appendix 2** below.

Cartographic Review

A review of cartographic sources for the study area, including the first edition of the 6-inch OS maps (surveyed and published in the 1830s-40s) and the 25-inch OS maps (surveyed and published 1887-1913), has revealed that no potential archaeological features were documented on footprint of the subject site. The 1st edition 6-inch OS map depicts the subject site as five complete fields and the majority of a sixth with a road or laneway to the west side and a townland and parish boundary following the line of a road to the north. A number of small structures are shown adjacent to the road near the northeast corner. The field is shown as being the same form as the 1st edition on the 25-inch OS map with the two structures to the northeast removed.



Figure 3: Extract from 1st edition 6-inch OS map showing general location of the proposed development site: (Source: www.archaeology.ie);

The proposed access path to the northeast of the subject site crosses an overgrown area containing a stream and the site of a former flourmill, shown on the 1st edition OS map.

Architectural Heritage

The NIAH [National Inventory of Architectural Heritage] lists two structures within c.1km of the proposed development, none of which are within the proposed development site. These include a water pump (NIAH No 2908601) and a 19th century house (NIAH No 29008602) in Rochfordstown to the southwest.

Table 2: Buildings/structures of architectural heritage value within 1km of the subject site

NIAH Reg. No	Name	Townland	Structure Type
20908601	-	Rochfordstown	water pump
20908602	Castle White House	Rochfordstown	house 1800-1840

The Planning and Development Act, 2000 (as amended) defines ‘Protected Structures’ as structures, or parts of structures, which form part of the architectural heritage and which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. The Planning and Development Act, 2000 (as amended) requires each planning authority to compile and maintain a Record of Protected Structures (RPS). This record is a mechanism for the statutory protection of the architectural heritage and forms part of each planning authority’s development plan. The purpose of protection is to manage and control future changes to these structures so that they retain their significant historic character. Works which would materially affect the character of the protected structure require planning permission.

The subject site is covered by the policies and objectives of the *Cork County Development Plan* and the *Ballincollig Carrigaline Municipal District Local Area Plan 2017*; these plans provide details on protected structures within the county of Cork and the suburbs of Cork City respectively. There are no protected structures within the study area. The nearest RPS to the site is the Chetwynd Viaduct (RPS No. 00563 /RMP No. CO086-002----), located c.1.05km to the south.

Placenames

The proposed development is located within Ardarostig and there are a further five townlands within the c.1km wide study area. Townlands are the smallest unit of land division in the Irish landscape and many preserve early Gaelic territorial boundaries that pre-date the Anglo-Norman conquest. The layout and nomenclature of Irish townlands was recorded and standardised by the work of the Ordnance Survey in the 19th century. The Irish translations of the townlands names often refer to natural topographical features but name elements may also give an indication of the presence of past human activity within the townland, e.g. dun, lios or rath indicate the presence of a ringfort while temple, saggart, termon or kill record an association with a church site. The Irish origins and translations for the townlands within the study area were sought from www.logainm.ie.

Table 3: Translation of Townland names (source www.logainm.ie):

Townland	Irish root	Translation
Ardarostig	<i>Ard an Róistigh</i>	ard height; high ‘roche’s height’

Townland	Irish root	Translation
Ballinaspig More	<i>Baile an Easpaig Mór</i>	baile townland, town, homestead mór great, big 'Bishopstown (big)'
Ballymah	<i>Baile Mhá</i>	baile townland, town, homestead 'good town'
Chetwynd	<i>Baile an Ghiolláin</i>	baile townland, town, homestead
Garranedarragh	<i>Garrán Darach</i>	dair (also: darú) oak garrán grove 'oak shrubbery'
Rochfordstown	<i>Baile an Rosfortaigh</i>	baile townland, town, homestead

4. Description of subject site

An archaeological field survey of the subject site was undertaken in May 2018 and again in July 2020. Dry and bright weather conditions provided excellent landscape visibility. The c.9 hectare tillage field was divided in two halves, with both the eastern and western halves surveyed concurrently by two archaeologists. The northern portion of the field comprises a relatively level, lower lying area at the base of a steep to moderate slope which forms the southern portion of the field (**Plates 1, 7**).

Western Half

The northern boundary of the western half of the subject field is formed by a c.4m wide area of overgrowth, which contains a slight east to west orientated linear depression (**Plate 2**). This area of overgrowth abuts a low, tree-lined earthen bank. The tree line is sporadic and is formed by both young and mature deciduous tree species. The Waterfall road extends in a roughly northeast to southwest direction, and at a level up to 2m lower than the field, immediately beyond the northern boundary. A number of modern properties are situated within a c.60m N-S by c.120m E-W portion of land which extends into the north-western corner of the field. The boundary between these properties and the subject field is formed by a combination of maintained hedgerows and low concrete block walls (**Plate 3**). Two overhead electricity lines (OHL) extend across the subject field. One extends across the centre of the field in an east to west direction, while the other OHL extends across the centre of the western half of the field in a north to south direction.

Near the north-western corner of the field a portion of the upper plough-soil possessed a slight variation in colouration. As opposed to the predominant reddish-brown hue evident across the vast majority of the field, this area possessed a darker greyish brown colouration (**Plate 4**). It was evident that the soil in this area contained an increased charcoal content. Occasional inclusions of possible oxidised clay fragments were also noted within the upper plough soil. This area, which is located at approx. ITM 563112, 568810 and measures c.7m N-S by c.3m E-W, provides evidence of possible *in-situ* burning and as such possesses a heightened archaeological potential.

The western boundary of the field is formed by an overgrown ditch measuring c.1.5m to 2m in depth and up to 3m in width. An overgrown and tree-lined earthen bank extends in a north to south direction to the immediate west of the ditch. The tree-line is formed by a mixture of small to medium sized deciduous tree species, including whitethorn with gorse also evident. The metal railings of the Irish Oxygen Company are evident a number of metres beyond the boundary (**Plates 5, 6**). At the south-western corner of the field the terrain rises sharply towards a high crest near the centre of the southern boundary of the field. Extensive views to the west, north and east are provided from this location (**Plate 7**). The southern boundary is formed by a low, overgrown earthen bank topped by a sporadic hedgerow along with whitethorn and gorse bushes as well as occasional medium sized deciduous trees (**Plate 8**). A c.5m wide unploughed buffer extends along the southern boundary away from the south-western corner of the field.

Eastern Half

The northern boundary of the eastern half of the subject field is formed by the same a c.4m wide area of overgrowth as noted above, although here there is no depression. Instead, the ground level slopes slightly towards a line of both young and mature deciduous tree species. This boundary is flanked by the Waterfall road embankment further north. The eastern boundary is formed by a moderate earthen bank measuring 1-1.5m high and 0.5m wide and lined with both of both young and mature deciduous tree species are all cut to an even height. (**Plate 11**). The bank is overgrown in places with thickets of brambles and is both eroded and denuded in places. A narrow drainage gully flanks the bank internally. The eastern side of the site is poorly drained

with standing pools of water at both the northeast and southeast corners of the field. A tall, (1.5-2m) overgrown earthen bank topped by a sporadic hedgerow along with whitethorn and gorse bushes as well as occasional medium sized deciduous trees forms the southern boundary (**Plates 12 & 13**). The bank respects the rise in ground level to the west and decrease in height as it progresses along the boundary. A c.5m wide unploughed buffer extends along the southern boundary which is lined with field clearance in the form of a row of large stones and boulders (**Plate 15**).

The internal area of the subject field was also surveyed. A number of post-medieval ceramic sherds were evident within the plough-soil; however, no further artefacts or areas of heightened archaeological potential were noted.

A programme of geophysical survey of the proposed development site was carried out in September 2018 by TARGET Archaeological Geophysics. No obvious archaeological responses were identified in the data and no indication of features associated with the levelled enclosure (RMP no. C0086-0134) to the west extending into the proposed development boundary. There are traces of former land divisions, some of which predate the historic mapping. A number weakly magnetic and poorly defined positive anomalies were detected. However, these displayed no significant patterning or concentration of response to suggest they are of archaeological origin. The majority of the anomalies indicated by the results from survey are expected to derive from effects from natural soil/geological variation, former land use, and modern ferrous debris (See **Figures 5 & 6**).

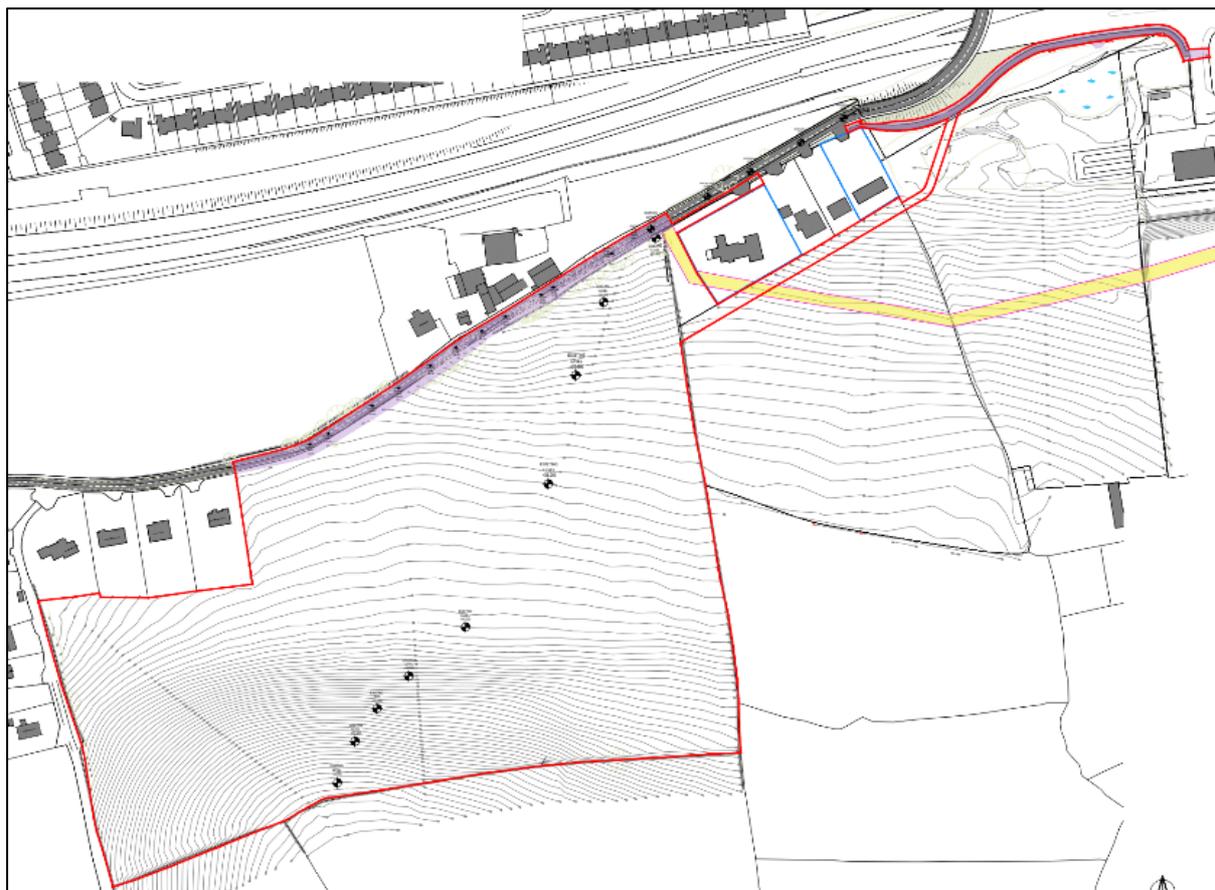


Figure 4: Proposed development area.

The proposed path to the northeast of the subject site crosses an overgrown area containing a stream and the site of a former flourmill, shown on the 1st edition OS map. The site of a fulacht fia (CO074-129----) is located c.80m to the northeast of the east end of the proposed path

5. Assessment of impacts

A levelled enclosure (C0086-134---) is located c.30m to the east of the site and the zone of notification for this monument partially extends into the development lands (by no more than 4 metres). The development of the subject site will not give rise to a direct impact on the monument itself.

An area within the proposed development site, which is located at approx. ITM 563112, 568810 and measures c.7m N-S by c.3m E-W, provides evidence of possible *in-situ* burning and as such possesses a heightened archaeological potential (see **Figure 5**).

The general landscape around the proposed scheme contains a high number of recorded archaeological monuments dating from the Neolithic period onwards. In addition, a number of excavations with the study area have demonstrated the potential presence of unrecorded, sub-surface archaeological within the wider study area.

A programme of geophysical survey of the proposed development site was carried out in September 2018 by TARGET Archaeological Geophysics. Five small possibly pit-like features spread across the site and an amorphous area towards the southwest corner of the field were identified during survey. No indication of features associated with the levelled enclosure (RMP no. C0086-0134) to the west extending into the proposed development boundary. Traces of former land divisions, some of which predate the historic mapping were noted and a number weakly magnetic and poorly defined positive anomalies were detected. These displayed no significant patterning or concentration of response to suggest they are of archaeological origin. The majority of the anomalies indicated by the results from survey are expected to derive from effects from natural soil/geological variation, former land use, and modern ferrous debris.



Figure 5: Greyscale results of geophysical survey (area of possible *in situ* burning at approx. ITM 563112, 568810 circled in red)

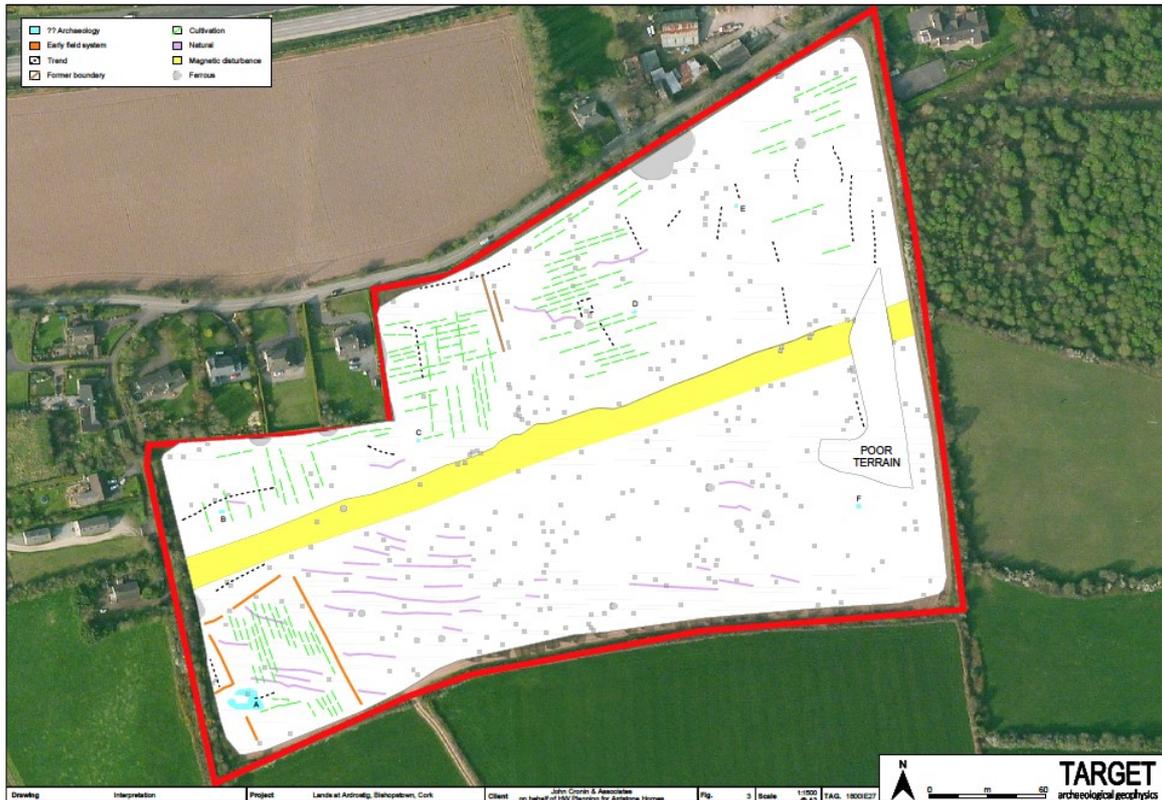


Figure 6: Interpretive results of geophysical survey

On balance, the proposed development site is therefore considered to be of **low archaeological potential**.

Residual impacts of the development

Should the proposed mitigation measures be followed as recommended, this shall provide for either the avoidance of any archaeological resource or the proper and adequate recording of this resource (including presently unknown potential archaeological features). As a result, there shall be no residual effects on the archaeological resource following construction of the proposed development.

6. Mitigation measures

There are **no recorded archaeological sites within the lands comprising the proposed development area**. The Historic Environment Viewer records **seventeen archaeological sites** within c.1000m of the proposed site boundary. An area located at approx. ITM 563112, 568810 and measuring c.7m N-S by c.3m E-W, provides evidence of possible *in-situ* burning and as such possesses a heightened archaeological potential. The footprint of the scheme will extend into the *Zone of Notification* for a levelled enclosure (RMP no. CO086-134----). Development of the subject site will not give rise to a direct impact on the monument itself. The general landscape around the proposed scheme contains a high number of recorded archaeological monuments dating from the Neolithic period onwards.

A number of weakly magnetic and poorly defined positive anomalies were detected during geophysical survey, these include five small possibly pit-like features spread across the site and an amorphous area towards the southwest corner of the field.

It is recommended that a licensed programme of **targeted archaeological testing**, undertaken by a suitably qualified archaeologist, take place prior to commencement of development (i.e. post grant of planning permission) on the five small possibly pit-like features spread across the site and an amorphous area towards the southwest corner of the field identified during geophysical survey as well as the area located at approx. ITM 563112, 568810, where possible *in-situ* burning was noted.

The proposed track to the northeast of the subject site crosses an overgrown area containing a stream and the site of a former flourmill, shown on the 1st edition OS map. The site of a fulacht fia (CO074-129----) is located c.80m to the northeast of the east end of the proposed track. Archaeological testing is not feasible within this area and **ground works associated with the track should be subject to archaeological monitoring under licence from the NMS.**

7. Conclusions

A number of discrete features of with a slight archaeological potential were noted during geophysical survey, these include five small possibly pit-like features spread across the site and an amorphous area towards the southwest corner of the field and an area (ITM 563112, 568810) within the proposed development was noted as possibly representing evidence of *in-situ* burning and as such possesses a heightened archaeological potential.

It is therefore recommended that a licensed programme of **targeted archaeological testing**, undertaken by a suitably qualified archaeologist, take place prior to commencement of development (i.e. post grant of planning permission) on the anomalies identified as potentially archaeological in nature during geophysical survey as well as the area where possible *in-situ* burning was noted.

The proposed access track to the northeast of the subject site crosses an overgrown area containing a stream and the site of a former flourmill, shown on the 1st edition OS map. The site of a fulacht fia (CO074-129---) is located c.80m to the northeast of the east end of the proposed track. Archaeological testing is not feasible within this area and **ground works associated with the access track should be subject to archaeological monitoring under licence from the National Monuments Service (NMS).**

8. References

Aalen, F.H.A. *et al* (1997) *Atlas of the Irish Rural Landscape*. Cork University Press, Cork

Lewis, S. (1837) *A Topographical Dictionary of Ireland*. Lewis and Son, London.

Websites consulted

www.excavation.ie

www.archaeology.ie

www.logainm.ie

<http://gisteagasc.ie/soils/map.php> (soil)

http://spatial.dcenr.gov.ie/imf/imf.jsp?site=GSI_Simple (Bedrock)

<http://maps.osi.ie/publicviewer/#V2,591271,743300,1,10>(Maps)

Appendix 1: Archaeological Inventory Entries

This table provides descriptions of the archaeological sites listed in the Record of Monuments and Places within the study area. These descriptions are sourced from the Archaeological Survey of Ireland's website (www.archaeology.ie).

Monument No.	Class	Description
CO073-069---	Ringfort-rath	In pasture, on W side of stream. Roughly circular area (36m N-S; 32m E-W) enclosed by low rise SE->NE, with shallow external fosse; natural sharp fall to stream NE->SE. Fosse truncated by field boundary on N side. Interior saucer-shaped; slopes gently down to E.
CO073-111---	Fulacht fia	A spread (9.72m E-W; 7.08m N-S; D 0.28m) of heat-shattered stones and charcoal-enriched soil was discovered during archaeological monitoring in advance of the construction of the N22 Ballincollig Bypass and was excavated in 2002. Excavation revealed a sub-oval trough (1.78m E-W; 0.77m N-S; D 0.7m), the base of which was cut into a natural gravel layer. A layer of sand on the base of the trough may have been a platform for some type of waterproof lining. A NE-SW linear alignment of stake-holes, possibly the remains of a screen, was found along the periphery of the spread. A further cluster of stake-holes to the NW did not form any discernible pattern. A metallised surface was also found, partly overlying the trough. Another fulacht fia (CO073-112----) lies c. 70m to the SE. A Bronze Age building (CO073-114----) and numerous miscellaneous excavated features (CO073-117----) lie c. 230m to the SE. (Danaher and Cagney 2003; Danaher 2004j, 56)
CO073-112---	Fulacht fia	A spread (11.72m E-W; 8.59m N-S; D 1.47m) of heat-shattered stones and charcoal-enriched soil was discovered during archaeological monitoring in advance of the construction of the N22 Ballincollig Bypass and was excavated in 2002. Excavation revealed at least three phases of activity and possibly two distinct fulachtaí fia. The first and earliest phase was represented by a sub-oval trough and a series of stake-holes. The heat-shattered stones and charcoal-enriched soil generated by this fulacht fia was used to cover these features and it in turn was sealed by a spread of re-deposited natural clay much of which seemed to have been derived from the construction of a second trough to the NE of the first. Stake-holes, probably representing the remains of a structure, were found to the E and W of the second trough. A third trough lay directly S of the second and truncated its S end. It was the largest (2.51m N-S; 1.26m E-W) of the three troughs and also had stake-holes both E and W of it, again probably representing the remains of a structure. A drainage feature associated with this trough may have served as an additional means of getting water into the trough. The earliest phase of this fulacht fia has produced a radiocarbon date of 2800-2500 BC which places it in the Late Neolithic period (NRA website). Another fulacht fia (CO073-111---) lies c. 70m to the NW. A Bronze Age building (CO073-114----) and numerous miscellaneous excavated features (CO073-117----) lie c. 180m to the SSE. (Danaher 2004k, 56)

Monument No.	Class	Description
CO073-113--	Pit-burial	In relatively even terrain c. 80m E of Twopot River, a cremation pit was uncovered during archaeological monitoring for the N22 Ballincollig Bypass. The subcircular pit (0.56m x 0.5m; D 0.12m) contained a fill of dark brown/black silty clay with a small quantity of poorly preserved cremated bone and two sherds of pottery. The sherds have been identified as Western Neolithic ware and a radiocarbon date from alder charcoal from the pit provided a date of 3960-3700 BC. (Danaher 2004m, 54-5; Danaher and Cagney 2004c).
CO073-114---	Building	The remains of a circular structure (diam. c. 5m) were uncovered during archaeological excavations in advance of the construction of the N22 Ballincollig Bypass. According to the excavator (Danaher 2004, 55), the remains consisted of 'a small slot-trench, post-holes and a hearth'. Numerous sherds of possible Bronze Age pottery were found within the hearth which was located in the SE quadrant of the structure. The excavator (ibid.) concluded that 'this structure may not have had a domestic function and alternatively may have been used as a working or storage area'. (Danaher 2004, 55).
CO073-115--	Structure	Discovered during excavations in Ballinaspig More in 2002 in advance of the construction of the N22 Ballincollig Bypass. Excavation revealed a large number of pits and post-holes which were visible over an area of 20m sq. and situated to the SW of a Bronze Age building (CO073-114----). The pits and post-holes contained occupational debris in the form of dark, rich soils with numerous sherds of Bronze Age pottery and stone tools present. (Danaher 2004d, 55-6; Danaher and Cagney 2004a)
CO073-117--	Excavation-miscellaneous	Discovered during excavations in Ballinaspig More in 2002 in advance of the construction of the N22 Ballincollig Bypass. Excavation revealed a large number of pits and post-holes which were visible over an area of 20m sq. and situated to the SW of a Bronze Age building (CO073-114----). The pits and post-holes contained occupational debris in the form of dark, rich soils with numerous sherds of Bronze Age pottery and stone tools present. (Danaher 2004d, 55-6; Danaher and Cagney 2004a).
CO073-125---	Burnt mound	This possible burnt mound was discovered during archaeological test-trenching undertaken in advance of the construction of the N22 Ballincollig Bypass. Excavation in 2001 revealed a spread (4.5m x 2.75m; max. D 0.21) of heat-shattered stones and charcoal-enriched soil. Immediately to the S of this spread was a deposit (1.4m x 0.8m; D 0.1m) of dark orange silty clay with charcoal inclusions which was interpreted as probably an associated hearth. The function of a shallow depression (1.5m x 0.7m; D 0.05m) filled with heat-shattered stones and charcoal-enriched soil, which was uncovered further to the S was not established but it was thought not to have been a trough. A fulacht fia (CO073-067----) lies c. 110m to the W. (Murphy 2003b, 26)
CO074-046---	Kiln-lime	In public park, on former demesne of Bishopstown House (CO074-055003-); built into slope. Front W-facing; arched recess (H 1.6m; Wth 2.08m; D1.6m), sloping slab to rear; stoking hole evident; recess extended forward c. 1.5m by brick-arch (H 1.65m; Wth

Monument No.	Class	Description
		2.77m) and front face of structure brought forward some distance. Brick-lined funnel (diam. 2.2m) almost completely infilled; top of kiln enclosed by remains of low wall. Side walls of lean-to structure flank front.
CO074-055001-	Designed landscape-belvedere	On top of a landscaped rock outcrop to NW of Bishopstown House (CO074-05502-); indicated on 1842 OS 6-inch map. Roofless, crenellated circular tower (H 2.3m; int. diam. 4.55m); entrance with added curved porch on S side; window facing N. Fireplace in W wall and niche in E wall. Interior originally decorated with shells inset in plaster of which only the imprints survive. Quartz pebble floor; remains of ledge at base of internal walls composed of glassy slag. Built as retreat by Dr. Peter Browne, Bishop of Cork and Ross 1710-1735; part of Bishopstown demesne (CO074-05503-) (McCarthy 1981).
CO074-055002-	Church	At NW corner of courtyard of Bishopstown House (CO074-055003-) and immediately W of N range are remains of chapel (CO074-055002-) indicated as 'Bishop's Chapel (in ruins)' on 1842 OS 6-inch map. Consecrated 1730; by 1848 datestones and memorials removed to St Finbarre's Cathedral (ibid., 27). Rectangular in plan (int. 9.1m E-W; 5m N-S); cut limestone chamfered quoins and surrounds to W door and windows. Porch entrance added to W with similar cut stone detail. Doorway in E wall; according to McCarthy (ibid., 27) 'covered way' is said to have existed between E entrance and mansion house. Vault entered below E gable; bodies of Peter Browne and Isaac Mann removed to Cathedral in 1865.
CO074-055003-	Country house	In public park on W fringes of Bishopstown; fragmentary remains of early 18th century house and demesne, built by Bishop Peter Browne for C of I bishops of Cork. House erected 1726, demolished c. 1831; site now occupied by recent L-shaped Scout Hall, only very fine limestone shouldered doorcase survives of original house, rebuilt into wall of recent building (McCarthy 1981, 6, 25). Taylor and Skinner's map (1969, 170) of 1778 depicts house as having gabled end wings on front elevation. Courtyard to S formed by farmbuildings (as shown on 1842 OS 6-inch map) to E and W which have been demolished; remains of wall on S side with entrance piers survive in poor condition. Cobbling in yard just visible with ornate designs using different coloured stones still discernible; according to McCarthy (ibid., 25), the date 1726 and initials 'PB' were highlighted. At NW corner of courtyard and immediately W of N range are remains of chapel (CO074-055002-) indicated as 'Bishop's Chapel (in ruins)' on 1842 OS 6-inch map. Consecrated 1730; by 1848 datestones and memorials removed to St Finbarre's Cathedral (ibid., 27). Rectangular in plan (int. 9.1m E-W; 5m N-S); cut limestone chamfered quoins and surrounds to W door and windows. Porch entrance added to W with similar cut stone detail. Doorway in E wall; according to McCarthy (ibid., 27) 'covered way' is said to have existed between E entrance and mansion house. Vault entered below E gable; bodies of Peter Browne and Isaac Mann removed to Cathedral in 1865. According to McCarthy (ibid., 25), foundations of original house re-used in farmbuilding along N side of courtyard as indicated on 1842 OS 6-inch map. Circular platform for animal traction in yard; according

Monument No.	Class	Description
		to McCarthy (ibid., 25) used to power pulping machine. Number of estate features survive including terraced 'lawn' to N of 'house', known locally as 'The Bishop's Garden'. This leads down to Curragheen river which is spanned by a pair of 3-arched footbridges; rectangular walled area to N of river, according to McCarthy (ibid., 31) was used as a graveyard until 1940s. Low waterfall to E of bridges; ornamental ponds to NW of chapel with 'shell house' (CO074-05501-); walled gardens to S with small garden kiln (2.44m x 2.44m) for burning garden rubbish; limekiln (CO074-046---) to E.
CO074-128---	Burnt mound	This possible burnt mound was discovered during archaeological test-trenching undertaken in advance of the construction of the N22 Ballincollig Bypass. Excavation in 2001 revealed an irregularly shaped deposit (10m x 5m; max. D 0.4m) of heat-shattered stones and charcoal enriched soil which survived only in natural depressions within the prehistoric ground surface. No pits or associated features were discovered. (Murphy 2003a, 26)
CO074-129--	Fulacht fia	This fulacht fia was discovered during archaeological test-trenching undertaken in advance of the construction of the N22 Ballincollig Bypass. Excavation in 2001 revealed a spread (8m x 2m; max. D 0.2m) of heat-shattered stones and charcoal-enriched soil. Underneath this spread was a subrectangular flat-based pit (2.5m x 2m; max. D 0.4m) with gently sloping sides which probably functioned as a trough. (Murphy 2003c, 26)
CO085-119---	Enclosure	Soilmark (AP, Dr. D.D.C. Pochin Mould) shows bivallate circular enclosure (diam. c. 30m) with possible associated linear soilmarks. (Walsh 1985, 94-5)
CO086-058---	Country house	We regret that we are unable to supply descriptive details for this record at present.
CO086-134---	Enclosure	We regret that we are unable to supply descriptive details for this record at present.

Appendix 2: Summaries of Archaeological Excavations

<i>Location</i>	<i>Licence</i>	<i>Summary</i>
Ballinaspig More	01E0546	<p>In the process of test-trenching along the proposed route of the N22 Ballincollig Bypass an area of dark brown sand containing burnt stone was identified. The surrounding area was stripped of topsoil and the full extent of archaeological deposits was established.</p> <p>The principal fulacht deposit measured 8m by 2m and the maximum depth was 0.2m. Underlying the deposit was a subrectangular pit with dimensions of 2.5m by 2m and a maximum depth of 0.4m. The sides of the pit were generally gently sloping, although on the southern side the edge was close to vertical. The base was flat and the fill consisted of fulacht material. It seems probable that this pit would have functioned as a trough during usage of the fulacht. No finds were recovered and no deposits produced samples capable of providing radiocarbon dates.</p>
Site C Carrigrohane	01E044	<p>The N22 Ballincollig Bypass scheme involves the construction of a new dual carriageway between Bishopstown (Ballinaspig More Td) and Ovens (Knockanemore Td) and covers an area of 750,000m². A desk-based survey was commissioned during the design stage of the bypass. This identified five known archaeological sites which might be affected by the road-building. One of these sites, Site C, a fulacht fiadh, was suspected to be relatively intact as the mound was still very obvious.</p> <p>The road would impact directly on the site so excavation was recommended in advance of the commencement of road construction. Excavation revealed that the fulacht mound had been badly disturbed by ploughing and that the furrows extended into the natural subsoil below the fulacht. Nevertheless the underlying features were not particularly badly damaged by this later disturbance. Four approximately circular pits cutting natural subsoil below the mound were associated with the use of the fulacht and may have functioned as troughs. In the more recent past a rectangular, timber-built structure had been built on the western side of the fulacht mound. Most recently a drain had been cut into the mound and the eastern side of the mound had been disturbed by a possible crossing-point over the ditch to the north of the site. Unfortunately no hearth was found, nor were any other relevant features. The results of dating from charcoal samples are awaited</p>
Ballinaspig More	01E0546	<p>Test-trenching was undertaken in advance of construction of the N22 Ballincollig Bypass. During this process an area of black, charcoal-stained clay, with substantial inclusions of heat-cracked stone fragments, was noted. The surrounding area was stripped of topsoil, hand-cleaned and the extent of the deposit established. The deposit was irregular and separated into distinct parts. Overall maximum dimensions were 10m by 5m with a maximum depth of 0.4m. The irregularity of the deposit would suggest that it has been heavily truncated by ploughing. Excavation revealed that the spreads only survived in natural depressions within the prehistoric ground surface. No pits or associated features were discovered. The excavated deposits were poor in charcoal and no samples suitable for dating purposes were obtained.</p>

Location	Licence	Summary
		<p>In the process of test-trenching along the proposed route of the N22 Ballincollig Bypass, a deposit of loose, black silt/sand was noted. The deposit contained large quantities of heat-cracked stone and was typical of a fulacht spread. Subsequently the surrounding area was stripped of topsoil and the extent of the deposit and associated features was established. The maximum dimensions of the deposit were 4.5m by 2.75m and it sat within a cut with a maximum depth of 0.21m. The cut had gently sloping sides and a bowl-shaped base. To the south of the fulacht spread was a deposit of dark orange silty clay with charcoal inclusions, measuring 1.4m by 0.8m and within a cut 0.1m deep. It seems probable that this was a hearth associated with use of the fulacht. A shallow depression lay further to the south and was filled with fulacht material. Measuring 1.5m by 0.7m and with a depth of 0.05m, the depression could never be identified as a trough even though the site had been truncated by ploughing. No finds were recovered and the excavated deposits were too poor in charcoal for adequate dating samples to be obtained.</p>
Ballinaspig More 4	02E0947	<p>Excavation of archaeological deposits exposed during the monitoring programme for the N22 Ballincollig Bypass Scheme revealed an area represented by three main phases of activity dating from the Bronze Age to the post-medieval period. The site was in the townland of Ballinaspig More, west of the Twopot River. This river divides the site from Ballinaspig More 5 (No. 215 below, 02E1033), which revealed evidence of Bronze Age and post-medieval settlement activity, and a ringfort is situated c. 120m south of the latter site.</p> <p>Topsoil-stripping in the area of Ballinaspig More 4 revealed a possible cremation pit and a series of unrelated features. These were distributed over an area measuring c. 30m north-south by 120m. They were identified as being the product of post-medieval farming activity, represented by rectilinear cultivation furrows aligned north-south at the southern extent of the site, by two linear drainage ditches, one of which was oriented east-west and the other north-south, and by a number of isolated pits and post-holes. Two large pits and a charcoal-rich spread were revealed at the northern extent of the site, with an average diameter of 2.4m. The spread possibly represented a single episode of burning, owing to the black, charcoal-rich deposit that overlay the subsoil but did not cut into it. The adjacent pit had a similar appearance before excavation, but this feature was cut into the subsoil. It contained three fills and a heavily oxidised base, suggesting more prolonged use. The rectilinear drainage ditch, which traversed the site in an east-west direction, had one fill, which contained a moderate quantity of charcoal and stone inclusions. The other, isolated pits were positioned sporadically across the site and appeared to be disparate features that did not form part of any structures.</p> <p>The three features initially discovered were possibly the remains of one cremation pit and two post-holes, all of which were probably truncated by modern agricultural activity. These were situated c. 50m east of the main concentration of activity on the site. One of the post-holes accommodated the remains of a post burnt in situ, and the other contained evidence of stone packing. The possible cremation pit was subcircular, 0.56m long, 0.5m wide and 0.12m deep. It contained a single fill of moderately compact, dark</p>

Location	Licence	Summary
		<p>brown/black, silty clay. Two sherds of Bronze Age pottery and an extremely small quantity of poorly preserved cremated bone, with individual fragments measuring no greater than 5mm in diameter, were also present in this deposit. The bone was found to the south of the deposit, near the surface</p>
Ballinaspig More 5	02E1033	<p>Monitoring, carried out as part of the N22 Ballincollig Bypass Scheme in the townland of Ballinaspig More, revealed settlement activity spreading possibly over four millennia, from the Bronze Age to the 1800s. The pre-development works for the construction of a large interchange in this townland unearthed a large number of archaeological features. Bronze Age activity was best represented, and, in an area measuring c. 400m east-west by 150m, two fulachta fiadh (Nos 216 and 217 below, 02E1230 and 02E1233), a possible truncated cremation pit (No. 214 above, 02E0947) and two possible Bronze Age structures and associated features (this report) were unearthed.</p> <p>The site measured 130m east-west by 30m, and excavation revealed a possible multi-phased settlement with at least four structures present. The site was on a slight ridge west of the Twopot River, on good agricultural land. The most recent of the four structures identified was a rectangular dwelling from the 1800s. Associated with this building were a stone yard and a number of drainage ditches. The structure measured just under 12m east-west by 5m; its remains consisted of shallow foundation trenches excavated into the silty clay subsoil, each containing a single course of a stone wall. Finds from these foundation trenches were all relatively modern, mainly comprising what would be expected from a domestic context. This structure appeared to be the remains of a farm cottage with an entrance to the north-west. Its presence was not noted on any of the Ordnance Survey maps.</p> <p>To the south-east of this was a discontinuous circular alignment of post-holes with a diameter of 7.4m. These eleven post-holes would have housed stout posts and had an average diameter of 0.4m and depth of 0.36m. No hearth, occupational layers or internal features were uncovered during the excavation of this structure, which suggests that it may not have been used as a dwelling. However, it is possible that natural erosion truncated a number of these post-holes, possibly removing a few altogether, particularly along the north and north-east. The location of this structure on the eastern edge of the ridge may have led to occupational evidence being scoured away by water action, a process that was observed during the excavation of this site. Soon after this feature was exposed, rainwater formed a channel through its interior. Unfortunately, no diagnostic finds were recovered from this structure, but charcoal was retrieved from a number of the post-holes.</p> <p>A smaller, shallow, post-built structure, which possibly post-dates the previous one, was present to the south-west of it. The post-holes of this structure contained iron nails and fragments of slate, and their fills were completely different from those of the larger circular structure.</p> <p>Evidence of the fourth structure, which was circular, with a diameter of c. 5m, comprised a small slot-trench, post-holes and a hearth. The slot-trench contained the burnt remains of split timber planks. This slot-trench existed only in the south-west of the structure, possibly</p>

Location	Licence	Summary
		<p>acting as a windbreak from the prevailing south-westerly winds. The rest of the structure may have been constructed of wattle and daub, and a small central post may have helped to support a roof structure. It appears that this hut was of flimsy construction, and the split planks within the slot-trench were unlikely to be load bearing. The hearth was present within the south-eastern quadrant of the structure. It is quite possible that this structure may not have had a domestic function and alternatively may have been used as a working or storage area. Numerous sherds of possible Bronze Age pottery were found within the hearth.</p> <p>Further settlement evidence was present south-west of this structure over an area of 20m².</p> <p>A large number of pits and post-holes containing occupational debris in the form of dark, rich soils with numerous sherds of prehistoric (Bronze Age) pottery and stone tools were present. It is possible that the features and structures excavated within this site lay on the northern periphery of a larger settlement site, the nucleus of which would be south of the road-take.</p>
Ballinaspig More 6	02E1230	<p>Monitoring was carried out as part of the N22 Ballincollig Bypass Scheme in the townland of Ballinaspig More. This revealed a spread of burnt-mound material, which on excavation was identified as a fulacht fiadh. It was situated less than 50m west of a second fulacht fiadh, Ballinaspig More 7 (No. 217 below, 02E1233), and c. 240m north-west of a possible Bronze Age settlement, Ballinaspig More 5 (No. 215 above, 02E1033), in an area of relatively flat land with slightly higher ground to the south. The nearest water source (Twopot River) was over 400m east of the site.</p> <p>An area measuring 14m east-west by 11m was cleaned back by hand to establish the nature and extent of any deposits present. Removal of the burnt-mound spread (maximum dimensions: 9.72m east-west by 7.08m and 0.28m deep) revealed a series of stake-holes to the south and east of the site, a sub-oval trough pit to the north-west of it and a metalled surface overlying part of this pit. The stake-holes consisted of a linear alignment running north-east/south-west along the periphery of the site. This alignment of stake-holes may have acted as screening, and there was a further cluster of stake-holes to the north-west of it; however, these latter features did not form any discernible pattern.</p> <p>The pit of the trough measured 1.78m east-west by 0.77m and was 0.7m deep. The base of this feature was cut into a natural gravel layer, suggesting that it would not have contained water naturally. Therefore some kind of lining would have been necessary to make it functional as a water container. Above the base a flat, evenly spread layer of pinkish sand was present, which may have acted as a platform for such a waterproof lining.</p>
Maglin 3	01E0445 ext.	<p>The N22 Ballincollig Bypass Scheme involves the construction of a new dual carriageway between Bishopstown (Ballinaspig More townland) and Ovens (Knockanemore townland) and covers an area of 750,000m². A desk-top survey, commissioned during the design stage, identified five known archaeological sites that might be affected by the road-building work. These were referred to as Sites A to E; this report is concerned with Site D, a fulacht fiadh to the north of the road-take.</p>

Location	Licence	Summary
		In June 2001 testing was carried out less than 30m south of this monument to determine whether any associated material was present within the road-take. No features of significance were exposed, and no finds were recovered. In spring 2002 the main contractor for the Ballincollig Bypass Scheme acquired a number of fields outside of the road-take to use as permanent dumps for topsoil. As this site is within one of these fields, a request was made by Dúchas to establish its extent by means of testing and subsequently to create a buffer zone around it. Once the extent was established, a decision was to be made on the most effective method for the preservation of this site in situ. The work was carried out in June 2002.
Ballinaspig More	08E0895	Fourteen test-trenches were excavated at this proposed development site on the south-west outskirts of Cork city. A partially levelled ringfort in the north-east of the site will not be affected by the proposed development. The area containing the monument will be excluded from the development within a 20m buffer zone that will extend from the outer edge of the monument. The stratigraphy on the site consisted generally of mid-brown stony topsoil 0.2–0.3m deep, over orange/brown to yellow/grey clay subsoil. There was evidence for drains and/or plough furrows throughout the site. Two small pits (F1, 0.23m north–south by 0.2m by 0.1m deep and F2, 0.39m east–west by 0.36m by 0.18m deep and 0.4m south-west of F1) were recorded 100m south-west of the ringfort and 6.3m north of the south site boundary. They were filled with a mixture of topsoil and blackened soil with some charcoal. No other features or finds of archaeological significance were recorded in the vicinity of the ringfort or elsewhere.
Ballinaspig More/ Ballinveiltig & Gourtagoulane	08E0063	An area within the Ballynora to Lehenaghmore gas pipeline route was identified as being of archaeological potential due to proximity to a circular enclosure (CO085–119) apparent in aerial photographs. No surface anomalies were apparent in the field at the time of inspection. The area is located in agricultural land close to the summit of an east–west ridge at an altitude of c. 75m OD. The area of archaeological potential extends over a distance of c. 50–70m in two townlands, Ballinveiltig and Ballinaspig More; i.e. at either site of the townland boundary. A 1.6m-wide trench was excavated in 5m segments, each of 10m with 5m intervals over a length of 75m. The field had been subject to regular modern cultivation and plough soil of c. 0.4m deep overlay yellow boulder clay and shale rock. Many modern items such as plastic and drink cans were found in the plough soil but no anomalies were apparent in the topsoil/subsoil interface or in the subsoil.
Ardarostig/ Garrandarragh 1	10R129; 09E0135 ext.	A second phase of testing was undertaken in Ardarostig/Garranedarragh 1 within the footprint of the N71 Chetwynd viaduct road scheme on 6 September 2010. Ardarostig/Garranedarragh 1, a wooded area to the west of the existing N71, was unavailable at the time of testing stage (i) undertaken by Sheelagh Conran between March and May 2009 (Excavations 2009, No. 11128, 09E0135). The area is densely wooded and overgrown with shrubbery and has non-specific

Location	Licence	Summary
		<p>archaeological potential. The Glasheen River bisects the area with Ardarostig town land to the west and Garranedarragh townl and to the east.</p> <p>A total of six trenches were excavated within the heavily wooded area to the west of the Glasheen River. All trenches were excavated to subsoil using a 5-tonne tracked excavator fitted with a toothless bucket. No archaeological features or deposits were recorded during the testing.</p> <p>In tandem with the test-trenching, a wade survey, including a metal-detector survey, was carried out along the Glasheen River in the area of the proposed development. The survey did not identify any features or deposits of archaeological significance; however, the dense overgrowth in the survey area impacted greatly on the efficiency of the survey.</p>
Doughcloyne/ Garrendarragh/ Ardarostig	-	<p>On 23–30 August 2010 testing was carried out on behalf of Cork City Council in advance of a proposed upgrade to the N25 Cork South Ring Road, specifically between the Sarsfield Road roundabout and the Bandon Road roundabout. None of the test-trenches investigated revealed any material of archaeological significance. The strata from the various box trenches proved relatively consistent and findings indicated the presence of deep to marginal peat formations over glacial outwash. The presence of a potential early Holocene alluvial fanning from the Glasheen River is suggested by the presence of substantial deposits of fine silt/clay inwash in several of the trenches. The tested remains suggests the area was poor marginal bogland from the early Holocene period up until possibly as late as the 18th century, when deep deposits of sterile stony clay were introduced over the bog in an apparent effort to level off and dry out the land to become agriculturally productive. In fact severance, caused by the construction of the existing N25 Cork South Ring Road, led to the area reverting back to marshland.</p>
Ballinveiltig	08E0665	<p>The site lies adjacent to the Curraheen River at the foot of a ridge of hills on the southern edge of the Lee Valley. The land is low lying (18.950D) and in this area the Curraheen River provides the boundary between the townlands of Ballynora and Curraheen. The area was the site of an iron works (a scrapping and plating mill) established by Richard Perrott in 1851 and much of the riverbank consists of a low levee made up of brown earth with large deposits of iron slag and of scrap metal. There was a possibility that a fulachta fiadh may be located in the vicinity of the river, which would be impacted on by the Ballynora to Lehenaghmore gas pipeline.</p> <p>It was proposed to excavate a c. 1.5–2m wide trench with a toothless bucket close to the edge of the stream and from this to excavate offset trenches as necessary to provide a comprehensive coverage of the area. A trench orientated north–south was excavated at c. 8m east of the riverbank for a length of 67m. The trench was 1.6m wide and followed the curve of the riverbank. The field was in pasture and the topsoil was c. 0.2m of dark-brown earth overlying a sandy subsoil. The subsoil was a fluvial deposit comprising a mixture of clay and sand with patches of gravel. An area of charcoal-rich soil and evidence of in situ burning (charcoal lying on oxidised clay) was revealed at a depth of 0.9m below the surface. The area of burning</p>

Location	Licence	Summary
		<p>lay 31.6m from the northern end of the trench. In order to investigate the feature and establish its spatial extent, an east-west offset was excavated for a length of 5.5m to the east and 1.6m to the west. The charcoal feature was calculated to cover an area of 3.7m east-west by 2.5m. The layer of charcoal was very shallow (less than 20mm deep). A few angular stones lay amongst the charcoal and these may have been fire-shattered; however, most of the stones were river-rolled and significant concentrations of stones could not be identified as being distinct from the general deposits of gravel that occurred throughout the subsoil.</p> <p>The only artefacts recovered were slag and nails and fragments of enamel as well as two pieces of glazed red earthenware. All of the finds were recovered from the surface and the topsoil.</p> <p>As the feature lay directly on the line of the proposed pipe trench, further excavation of the area of burning was recommended and the original licence was duly extended. Once topsoil had been stripped in an area 10m east-west by a maximum of 7.5m a previously unrecorded fulacht fiadh was identified. The site was then excavated in quadrants.</p> <p>The site comprised a roughly circular spread of shattered burnt stones and charcoal-rich soil (4.3m north-south by 6.7m by 0.09m thick). An oval-shaped hearth (1.66m north-south by 1.1m) was located at the south-west point of the circular spread and a small circular pit (0.4m diameter), filled with dark-brown/black soil with small fire-blasted stones, was located immediately west-south-west of the hearth. A layer of clay (0.35-0.5m thick) separated the upper layer of burnt stones from a 0.15-0.2m-thick base layer of black organic material containing twigs and nuts. Pieces of wood within this layer may represent the remains of a trough. These were retained for specialist investigation.</p> <p>A second fulacht fiadh (08E0804, below No. 225), a ring-ditch (08E0802, below No. 223) and a Bronze Age enclosure (08E0803, below No. 224) were also excavated in Curraheen townland as part of this pipeline project at a distance of between 230m and 400m south-west of this site.</p>
Rochfordstown/ Iniskenny	06E0912	<p>Twenty-one test-trenches were excavated at a proposed housing development site in a greenfield site at Rochfordstown and associated treatment plant at Inishkenny, Waterfall, Co. Cork. Three fulachta fiadh are located within the proposed development site. The sites were not visible before testing. The burnt mounds associated with the two fulachta fiadh (CO085-045 and CO085-046) within the site of the proposed housing development were located.</p> <p>CO085-045 was seen to be a low mound, c. 0.4m high. The extent of the roughly circular spread of blackened soil and heat-shattered stone was 18m north-south by 19m. One hundred and thirty metres to the north-east of CO085-045 the spread of burnt material of CO085-046 forms a low mound, which is c. 0.3m high, and slopes down to the south and west; there is no slope to the north. The extent of the burnt material was 11m east-west by 11.2m north-west/south-east. It is proposed to place a 20m buffer zone around the two sites. There was no trace of a mound or of any burning</p>

<i>Location</i>	<i>Licence</i>	<i>Summary</i>
		associated with the third fulacht fiadh (CO085-042) in the area which will be affected by construction of the proposed treatment plant. No features or finds of archaeological interest, other than the fulachta fiadh, were exposed within the test-trenches.
Chetwynd	08E0891	<p>In the course of monitoring of a natural gas pipeline (Ballynora-Lehenaghmore) in the townland of Chetwynd, Co. Cork, a possible archaeological feature became apparent as an area of dark soil. On preliminary investigation, the dark soil was seen as a trench c. 1m wide and at least 1m deep. The feature appeared to be a souterrain, consequently further excavation of a wider area within the pipeline corridor was undertaken. The discovery of concentric ditches suggested the site was a bivallate ringfort. Initially the areas available for excavation were restricted. Following discussions with BGE, the contractor and the project manager, a phased approach to excavation was devised. This involved excavation of the area in three linear segments, each c. 8-10m wide.</p> <p>The ringfort was located on high ground (90-100m OD) with extensive views to the north and west. Approximately two-thirds of the northern part of the ringfort was excavated. Two concentric ditches were recorded but no trace of the enclosing banks remained. The outer ditch was c. 54m in diameter; it was cut onto the natural subsoil and was U-shaped in profile, with a broad base. It was on average 3.6m wide and c. 1.5m deep. The inner ditch was c. 36m in diameter and had both a U- and V-shaped profile. It was on average 2.5m wide and c. 1.4m deep.</p> <p>The entrance could not be definitely identified within the excavated area. As the bank was not present and there was no physical link between the ditches, it was not possible to be sure if the ringfort was bivallate or if the inner bank and ditch became obsolete when replaced by a bank and ditch enclosing a greater circumference. The balance of the evidence suggests a bivallate ringfort as there was no evidence for occupation material overlying the inner ramparts. Finds of 18th-century date within the fill of the outer ditch suggest a demolition date prior to the first edition of the OS map, on which the ringfort is not recorded.</p> <p>Within the enclosure three earth-cut souterrains, a circular house and various pits were excavated.</p> <p>Souterrain 1 had a stepped entrance passage leading to a rectangular chamber. The chamber and entrance passage were cut from the surface as straight-sided pits and not as a tunnel. There was evidence for two post-holes at the entrance and a further two within the chamber. There was also evidence for a threshold at the entrance to the chamber. A second possible chamber led off from the south-west corner and the entrance to this chamber was marked by opposing post-holes. This chamber extended south beyond the limit of excavation. All of the post-holes became apparent as voids within the backfill of the chambers indicating that the posts had remained in situ when the souterrain was backfilled.</p> <p>Souterrain 2/4 was more elaborate and was originally thought to be two separate souterrains. It comprised an entrance passage leading to a small chamber with post-holes in each corner. An earth-cut creep (tunnel) led north from this chamber to a larger rectangular</p>

Location	Licence	Summary
		<p>chamber, also with post-holes in each corner. To the west of this chamber was a short north/south passage with a shaft in its southern end. The shaft was stone lined and several quernstone fragments were incorporated into the construction. Some of the fragments are rough-outs or stones abandoned in the course of manufacture. A further creep led north from the shaft to a larger subrectangular chamber from which extended to the north and north-east two creeps (one of these may have connected to the inner ditch). The northern chamber had evidently collapsed and been backfilled in recent years with modern farm debris and rubble. The morphology of the chamber suggests that it was different from the other rectangular chambers in that it was of 'earth-cut' or tunnelled construction.</p> <p>Souterrain 3 was a simple linear gallery comprising a short entrance passage and a small chamber with post-holes in each corner. One post-hole was filled with copper melting slag. A narrow opening with two opposing post-holes led to a creep which opened to the inner ditch</p> <p>Evidence for habitation within the ringfort consisted of a small circular structure (c. 4m in diameter externally and c. 2.4m internally). The foundation trench was partially filled with stone packing. It had a threshold stone and a central hearth which contained a deposit of burnt bone.</p> <p>Within the two larger souterrains (1 and 2/4) there was evidence for slumped habitation layers. Two deposits of oxidised clay and charcoal within these layers produced fragments of lignite bracelets and sherds of coarse pottery. It is possible therefore that there were houses over the souterrain which were truncated by modern agricultural activity. Several pits containing burnt bone were excavated; whetstones, iron objects and sherds of coarse pottery and fragments of quernstones were found elsewhere on the site.</p> <p>Post-excavation and specialist analysis is ongoing.</p>
Chetwynd 1, Areas A and B	10E0353	<p>The excavation of site Chetwynd 1 (Area A and B) was undertaken along the route of the proposed N71 Chetwynd viaduct road scheme situated approximately 9km south-west of Cork city in November 2010. Chetwynd 1 (Area A) was first identified during a programme of testing (Excavations 2008, No. 128, 09E0135) undertaken by Sheelagh Conran in October 2009. Area B was identified as having archaeological potential and as such ground disturbances were monitored. Nothing of archaeological significance was identified in Area B.</p> <p>Chetwynd 1 (Area A) was identified as a burnt-mound site. Two main burnt mounds were identified in association with four possible troughs and a cluster of stake-holes. The site had been significantly disturbed in the modern era with evidence for a land drainage system and modern pottery was found mixed in the main burnt mound. Post-excavation analysis continues.</p>
Garrandarragh 1, Areas A	10E0352	<p>the excavation of site Garranedarragh 1 (Areas A and B) was undertaken along the route of the proposed N71 Chetwynd viaduct road scheme situated approximately 9km south-west of Cork City in November 2010.</p>

<i>Location</i>	<i>Licence</i>	<i>Summary</i>
		Garranedarragh 1 comprised linear boundary ditches, furrows and drains associated with post-medieval field drainage and agricultural activity. The majority of features have been dated to the post-medieval period due to material such as glass, post-medieval pottery and brick found in many of the deposits and fills.

Appendix 3: Photographic record



Plate 1: View southwards from north-central portion of field.



Plate 2: View westwards of western portion of northern boundary of field.



Plate 3: View of hedgerow separating private dwellings from north-western corner of field.



Plate 4: View of area of darker soil colouration (mid frame) with increased charcoal content, evident near the north-western corner of the subject field.



Plate 5: View of western boundary of field.

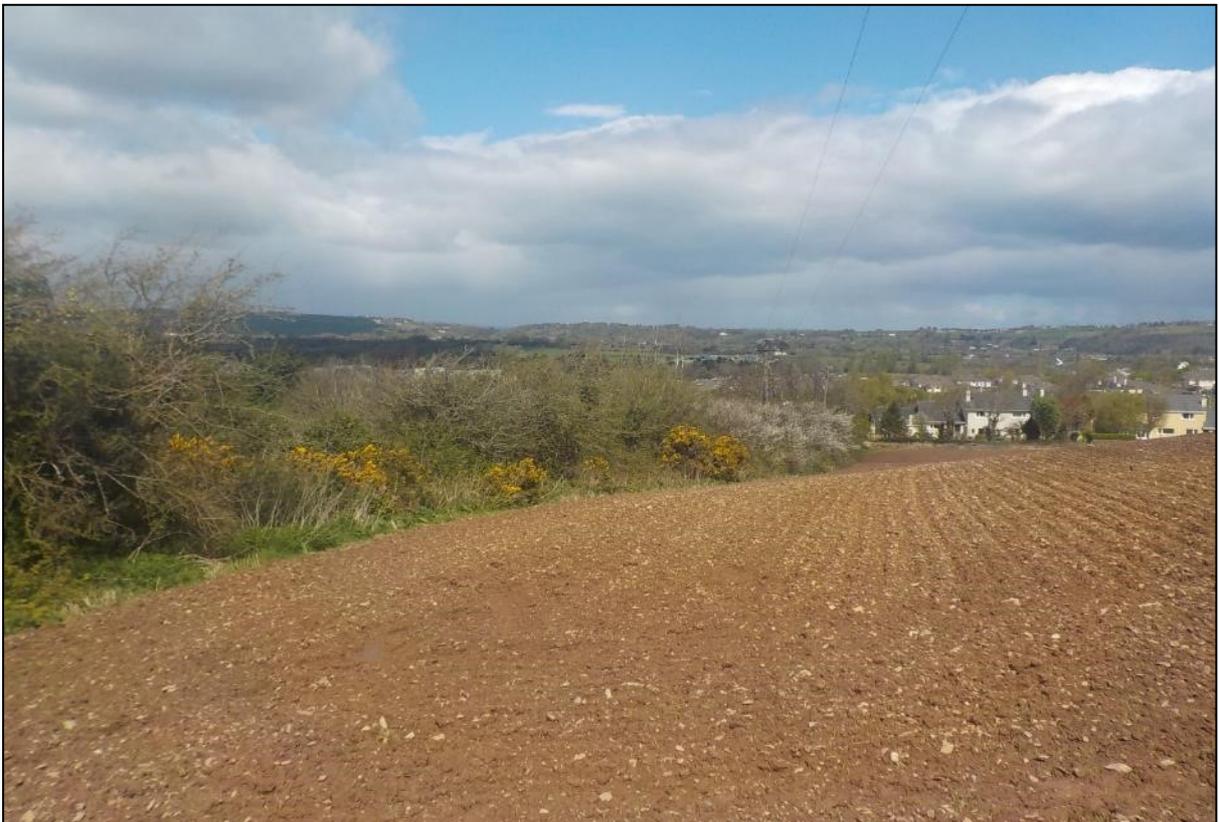


Plate 6: View of western margin of field, facing north.



Plate 7: View north-eastwards from south-central portion of field.



Plate 8: View eastwards along northern boundary of field from southwest corner.



Plate 9: Aerial view eastwards of proposed access at the northeast of the subject site.



Plate 10: View south-westwards from the northeast corner of the field.



Plate 11: View southwards along the eastern boundary.



Plate 12: View westwards along the southern boundary.



Plate 13: View of earthen bank that forms the south boundary of the field.



Plate 14: View to the north from the central portion of the southern boundary.



Plate 15: View of field clearance extending along the unploughed buffer zone at the southern boundary.



Plate 16: View to the northeast from the northwest corner of the field.



Plate 17: Aerial view of partially levelled enclosure (CO086-134---) located c.30m to the east of the subject site, looking southeast