

17 CULTURAL HERITAGE (ARCHAEOLOGY)

17.1 Introduction

Irish Archaeological Consultancy Ltd has prepared this report on behalf of Aeval to assess the impact, if any, on the archaeological and cultural heritage resource of a proposed redevelopment at Woodbrook, Shankill, Co. Dublin (ITM 725941/720644). The overall assessment was undertaken by Ross Waters and Faith Bailey of Irish Archaeological Consultancy Ltd and incorporates the results of a geophysical survey (Nicholls 2019, Appendix 17.1) and archaeological testing (Kavanagh 2019, Appendix 17.2). The proposed development area is currently occupied by open fields and Shanganagh Park and includes a small section of Woodbrook Golf Club.

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

- Determining the presence of known archaeological heritage sites that may be affected by the proposed development.
- Assessment of the likelihood of finding previously unrecorded archaeological remains during the construction programme.
- Suggested mitigation measures based upon the results of the above research.

The study involved detailed interrogation of the archaeological and historical background of the development area. This included information from the Record of Monuments and Places of County Dublin; the County Development Plan; the topographical files of the National Museum of Ireland and cartographic and documentary records. Aerial photographs of the study area held by the Ordnance Survey of Ireland, Bing Maps, and Google Earth were also consulted. A field inspection was carried out in an attempt to identify any known cultural heritage sites and previously unrecorded features, structures and portable finds within the proposed development area.

An impact assessment and a mitigation strategy have been prepared. The impact assessment is undertaken to outline potential adverse impacts that the proposed development may have on the cultural heritage resource, while the mitigation strategy is designed to avoid, reduce or offset such adverse impacts.

17.1.1 Definitions

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

‘Cultural Heritage’ where used generically, is an over-arching term applied to describe any combination of archaeological and cultural heritage features, where: -

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

17.1.2 Impact Definitions

Imperceptible Impact

An impact capable of measurement but without noticeable consequences.

Not Significant

Effects which causes noticeable changes in the character of the environment but without noticeable consequences.

Slight Impact

An impact which causes changes to the character of the environment which are not significant or profound and do not directly impact or affect an archaeological feature or monument.

Moderate Impact

An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends. A moderate effect arises where a change to the site is proposed, which although noticeable, is not such that the archaeological integrity of the site is compromised and which is reversible. This arises where an archaeological feature can be incorporated into modern day development without damage and that all procedures used to facilitate this are reversible.

Significant Impact

An impact which, by its magnitude, duration or intensity, alters an important aspect of the environment. An impact like this would be where part of a site would be permanently impacted upon, leading to a loss of character, integrity and data about the archaeological feature/site.

Very Significant

Effects which, by its character, magnitude, duration or intensity significantly alters the majority of a sensitive aspect of the environment.

Profound Impact

Applies where mitigation would be unlikely to remove adverse effects. Reserved for adverse, negative effects only. These effects arise when an archaeological site is completely and irreversibly destroyed by a proposed development.

Impacts as defined by the EPA 2017 Guidelines (pg. 23).

17.2 Assessment Methodology

17.2.1 Consultation

During scoping and research for the assessment and EIAR a number of statutory and voluntary bodies were consulted to gain further insight into the cultural background of the receiving environment, as follows: -

- Department of Arts, Heritage and the Gaeltacht – the Heritage Service and Policy Unit, National Monuments Section: Record of Monuments and Places; Sites and Monuments Record; Monuments in State Care Database; Preservation Orders and Register of Historic Monuments;
- National Museum of Ireland, Irish Antiquities Division: topographical files of Ireland; and
- Dún Laoghaire–Rathdown County Council: Planning Section.

17.2.2 Study Methodology

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

17.2.3 Paper Survey

- Record of Monuments and Places for County Dublin.
- Sites and Monuments Record for County Dublin.
- Monuments in State Care Database.
- Preservation Orders.
- Register of Historic Monuments.
- Topographical files of the National Museum of Ireland.
- Cartographic and written sources relating to the study area.
- Dún Laoghaire-Rathdown County Development Plan 2016-2022.
- Place name analysis.
- Excavations Bulletin (1970–2018).

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

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

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

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

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

Register of Historic Monuments was established under Section 5 of the 1987 National Monuments Act, which requires the Minister to establish and maintain such a record. Historic monuments and archaeological areas present on the register are afforded statutory protection under the 1987 Act. The register also includes sites under Preservation Orders and Temporary Preservation Orders. All registered monuments are included in the Record of Monuments and Places.

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

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

- William Petty, *Down Survey Map of the Barony of Rathdown and Parish of Connough and Rathmichaell*, c. 1655.
- John Rocque, *Map of County Dublin*, 1760.
- John Taylor, *Map of the Environs of Dublin*, 1816.
- Ordnance Survey maps of County Dublin 1843, 1871, and 1909.

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

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

Development Plans contain a catalogue of all the Protected Structures and archaeological sites within the county. The Dún Laoghaire-Rathdown County Development Plan (2016-2022) and Woodbrook – Shanganagh LAP (2017-2023) were consulted to obtain information on cultural heritage sites in and within the immediate vicinity of the proposed development.

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

Excavations Bulletin is a summary publication that has been produced every year since 1970. This summarises every archaeological excavation that has taken place in Ireland during that year up until 2010 and since 1987 has been edited by Isabel Bennett. This information is vital when examining the archaeological content of any area, which may not have been recorded under the SMR and RMP files. This information is also available online (www.excavations.ie) from 1970–2018.

17.2.4 Field Inspection

Field inspection is necessary to determine the extent and nature of archaeological and historical remains and can also lead to the identification of previously unrecorded or suspected sites and portable finds through topographical observation and local information.

The archaeological field walking inspection entailed: -

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

17.2.5 Geophysical Survey

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

A geophysical survey was undertaken to inform this assessment in November and December 2018 and February 2019 within the proposed development (Nicholls 2019, Licence 18R0223; Appendix 17.1).

17.2.6 Archaeological Testing

Archaeological Test Trenching can be defined as ‘*a limited programme... of intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land or underwater. If such archaeological remains are present test trenching defines their character and extent and relative quality*’ (ClfA 2014a, 4). A programme of archaeological testing based on the results of the geophysical survey was carried out within the proposed development area in April 2019. This was undertaken by Liza Kavanagh of IAC under Licence 19E0098, the full report is reproduced in Appendix 17.2.

17.3 Receiving Environment

17.3.1 Archaeological and Historical Background

The proposed development area is located at Woodbrook, Shankill, Co. Dublin in the southern portion of the Woodbrook – Shanganagh LAP, within the townlands of Cork Little and Shanganagh. These townlands are located in the parish of Old Connaught and Rathmichael and the barony of Rathdown. The DART line separates the development area into two portions. The eastern portion is comprised of two fields, that are currently located in Shanganagh Park, which is bordered by Woodbrook Golf Club to the south and east. The townland boundary between Cork Little and Shanganagh forms the southern boundary. The western boundary is formed by the DART line.

The western section of the development area is comprised of open fields (and associated pipeline wayleave). The park and Shanganagh Cemetery border this portion of the development to the north and west. The remainder of the western boundary is formed by the Dublin Road, which is also the townland boundary between Aske and Cork Little. The townland boundary between Cork Little and Shanganagh traverses east-northeast to west-southwest through the upper limits of the western half of the development. The golf club lies to the immediate east and to the immediate south are the demesne landscapes of Corke Lodge and Woodbrook House (NIAH Garden DU-50-O-260200). The pipeline wayleave travels into the demesne of Shanganagh Castle (NIAH Garden DU-50-O-256212). The demesnes of the Aske (NIAH Garden DU-50-O-254202) and Beauchamp (NIAH Garden DU-50-O-253206) are situated to the immediate west of the site.

There is one recorded monument located within 250m of the proposed development. This consists of the site of a castle (RMP DU026-120) at Shanganagh (Figure 17.1). The castle is also a protected structure. A number of monuments are located within the wider landscape, the position of which are shown on Figure 17.1.



Figure 17.1: Proposed development area showing surrounding recorded monuments.

Mesolithic Period (6000-4000 BC)

The Mesolithic Period (6000–4000 BC) is the earliest time from which there is clear evidence for prehistoric activity in Ireland. During this period people hunted, foraged and gathered food and appear to have had a mobile lifestyle. The most common evidence found to show the presence of Mesolithic communities at a site are scatters of worked flint material, a by-product from the production of flint implements. The current archaeological evidence suggests that south County Dublin was inhabited by the end of the Mesolithic period, much of the artefactual and monumental evidence has been eliminated by a combination of the growth of the built-up area and coastal erosion (Stout and Stout 1992, 5). At this time people made crude flint tools known as Larnian Flakes. Small numbers of these flakes have been found at Dalkey Island, Dun Laoghaire and Rathfarnham and may indicate small-scale transient settlement along the riverbanks and seashores (Corlett 1999, 10). The earliest evidence comes from middens, collections of debris, which contained material relating to the manufacture of stone tools and the collection of coastal resources such as shellfish, fish and birds (Liversage 1968, 144). The lower and therefore earlier layers of the middens included 'Bann flakes' and other Larnian material representative of the Mesolithic period while the more recent layers include arrowheads and convex scrapers more typical of the Neolithic period.

Neolithic Period (4000-2500 BC)

During the Neolithic period (c. 4000–2500BC) communities became less mobile and their economy became concentrated on the rearing of stock and cereal cultivation. This transition was accompanied by major social change. Agriculture demanded an altering of the physical landscape; forests were rapidly cleared and field boundaries constructed. There was a greater concern for territory, which saw the construction of large communal ritual monuments called megalithic tombs, which are characteristic of the period. The most common type of megalithic tomb within the Rathdown area is the portal tomb. The earliest indicators of human occupation in the immediate vicinity of the proposed scheme consist of a Neolithic tomb in the townland of Shankill (RMP DU026-132), c. 1.95km to the west. This tomb had been erected into a pre-existing fulacht fia.

Bronze Age (2500-500 BC)

The Bronze Age (2500-500BC) was marked by the widespread use of metal for the first time in Ireland. As with the transition from Mesolithic to Neolithic the transition into the early Bronze Age was accompanied by significant social change. Megalithic tombs were no longer constructed and the burial of the individual became typical. Cremated or inhumed bodies were often placed in a cist, which is a small stone box set into the ground or a stone lined grave. These were often accompanied by pottery. A number of burials were identified in the Dun Laoghaire Rathdown area in the 19th and 20th centuries, which may date to this period. Isolated stone-lined burials were noted during drainage works in Dalkey and two cist burials, possibly of Bronze Age date were identified at Stillorgan Park (NMI 1955:42-73) and Cabinteely (NMI R2454.1-3).

The most common Bronze Age site within the archaeological record is the burnt mound or fulacht fiadh. Over 4500 fulachta fiadh have been recorded in the country making them the most common prehistoric monument in Ireland (Waddell, 1998, 174). Although burnt mounds of shattered stone and charcoal-rich soil occur as a result of various activities that have been practiced from the Mesolithic to the present day, those noted in close proximity to a trough are generally interpreted as Bronze Age cooking/industrial sites. Fulachta fiadh generally consist of a low mound of burnt stone, commonly in horseshoe shape, and are found in low lying marshy areas or close to streams or rivers. Often these sites have been ploughed out and survive as a spread of heat shattered stones in charcoal-rich soil with no surface expression in close proximity to a trough. Much debate exists as to the function of these monuments. Current hypotheses range from transient cooking sites to more semi-permanent activities including textile dyeing or beer production. The closest example of a fulacht fia was uncovered in the townland of Shanganagh (RMP DU026-116) by Paddy Healy located c. 290m to the west of the proposed development.

Human activity in the vicinity of the proposed scheme during the Bronze Age is also attested to by the site of 'Toole's Moat' in the townland of Oldconnaught (RMP DU026-067) located c. 340m to the west of the proposed development. Excavations in advance of the Shankill-Bray By-Pass necessitated excavation of the site. Quarrying in the 1800s discovered archaeological material at the site and the remains of seven skeletons and associated bronze fibulae were recovered. Large-scale quarrying in the 1950s appears to have almost totally removed what would have been the original structure and the only feature uncovered was what appeared to be a portion of a post-medieval ditch.

Iron Age (500 BC-AD 400)

There is increasing evidence for Iron Age (c. 500 BC – AD 400) settlement and activity in recent years as a result of development-led excavations as well as projects such as LIARI (Late Iron Age and Roman Ireland). Yet, this period is distinguished from the rather rich remains of preceding Bronze Age and subsequent early medieval period by a relative paucity of evidence for material culture in Ireland. The Iron Age had traditionally been associated with the arrival of the Celts and the Celtic language in Ireland. The Celts were an Indo-European group who are thought to have originated probably in east-central Europe in the 2nd millennium BC. They were among the earliest to develop an Iron Age culture, as has been found at Hallstatt, Austria (c. 700BC).

The available evidence suggests that large defensive structures and earthworks known as promontory or hill forts were characteristic of the period. The former is a banked and ditched structure located above a steep cliff or bluff and often found in coastal areas. The hill fort or hill top enclosures are very interesting in that they are almost always multi-period. As a result, their dating is problematic but there appears to be some consensus that their peak use and greatest extents are dated to the Iron Age (Raftery 1994). There is no known evidence of Iron Age activity in the vicinity of the proposed development.

Early Medieval Period (AD 400–1169)

The early medieval period is depicted in the surviving sources as entirely rural characterised by the basic territorial unit known as túath. Byrne (1973) estimates that there were probably at least 150 kings in Ireland at any given time during this period, each ruling over his own túath. During this sometimes-violent period, roughly circular defensive enclosures known as ringforts were constructed to protect farmsteads. Although most of the ringforts that have been excavated are shown to date to this period, some have earlier origins and may have been originally constructed during the Iron Age, or even earlier.

The Rathdown area was well-populated during this period with a large number of ecclesiastical centres established in the area (Rathmichael, Tully, Shankill and Kiltiernan) and close proximity to the coastal resource. It is therefore surprising that there is not greater evidence for settlement in the form of ringforts within the area, the closest example is c. 2.4km to the west (RMP DU026-053). It is possible that there was no need for a large number of defended settlements within the area as Rathdown was out of reach of the constant attention of the Kings of Meath to the north of Dublin city and the Kings of Leinster to the west of the Wicklow Mountains. It is also possible that many of the sites were removed during the medieval period, when the arrival of the Anglo-Normans and their new techniques of warfare rendered the ringfort obsolete (Corlett 1999, 53).

In the early medieval period south Dublin and adjoining areas of north Wicklow formed part of the territory of Cualu, which was controlled by the Dál Messin Corb, a former royal family of Laigin. Following their loss of power, they withdrew over the mountains to the coast around Arklow and the Uí Théig became the leading tribe in the area. In the 8th century the Uí Théig were replaced by a branch of the Uí Briúin family lending the name Uí Briúin Chualann to the territory now known as Rathdown (Corlett 1999, 35). During the early medieval period powerful ecclesiastic and secular settlements expanded and a mosaic of kingdoms formed across the country. The Mac Turcaill dynasty controlled large tracts of land at this time, including lands in Uí Briúin Cualann stretching south from Tully to the Dargle River in Bray (Murphy and Potterton 2010, 88). It was at this time that important ecclesiastical centres were being founded across the country.

The early medieval period saw the introduction of Christianity to Ireland and with it the arrival of churches into the Irish landscape. Early medieval ecclesiastical enclosures are recorded at Shanganagh (RMP DU026-054001-4) c. 390m to the west and Cork Great (RMP DU026-068-9) c. 610m to the south of the development.

The remains of the early medieval ecclesiastical complex at Shanganagh lie within the boundary of the Shanganagh demesne. It is possible that the site, known as Killtuck, was dedicated to Toca mAeda mSenaic brother of Crimthann Cualann, King of Leinster who died in the early 7th century (Corlett 1999, 137). A considerable portion of the walls of the church were standing along with another small square structure when the site was visited in the 19th century by Eugene O'Curry of the Ordnance Survey (Ball 1902, 119). Today the remains of the church consist of the foundations of a small stone building measuring 10.6m by 5.49m. A number of stone monuments identified at the site have since been relocated. One, a small stone cross, is located in the grounds of St. Ann's Church in Shankill while another cross is located beside a lane in Rathmichael (Corlett 1999, 137). A rectangular enclosure, visible on a vertical aerial photograph, once surrounded the site.

The site of Cork Abbey is recorded by O'Curry of the Ordnance Survey as another possible early medieval foundation. He suggested that the monastery may have been founded by St. Curcagh of the Cill Curcaighe whose festival is celebrated on 21 July and that a burial place was uncovered nearby (Ball 1902-1920). The construction of Cork Abbey house in the 18th century has erased any upstanding early medieval remains from the site. The house itself was demolished in the mid-20th century and lends its name to a modern housing estate constructed on the site. A holy well known as the Abbey well is marked in the grounds of Cork Abbey on Duncan's map of 1821 and the first edition Ordnance Survey map, 1843.

Medieval Period (AD 1169–1600)

The beginning of the medieval period was characterised by political unrest that originated from the death of Brian Borumha in 1014 at the Battle of Clontarf. Diarmait MacMurchadha, deposed King of Leinster, sought the support of mercenaries from England, Wales and Flanders to assist him in his challenge for kingship. Norman involvement in Ireland began in 1169, when Richard de Clare and his followers landed in Wexford to support MacMurchadha. Two years later de Clare (Strongbow) inherited the Kingdom of Leinster and by the end of the 12th century the Normans had succeeded in conquering much of the country (Stout and Stout 1997, 53).

The arrival of the Anglo-Normans and ensuing social upheaval led to the significant changes in land ownership and settlement. Much of Rathdown was granted to Walter de Ridelesford before 1176 by Strongbow, however it appears that Henry II took back some of these lands though as he wanted to keep much of Dublin and its surroundings to himself. A large part of Rathdown then became part of the royal estate of Obrun. This estate included parts of Ballycorus, Kiltiernan, Powerscourt and Corke (Murphy and Potterton 2010, 85). The greatest landowner within the region under the Norman regime was the Archbishop of Dublin, who retained those lands owned since before the invasion, including Dalkey, Rathmichael and Shankill. A portion of the district of Shanganagh, then known as Rathsalchan and Kiltuck, belonged to the Priory of the Holy Trinity (Ball 1902, 117). Another portion of the land, known as the seigniory of Shanganagh, belonged to the Vicars-Choral of St. Patrick's Cathedral. The lands of Cork, extending from Little Bray to Shanganagh, were held by Fulk de Cantilupe. The lands were subsequently leased to the Priory of the Holy Trinity. Towards the close of the 13th century they were held under the Crown by Geoffrey de Lysenham and were occupied by the Belinges family (Ball 1902, 119).

By end of the 13th century many of the English settlers had withdrawn on account of the war in Scotland. The Irish tribes took advantage of this and carried out many raids on those that remained. During the course of the Scottish invasion under Edward Bruce during 1315-1317, Irish tribes occupied many outlying districts in County Dublin with the remainder being uncultivated and laid to waste. Towards the middle of the 14th century steps were made to restrict the military capacity of the Irish tribes and to protect the remaining area of Anglo-Norman influence. A military garrison was stationed at Bray and the lands in the area were re-invested with new tenants including the Lawless and Walsh families who remained in the area for many centuries.

There are a large number of fortified buildings within the Rathdown area and this was in part due to the presence of the Pale. The Pale was defined as a hinterland around the centre of Anglo-Norman rule based in Dublin. During the 15th century the 'Subsidised Castles Act' provided grants of ten pounds to encourage the construction of castles to defend the Pale against the native Irish. The partial remains of a tower house survive c. 1.9km to the north of the proposed development in the Shanganagh townland (RMP DU026-031001). The tower house, Shanganagh Castle, was constructed in 1408 by Thomas Lawless but by the mid-15th century the family had, as elsewhere in the surrounding area, been supplanted by a member of the Walsh family. The structure was constructed of granite and remains of battlements and a wall-walk are visible on the northwest side (Turner 1983, no. 63).

The Pale defences were also strengthened during this period, by the construction of earthen banks and ditches. In 1494 an act of parliament required landowners to construct a line of defences along the borders of the Pale. The remains of a linear earthwork (RMP DU026-124 and RMP WI004-005), possibly a section of the Pale defences, are located on the site of the present county boundary, which runs through the Old Bray Golf Club, c. 885-895m to the south. Its appearance is similar to sections of the earthwork recorded elsewhere in the county. The earthwork is strategically located at the summit of a natural rise in the ground level which may represent the edge of the former valley of the Dargle River. The line of the earthwork is depicted on the first edition Ordnance Survey map, 1843 as a tree-lined path and forms part of the townland boundary between Ravenswell and Cork Great.

Post-Medieval Period (AD 1600–1900)

The Civil Survey of 1654-56 (Simington 1945) was the first relatively comprehensive survey of land ownership in Ireland - dating from the Cromwellian confiscation of land after the rebellion of 1641 and the subsequent civil war. It can also include brief descriptions of major buildings such as castles, churches or mills. In 1641 the survey records John Walsh as the landowner of Shanganagh and James Walsh as the owner of the townlands Cork (Cork Great and Cork Little), Connagh (Old Connaught) and a portion of litle Brey (Little Bray); however, by 1670 John Walsh owned them all.

Even with the turmoil of the English civil war and arrival of Cromwell in Ireland, the population of southeast Dublin and northeast Wicklow prospered. The 17th century saw dramatic rise in the establishment of large residential houses around the country. The large country house was only a small part of the overall estate of a large landowner and provided a base to manage often large areas of land that could be located nationwide. Lands associated with the large houses were generally turned over to formal gardens, which were much the style of continental Europe. Gradually this style of formal avenues and geometric gardens designs was replaced during the mid-18th century by the adoption of parkland or demesne landscapes – which enabled the viewing of a large house within a designed ‘natural’ setting. Although the creation of a parkland landscape involved working with nature, rather than against it, considerable constructional effort went into their creation. Earth was moved, field boundaries disappeared, streams were diverted to form lakes and quite often roads were completely diverted to avoid travelling anywhere near the main house or across the estate. A number of large houses and demesne landscapes once surrounded the area containing the proposed development. These included Woodbrook House (RPS 1870), Corke Lodge (RPS 1869), the Orchard (NIAH 60260175), Beauchamp House (RPS 1862), Wilford House (RPS 1873), Shanganagh Castle (RPS 1845; RMP DU026-120), St. James Parsonage/Askefield House (RPS 1860), the Aske (RPS 1866), and Cuilin (RPS 1868). These buildings were accompanied by naturalised demesne landscapes, which today have become substantially denuded due to suburban residential development. The best-preserved building and landscape within the vicinity is Woodbrook House and demesne (RPS 1870), located to the immediate south of the proposed development.

In 1793 the newly established French Republic was at war with Great Britain and a number of other continental countries (Kerrigan 1974a, 107). In 1803 an Act of Parliament was passed to allow for the acquisition of land for costal defences in Britain and Ireland (Kerrigan 1974b, 148). Twenty-seven Martello towers were constructed between Bray in County Wicklow to Balbriggan in north County Dublin to protect the city and Dublin Bay from a possible French landing (ibid). There are two Martello towers recorded in the wider area at Cork Great (RMP DU026-070) c. 700m to the south-southeast and Shanganagh (RMP DU026-055), c. 640m to the north-northeast. The towers along with their defensive batteries are depicted on John Taylor’s Map of the Environs of Dublin, 1816 and on the first edition Ordnance Survey map, 1843. The towers at Cork Great and Shanganagh are no longer extant and are likely to have been lost as a result of coastal erosion. A pair of earthen tree-lined banks running northwest to southeast through the green field area to the west of Shanganagh Cliffs Estate represented the remains of a path known as “Battery Wood” (Turner 1983). The path leads to a battery, the location of which was ill-chosen as it was to the rear of some rising ground and did not command a view of the shore (Joyce 1912, 62). The dwelling which accommodated the garrison was still standing in the early 20th century and is represented today by the remains of a stone-built wall to the east of the coastal path.

The branch of the Dublin & South Eastern Railway was constructed running south from Harcourt Street Station to Bray in the mid-19th century. The route of which runs to the immediate east of the proposed development.

17.3.1.1 Summary of Previous Archaeological Fieldwork

A review of the Excavations Bulletin (1970-2018) has shown that no previous archaeological investigations have been carried out within the proposed development area. Investigations carried out within the surrounding area are summarised below:

Monitoring of geotechnical investigations in advance of the Shanganagh-Bray main drainage scheme were carried out to the immediate east of the western half of the development (Licence: 05E0392; Bennett 2005:530). Further monitoring for the scheme was carried out during the installation of a 6km pipeline through the townlands of Ravenswell, Cork Great, Cork Little and Shanganagh, c. 135m to the east (Licence 11E0304; Bennett 2011:228). No features of archaeological significance were discovered during the course of either works.

In advance of the construction of the Shankill/Bray By-Pass excavations were carried out at the sites of "Toole's Moat" and Palermo, Old Connaught Avenue, c. 340m to the west (Licence E000505). At "Toole's Moat" several skeletons and bronze fibulae had been discovered during quarrying. Investigations discovered a post-medieval ditch with a corroded piece of iron and a fragment of a clay pipe. At the Palermo estate an octagonal shaped area was investigated, post-medieval delft and corroded iron fragments suggest the feature is ornamental and associated with the demesne (Keeley 1989).

A geophysical survey for the LUAS Line B was carried out c. 425m to the west; however, no archaeology was found (Licence: 08R0308).

17.3.1.2 Cartographic Analysis

William Petty's Down Survey, Map of the Barony of Rathdown and Parish of Connough and Rathmichaell, c. 1655

The map for depicts the townlands of Cork Little and Cork Great as one larger townland, Corke (Figure 17.2). The land is owned by James Walsh and is recorded as 183 acres. Shanganagh lies to its immediate north and its 400 acres are recorded as being owned by John Walsh. No features are shown within either townland.

John Rocque's An Actual Survey of the County of Dublin, 1760

Rocque's map depicts the area of the proposed detail in more detail than Petty's, roads and topographical features are depicted (Figure 17.3). Corke has been split into Little Cork and Old Cork. The area of the proposed developments consists of open fields with a road leading south to Bray from Dublin on the western limit. A structure that represents Wood Lawn House/Corke Lodge (RPS 1869) is depicted to the immediate south within a garden fronting onto an east-west road, Woodbrook House (RPS 1870) located to the southeast also fronts onto the road. A moat is annotated to the west (RMP DU026-067). The building south of this represents Wilford House (RPS 1873). Shanganagh Park House (RPS 1792) is marked on the northern limit of the Shanganagh townland, which is comprised of open fields.

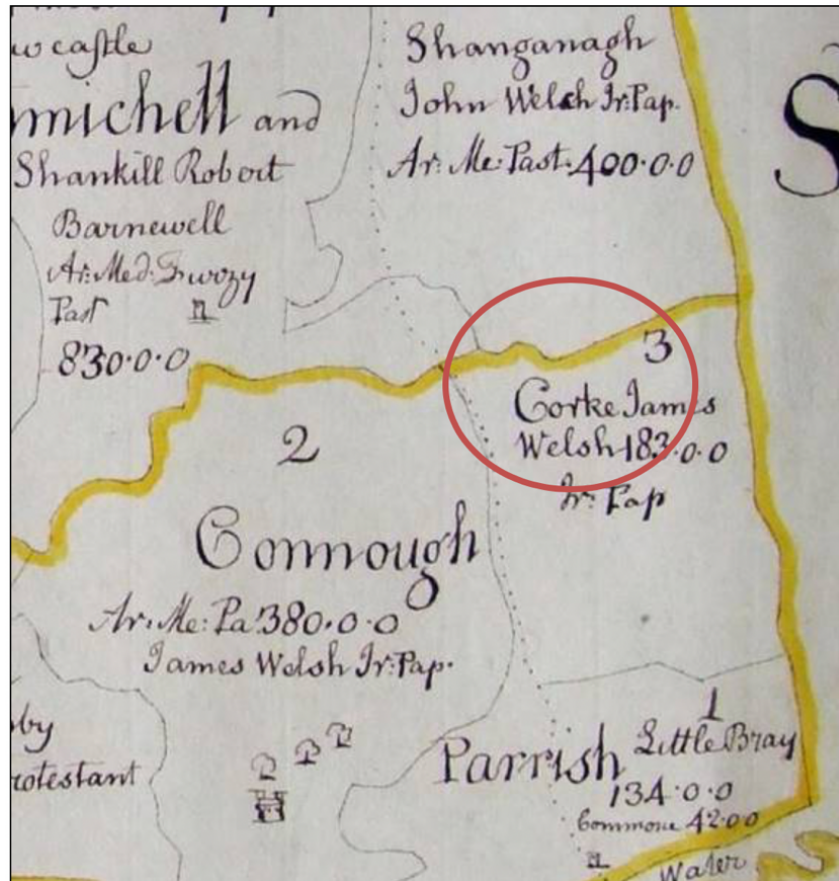


Figure 17.2: Extract from Petty's Down Survey (c. 1655) showing the approximate area of the proposed development



Figure 17.3: Extract from Rocque (1760) showing the approximate area of the proposed development

John Taylor's Map of the Environs of Dublin, 1816

There have not been any changes within the area of the proposed development (Figure 17.4). The wider area has undergone growth and St James' Church (RPS 1863) is annotated as a chapel to the immediate west of the proposed development and there are a few dwellings depicted along the road to the immediate south of the chapel. Wilford (RPS 1873), Woodlawn (RPS 1869), and Woodbrook (RPS 1870) are still depicted to the south. The ruins of Kiltuck Church (RMP DU026-054001) are depicted to the north of the proposed development beside the Shanganagh Castle estate (RPS 1845; RMP DU026-120).

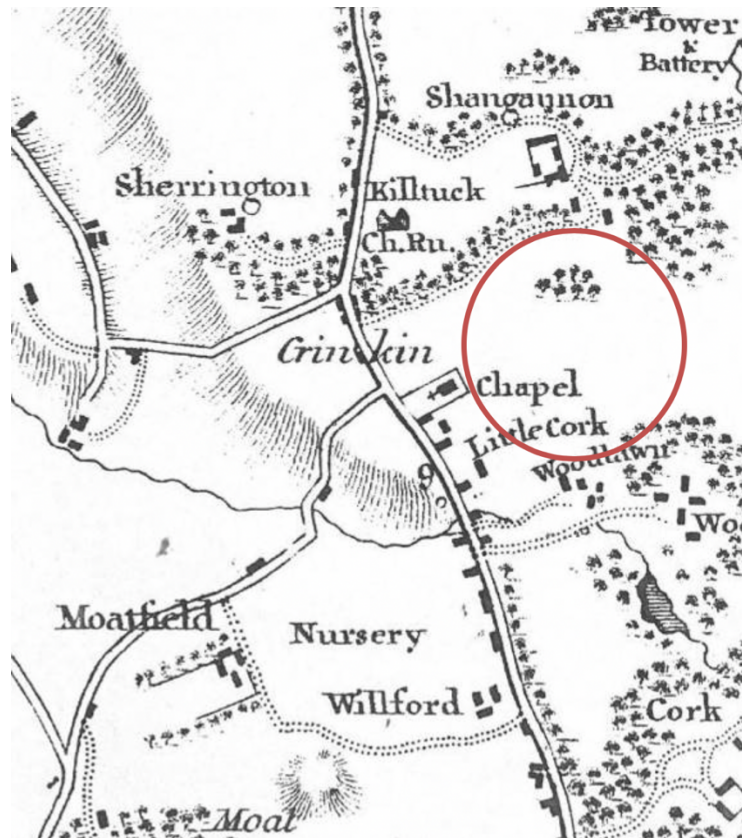


Figure 17.4: Extract from Taylor (1816) showing the approximate area of the proposed development

First Edition Ordnance Survey Map, 1843, scale 1:1560

This map is the first to depict the area of the proposed development accurately, it is shown as being located in six open fields and five fields in the demesne landscape of Shanganagh Castle (Figure 17.5). A monument associated with Shanganagh Castle (RPS 1845; RMP DU026-120) is depicted in the demesne. A gravel pit is marked to the immediate east of the western half of the development at the townland boundary with Shanganagh and Cork Little. By the time of this map the demesne landscapes of Wood Brook (RPS 1870), Wood Lawn (RPS 1869), Oak Lawn (RPS 1866), Beauchamp (RPS 1862), Wilfort House (RPS 1873), Shanganagh Castle (RPS 1845; RMP DU026-120), Aske Cottage (RPS 1860), and Moatfield Cottage (RPS 1868) are visible. The dwellings along the Bray Road depicted south of the chapel on Taylor's map are no longer standing. The moat is no longer annotated but is depicted within a forest with roads leading to Moatfield (RPS 1868) and Wilfort (RPS 1873).

Ordnance Survey Map, 1863-7, scale 1:2500

The proposed development area now lies in seven open fields and six demesne fields of Shanganagh Castle (RPS 1845; RMP DU026-120). The gravel pit is now located on the northern side of the townland boundary. The church is named as St. James' Church (RPS 1863) for the first time and Hackett Memorial Hall (RPS 1858) is depicted to the west. The monument (NIAH 60260147) is no longer shown to the north. The forested area around 'Toole's Moat' has diminished and it is now encircled by a road. Several of the houses in the surrounding area have changed names; Wood Lawn House is now the Estate Office of Woodbrook (RPS 1869), Oak Lawn to The Aske (RPS 1866), Aske Cottage to St James' Parsonage (RPS 1860), and Moatfield Cottage to Highnam Lodge (RPS 1868). The Dublin and South Eastern Railway has been constructed by this time and two branches of the railway converge c. 100m to the east of the development and continue onto Bray. These two branches terminate in Kingstown (Dún Laoghaire) and Harcourt Street.

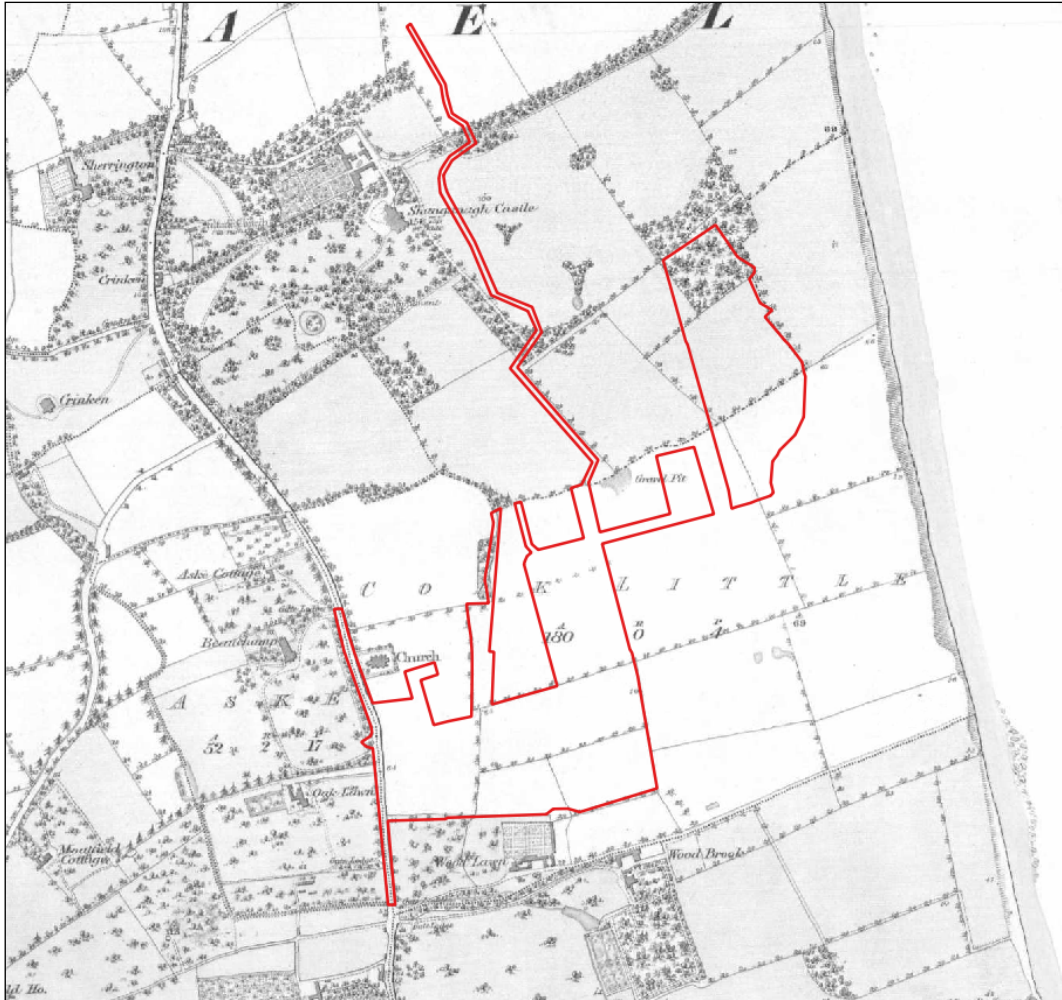


Figure 17.5: Extract from the first edition OS map (1843) showing the proposed development

Third Edition Ordnance Survey Map, 1906-9, scale 1:10560

The proposed development area is now located in 14 fields, two of which may be part of demesne gardens, and there are two structures depicted in the western half, one in the lower fields and the other in the extreme north. The demesne of Shanganagh Castle (RPS 1845; RMP DU026-120) has shrunk and this may be as a result of the realigned railway which now runs between the eastern and western half of the development. The earlier tracks are marked as disused and the branch to Dún Laoghaire now follows the same route as the modern DART. The fields to the south of the eastern half of the development are annotated as Woodbrook Golf Links. A new designed garden and house are located to the west of the development, the Orchard. There have been several name changes among the rest of the houses; Woodbrook Estate Office to Corke Lodge (RPS 1869), Wilfort to Wilford (RPS 1873), and Highnam Lodge to Cuilin (RPS 1868). There are no other significant changes to note.

17.3.1.3 Aerial Photography Plan

Inspection of the aerial photographic coverage of the proposed development area held by the Ordnance Survey (1995-2013), Bing Maps, and Google Earth (2005-2018) was undertaken as part of this assessment. This revealed that the site has comprised a series of open fields and part of a golf-course and Shanganagh Park since 1995. On the aerial photography from 2008 a sub-circular feature was noted in the middle of the northern field in Cork Little to the west of the railway. The field inspection determined that the feature represents the remains of a modern well and this was confirmed during archaeological testing.

17.3.1.4 Dun Laoghaire-Rathdown County Development Plan

Record of Monuments and Places

The Dún Laoghaire-Rathdown County Development Plan (2016–2022) recognises the statutory protection afforded to all Record of Monuments and Places (RMP) sites under the National Monuments Legislation (1930–2014). The development plan lists a number of aims and objectives in relation to archaeological heritage (Appendix 17.5).

There are no recorded monuments located within the proposed development area. The closest site consists of Shanganagh Castle (RMP DU026-120), located c. 85m west-southwest of the proposed associated pipeline. This is also listed on the RPS as RPS 1845 (Figure 17.1).

17.3.1.5 Place Name Analysis

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

Name	Derivation	Possible Meaning
Aske	An Easc	'the track of a stream'. Eisc = morass, relates to marsh.
Cork Great	Corcagh	'Marsh'. Potentially named after the nearby Cork Abbey
Cork Little	Corcagh	'Marsh'. Potentially named after the nearby Cork Abbey
Oldconnaught	Seanchonach	'Old field of the hounds'
Rathdown	Ráth an Dúin	'Ringfort'
Rathmichael	Ráth Michíl	'MacTail's fort'
Shanganagh	Seangánach	'Old sand'
Shankill	Seanchill	'Old church'

Table 17.1: List of townlands, parishes, and baronies in the vicinity of the proposed development area.

17.3.1.6 Townlands

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

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

The vast majority of townlands are referred to in the 17th century, when land documentation records begin. Many of the townlands are mapped within the Down Survey of the 1650s, so called as all measurements were carefully 'laid downe' on paper at a scale of forty perches to one inch. Therefore, most are in the context of pre-17th century landscape organisation (McErlean 1983, 315).

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

17.3.1.7 Cultural Heritage Sites

The term 'cultural heritage' can be used as an over-arching term that can be applied to both archaeology and architectural features. However, it also refers to more ephemeral aspects of the environment, which are often recorded in folk law or tradition or possibly date to a more recent period. Shanganagh Park is located in the upper fields of the eastern half of the development and to the north of the western half. It is a public park in use for a variety of leisure, social, and communal activities. Within the surrounding environs the recorded monuments, protected structures and demesne landscapes constitute as cultural heritage sites. Further cultural heritage sites in the area consist of Shanganagh Cemetery, to the immediate north, a relatively recent and active cemetery and Woodbrook Golf Club, to the immediate east, founded in the early 20th century.

17.3.1.8 Field Inspection

The field inspection sought to assess the proposed development area, its previous and current land use, the topography and any additional information relevant to the report. The field inspection was carried out on the 20 November 2018. For ease of discussion the proposed development has been divided into three sections (Figure 17.6).

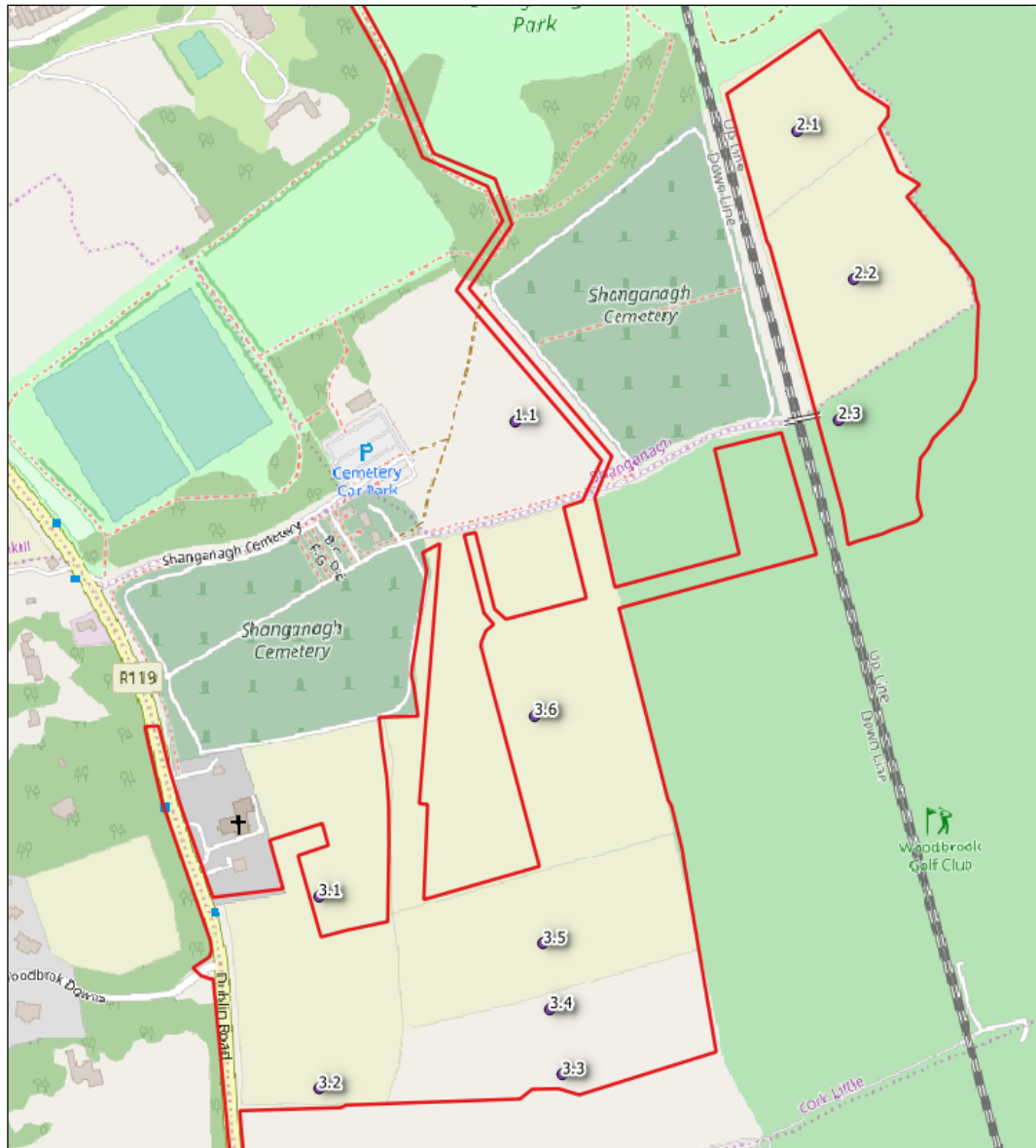


Figure 17.6: Field Numbering for the Field Inspection.

The first section contains one field (1.1) situated between the east and west halves of Shanganagh Cemetery. The townland boundary between Cork Little and Shanganagh, to the south of the field, is defined by trees and the road joining the east and west halves of the graveyard. The field is uneven and overgrown (Plate 17.1). It is bordered to the east by the graveyard and to the west by a car park, recycling bank and Shanganagh Park. The field is surrounded by trees at each boundary. The field is separated from Shanganagh Park to the north by an earthen bank c. 1m high. The proposed development will connect to a footpath in Shanganagh Park from the north-eastern corner of the field (Plate 17.2).

The second section comprises two fields (2.1 & 2.2) and a small patch of land (2.3) to the immediate east of the DART tracks in Shanganagh Park. Woodbrook Golf Club borders this section to the east and south. The two fields (2.1 & 2.2) are flat and bordered by mature vegetation (Plate 17.3). The townland boundary between Cork Little and Shanganagh forms the southern boundary of Field 2.2. It consists of tall trees and mature vegetation around a 1m high earthen bank. A sub-ovular feature of slightly raised ground is present within the field (Plate 17.4), which is likely to represent a natural topographic feature. Field 2.3, to the south of Field 2.2, was overgrown at the time of the inspection and uneven with occasional briars present (Plate 17.5). It is raised above the golf course and DART tracks. A metal bridge with two stone abutments crosses over the tracks between the lower field and small patch of land (Plate 17.6).

The third section of the proposed development lies in the townland of Cork Little to the south of Shanganagh Cemetery. The Dublin Road forms the townland boundary between Cork Little and Aske and is the western limit of this section. It is lined in parts by large trees which may represent the earlier townland boundary (Plate 17.7). There are several structures listed on the RPS that front onto this road and these are mainly formed by the entrances, walls and lodges of houses and their garden demesnes.

There are six fields within the third section. Field 3.1 is bordered by the Dublin Road, mature vegetation, a stone wall and a slight ditch to the west. The field is undulating and in arable use. It is bounded by thick, mature vegetation (Plate 17.8). The southern boundary consists of an earthen bank covered in scrub that was grown between 2005 and 2008. The rear wall of the church is built atop an older stone wall, which potentially represents the original wall of the church (Plate 17.9).

Field 3.2 lies directly south of Field 3.1. It is a rectangular field bounded to the south by a wooded area: the demesne landscape of Corke Lodge (Plate 17.10). Field 3.3 slopes down to the western field boundary west and is bounded to the north by a 0.5m high bank covered in scrub and to the south by mature vegetation belonging to the demesnes of Woodbrook and Corke Lodge (Plate 17.11). The remains of the rear walls of Corke Lodge are visible in the boundary (Plate 17.12). The golf club lies to the immediate east of Fields 3.3-6 and is separated by mature vegetation and a 0.5m deep ditch.

Field 3.4 slopes down to the west where it is bounded by mature vegetation and a ditch, which is similar to the northern boundary (Plate 17.13). The southern boundary is formed by the earthen bank that extends east from Field 3.1 and 3.2 into Field 3.3 and 3.4. Field 3.5 is under crop and undulates east to west (Plate 17.14). It is bounded by mature vegetation and a ditch.

Field 3.6 is bounded by mature vegetation and ditches except at the north where the townland boundary between Cork Little and Shanganagh is formed by the trees and the road joining the east and west half of Shanganagh Cemetery (Plate 17.15). The field is undulating with a shallow depression in the southwest corner and is under crop. The sub-circular feature identified in the aerial photography consisted of an overgrown sub-ovular area with several large stones and pieces of rusted metal. One of the stones is plugging a circular hole in the centre of the feature with a piece of rusted metal extending out of it. This potentially represents the remains of a modern well (Plate 17.16 and 17.17), which was confirmed during archaeological testing.



Plate 17.1: Field 1.1, facing south-east.



Plate 17.2: Footpath in Shanganagh Park, facing north-east.



Plate 17.3: Field 2.2 in Shanganagh Park, facing north-north-west.



Plate 17.4: Sub-ovular feature in Field 2.2, facing north.



Plate 17.5: Field 2.3, facing south-east.



Plate 17.6: Bridge over DART tracks at Field 2.3, facing north-west.



Plate 17.7: Dublin Road, facing north.



Plate 17.8: Field 3.1, facing north-west.



Plate 17.9: Rear wall of St James's Church in Field 3.1, facing west.



Plate 17.10: Field 3.2, facing west.



Plate 17.11: Field 3.3, facing west.



Plate 17.12: Rear walls of Corke Lodge in Field 3.3, facing south-west.



Plate 17.13: Field 3.4, facing east-north-east



Plate 17.14: Field 3.5, facing north-west



Plate 17.15: Field 3.6, facing north-east.



Plate 17.16: Sub-circular feature in Field 3.6, facing south



Plate 17.17: Close-up view of feature in Field 3.6, facing east

17.3.1.9 Geophysical Survey

A geophysical survey was carried out within the proposed development area on the 19 and 29 November, 3 December 2018, and 9 February 2019. The survey was conducted by Target Archaeological Geophysics on behalf of IAC Ltd, under licence 18R0223. This survey comprised of a magnetometer survey covering c. 18 Ha. The proposed development area was found to contain high levels of ferrous signals resulting from modern disturbance.

The survey identified one definite enclosure site and three probable enclosures. These include remains of a circular enclosure, c. 32m in diameter (M3); two smaller probable circular enclosures likely to represent ring ditches c. 5-8m in diameter (M4) and the suspected eastern portion of a larger enclosure site (M8). Interpretation of the probable enclosure recorded in M8 has been significantly complicated by magnetic disturbance caused by the proximity of the Dart Railway, which is located immediately to the west.

Further responses consisted of discrete anomalies in M1; a possible early field system in M3; and a multitude of weakly magnetic trends, zone of increased response, and small-scale positives in M4. The full report and figures have been included as Appendix 17.1 in this EIAR.

17.3.1.10 Summary of Archaeological Test-Trenching

A programme of archaeological testing was undertaken at Woodbrook, Shankill, Co. Dublin to ascertain potential impact of the proposed development on the potential archaeological resource.

This assessment (Licence 19E0098) was undertaken by Liza Kavanagh of IAC Ltd from the 17 to the 30 April 2019. A total of 103 trenches were mechanically investigated across the test area which had a combined length of c. 4,766 linear metres, 50 linear metres of which were investigated by hand-dug trenches. A total of 17 Archaeological Areas were identified during archaeological testing. This included a Bronze Age enclosure (32m in diameter); a possible early medieval enclosure containing the remains of an adult male inhumation; two small ring ditch enclosures; at least 12 linear features; a total of 25 scattered pits and a post medieval/ modern red-brick well with associated drainage. The full report, including figures, has been included as Appendix 17.2 in this EIAR.

17.3.1.11 Conclusion

A study of the cartographic sources available for the proposed development, situated south of Shankill and north of Bray, revealed that the site remained undeveloped throughout the post-medieval period. The Walsh family owned the land in the 17th century though no development is depicted. By the 18th century the Dublin Road is depicted to the west of the site and the surrounding lands have started to transition into the demesne landscapes of Woodbrook (NIAH Garden DU-50-O-260200), Corke Lodge (RPS 1869), and Wilford (NIAH Garden DU-56-O-255198). Throughout the 19th century this transition continued with the demesnes of Beauchamp (NIAH Garden DU-50-O-253206), Aske (NIAH Garden DU-50-O-254202), and Askefield (RPS 1860). The demesne of Shanganagh Castle (NIAH Garden DU-50-O-256212) extends into the north of the site, however the rest remained as open fields.

There is one site listed within the RMP within a 250m radius of the proposed development. This consists of Shanganagh Castle (RMP DU026-120), c. 85m west-southwest of the pipeline (See Appendix 17.3). Archaeological investigations and recorded monuments in the wider environs provide evidence of human activity from the Bronze Age and the post-medieval period. The presence of a fulacht fia (RMP DU026-116) c. 290m to the west and a Bronze Age burial site (RMP DU026-067) c. 340m to the west show the presence of Bronze Age populations in the surrounding landscape. This presence was confirmed within the proposed development area by a geophysical survey, carried out within the proposed development area under licence 18R0223. Possible ring ditches of Bronze Age date were identified during the survey. A programme of archaeological testing targeted the geophysical survey anomalies and was carried out under licence 19E0098. This revealed 17 potential archaeological areas including a large Bronze Age enclosure and two small ring ditches. Testing also confirmed the presence of a possible early medieval enclosure containing the remains of an adult male inhumation, 12 linear features, 25 scattered pits and a post medieval/modern red-brick well with associated drainage.

17.4 Characteristics of the Proposed Development

The site is generally bounded by the Old Dublin Road (R119) and St. James (Crinken) Church to the west, Shanganagh Public Park and Shanganagh Cemetery to the north, Woodbrook Golf Course to the east and Cork Lodge and woodlands and Woodbrook Golf Clubhouse and car park to the south. The replacement golf hole lands are generally bounded by the existing train line to the west, Shanganagh Public Park to the north and Woodbrook Golf Course to the east and south. The proposed development is within the townlands of Cork Little and Shanganagh, Shankill, Co. Dublin.

In summary, the proposed Strategic Housing Development broadly comprises: -

- 685no. residential units (207no. houses, 48no. duplex and 430no. apartments) in buildings ranging from 2 to 8-storeys.
- 1no. childcare facilities (c. 429 sq. m gross floor area).
- Provision of Woodbrook Distributor Road / Woodbrook Avenue from the Old Dublin Road (R119) to the future Woodbrook DART Station, including the provision of a temporary surface car park (164no. parking spaces including set down areas and ancillary bicycle parking and storage) adjacent the future Woodbrook DART Station in northeast of site.
- Provision of a series of linear parks and green links (Coastal Park and Corridor Park), including 2no. pedestrian / cycle links to Shanganagh Public Park and provision of interim landscaping of future public plaza to serve future Local Centre to allow full north / south connection, supplemented by smaller pocket parks.
- Provision of SuDS infrastructure and connection to existing surface water culvert on Old Dublin Road (R119).
- Provision of waste water infrastructure (pumping station including 24 hour emergency storage and rising foul main through Shanganagh Public Park to tie-in to existing services at St. Anne's Park Residential Estate).
- 2no. replacement golf holes on eastern side of railway line.
- All associated and ancillary site development and infrastructural works, hard and soft landscaping and boundary treatment works.

A full project description is provided in Chapter 3: Description of Proposed Development.

17.5 Potential Impacts of the Proposed Development

Impacts can be identified from detailed information about a project, the nature of the area affected and the range of archaeological resources potentially affected. Archaeological and cultural heritage sites can be affected adversely in a number of ways: disturbance by excavation, topsoil stripping; disturbance by vehicles working in unsuitable conditions; and burial of sites, limiting access for future archaeological investigation. Upstanding archaeology and cultural heritage can be affected adversely by direct damage or destruction arising from development, from inadvertent damage arising from vibration, undermining etc. and also by indirect impacts to a building's visual setting, view or curtilage.

17.5.1 Archaeology

Phase 1 of the proposed development involves the construction of c. 685 dwellings (both houses, duplexes and apartments) as well as road infrastructure, services and landscaping. Ground disturbances associated with the proposed development will result in a direct and negative impact on the following sites: -

Archaeological Area (AA)	Site Type	Impact Type	Significance
AA1	Bronze Age enclosure	Direct	Profound negative
AA3	Two ring ditches and associated features	Direct	Profound negative
AA4	Linear and pit features	Direct	Significant negative
AA5	Multiple pit features	Direct	Significant negative
AA6-8	Multiple pit features	Direct	Significant negative
AA10, 11, 14	Single pits features	Direct	Significant negative
AA15	Hearth	Direct	Significant negative
AA17	Post medieval well and associated drainage features	Direct	Moderate negative

Table 17.2: Potential impacts on the archaeological resource.

Phase 1 of the golf course development within the area to the east of the railway will see extensive ground disturbances associated with the proposed landscaping. Ground disturbances associated with the proposed development will result in a direct and negative impact on the following sites:

Archaeological Area (AA)	Site Type	Impact Type	Significance
AA2	Possible bivallate enclosure with burial	Direct	Significant negative
AA16	Pit	Direct	Significant negative

Table 17.3: Potential impacts on the archaeological resource.

AA 9 (linear features), AA 12 and AA 13 (isolated pit features) are all located in Phase 2 of the development lands, which will form part of a Phase 2 application. The impact of any development on these areas will be reported on as part of any future Phase 2 application.

There may be an adverse impact on previously unrecorded archaeological feature or deposits that have the potential to survive beneath the current ground level outside of the footprint of the excavated test trenches. This will be caused by ground disturbances associated with the proposed development.

17.6 Ameliorative, Remedial or Reductive Measures

17.6.1 Archaeology

Preservation in-situ is considered to be the most appropriate manner in which to ensure the conservation of archaeological remains. However, it is not possible to avoid impacts on sites AA 1, AA 3-8, AA 10-11, AA 14-15 and AA 17, due to the requirements of the design layout. As such and in order to ameliorate negative impacts, the archaeological sites within the development area will be preserved by record (archaeological excavation), prior to construction taking place. This will be carried out under the direction of a licence eligible archaeologist, in consultation with the National Monuments Service of the DoCHG and the National Museum of Ireland.

It is not possible to avoid impacts on sites AA 2 and AA 16 as part of the golf course development due to the landscaping requirements. As such and in order to ameliorate negative impacts, the archaeological sites within the development area will be preserved by record (archaeological excavation), prior to construction taking place. This will be carried out under the direction of a licence eligible archaeologist, in consultation with the National Monuments Service of the DoCHG and the National Museum of Ireland.

All topsoil stripping associated with the proposed development will be monitored by a suitably qualified archaeologist. If any features of archaeological potential are discovered during the course of the works further archaeological mitigation may be required, such as preservation in-situ or by record. Any further mitigation will require approval from the National Monuments Service of the DoCHG.

17.6.2 Cultural Heritage (Archaeology)

There will be no residual impact on the cultural heritage (archaeology) resource.

17.7 Monitoring

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

17.8 Reinstatement

Not applicable.

17.9 Difficulties Encountered

No difficulties were encountered during the compilation of this Chapter.