

## 17 CULTURAL HERITAGE (ARCHITECTURAL & ARCHAEOLOGICAL HERITAGE)

### 17.1 Introduction

The chapter describes and assesses the archaeological, cultural and architectural heritage of the lands proposed for residential development at Portmarnock South Phase 1F and the rising main which will serve the Portmarnock South LAP lands (Figure 17-1).

This chapter describes the archaeological findings as a result of investigations undertaken on Phase 1F lands including geophysical survey and test excavation as well as investigations and archaeological monitoring which have been undertaken across the wider site for the previous phases of works (Phase 1A, 1B, 1C, 1D and 1E 2016-present).

The Phase 1F lands are located in the townland of Maynetown and Portmarnock, to the west of the Coast Road (R106) and the Baldoyle Estuary, north of the Mayne Road (R123) and to the east of the Dublin-Belfast Railway Line and to the south and east of the existing 'St. Marnock's Bay' residential development. The rising main will travel from the pumping station along the south-west edge of the Phase 1F lands, crossing Mayne Road and Mayne River to emerge in Stapolin townland (Figure 17-2).

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Supporting investigations comprise geophysical survey by J. M. Leigh Surveys Ltd and archaeological test excavations which were undertaken by licensed director, Gill McLoughlin. The results of these investigations are also presented in this chapter.

Consultation has taken place with the National Monuments Service and Fingal County Council throughout all previous phases of archaeological investigation and excavation works within the Phase 1F lands.

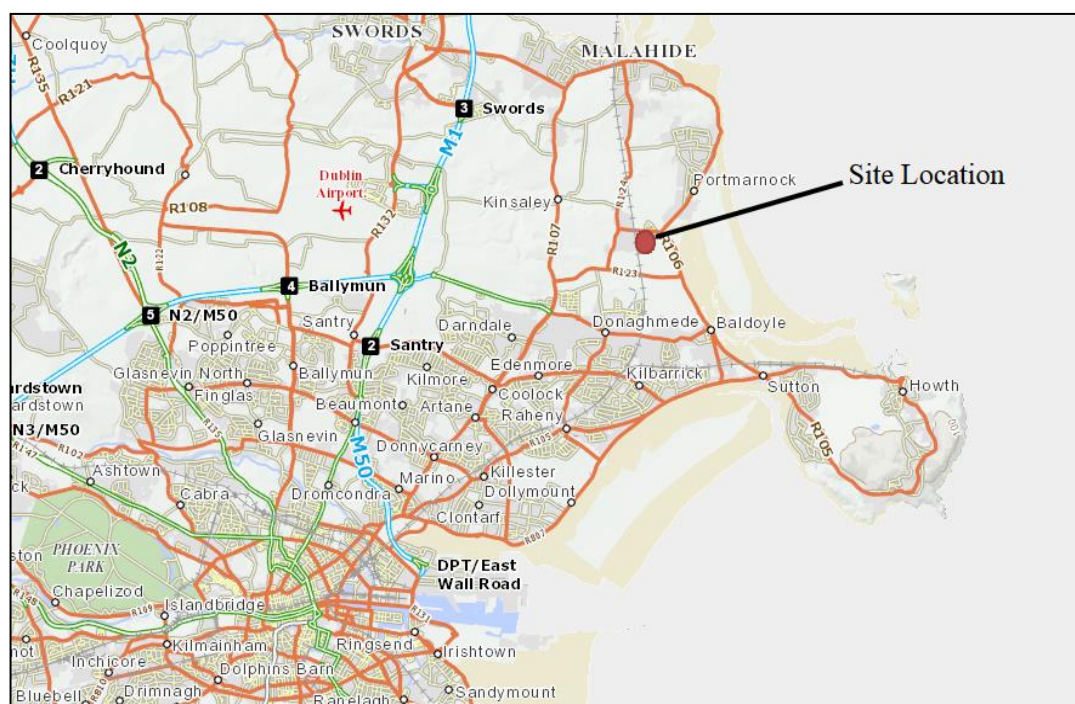


Figure 17-1 Site Location

There are six recorded monuments within the Phase 1F lands, while the Zone of Notification (ZoN) for two more extend into the development site (Figure 17-2). The first is a burnt mound (SMR DU015-157) which was revealed through geophysical survey and archaeological testing (Nicholls 2002; Phelan

2004; Licence 02R0020; 04E1415) and which was fully excavated during Phase 1B investigations (McLoughlin 2020b; Licence 18E0016).

An extensive Later Medieval settlement was located to the north-west corner of the proposed development, extending along the south side of Station Road. Three of the records associated with this settlement are located within the planning boundary (SMR DU015-136001/002/003). They were excavated in 2008 (Moriarty 2009b; Licence 08E0376). Further investigations as part of Phase 1B demonstrated that the settlement extended further east and west (McLoughlin 2020b; Licence 18E0016). This was added to the SMR (SMR DU015-154), and while the point data for the site is outside of the planning boundary, the actual extent of the excavated site extended into the proposed development. It was fully resolved through excavation.

The other site is an enclosure (RMP DU015-055) in Maynetown townland. This below ground enclosure was detected through aerial photography (1999) and geophysical survey (Sheil et al 2000; Licence 00R0037), and verified by test excavation (Wallace 2000; Moriarty 2009a; Licence 00E0732, 08E0376). Additional geophysical survey and archaeological testing at the monument in 2022 confirmed its location and extent (McLoughlin 2023; Leigh 2022; Licence 22E0509, 22R0112). As part of the Masterplan process for the Portmarnock South lands, this site is to be preserved in-situ and protected. The preservation of the site has been secured to date by;

- encircling the site with a 20m buffer zone which will effectively prevent any built development taking place within the boundaries of the monument;
- a temporary metal fence which was erected to respect this buffer zone.

This monument will be retained within an amenity area (formerly identified as a Class 2 public open space) and as part of the Racecourse Park Development Project.

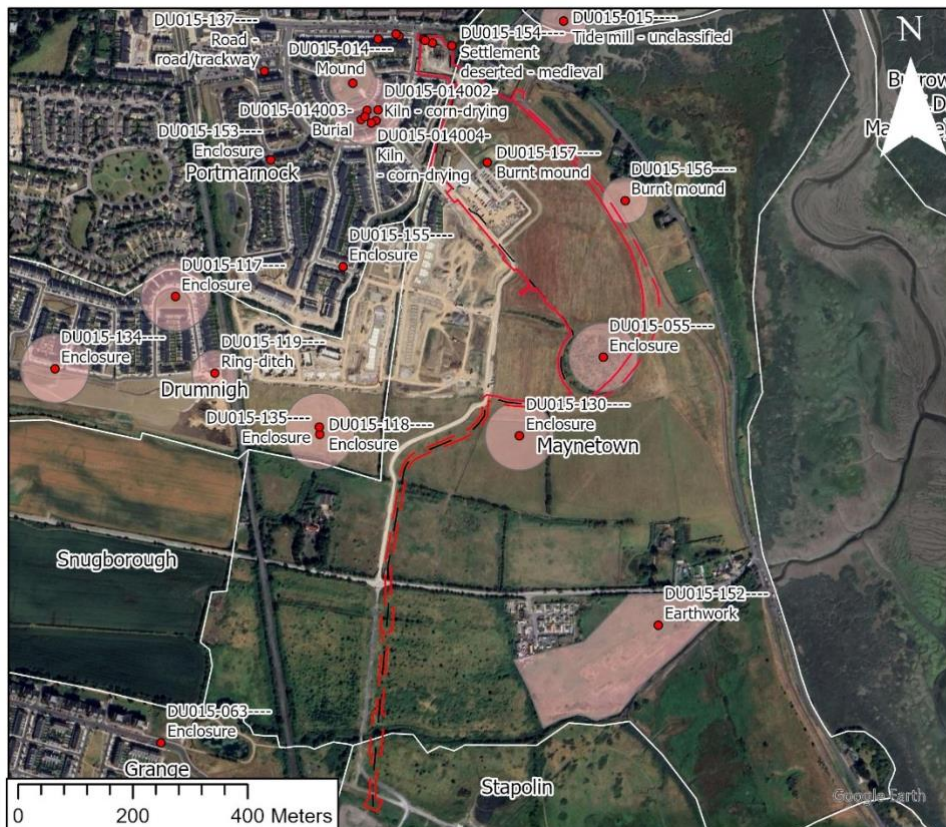


Figure 17-2 Phase 1F lands and rising main route

The ZoN for another burnt mound (SMR DU015-156) extends into the lands on the east edge. The site itself was outside of the proposed development lands and it was excavated where it fell within the route of the sewer pipeline to the Coast Road (McLoughlin 2019a; Licence 16E0101).

The ZoN for another enclosure (SMR DU015-130) extends into the route of the rising main. This site was identified through geophysical survey to the south of the route and is outside of the proposed development (Nicholls 2008; Harrison 2008; Licence 07R0230).

## 17.2 Assessment Methodology

The methodology has been designed so a full understanding of the potential effects on the character of the historic landscape can be assessed. A detailed archaeological and historical background has been included which describes the character of the immediate and wider historic landscape, as well as the individual heritage assets, and highlights the potential to reveal subsurface features. The methodology used is based on the Environmental Protection Agency (EPA) Guidelines (2022), and both direct physical effects, as well as impacts on the setting of individual heritage assets, have been assessed.

The evaluation of the archaeological and cultural heritage resource of the proposed development site was based on a desk study of published and unpublished documentary and cartographic sources, supported by a site inspection, geophysical survey, and test excavation.

This has established, as far as the records allow, the archaeological potential of the site and its immediate environs.

By using all the different sources and data sets we have developed an understanding of the historic character that surrounds and is part of the proposed development and as a result of this, we can assess the cumulative effect of the proposed development as well as the Phase 1F development and rising main.

### 17.2.1 Desk study

The assessment has been conducted based on the available information and has followed the existing best practice format of desk and field study. The desk study used the following sources:

- Record of Monuments and Places and Sites and Monuments Record: The primary source of information for the desk study is the Record of Monuments and Places (RMP) of the Department of Housing, Local Government and Heritage (DHLGH). The Sites and Monuments Record (SMR), as revised in light of fieldwork, formed the basis for the establishment of the statutory RMP pursuant to Section 12 of the National Monuments (Amendment) Act, 1994. The RMP records known upstanding archaeological monuments, their original location (in cases of destroyed monuments) and the position of possible sites identified as cropmarks on vertical aerial photographs. It is based on a comprehensive range of published and publicly available documentary and cartographic sources. The information held in the RMP files is read in conjunction with published constraint maps. Archaeological sites identified since 1994 have been added to the non-statutory SMR database of the Archaeological Survey of Ireland (National Monuments Service, DHLGH), which is available online at [www.archaeology.ie](http://www.archaeology.ie) and includes both RMP and SMR sites. Those sites designated as SMR sites have not yet been added to the statutory record, but are scheduled for inclusion in the next revision of the RMP;
- The topographical files of the National Museum of Ireland: The topographical files of the National Museum of Ireland (NMI) identify recorded stray finds held in the museum's archive. The files, which are donated to the state in accordance with national monuments legislation, are provenanced to townland and sometimes include reports on excavations undertaken by NMI archaeologists earlier in the 20<sup>th</sup> century;
- Fingal County Development Plan (2023-2029): The current Fingal County Development Plan was consulted for a list of protected structures, the Record of Protected Structures (RPS)

sites), comprising schedules of buildings and items of architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest that are listed for protection in the study area;

- Portmarnock South Local Area Plan (LAP) 2013: This document recognises the importance and the protection of recorded archaeological and newly identified sites and monuments. It identifies the following points in relation to creating a strong vision within the context of the proposed development lands at Portmarnock South: -
  1. The protection of archaeological sites within a changing environment and the development of the LAP lands so they have a meaningful expression and reason to be within the present landscape, making these remains into an accessible historic landscape that individuals can relate to;
  2. Provision of signage that can be adopted throughout Fingal so it becomes a recognisable brand.

The Development Plan identifies the Portmarnock LAP as being 'operational' at the time of the publication of the Development Plan. The Portmarnock South LAP has subsequently lapsed on 6 July 2023. The Development Plan clarifies this position that "the provisions of the operational LAPs will continue to apply up to the expiration of the LAP, thereafter the provisions of the Development Plan will pertain." Arising from this, the Portmarnock South LAP no longer applies to development at the subject lands.

- National Inventory of Architectural Heritage: The National Inventory of Architectural Heritage (NIAH) was established in 1990 in order to fulfil Ireland's obligations under the Granada Convention which states that 'for the purpose of precise identification of the monuments, groups of buildings and sites to be protected, each Party undertakes to maintain inventories of that architectural heritage'. The survey of Fingal was carried out in 2002; this building survey highlights a representative sample, and raises awareness of the wealth of architectural heritage in the county. The NIAH surveys can be reviewed at [www.buildingsofireland.ie](http://www.buildingsofireland.ie).
- Previous excavations data: Courtney Deery Heritage Consultancy Ltd and Margaret Gowen & Co. Ltd have undertaken a number of excavations previously within the larger development lands (see reference section). In addition to this, the 'Excavations' bulletin published by Wordwell and on the website [www.excavations.ie](http://www.excavations.ie), was consulted for any previous relevant archaeological surveys and excavations that have taken place on or in the vicinity of the proposed development. The 'County Dublin Archaeology Data viewer' also provides excavation information for County Dublin in the form of a webGIS in which archaeological excavations are mapped with excavation reports provided. It is available at [www.heritagemaps.ie](http://www.heritagemaps.ie). Excavating archaeologists working within the surrounding environment were also asked for comments on newly revealed features.
- Documentary and cartographic sources: Documentary and literary sources used are detailed in the references at the end of the chapter. Historical maps were examined to determine the changing nature of the land chosen for the proposed development. Cartographic sources consulted for this chapter include the Down Survey map of the County of Dublin, the Barony of Coolock and the Parish of Howth and Portmarnock, c. 1656; Rocque's map of County Dublin, 1760; Taylor's map of the Environs of Dublin, 1816; and the first and revised editions of 6 Inch and 25 Inch Ordnance Survey maps.

### 17.2.2 Site Inspections and Investigations

Numerous archaeological investigations comprising geophysical survey, archaeological test excavation, archaeological excavation and archaeological monitoring have been undertaken across the Portmarnock lands generally and within the Phase 1F lands specifically over the past 25 years. They are discussed in Section 17.5.5 of this chapter.

Supporting investigations comprise geophysical survey by J.M. Leigh Surveys Ltd and archaeological test excavations which were undertaken by licensed director, Gill McLoughlin. The results of these investigations are also presented in this chapter.

A site inspection was undertaken on 22 January 2025 by Dr Yolande O'Brien and Dr Karen O'Toole to assess the condition of the proposed development lands at the time. This has been supplemented by the results of archaeological monitoring of topsoil stripping of portions of Phase 1F lands as part of the Phase 1E enabling works and topsoil stripping for the adjacent phase 1E lands which have been undertaken in April and May 2025 under licence.

A wade survey and metal detection survey was undertaken in May 2025 by Dr Yolande O'Brien and Johnny King where the rising main will cross under the Mayne River through directional drilling (Licence 25D0223, 25R0245).

### 17.2.3 Consultation

Consultation has taken place with the National Monuments Service and Fingal County Council throughout all previous phases of archaeological investigation and excavation works within the Phase 1F lands. The LRD planning process has included consultation with Fingal County Council and the submission of two reports containing a cultural heritage impact assessment and archaeological heritage strategy (O'Brien 2025a; 2025b).

### 17.3 Standards and guidelines

The following legislation, standards and guidelines were consulted to inform the assessment:

- Historic and Archaeological Heritage and Miscellaneous Provisions Act, 2023;
- National Monuments (Amendments) Acts, 1930-2014;
- Planning and Development Act, 2024;
- The Planning and Development Act 2000, as amended;
- Heritage Act, 1995;
- Council of Europe Convention for the Protection of the Architectural Heritage of Europe (Granada) 1985, ratified by Ireland in 1991;
- Council of Europe European Convention on the Protection of the Archaeological Heritage (Valletta) 1992, ratified by Ireland in 1997;
- EPA (2002), Guidelines on the information to be contained in Environmental Impact Statements.
- EPA (2003), Advice Notes on Current Practice (in preparation of Environmental Impact Statements).
- Frameworks and Principles for the Protection of the Archaeological Heritage, 1999, (formerly) Department of Arts, Heritage, Gaeltacht and Islands;
- Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act, 2000.
- Guidelines for the Assessment of Architectural Heritage Impact of National Road Schemes, 2005, NRA.
- Guidelines for the Assessment of Archaeological Heritage Impact of National Road Schemes, 2005, NRA.
- National Landscape Strategy for Ireland 2015-2025, Department of Arts, Heritage and the Gaeltacht.

The Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 was enacted in October 2023 and this Act is now law. The Minister for Housing, Local Government and Heritage commenced certain provisions in May 2024 (S.I. No. 252/2024) and in December 2024 (S.I. No. 663/2024); however, until the Act is fully commenced, the National Monuments Acts have not yet been repealed and therefore remain in force.

## 17.4 Ratings of impacts

The assessment of the likely significant effects on the environment resulting from the construction and/or operation of the proposed development relies on a combination of qualitative and quantitative assessment.

Cultural heritage assets/landscapes are considered to be a non-renewable resource and location sensitive. In this context, any change to their environment, such as construction activity and ground disturbance works, could affect these sites. The methodology which will be applied at the EIAR phase is based on the EPA Guidelines (2022), and both direct physical effects, as well as impacts to the setting of individual heritage assets, will be assessed. The likely significance of all impacts is determined in consideration of the magnitude of the impact and the baseline rating upon which the impact has an effect (i.e. the sensitivity or value of the cultural heritage asset). Having assessed the magnitude of impact with respect to the sensitivity/value of the asset, the overall significance of the effect will then be classified as Imperceptible, Not Significant, Slight, Moderate, Significant, Very Significant, or Profound.

Cultural heritage is a broad term that includes a wide range of tangible and intangible cultural considerations. It encompasses aspects of archaeology and architecture and is expressed in the physical landscape as well as in non-physical ways. Cultural heritage can relate to settlements, former designed landscapes, buildings and structures, as well as folklore, townland and place names, historical events and traditions. Archaeological sites that are afforded protection as Recorded Monuments are regarded as being of high importance. Cultural heritage sites with upstanding features which are not afforded protection under the above criteria are considered to be of medium importance. The assessment methodology is set out fully in Appendix 17.1 of this EIAR.

## 17.5 Receiving Environment

### 17.5.1 Archaeological and Historical Background

#### Prehistoric Period

Evidence of prehistoric activity in the form of flint scatters, has been found in a number of locations along the north Dublin coast, dating to the Mesolithic and Neolithic periods. Mitchell discovered both Mesolithic and Neolithic flints as well as polished stone axes at the raised beaches at Sutton during his excavations in the 1950s and 1970s (Mitchell 1956; 1972; Stout and Stout 1992) and a major assemblage of flint artefacts was found at Paddy's Hill in Robswalls townland in the 1980's as a result of systematic field walking and excavation. In total 2,809 artefacts were retrieved from Paddy's Hill, ranging in date from Neolithic to early Bronze Age. The only structural evidence identified during the excavation was two pits, the contents of which produced dates of around 2000 BC (4120+/-70 BP and 4040+/-70 BP, Keeling et al. 1994).

Other prehistoric material is relatively rare in this part of the county, and Stout and Stout (1992) speculate that centuries of continuous tillage north of the River Liffey must have led to the destruction of a large number of archaeological monuments. Despite this, recent excavations to the south of Station Road in Portmarnock (McLoughlin 2019a, 2019b, 2020b; Licence 16E0101, 16E0613, 18E0016) have added to the evidence of prehistoric activity in coastal north county Dublin. A variety of flint artefacts and two stone axeheads recovered during the course of the excavations attest to prehistoric activity in the area, as does burnt mound activity in the form of a large waterhole filled with burnt stone and charcoal rich soil, dated to the early Bronze Age (2434-2051 BC). This feature was discovered close to the coast road (R106) during monitoring of an east-west pipeline trench (McLoughlin 2019a; Licence 16E0101). A pit containing grinding stone fragments was dated to the

Late Bronze Age (968-807 BC) and a curving ditch within an early medieval enclosure was dated to the Iron Age (BC 353 BC - 1 AD) (McLoughlin 2019a; Licence 16E0101). Another ditched enclosure (SMR DU015-014001) returned Late Iron Age and early medieval dates and a pit within that enclosure was dated to the early Mesolithic (6329-6052 BC) (McLoughlin 2019b; Licence 16E0613). The flint artefacts from these recent excavations include a tiny barbed and tanged arrowhead dating to the Beaker period (16E0101:198:1), a Neolithic / Beaker hollow based arrowhead (16E0613:2), a Later Mesolithic butt-trimmed flake (18E0016:2194) and a Neolithic elongated leaf-shaped projectile form (18E0016:1809). A significant late Bronze Age find from the Phase 1C excavation is a copper alloy Dowris phase knife blade (19E0303:4).

The Neolithic period (c.4000 – c.2400 BC) saw new developments in ritual activity and the building of the first permanent monuments in the Irish landscape – megalithic tombs. A large, well-preserved portal tomb at Howth Demesne, at the foot of Muck Rock and a number of cairns on Lambay Island, could date to the Neolithic period. This whole stretch of north Dublin coast has a clear view of Lambay Island to the east and excavations on the island have revealed areas of Neolithic activity associated with stone axe and flint tool manufacturing (Cooney 2000).

The Bronze Age (c.2400 – c.600 BC) is represented in this part of north county Dublin by a limited range of monuments. A number of ring-ditches or barrows have been identified on aerial photographs in the wider area, at Hazelbrook (SMR DU015-131 & 132), Burrow (RMP DU015-006), St Doolaghs (RMP DU015-011) and Drumnigh townlands (SMR DU015-119). Burial mounds to the south of Baldoyle village (RMP DU015-019 and DU015-023) were destroyed in the 1920's and 30's.

There is a note on RMP maps dating to the 1980s that there may have been a *fulacht fiadh* in the field to the east of the Portmarnock mound (RMP DU015-014), although this appears to have been removed by ploughing (RMP files). This description relates to lands within the Phase 1F planning boundary. Testing carried out in 2004 (Phelan 2004; Licence 04E1415) identified a burnt mound trough in the same field which could relate to this record. This feature has since been excavated as part of the Phase 1B development works and returned a radiocarbon date range in the Early Bronze Age (BC 2135-1920) (McLoughlin 2020b; Licence 18E0016).

Given the indications of prehistoric activity in the area, it is possible that the upstanding mound at Portmarnock (RMP DU015-014; 115m west of Phase 1F) could be prehistoric. Testing of the mound in 2007 (Moriarty 2009a) suggested a medieval date, however the mound was quite disturbed. Based on the newly revealed evidence for prehistoric activity in the surrounding area, it now seems more likely that the mound had its origins in prehistory. Morris (1939) in an examination of the *Díndsheanchas* (Old Irish metrical lore of place names, edited by Gwynn in the early part of the 20<sup>th</sup> century) has associated this site with the burying place of 'Maine', 'son of Medb and Ailell'. Maine (also known as Maine or Cichmaine), the son of Medb and Ailell of Connacht, is said to have been killed by fishermen at Inbher Cichmaine, the inlet or bay of Cichmaine and his burial ground is described as being at the northern end of Inbher Cichmaine. Morris makes the argument that Inbher Cichmaine appears to correspond with what is now known as Portmarnock Bay and the mound situated at the northern end of the bay, corresponds with the reputed burial location. It is possible that if the mound did originate in prehistory, it could have been used as the burial place of Maine.

### Early Medieval Period

The early medieval period represents the introduction of Christianity into Ireland, and there are several large well-known early medieval Christian foundations in north County Dublin. Churches in the vicinity of the development lands include the ruins of a church at Portmarnock (RMP DU015-007) dedicated to St Marnock, an early religious figure. The earliest reference to this church is AD 1185 when it was granted to St Mary's Abbey, Dublin by Prince John (Gilbert 1884). However, indications that it may date to the early medieval period include its dedication to an early saint, its proximity to a holy well which is also dedicated to St Marnock (Joyce 1912), and the former presence of an ogham stone at the site. There is another holy well known as Tobermaclaney at the northern end of the Velvet Strand, in Carrickhill townland (RMP DU012-039). Grange Abbey (RMP DU015-069) was located c.2km south south-west of the Phase 1F lands, and there was a church at Balgriffin, to the southwest, since at least the 12<sup>th</sup> century (RMP DU015-012). The church at Balgriffin was dedicated to St Samson,

a Welsh abbot who came to Ireland around AD 516 to study and who eventually found himself in Balgriffin. He only stayed a few months, but his connection with the area endured. St Doulagh's, located c.2km to the west, comprises a church, graveyard, wells and an enclosure and was established as early as the 9<sup>th</sup> century AD. In Kinsealy townland, c.1.6km to the northwest, a church was in ruins by the 17<sup>th</sup> century and a kink in the wall surrounding the church and graveyard to the southeast could be an indication of an earlier enclosure (RMP DU015-002).

A burial discovered in the grounds of Suttonians rugby club in 1937 (RMP DU015-022) was laid out in a stone lined cist oriented east-west with no accompanying grave goods (Raftery 1941) and is thought to date to the early medieval period.

There are many sub-surface enclosure sites which have been identified in Portmarnock and the surrounding townlands as a result of aerial photographic analysis, particularly in recent years. Based on the results of excavations carried out in 2016-2017 and 2019 to the south of Station Road, Portmarnock, it is likely that many of these enclosures could represent early medieval settlement activity. Three excavated enclosures at Portmarnock have been dated to the early medieval period, with elements of Iron Age activity (McLoughlin 2019a; 2019b; 2022a; Licence 16E0101, 16E0613 and 19E0303). Within Phase 1F, a further tested example at the subsurface enclosure (RMP DU015-055) at Maynetown which remains in situ, was also dated to the early medieval period (AD687-887; Moriarty 2009a; Licence 07E0574).

### Viking Activity

By the early historic period shipping routes had been established along the eastern coast and the arrival of the Vikings at the end of the 8<sup>th</sup> century saw the establishment of Hiberno-Norse settlements along the coastline. Fingal was in close proximity to the Viking settlement at Dublin, and the significant Norse influence on Fingal can be seen from the local Gaelic place-names, such as Fine Gall (Fingal) or 'territory of the strangers' and Baile Dubh Gaill (Baldoyle) or 'town of the dark stranger'. Viking rule and settlement influenced the region for over two hundred and fifty years, from the 9<sup>th</sup> to the 12<sup>th</sup> centuries. Bradley suggests Viking Dublin should be looked at as part of 'the rurally settled area of the Dublin Scandinavians' rather than as a number of successful trading settlements strategically located along the coast (Simms and Fagan 1992, 89).

According to Hurley, a Viking harbour is recorded in the vicinity of Baldoyle, with the early Viking settlement located further inland than the present-day village, as the seashore was at a higher level than it is today (Hurley 1983). It has been suggested that a extensive area of cropmarks in Maynetown may represent a Viking *longphort* (SMR DU015-152) referred to in the Fragmentary Annals of Ireland as 'Port Manann' (Downham 2008). It is located immediately to the north of the confluence of the Mayne River and a stream which runs through the former Baldoyle Racecourse, approximately 220m east of the planning boundary of the rising main. The cropmarks comprise a large square enclosure (c. 116m NW-SE by c. 138m NE-SW), a D-shaped enclosure (c. 50m NE-SW by c. 45m NW-SE), a sub-square enclosure and a deep oval hollow (c. 25m NE-SW by c. 7m NW-SE). Duffy et al. (2024) note that it is likely that the earthworks relate to large-scale medieval activity, distinct from the early medieval activity of Gaelic Irish character further north within the Portmarnock development. In the context of the strong Scandinavian placename evidence in the immediate area, it is therefore proposed that these remains represent the remnants of a longport. Kelly (2015) notes that common factors among Viking *longphort* sites include a large D-shaped enclosure on the shore of a river or lake, a further inner enclosure, the use of natural features such as marshy ground for defence and the proximity of a pool. The identified features appear to fit these criteria. Additionally, it is noted that flood mapping and topography suggest a former large pool immediately south of the site. It is also suggested that the deep oval hollow is a 'naust' or boathouse, as it opens onto a ditch / channel which connected to the river / pool, and it is of comparative dimensions to Danish examples and of the Viking ship Skuldelev 2 (Duffy et al. 2024). This theory has yet to be confirmed through further archaeological investigations.

In addition, archaeological excavations undertaken at a rectangular cropmark site in Baldoyle in 2014 provided a radiocarbon date of the 9<sup>th</sup> / 10<sup>th</sup> century for a charred seed retrieved from the bottom of one of the features (Duffy 2014; Licence 13E0238). This implies that there was at least some level of

settlement activity there during the Viking period. There is also evidence to suggest that a Norse community lived on Lambay Island, at least on a temporary basis, using it as a base from which to attack the mainland (Cooney 1993).

### Medieval and Post-medieval Period

Excavation in 2008, uncovered the remains of a medieval village containing six well defined property plots within the Phase 1B development area. The area of excavation was roughly rectangular in plan and measured c. 50–70m north–south by 110m. The property plots uncovered were defined by linear ditches and separated into toft and croft areas by internal divisions. They measured between 16m and 22m wide and up to 65m long, although their true lengths could not be properly assessed as the front of the plots were truncated by a 19<sup>th</sup> century roadway (Station Road) (Moriarty 2009b; Licence 08E0376; SMR DU015-136001/002/003). An easterly extension of the settlement was excavated in 2018 and a further structure, metalled surfaces and wells were identified (McLoughlin 2020b; Licence 18E0016; SMR DU015-154). The site corresponds to the medieval vill of Portmarnock, a possession of St Mary's Abbey, Dublin, which on the dissolution of the Monastery in 1539 contained ten cottages. A large assemblage of artefacts was recovered during both excavations at the site and include medieval pottery, metal objects, organic remains and plough pebbles. Finds and radiocarbon dating evidence suggest occupation at the site from the 11<sup>th</sup> /12<sup>th</sup> century to the 17<sup>th</sup> century (Moriarty 2009b; McLoughlin 2020b).

From the 12<sup>th</sup> century, the Anglo-Normans superimposed the manorial system of landholding they had acquired from England and the Welsh borderlands onto their newly conquered territory in Fingal. The majority of Anglo-Norman manors were on, or close to, rivers, and, preferring established sites with an existing infrastructure, the new invaders also took over established ecclesiastical sites. Portmarnock was one such pre-Norman ecclesiastical site, becoming a manorial village when taken over by the Anglo-Normans in the 12<sup>th</sup> to 15<sup>th</sup> centuries.

Two tidal mills are recorded in the possession of St Mary's Abbey in an inquisition taken in 1541 (de Courcy 1996), one of which is probably represented by the remains of the old mill at Portmarnock (RMP DU015-015). It was recorded as being in the property of the Plunkett family in 1663, but in a ruinous state after 1903 – 'unroofed and much dilapidated by the storm of 1903'. The only surviving structural remains which may represent a mill structure in the vicinity of Portmarnock Bridge consist of a grass covered rectangular platform at the edge of the estuary located at the site of the corn mill shown on the First Edition OS six-inch map. According to the archaeological record ([www.archaeology.ie](http://www.archaeology.ie)) the remains of the mill comprises the footing of the mill building walls, the sluice gate, 19<sup>th</sup> century mill race and fragmentary remains of the walls revetting the mill pond and inlet. The Down Survey refers to a tidal mill at Malahide as 'a mill that goeth by ebb tides' (Joyce 1912, 280, 284).

Fingal emerged as a distinct cultural zone and was often referred to as 'the breadbasket of Dublin.' Its strategic importance to the new English-dominated city did not go unnoticed by Owen O'Neill who, in 1641, ravaged the country between Castleknock and Drogheda, then containing 'the goodliest haggards of corn that ever was seen in those parts' (Smyth 1992). Richard Stanyhurst, in his 'Description of Ireland', refers to Fingal as an important part of the Pale, the region having the highest reputation for good husbandry. In the 17<sup>th</sup> century, according to the author of 'A Geographical Description of the Kingdom of Ireland', the name Fingal was associated with the more arable portion of the lands north of Dublin (Ball 1920). The name Portmarnock is derived from Port Mo Ernoc or Ernan, interpreted as St Mernoc's bank or landing place.

#### 17.5.2 Aerial Imagery

Aerial imagery was examined from 1999 to 2025 from Google Earth, Bing and Digital Globe sources. The enclosure site (RMP DU015-055) was clearly visible in 2003 when dry weather conditions were experienced, with the circular enclosure ditch and the associated 'avenue' to the east visible (Figure 17-3). The enclosure to the south of Phase 1F lands (SMR DU015-130) is identifiable in the 2003 image

as well as in imagery from July 2013 and June 2020. No other features were identified from aerial photography within Phase 1F lands.



Figure 17-3 Enclosures DU015-055 and DU015-130 visible on aerial photography (Google Earth, September 2003)

The earthworks on the Mayne River which have been tentatively identified as a potential Viking *longphort* (Duffy et al. 2024) are visible on multiple aerial photos (Figure 17-4). These earthworks appear in the field east of the route of the rising main, but aerial photography does not suggest that it extended past the field boundary.



Figure 17-4 Earthworks of potential *longphort* DU015-152 and route of rising main (Google Earth, January 2005)

### 17.5.3 RMP / SMR Sites

There are six recorded monuments within the Phase 1F lands, with the ZoN for a seventh site extending into the east side of the Phase 1F lands, and the ZoN of an eighth site extending into the route of the rising main (Figure 17-2).

The first is a burnt mound (SMR DU015-157) which was identified in the course of geophysical survey and test excavation (Phelan 2004; Licence 04E1415). It was excavated as part of the Phase 1B

excavations, revealing an oval pit measuring 2.8m long by 1.28m wide and 0.5m deep. The pit was interpreted as the trough from a burnt mound and the fill contained inclusions of charcoal and heat affected stone. Radiocarbon dating indicated a date of 2135-1920 BC. Three possible postholes were identified within 2m of the trough to the north, north-east and south-east, possibly representing a windbreak feature' (McLoughlin 2020b; Licence 18E0016).

An extensive Later Medieval settlement was located to the north-west corner of the proposed development, extending along the south side of Station Road. It corresponded to the *vill* of Portmarnock which was in the possession of St. Mary's Abbey. Three of the records associated with this settlement are located within the planning boundary (SMR DU015-136001/002/003). They were excavated in 2008 (Moriarty 2009b; Licence 08E0376) and comprised six well-defined property plots defined by linear ditches and separated into toft and croft areas by internal divisions. Over 2000 sherds of medieval pottery were recovered, mostly of Leinster Cooking Ware and Dublin-type wares, as well as over 3000 metal objects. Radiocarbon analysis suggested the main occupation of the settlement was the 16<sup>th</sup> to the 17<sup>th</sup> century. One structure in Plot 1 (SMR DU015-136001) measured 15m E-W and was truncated within a metalled yard with a well and rubbish pits to the rear. Plot 2 contained two structures and an associated yard; the first (SMR DU015-136002) measured 6m N-S by 7m E-W and was defined by shallow foundation cuts with a packed floor. The second (SMR DU015-136003) survived as an area of clay flooring (54.m x 3.5m) with an associated hearth and a western wall cut.

Further investigations as part of Phase 1B demonstrated that the settlement extended further east and west (McLoughlin 2020b; Licence 18E0016). This was added to the SMR (SMR DU015-154), and while the point data for the site is outside of the redline boundary, the actual extent of the excavated site extended into the proposed development. It comprised north-south linear ditches and intermittent east-west ditches which were broadly consistent with the site excavated to the west. Other features included an area of metalling suggestive of a yard area and three well pits. A stone structure defined by an L-shaped foundation had a keyhole shaped oven set into the wall. Charred cereal from this structure dated to 1275-1386 AD, while the lower fill of the main north-south ditch returned a date of 1420-1454 AD. Finds included a large quantity of medieval pottery, mostly Dublin-type ware and Leinster Cooking Ware, with a large assemblage of plough pebbles and moderate quantities of animal bone. This settlement (comprising SMR DU015-136001/002/003/004/005/006 and DU015-154) was fully resolved through archaeological excavation.

The final site within the Phase 1F lands is an enclosure (RMP D0015-055). The Maynetown enclosure is to be preserved in-situ within the overarching development, and the interconnector monumental routeway provides access and views to and from this monument and the recorded mound (RMP DU015-014) in Portmarnock townland.

The Maynetown enclosure (RMP DU015-055) is located towards the eastern end of an east-west ridge with extensive views of the coast (Figure 17-5). The site comprises a 70m diameter enclosure with an 'avenue' feature comprising of two parallel ditches leading to an east-facing entrance from the coast. Lower fills from the enclosure ditch were dated to AD 687-887.

It is not depicted on the Down Survey map of 1656, Rocque's map of 1760 or on the First Edition OS six-inch map of 1837, indicating that this enclosure has not had an above-ground presence for several centuries.

The mound (RMP DU015-014; outside of Phase 1F) is also listed as a protected structure (RPS 0475) in the Fingal Development Plan 2023-2029 and is considered in documentary sources to have been the burial place of Maine, the son of Queen Medb and Ailill of Connacht. The mound is flat-topped, oval in plan and is located within a green area within the present development. It is located on a slight rise with extensive views of the coast to the southeast.

Both of these sites have been preserved in situ in accordance with a multidisciplinary conservation plan which was agreed with the National Monuments Service of what was the Department of Environment, Heritage and Local Government (now the Department of Housing, Local Government and Heritage, DHLGH) and Fingal County Council (Gowen 2009). Both monuments will form focal points and green areas within the overarching Portmarnock South development.



**Figure 17-5** Drone view of testing at enclosure DU015-055 shown surrounded by protective fencing with view of Portmarnock Estuary, Howth and Ireland's Eye (McLoughlin 2023)

The ZoN of a burnt mound (SMR DU015-156) extends into the Phase 1F lands. It is located outside of development site and was identified within the route of the sewer pipeline to the Coast Road as part of Phase 1A investigations (McLoughlin 2019a; Licence 16E0101). It comprised a large sub-oval or keyhole shaped pit which was filled with black soil containing charcoal and burnt stones. A sample of alder charcoal was radiocarbon dated to 2434-2051 cal BC. Although it was noted that it was possible that remnants of the burnt mound could remain outside of the area of the pipeline to the north, monitoring of the pipeline ensured it does not extend further towards the development lands.

The final site is that of an enclosure (SMR DU015-130) which was identified from geophysical survey of a proposed realignment of Mayne Road (Nicholls 2008; Harrison 2008; Licence 07R0230). The site is also visible as a faint crop mark in aerial photography (Figure 17-3). The survey shows that while the ZoN extends into the route of the rising main, the site itself is approximately 45m south of the planning boundary and will therefore not be impacted by the development.

#### 17.5.4 Archaeological Investigations

Numerous archaeological investigations have been undertaken across the wider Portmarnock development since 2000 (Figure 17-6). As Phase 1F is the last area within the overall Portmarnock lands to be developed, there has been considerable disturbance in these lands previously related to pipelines, spoil storage, haul roads and compound areas. Ground reduction related to these activities have been monitored under multiple licences. This is also the case for the route of the rising main, which has already been archaeologically monitored within the Phase 1F lands, and part of which has been geophysically surveyed and tested in relation to other developments. Archaeological investigations which have taken place within the Phase 1F lands and along the route of the rising main are discussed below.

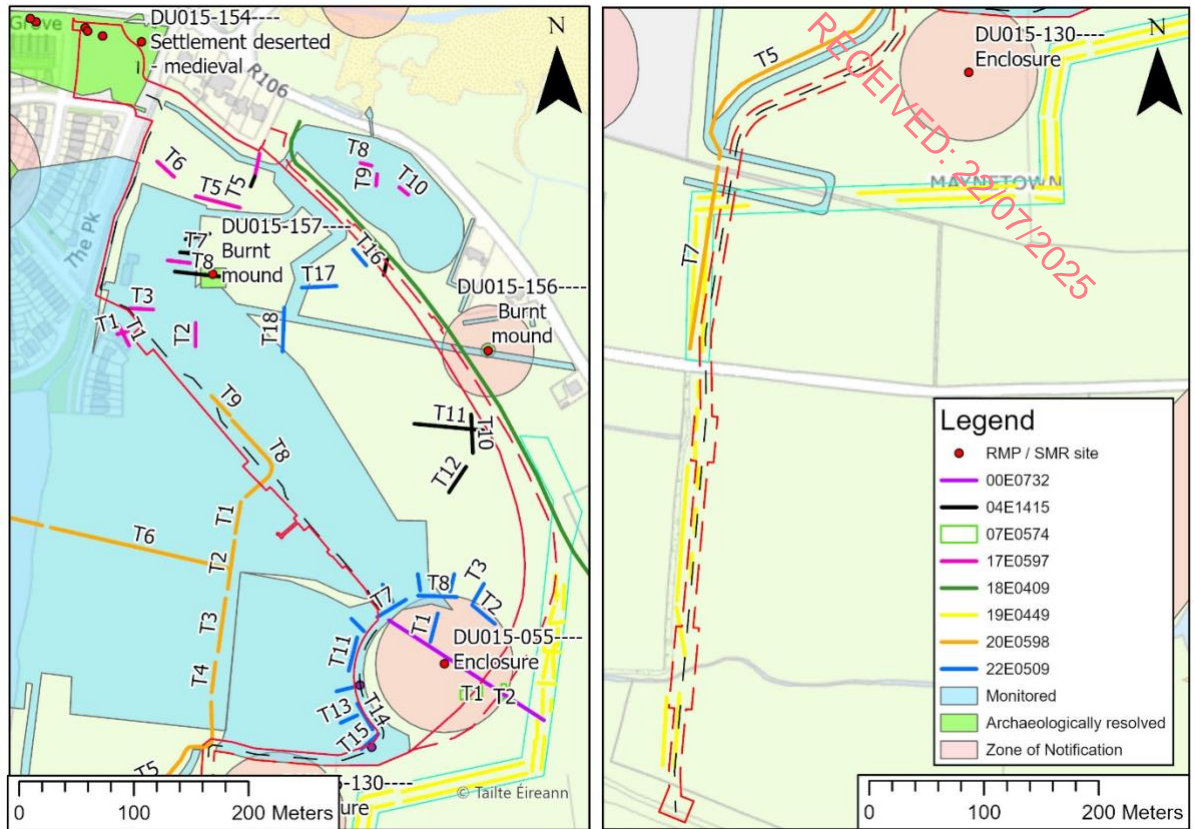
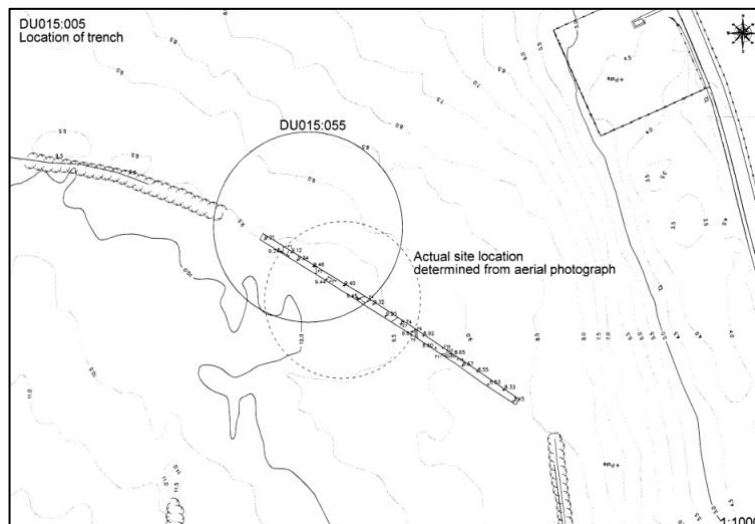


Figure 17-6 Archaeological testing and monitoring in Phase 1F lands and rising main

**October 2000: Archaeological test-excavation of RMP enclosure site DU015-055 (Wallace 2000; Licence 00E0732)**

In October 2000 a small-scale testing programme was carried out at the enclosure site DU015-055 that had been identified through aerial photography. One test trench, measuring 160m in length and 3.5m in width, was mechanically excavated across the site (Figure 17-6, Figure 17-7). The test trench confirmed the presence of a large circular enclosure approximately 70m in diameter and identified a possible entrance feature on the southeast side of the monument. The excavation was not deep enough to expose the base of the ditch. Several features were identified within and outside of the enclosure, comprising deep plough marks, a deposit of charcoal and shell, and slot trenches. A small bead was recovered from the ditch – it was a segmented cylinder, 1.65cm long and 0.70cm wide.



**Figure 17-7** Location of test trench excavated by Wallace on enclosure DU015-055 (Wallace 2000; Licence 00E0732)

#### **November 2000: Geophysical survey of RMP sites (Shiel et al. 2000; Licence 00R0037)**

The aim of this survey, which was undertaken by GSB Prospection for Margaret Gowen & Co. Ltd., was to locate and identify the nature and extent of the archaeological remains, and in turn to identify an adequate buffer zone around each site to protect the archaeology in these areas. This survey confirmed, in particular, the archaeological potential of the lands around enclosure site DU015-055 (Shiel et al. 2000). Geophysics corroborated the existence of an entrance feature on the south-east side of the enclosure ditch which had been visible on aerial imagery and suggested through archaeological testing. Two splayed linear responses running for a distance of up to 120m from the entrance in a south-east direction also give the impression of a formal approach to the enclosure (ibid.), a portion of which was picked up as a slot trench during the test excavation by Wallace (2000) (Figure 17-8).

#### **February 2002: Geophysical Survey (Nicholls 2002; Licence 02R0020)**

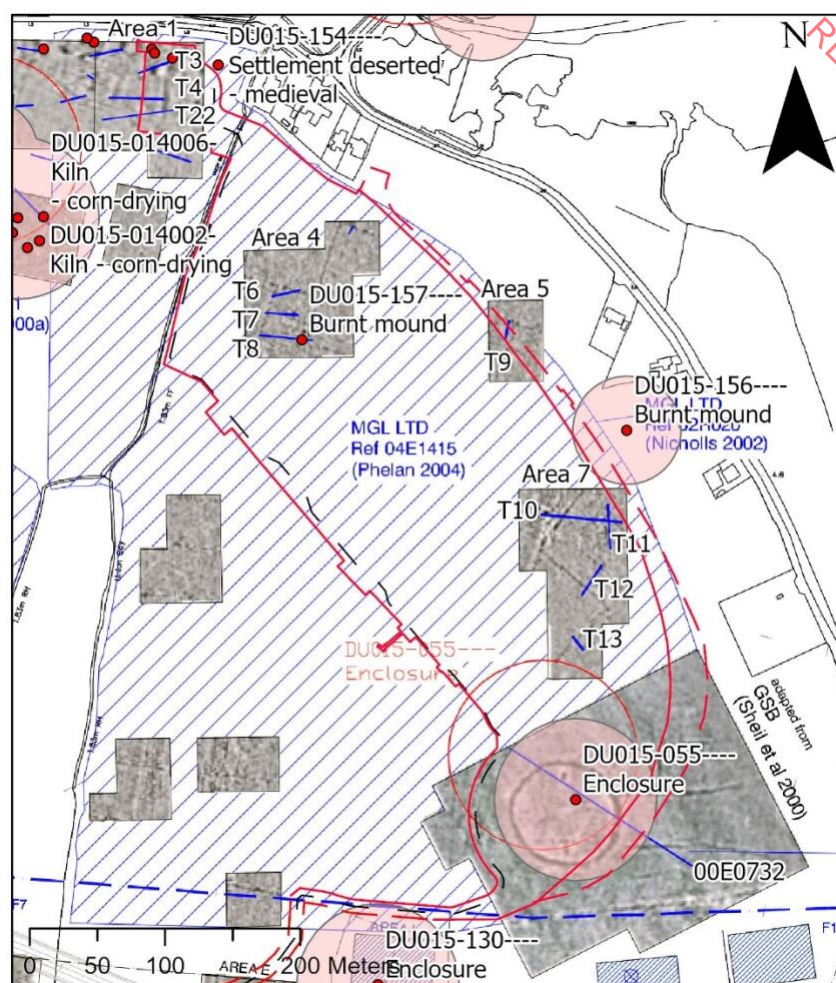
Given the concentration of archaeological activity confirmed by the 2000 geophysical survey (Shiel et al. 2000), a further phase of geophysical investigation was undertaken in February 2002 (Nicholls 2002; Licence 02R0020). The entire area was scanned and areas of significant responses were subjected to detailed scanning. Areas 1, 4, 5 and 7 from this detailed survey fall within the Phase 1F lands.

Area 1 contained a series of ditch-type responses oriented approximately north-south. It was noted that is suggested the remains of an early field system within which was a number of broad sub-angular pit-type responses.

Area 4 comprised a linear response approximately 90m in length which corresponded with a former field boundary shown on historic mapping. The south-west corner this area was thought to be of interest as it contained a number of short ditch lengths and pit-like features.

Area 5 also showed evidence of a former field system. An isolated pit-like feature was potentially archaeological. One weak linear trend oriented north-east by south-west may have been significant.

Area 7 showed further evidence of the historic field system. A broad area of activity was recorded in the eastern half of the survey area which may be of interest, although it could also be related to a scatter of modern brick debris which was noted in this location at the time of the survey. Several faint linear trends may have been archaeological in origin.



**Figure 17-8** Composite image of geophysical surveys 00R0037 and 02R0020 and archaeological test excavations 00E0732 and 04E1415 in Phase 1F lands

#### **October 2004: Archaeological test excavation at Portmarnock (Phelan 2004; Licence 04E1415)**

Archaeological testing was undertaken across the Portmarnock lands in 2004 by Sinéad Phelan (2004; Licence 04E1415). This included 12 trenches in Areas 4, 5 and 7 from the previous geophysical survey which are within the Phase 1F area (Figure 17-6, Figure 17-8).

Trench 8 from Area 4 investigated an anomaly identified by the geophysical survey. It was found to be a pit feature measuring 2.70m long, 1.20m wide and 0.23m deep, filled with a black charcoal-rich clay with heat-shattered stone. It was interpreted as the remains of a trough of a *fulacht fiadh*. The site was added to the SMR in 2023 (SMR DU015-157).

The remains of five linear features and an oval feature with a 12<sup>th</sup> to 14<sup>th</sup> century date were also recorded in Area 1. Finds included Dublin type coarse ware, Dublin type fine ware and Bristol Redcliffe ware.

None of the other trenches revealed any features of archaeological significance. It was recommended due to the close proximity of the mound (RMP DU015-014) and the enclosure (RMP DU015-055) that archaeological monitoring of all ground works for the proposed development take place under licence to the National Monuments Service in advance of construction.

### 2007-2008: Geophysical survey of proposed realignment of R123 Mayne Road (Harrison 2008; Nicholls 2008; Licence 07R0230)

Two phases of geophysical survey were undertaken of a proposed realignment of Mayne Road from 2007 to 2008 (Harrison 2008; Nicholls 2008; Licence 07R0230; Figure 17-9). The proposed route crossed the line of the rising main and was scanned with a number of locations returning responses which merited further detailed survey. Of these areas, Area E partially extended into the route of the proposed main rising. The survey results indicated a linear ditch-like feature which corresponds with an historic field division which is depicted on the First Edition six-inch OS map (Figure 17-31).

In addition to this, it was this survey which detected an enclosure which has subsequently been added to the SMR (SMR DU015-130). While the ZoN of this site extends across the route of the rising main, the results of this survey demonstrate that the site is approximately 45m outside of the wayleave of the rising main and will not be impacted by the proposed development.

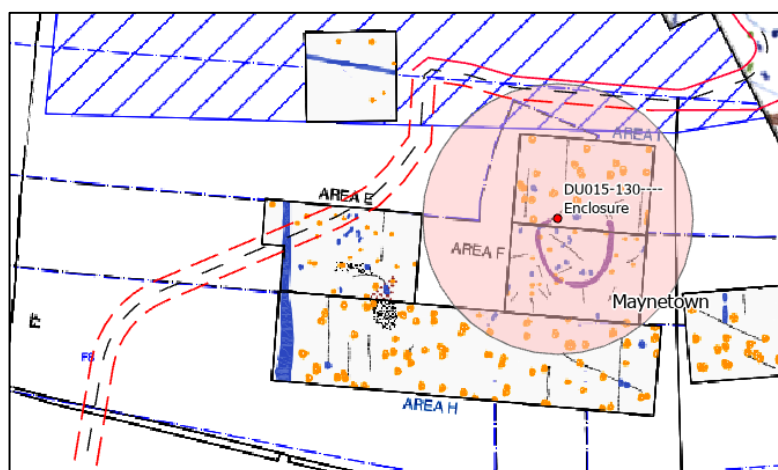


Figure 17-9 Route of rising main overlaid on results of geophysical survey (07R0230)

### June 2008: Archaeological test excavation of Portmarnock Mound (RMP DU015-014) and Maynetown enclosure (RMP DU015-055) (Moriarty 2009a; 07E0574)

In June and July 2008, a small-scale test-excavation was carried out on the enclosure site (Moriarty 2008; Licence 07E0574). The excavation was designed to garner more information about the subsurface enclosure prior to its preservation in situ. Two trenches were opened at the enclosure site (RMP DU015-055) (Figure 17-6, Figure 17-10).

Topsoil of 0.30-0.40m overlay the archaeological features, the earliest of which was a large sub-circular pit. The enclosure was found to be defined by a very large and substantial ditch which measures approximately 7m in width by a maximum of 2m in depth. Finds recovered from the ditch comprised butchered animal bone, including horse, and a ferrous nail shank. A charcoal sample recovered from the base of the ditch delivered a radiocarbon date of cal. AD 687-887, dating the site to the early medieval period. The southern avenue ditch which extended from the east side of the enclosure measured up to 5.50m wide by 1.40m deep. One of the fills contained a disarticulated human arm bone. A fragment of vitrified clay possibly represented kiln fabric. A small area of metallated surface was identified along the northern edge of the avenue ditch which was possibly related to the entrance leading into the circular enclosure.

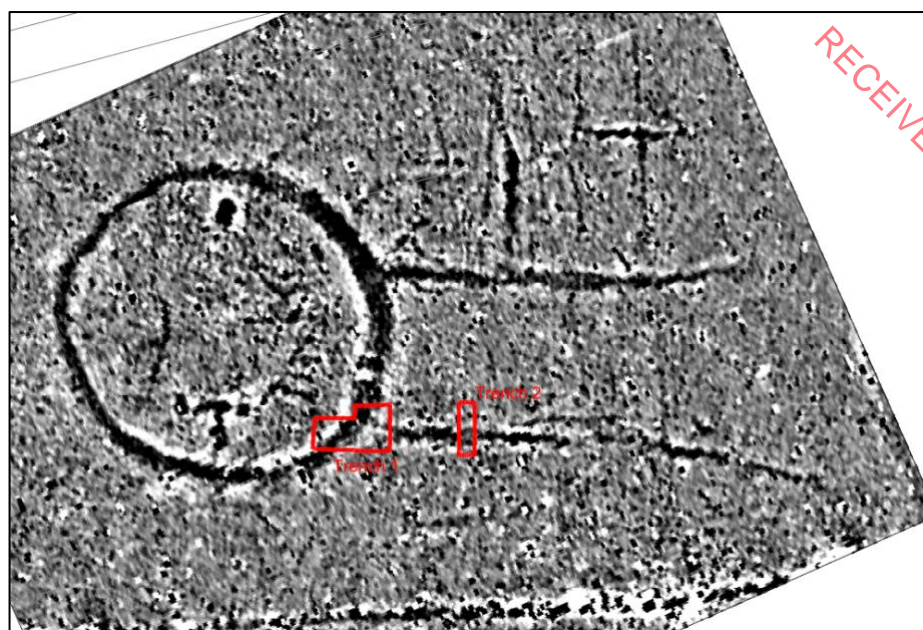


Figure 17-10 Geophysical survey showing Test Trenches 1 and 2 (Moriarty 2009a)



Figure 17-11 Enclosing ditch (DU015-055) as identified in Trench 1

**September 2008: Archaeological excavation at Station Road, Portmarnock (Moriarty 2009b; Licence 08E0376)**

Excavation of a medieval settlement along Station Road was undertaken from September to December 2008 (Moriarty 2009b; Licence 08E0376). Part of this excavation extended into the north-west corner of the planning boundary of the Phase 1F lands. The excavation revealed the remains of six well laid out property plots, which contained the truncated remains of buildings, yard areas, pathways and wells. This site corresponds to the medieval *vill* of Portmarnock, a possession of St. Mary's Abbey, Dublin, which on the dissolution of the Monastery in 1539 contained ten cottages. The medieval *vill* was distinct from the modern village of Portmarnock, which is a largely 19<sup>th</sup> / 20<sup>th</sup> century development located roughly 500m to the northeast of the site. Prior to the excavation no upstanding remains of the medieval village survived and this was probably due to deep ploughing, as the site was located in an area of intensive tillage farming. Further truncation had also been caused by Station Road, which was a 19<sup>th</sup> century thoroughfare constructed to facilitate the new Dublin-Belfast railway

line. This road bounded the northern part of the site and had severely damaged the front of the village plots. The settlement was subsequently added to the SMR (SMR DU015-136001/002/003/004/005/006), of which three sites (SMR DU015-136001/002/003) are within the proposed development. These sites are fully excavated and resolved, and will therefore not be impacted by the proposed development.



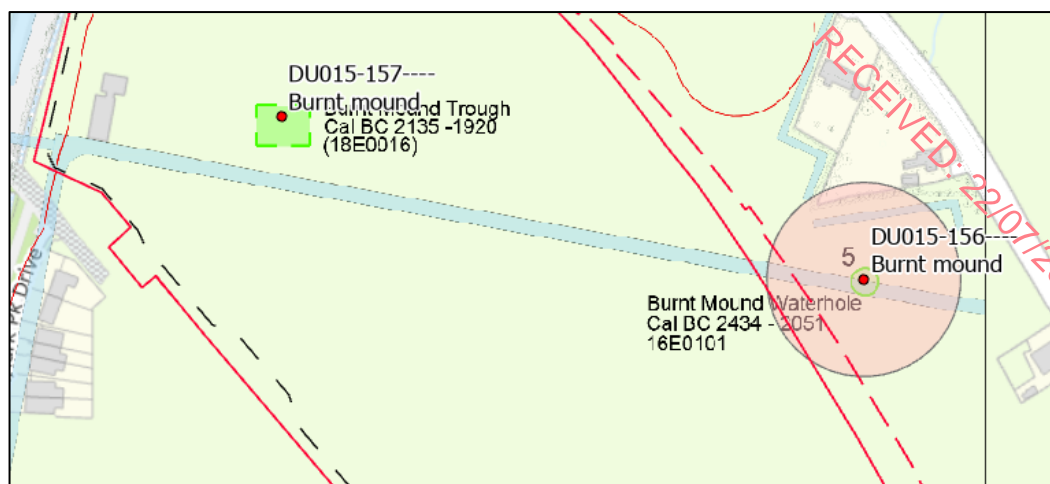
Figure 17-12 Medieval settlement (Moriarty 2009b)

#### September 2012: Archaeological monitoring of site compound (Walsh 2014; Licence 12E0358)

In 2012, archaeological monitoring was carried out of topsoil stripping for the establishment of a site compound and the carrying out of enabling works associated with the development permitted under planning permission register reference F07A/0947 (Walsh 2014; Licence 12E0358). The enabling works comprised the construction of a site entrance and compound, the erection of fencing around the mound (RMP DU015-014) and the Maynetown enclosure site (RMP DU015-055), the erection of hoarding along the northern perimeter of the site and the excavation of a c.100m long trench along the western boundary of the site for power cables. No archaeological features were encountered during the course of the topsoil stripping.

#### March 2016: Archaeological monitoring of sewer pipeline (McLoughlin 2019a; Licence 16E0101)

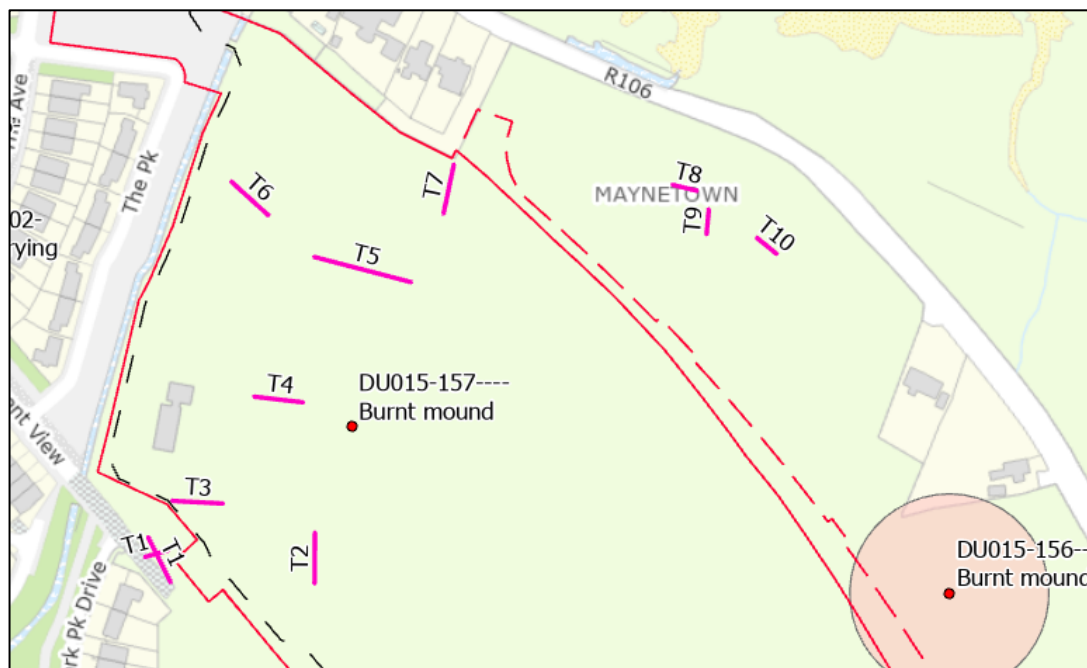
Archaeological monitoring was undertaken by Gill McLoughlin along a sewer pipeline from the Phase 1A area to the coast as part of investigations from March 2016 to early 2017 (McLoughlin 2019a; Licence 16E0101; Figure 17-6, Figure 17-13). Part of this pipeline ran through the Phase 1F lands. Nothing of archaeological significance was identified within the Phase 1F lands, although a burnt mound (SMR DU015-156) was excavated outside of the development site and the ZoN for this recorded monument extends into the Phase 1F lands.



**Figure 17-13** Archaeologically monitored area (Licence 16E0101) and excavated burnt mounds within (Licence 18E0016) and adjacent to (Licence 16E0101) Phase 1F lands

**November 2017: Archaeological testing of Phase 1B (McLoughlin 2017; Licence 17E0597)**

Archaeological testing of cropmark features was undertaken in November 2017 by Gill McLoughlin in relation to the development of Phase 1B (McLoughlin 2017; Licence 17E0597; Figure 17-6, Figure 17-14). Ten trenches were excavated, of which six fall within the Phase 1F lands. The features identified and investigated during test trenching corresponded well with cropmarks visible on aerial photography and represent linear ditches and drainage features, many of which contained modern material. No features, finds or deposits of archaeological significance were identified.



**Figure 17-14** Phase 1B test trenches within Phase 1F lands

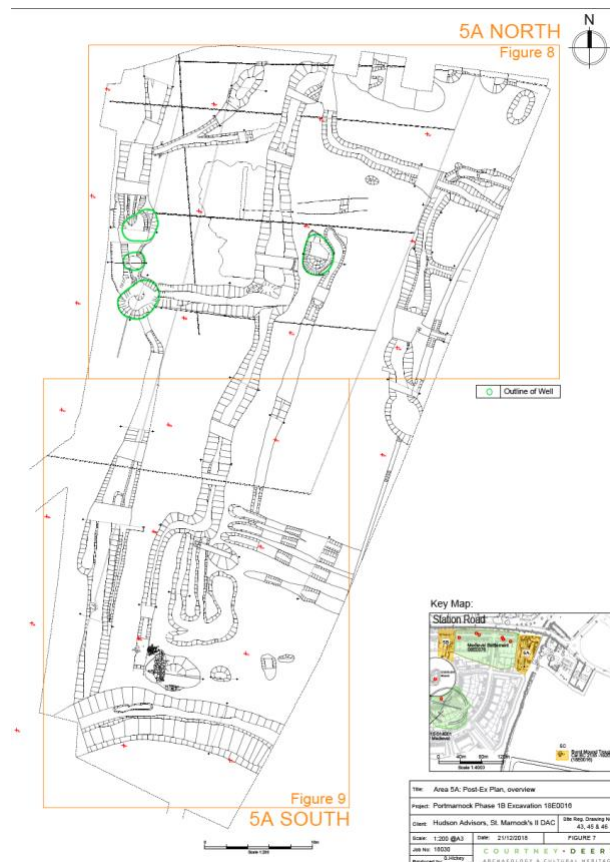
**May 2018: Excavation of medieval settlement and burnt mound (McLoughlin 2020b; Licence 18E0016)**

Excavations related to the Phase 1B lands took place from May to July 2018 (McLoughlin 2020b; Licence 18E0016; Figure 17-13). The area designated 5A comprised a continuation of the medieval

settlement which was excavated by Moriarty (2009b; Licence 08E0376), and Area 5C was the burnt mound that had been identified by Phelan (2004; Licence 04E1415).

Part of the medieval settlement at Area 5A extends into the planning boundary for Phase 1F. The archaeological remains comprised north-south linear ditches and intermittent east-west ditches broadly consistent with the pattern of ditches identified in the previous excavation area. Other features included an area of metalling suggestive of a yard area and three well pits. Remnants of a stone structure in the south of the site were defined by an L-shaped foundation with a keyhole shaped oven set into the wall. Charred cereal from a founding deposit in the structure returned a date range of 1275-1386 AD, placing the initial construction between the late 13<sup>th</sup> to the late 14<sup>th</sup> century, and a lower fill of the main north-south linear ditch returned a date range of 1420-1454 AD.

A large quantity of medieval pottery, mostly Dublin-type and Leinster Cooking Ware was recovered from this area, along with a large assemblage of plough pebbles and moderate quantities of animal bone. Processing of soil samples from selected features also yielded charred cereals. The site was fully excavated and archaeologically resolved and was subsequently added to the SMR (SMR DU015-154).



**Figure 17-15** Medieval settlement excavated as part of Phase 1B (McLoughlin 2020b)

In the intervening 14 years since Area 5C was tested, a depth of between 1.2-1.4m of subsoil had been deposited over the area on top of the existing sod and topsoil layer, which had been somewhat compacted as a result. Excavation revealed an isolated oval pit measuring 2.80m long by 1.28m wide and 0.50m deep which was interpreted as the trough of a burnt mound. The main fill contained inclusions of charcoal and heat affected stone. Three possible postholes were identified within 2m of the trough, possibly relating to a windbreak feature. Charcoal from the basal fill of the pit was radiocarbon dated to the Early Bronze Age (2135-1920 BC). The site was added to the SMR following excavation (SMR DU015-157).

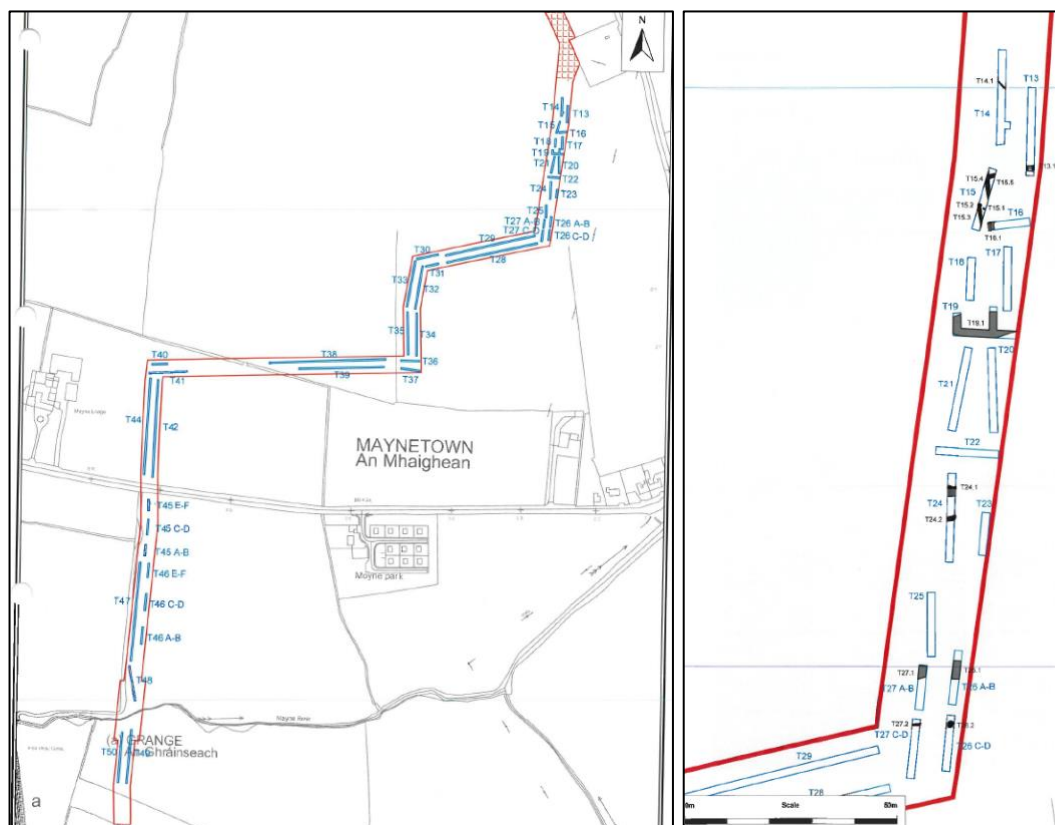
### October 2019: Archaeological Testing of Uisce Éireann Rising Main (Kavanagh & Whitaker 2019; Licence 19E0449)

Archaeological testing was undertaken by Liza Kavanagh in advance of a proposed rising main associated with a pumping station for Irish Water (Kavanagh & Whitaker 2019; Licence 19E0449). This is a separate scheme and mostly outside of the planning boundary for the Phase 1F lands, but there is a slight overlap east of the enclosure (RMP DU015-055). The scheme was located 50m to the east of enclosure DU015-055, and the pipeline will cross the associated ditched entrance avenue that approaches the enclosure from the east (Figure 17-6, Figure 17-16). It goes on to join the proposed rising main associated with the subject site south-west of the Phase 1F lands.

The north end of T14 is within the planning boundary of the proposed development. This trench contained a NNE-SSW oriented ditch which measured 1.1m wide and 0.68-0.70m deep with steep sides and a concave base. It was filled with pale to med-grey silty clay with occasional to moderate marine shell and occasional flecks, animal bone and burnt stone. This ditch appears to extend towards the application lands.

The archaeological activity was concentrated within the area of test trenches 13-27 to the east of monument DU015-055 and is likely to represent early medieval features contemporary with the enclosure, which once formed a double ditched avenue to the entrance into the enclosure. These features included two pits, a large ditch with possible associated spread, seven linear ditches, two possible ditches, one historic field boundary and a possible trough.

T40-T42, T45-T46 and T48-T49 are located within the planning boundary of the temporary rising main. The only features identified were a spread of red brick in T41. It was recommended that archaeological monitoring be undertaken of all topsoil stripping within the pipeline wayleave.



**Figure 17-16** Locations of test trenches and detail of features identified east and south of enclosure DU015-055 (Kavanagh & Whitaker 2019)

### October 2020: Archaeological monitoring of Phase 1C (McLoughlin 2022b; Licence 20E0180)



A final phase of geophysical survey was undertaken of the enclosure (RMP DU015-055) in 2022 in order to confirm the exact location of the enclosing elements of the enclosure due to a discrepancy between the geophysical information, the location recorded in the SMR and the temporary fencing that had been erected around the monument. The survey successfully identified the accurate location of the recorded enclosure, which presents as a circular ditched enclosure (75m diameter) with an entranceway in the east. Numerous responses within the enclosure are indicative of pits and ditches and possible burnt features. The location and direction of the ditched causeway was also accurately recorded (Figure 17-18, Figure 17-19).

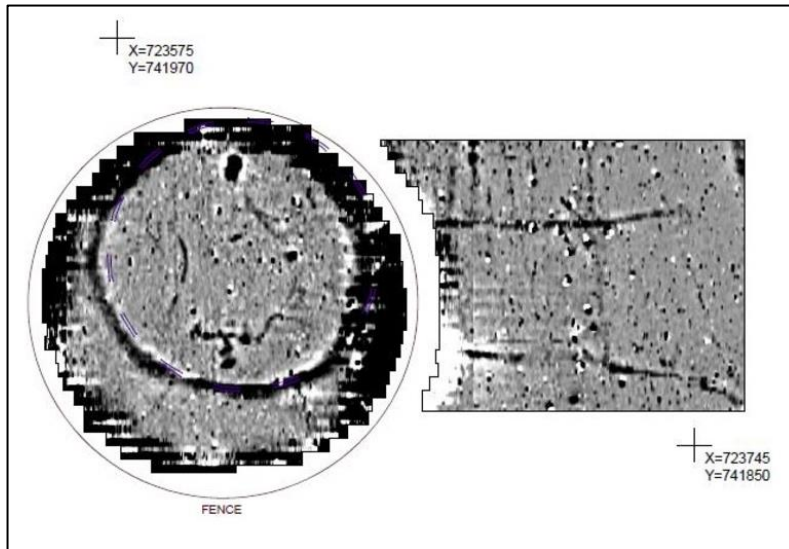


Figure 17-18 Geophysical survey greyscale of enclosure DU015-055 (Leigh 2022)

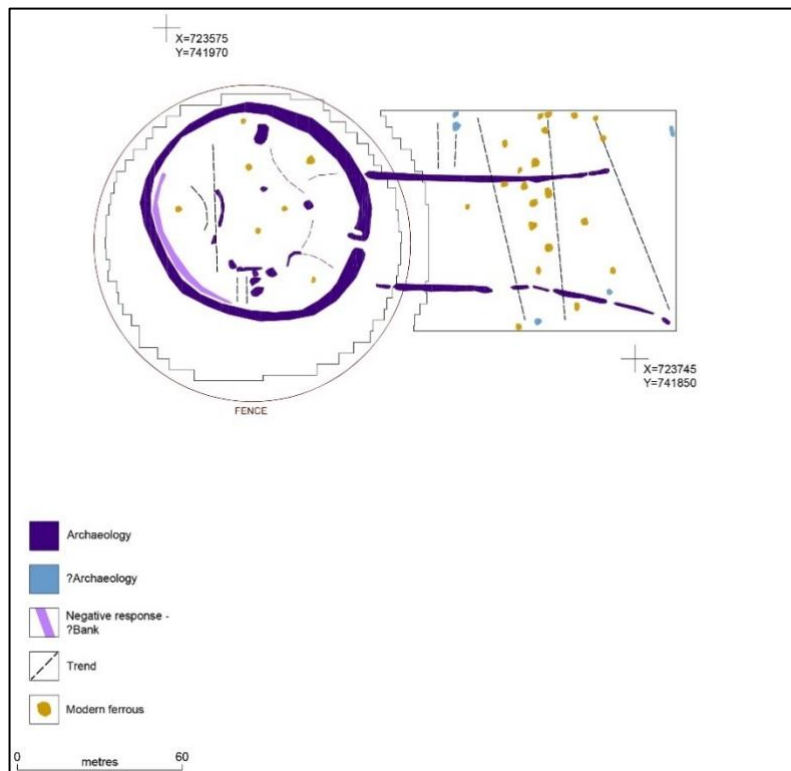


Figure 17-19 Summary interpretation of geophysical survey of enclosure DU015-055 (Leigh 2022)

**July 2022: Archaeological Testing of Enclosure DU015-055 and Foul Water Pipe (McLoughlin 2023; Licence 22E0509)**

Archaeological testing was undertaken by Gill McLoughlin in July 2022 on the enclosure (RMP DU015-055) as part of pre-planning investigations related to Portmarnock Phase 1E and 1F (McLoughlin 2023; Licence 22E0509; Figure 17-6, Figure 17-20). The purpose of the testing was to investigate the area surrounding the enclosure in advance of planning for Phases 1E and 1F to see if there were any associated archaeological features, and to investigate both the enclosure ditch and a pit within the interior of the enclosure with the aim of gathering information which would assist in the interpretation and future presentation of the site. The archaeological testing followed discussions with the National Monuments Service and Fingal County Council in relation to the preservation of the site.

Fourteen test trenches were excavated to assess the area of Phase 1E and Phase 1F housing and roadways closest to the enclosure to the west and north (T2-T15); one trench was placed to target the enclosure ditch and a substantial internal feature indicated on geophysical survey (T1); and three trenches were placed to target a proposed foul water route (T16-T18). The results of the investigation are summarised below and the archaeological testing report is included in Appendix 17.2 of this EIAR.



Figure 17-20 Testing layout for Phases 1E and 1F, Trenches 1-18 (McLoughlin 2023; Licence 22E0509)

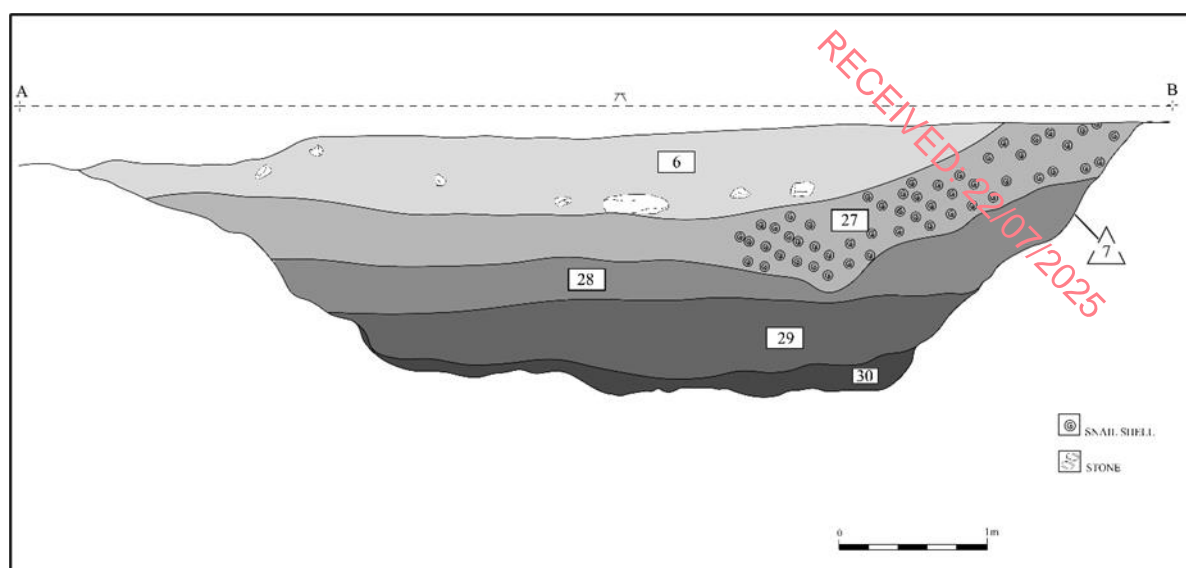
The enclosure ditch and a large internal pit, as indicated in the geophysical survey, were identified in trench T1. The oval-shaped pit measured 8.3m long and was excavated to a depth of 1.25m, but the base could not be reached because of ingress of water. A deposit of human remains was dumped in the fill of the internal pit after having been disinterred from elsewhere. The deposit of bones represents a minimum of ten individuals including at least five adults and a minimum of five non-adults ranging from 1.5-16 years. Cranial trauma was noted in two individuals. The bones were

present at 0.4m below current ground level and appeared to have been wrapped or contained somehow, resulting in a linear pattern of deposition (NE-SW) which did not relate to a cut (Figure 17-21). An iron find, possibly a fragment of a knife blade, was also recovered from this deposit. Slag, identified as smithing hearth cakes, is evidence of blacksmithing contemporary with the enclosure. A large annular iron ring was recovered from one of the upper fills of pit and may have been used as a pull handle or a suspension loop. A sample from a human femur was radiocarbon dated to 674-876 cal AD.



**Figure 17-21** Trench 1, deposit of human skeletal remains, section of pit in the background (McLoughlin 2023; Licence 22E0509)

The ditch was 7.1m wide and 1.76m deep. Dating of a sample of animal bone from the secondary fill of the enclosure ditch yielded a date range of cal AD 774-952 and a fragment of human bone yielded a date range of cal AD 674-876. These dates align well with a date retrieved from a previous phase of testing in 2008 (Moriarty 2009a) and with the dating of three other enclosures excavated nearby in Portmarnock townland (McLoughlin 2019a; 2019b; 2022).



**Figure 17-22** West-facing section of enclosure ditch (McLoughlin 2023; Licence 22E0509)

Cattle dominated the animal bone assemblage, and they were likely brought to the site on the hoof and killed, butchered and eaten on site. A perforated cattle scapula appears to indicate a shoulder of beef suspended on a hook, possibly for smoking and may indicate a preserved joint of beef. A relatively high incidence of horse was also noted, and while the assemblage was too small to be statistically viable, a high incidence of horse was also noted at adjacent excavated sites in Portmarnock, so it may be significant.

Two linear ditches and two smaller linear features likely to be associated with sub-surface enclosure DU015-055 were identified in trenches T2 and T3 to the northeast of the enclosure. Ditch C19 was identified in T3 and was oriented WSW-ESE. It measured 3.3m wide by 1.05m deep and contained three fills, all of which contained seashell and animal bone. Ditch C15 was oriented E-W, measured 2.6m wide and in excess of 0.7m deep. The full depth of this ditch was not reached due to rapid water ingress from below. Three distinct fills were noted, which contained animal bone, seashell and charred environmental remains. The nature of the fills in both ditches suggests that these features were associated with the ditched enclosure.

Nothing of archaeological interest was identified in the other test trenches to the north and west of the buffer zone associated with the enclosure (T4-T15) or in the three test trenches within the route of the foul water pipeline through the Phase 1F lands (T16-T18).

It was recommended in the archaeological testing report that the linear ditches and associated features to the northeast of the enclosure in the vicinity of T2 and T3 be fully excavated under licence, in advance of development. It was also recommended that a plan for landscaping the area be agreed in advance with the archaeologist to ensure that the methodology proposed will allow suitable protection to the below ground archaeological remains.

### January 2025: Site Inspection

A site inspection was undertaken on 22 January 2025 in fine weather by Dr Yolande O'Brien and Dr Karen O'Toole in order to assess the condition of the Phase 1F lands (Figure 17-23).

The northwest end of the Phase 1F lands are dominated by the construction compound and ancillary construction areas. This area had been very much disturbed previously owing to its use for storage of spoil, leading to considerable overburden and compression. The majority of this area has been archaeologically monitored as part of enabling works in advance of the installation of the compound areas. It is now characterised by rough gravel surfaces.

The attenuation area is located on the north-east corner of the compound. The ground around it comprises very disturbed, rough, wet grassland.

The compound and attenuation areas were separated from the rest of the Phase 1F lands by way of Harris fencing. The rest of the proposed development area was accessible from the greenway. It comprises rough pasture. Mowed tracks had been made through part of this pasture, with some disturbance noted along them. A single hedgerow remained from the former field boundary.

The enclosure DU015-055 was within protective fencing on the south end of the Phase 1F lands. However, several breaches were noticed in the fencing where panels had fallen away. The interior of the fenced area was extremely overgrown with willow, briars and palm trees which had evidently seeded from nearby gardens. There was evidence of a former campsite in the area.

There are extensive views towards Howth Head and Ireland's Eye and overlooking the greenway. The ground drops towards the greenway with the grass along the greenway appearing less rough. It was noted that the slope precludes views towards the subsurface enclosure from the greenway.

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Figure 17-23 Site inspection (January 2025)

### March 2025-present: Archaeological Monitoring of Phase 1E (McLoughlin *forthcoming*; Licence 24E1233)

Archaeological monitoring of ground reduction associated with Phase 1E has been ongoing since March 2025 (McLoughlin *forthcoming*; Licence 24E1233). This has included a portion of the lands within Phase 1F in order to facilitate a residential access road and a spoil storage area. The road coincides with the route of the rising main where it exits the Phase 1F lands and travels through the ZoN of an enclosure (SMR DU015-130). No evidence of any archaeological remains were identified within the ZoN of the enclosure.

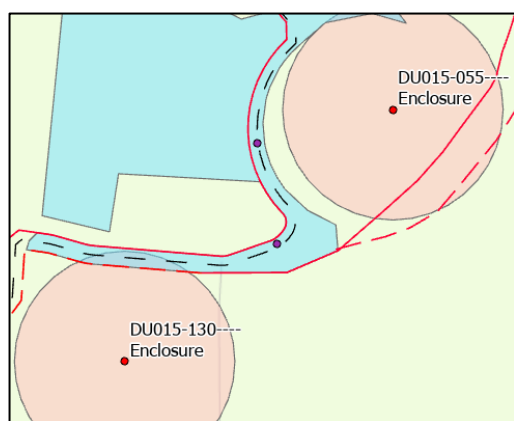
Two pits have been identified within the route of the residential road / rising main to the west and southwest of the large enclosure (RMP DU015-055; Figure 17-25). The first, to the west of the enclosure, measured 1.82m long by 0.85m wide and 0.39m deep and contained a single fill of black sandy, silty clay with heat affected stone. It was interpreted as a possible trough.

The second sub-rectangular pit, to the south-west of the enclosure, measured 1.5m long by 1.01m wide and 0.18m deep. It contained two fills with burnt stone inclusions in the upper fill, but was thought to be too shallow to have been a trough (Figure 17-24). It was noted that its fill was almost identical to that of the first pit and was likely related in some way to burnt mound activity.

Both these pits have been fully excavated and dating material has been retrieved from one of them. Further analysis will be in the forthcoming report. No further onsite archaeological work is required.



**Figure 17-24** Pit / trough identified on residential road / rising main route (McLoughlin *forthcoming*; Licence 24E1233)



**Figure 17-25** Locations of pits / troughs identified on residential road / rising main route (McLoughlin *forthcoming*; Licence 24E1233)

Several modern stone drains were identified at the storage area, running in an east-west orientation and consistent with drains which have been found throughout the wider Portmarnock development. A narrow, shallow, linear ditch measuring 0.65m in width and 0.18m in depth and orientated north-south was also identified during the topsoil stripping (Figure 17-26). This linear feature had a gradual break of slope, gradual sides and a slightly concave base with a moderate, light brown, clayey silt with no inclusions of note. There is nothing suggest that this feature is of archaeological significance, and it may be the remains of an agricultural furrow that went to considerable depth.



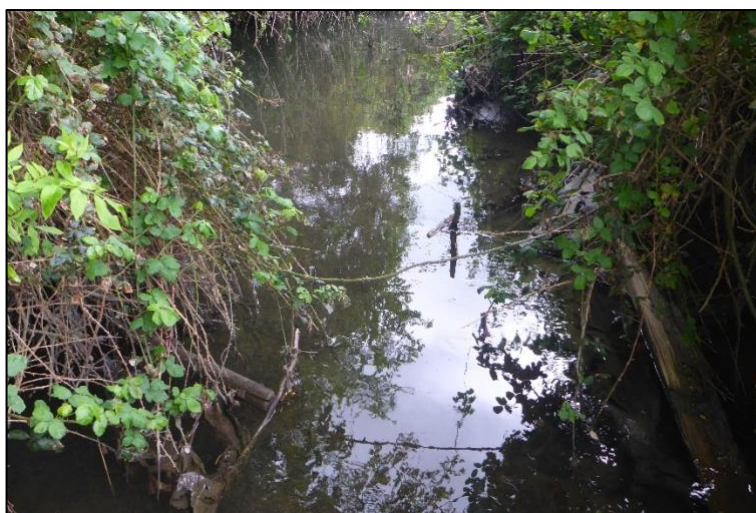
Figure 17-26 Linear feature, possibly a furrow (McLoughlin *forthcoming*; Licence 24E1233)

#### May 2025: Wade survey

A wade survey and metal detection survey were undertaken of Mayne River where it is proposed to install a rising main beneath the watercourse by way of directional drilling (Licence 25D0223, 25R0245) (Figure 17-27). This survey was carried out in fine weather by Dr Yolande O' Brien and Johnny King. It was proposed to conduct a wade inspection and metal detection survey of the river bank and channel of the Mayne River in order to assess the river bed and banks for any archaeological and cultural heritage features and assess the potential impact of the directional drilling of the rising main.

The banks were found to be excessively overgrown with bramble, nettles and other vegetation, precluding metal detection of these areas. The watercourse was accessible and the water level was suitably low for a wade survey however, and the metal detector was used in addition to a visual inspection.

The river bed comprised gravel and the river banks were quite steep in places. Numerous pieces of rubbish and discarded material were found in this location including fence posts, litter, a sign and a blanket. A plastic pipe lay on the riverbed, but it was not attached to anything and appeared to have arrived there as waste. The metal detector identified numerous metallic objects, particularly in the vicinity of dumped material, but nothing of archaeological significance was found.



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Figure 17-27 Mayne River where the rising main will cross by way of directional drilling

### 17.5.5 Adjacent Archaeological Investigations

A number of site investigations have taken place within the wider Portmarnock residential development areas. These investigations are of interest as they demonstrate the rich archaeology from the prehistoric to the medieval period within this area.

Archaeological testing took place on the route of the Baldoyle to Portmarnock Greenway at Maynetown townland under licence 18E0409. A single test trench measuring 980m was excavated along the route of the greenway in Maynetown townland, running along the length of the north-east planning boundary of the Phase 1F lands. Topsoil measured between 0.30m and 0.55m deep, and was generally shallower towards the northern end. No features of archaeological significance were identified during the testing programme (O'Dowd 2018). It was recommended that archaeological monitoring of all topsoil removal take place.

In 2016 archaeological investigations revealed the presence of a sub-square ditched enclosure within the Phase 1A lands dating to the early medieval period with evidence of an internal ditched feature dating to the Iron Age, which was subsequently fully excavated (McLoughlin 2019a; Licence 16E0101). A wooden artefact (hoop) found at the bottom of the external ditch provided a calibrated date of AD 686-876 and this along with several other secure dates retrieved from the ditch provided a firm early medieval context for the site.

In January 2017, an enclosure of elliptical or subcircular shape was excavated within the Phase 1B development lands (DU0015-014001) (McLoughlin 2019b; Licence No. 16E0613). It measured a maximum external diameter of 77m east-west x 70m north-south (68m east-west x 60m north-south internal diameter), with an entrance to the east. A wooden hoop artefact was recovered during testing from close to the bottom of the ditch and this has been dated AD 641-763. Significant finds recovered from the ditch include early medieval pottery imported from the eastern Mediterranean region (LRA 1/Bii ware, dated to c.450-600AD), E-ware dated to the late 6<sup>th</sup> to mid 7<sup>th</sup> centuries imported from western France, a wooden dish preserved in the base of the ditch, stone tools and worked antler artefacts. A huge volume of animal bone was recovered from the ditch, and this included whale/cetacean bones. Cereal drying (kilns) and metalworking activity were evident on site and there was one human burial (adult, male, approx. 40-45 years in age and 410-607AD in date) excavated within the enclosure. Dating and the finds assemblage confirmed this was a multi-phased site with the majority of activity taking place in the Late Iron Age/ early medieval period. Phases represented on the site are Mesolithic, Late Bronze Age, Iron Age, Late Iron Age/ early medieval, and early medieval.

In 2019 an excavation was carried out in the Phase 1C lands comprising a large double ditched enclosure, with the eastern side of the outer enclosure corresponding with the upstanding boundary between Portmarnock and Drumnigh townlands (McLoughlin 2022a; Licence 19E0303). The inner

enclosure measured 36m northeast-southwest by 29m northwest-southeast internally, and the outer enclosure was 105m northeast-southwest by an estimated 71m northwest-southeast internally (the eastern extent was beyond the limit of excavation). The course of the outer enclosure was irregular, and the depth of both ditches was variable. Radiocarbon dating has indicated that the two enclosures were contemporary, with most of the dates ranging between the mid/late 7<sup>th</sup> to late 10<sup>th</sup> centuries, although there was some evidence that the beginnings of the site may have been during the late Iron Age / early medieval transition. There was also evidence for some activity at the site in the early Bronze Age, in the form of a gully truncated by the outer enclosure ditch, and a late Bronze Age copper-alloy knife blade recovered from the outer ditch which represents disturbance of an earlier phase of activity, either at or in the vicinity of the site. A wooden bucket-type vessel made of yew recovered from waterlogged basal fills of the inner ditch returned a radiocarbon date range of AD 652-763. The wooden vessel, along with two tiny bone comb fragments, an iron weaving tensioner, a small amount of iron slag and a tuyere fragment are indications of domestic and small-scale industrial activities at the site. Animal bone and seashell recovered from the site represents food waste, and charred cereals indicate cereal processing at or near the site, further indicating some level of occupation.

From November 2023 to the end of February 2024, archaeological monitoring under licence 22E0418 took place throughout Portmarnock South Phase 1D lands in compliance with Condition 22 of the ABP 312112-21 permission to grant (McLoughlin 2024). All topsoil removal and earthmoving activity was archaeologically monitored under the direction of an archaeologist. No finds, features, deposits or archaeological material was revealed as a result of the monitoring exercise. Phase 1D lands lie to the south-west of Phase 1F.

## 17.5.6 Cultural Heritage

### Folklore

Morris (1939) has suggested that the Portmarnock mound (RMP DU015-014) may have been a burial place of Maine, son of Maedhbh and Ailill of Connacht. He based this assumption on a passage in the Metrical Dinshenchas, which describes Maine being killed at Inber cichmaine, ([www.celt.ucc.ie](http://www.celt.ucc.ie)), a place Morris equates with Portmarnock Bay. As the place of Maine's death is described as being located at the northern end of the inlet, Morris claims that this is similar to where the tumulus / mound is located in Portmarnock townland at the northern end of what is now known as Portmarnock Bay.

*“At Inber Cichmain, though it be narrow, was slain (a mighty onslaught) far-famed Maine, son of Medb and Ailell, exulting in fury of warlike combats.*

*Him Fergna, generous sob of widowed Findchoem, smote, in his flower, and his grave is in the ground, where the tall stripling murdered him.*

*Dreadful the deed unworthy that Findchoem's son committed, the killing of Maine Andoe, lord of steeds, known over every bright blue-watered plain.*

*Around the Curragh – famous meeting! It was ruin, it was great pity, - befell the loss of mighty Maine, that was not witless, whereby the inlet got its name.*

*There was he slain (harsh the tidings), Ailill Find's ill-omened son, Cichmaine, stout champion against death, when he leapt into the inlet in the north.*

*Or else, this is the true story of the stranger's death by no kindly deed, even the killing of him with the fierce heavy eyes as he hauled the fish out of the inlets.”*

However, this was based on a rather dubious comparison between the local topography and the descriptions in the text. Indeed, other scholars, such as O'Hogan, have placed Inber cichmaine not at Portmarnock but instead, further north at Tullyallen, ([www.publish.ucc.ie](http://www.publish.ucc.ie)), where the River Mattock enters the Boyne.

### Townland Names

The townland of Maynetown is thought to have derived from Maine, the son of Medb and Ailill who is associated with the mound. Despite the English suffix 'town,' the name is of Irish origin.

The name Portmarnock is derived from *Port Mo Ernoc* or *Ernan*, interpreted as St Mernoc's bank or landing place.

Stapolin is derived from *Steach Póilín*, which means 'Little Paul's house'.

Much of the northwest planning boundary of the Phase 1F lands corresponds with the Portmarnock / Maynetown townland boundary. This boundary is formed by a mature hedgerow and an unnamed watercourse. The north-west corner of the proposed development extends across this boundary where a former bank has been breached.

The Maynetown / Stapolin townland boundary is formed by the Mayne River. It is proposed that the rising main will cross this watercourse by way of directional drilling.

### 17.5.7 Cartographic Sources

#### The Down Survey (1656-1658)

The Down Survey of the 1650s was at the time the most coherent mapping project ever undertaken in the world. The aim was to measure lands forfeited by the Catholic Irish in order to redistribute it to Merchant Adventurers and English soldiers. 'Portmathnock' is indicated on the 'Map of County Dublin', with the inlet and a bridge indicated. The map of 'The Barony of Coolock in the County of Dublin' depicts the Parishes of Portmarnock and Moyne, with the inlet appearing to feed two tidal mills, one in Moyne, and the other in the vicinity of the recorded mill site at Maynetown / Portmarnock (RMP DU015-015). In the townland of Maynetown indicated as 'Mayne' on the 'The Parishes of Portmarnock and Howth in the Barony of Coolock' there is a thatched house recorded in the civil survey and this is shown on the map, the land is described as arable, meadow and pasture. The land is recorded as belonging to Henry Seagrave of Cabragh. The townland boundaries between Portmarnock, Mayne and Drumnigh are unchanged since the time of the Down Survey.



Figure 17-28 Down Survey parish map of Portmarnock

#### Rocque's 'An Actual Survey of the County of Dublin' (1760)

Rocque's map of 1760 depicts the inlet and mudflats, with a cluster of houses north of the bridge at Portmarnock indicating Portmarnock village. A mill is also depicted by the bridge. The mound (RMP DU015-014), is depicted to the west of the Phase 1F lands, and south of a large house with formal gardens. A short north-south aligned avenue appears to connect the two, presumably incorporating the existing monument as a landscape design feature. The mound is the only feature depicted within the vicinity of the Phase 1F development, with the remaining lands shown to have been open

farmland. To the south of the site where the rising main will be located, an east-west road is depicted which corresponds with the existing Mayne Road (R123). The Mayne River is depicted south of the road and the Mayne Bridge further east where it meets the Coast Road (Figure 24).



Figure 17-29 Rocque's map of County Dublin (1760) with approximate Phase 1F location

#### Taylor's Map of the Environs of Dublin (1816)

Taylor's 1816 map of the area shows the development of the Station Road and a cluster of buildings at Portmarnock Village. The mound (RMP DU015-014) is indicated as a knoll south of the road, and a series of streams appear to run through the townlands of Portmarnock, Drumnigh and Maynestown. A cluster of buildings annotated Maine House is depicted to the south of the site and north of the east-west road which is unchanged from the earlier mapping. There are no structures or features shown at the location of Phase 1F or the rising main (Figure 17-30).



Figure 17-30 Taylor's Map of the Environs of Dublin (1816)

#### Ordnance Survey Historical Mapping

Ordnance Survey (OS) Ireland completed their first map survey of Ireland between 1829 and 1842, producing the First Edition Six-Inch-to-the-Mile maps which are renowned for their accuracy and level

of detail. The Dublin sheets were produced in 1843 and the lands at Maynetown are shown as open agricultural fields at that time. A single tree is shown on a field boundary in the centre of the Phase 1F lands. The mound (RMP DU015-014) is depicted to the west of the Phase 1F lands, and the townland boundaries are illustrated. The line of the railway is depicted with the note 'Drogheda Railway in Progress', clearly transecting the earlier field divisions. A building is depicted in the same location as Mayne House from the earlier mapping but it is not annotated (Figure 17-31).

The second edition six-inch map of c. 1885 shows the completed railway and the addition of Portmarnock Station. The buildings depicted on Taylor's map and the first edition OS map have been added to and are now annotated Mayne Lodge. Some of the field boundaries within the Phase 1F lands had been removed or straightened by this time, but no other features are depicted within the proposed development site or along the rising main route (Figure 17-15).

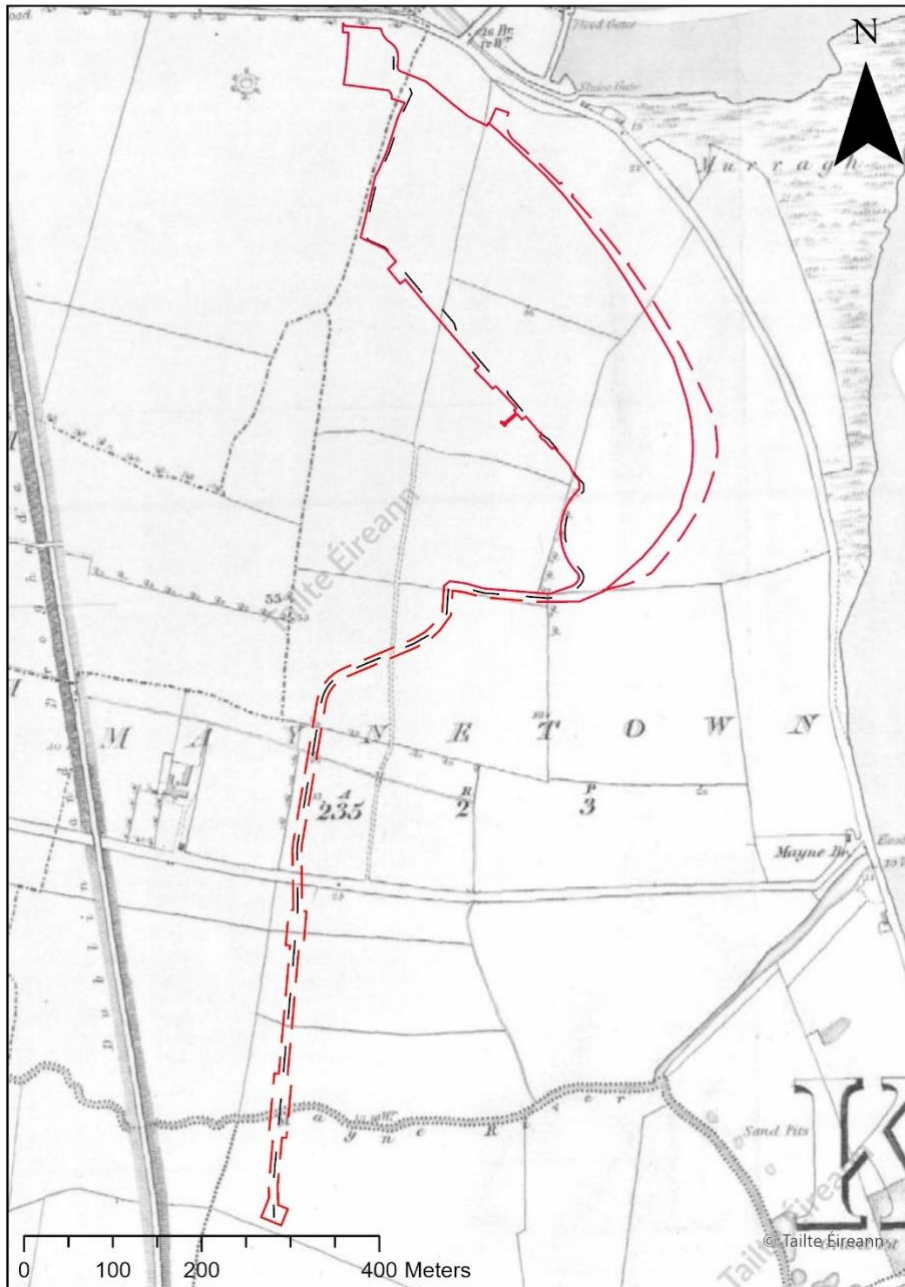


Figure 17-31 Location of proposed development on the First Edition OS Six-Inch map (1843)

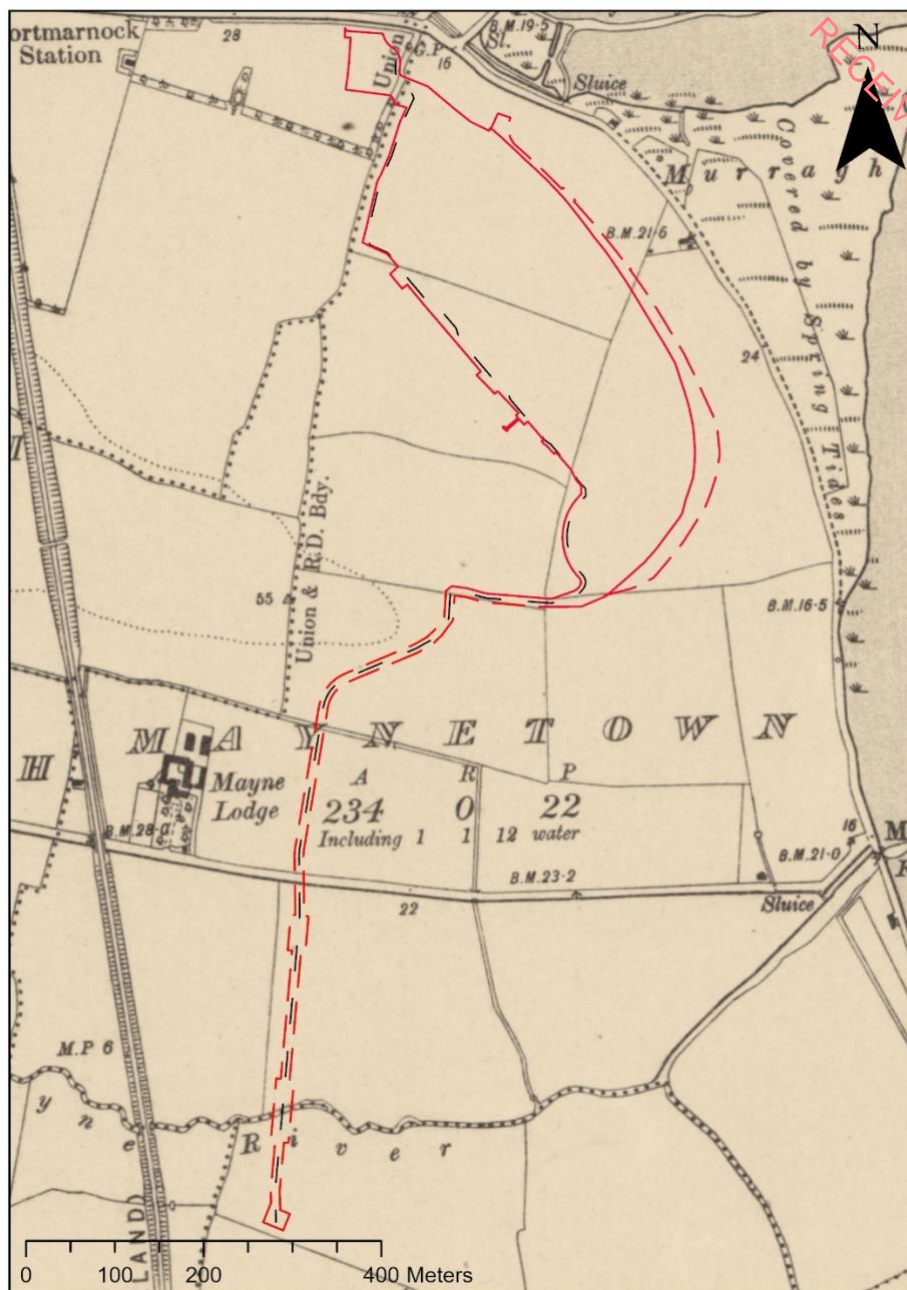


Figure 17-32 Location of proposed development on the Second Edition six-inch map (1855)

**17.5.8 Built Heritage**

**Record of Protected Structures / NIAH Survey**

The mound (RMP DU015-014) is recorded as a protected structure by Fingal County Council (RPS 0475), but there are no further protected structures or sites recorded by the NIAH within the overall Portmarnock development.

The railway bridge which carries the railway over the Mayne River is also a protected structure (RPS 0919). It is located approximately 150m west of where the rising main will cross the river and will not be impacted by the proposed development.

The next closest site of architectural merit is St Marnock’s Church (RPS 0457; NIAH 11350030), approximately 1km northwest of the application site. The Church of Ireland church was built 1786-

88. Several sites are located in Portmarnock Village, along the Strand Road and Coast Road, which date to the 18<sup>th</sup> and 19<sup>th</sup> century, showing the development of the seaside town at that time.

Portmarnock House is no longer present. It was illustrated on Rocque's map of 1760 with an avenue linking the house to the mound, but the construction of the Station Road separated the house from this feature as evident in Taylor's map of 1816. The First Edition 6-Inch map shows an ornamental geometric garden south of the house along the Station Road. A gate lodge and long avenue are also depicted.

Mayne (or Moyne) Lodge remains extant with an attractive gated entrance and a cluster of buildings of which some appear to be original, although the house appears much altered. It is not, however, recorded as a protected structure or on the NIAH. The rising main will pass approximately 130m east of the house and will not impact it.

## 17.6 Characteristics of the Proposed Development

### 17.6.1 Proposed Development

The proposed development will comprise 296no. residential units consisting of 42no. duplex / apartments and 254no. houses ranging in height between 1.5 and 3 storeys; public open space including southern Monument Park which formed part of the Racecourse Park development permitted under ABP Reg. Ref. JP06F.311315; vehicular access to serve the development is proposed off Monument View; and all associated and ancillary site development, infrastructural, landscaping and boundary treatment works.

The proposed development will also comprise a new (temporary) rising main to serve this phase and previous development phases (1A to 1E inclusive), c.1.7km long, running from the interim St. Marnock's Pumping Station at Station Road/The Avenue (constructed under ABP Reg. Ref. 300514-17 & upgraded under ABP Reg. Ref. 312112-21) connecting to the North Fringe Sewer in the south via Phase 1E (permitted under FCC Reg. Ref. LRD0002/S3), Racecourse Park North and South (permitted under ABP Reg. Ref. JP06F.311315) including crossing under both Moyne Road and Mayne River; upgrade of pumping station and storage as required and all associated and ancillary site development and reinstatement. The proposed rising main and interim St. Marnock's Pumping Station will be decommissioned and these lands will then discharge by gravity to a proposed new Uisce Éireann Pumping Station adjacent to Portmarnock Bridge when same is completed.

Part of the development includes the preservation in-situ and landscaping of the area of the enclosure (RMP DU015-055) to create a public amenity area. Detailed description of this is set out in Chapter 13 of this EIAR.

#### 17.6.1.1 Construction Stage

Construction activities which are likely to cause an effect include excavation and ground reducing works which will be required for the preparation of foundations, road construction, landscaping, drainage, substations, the rising main etc. as set out in Chapter 3: Description of Proposed Development. The assessment methodology is set out in Appendix 17.1.

#### 17.6.1.2 Operational Stage

Mitigation measures for all subsurface archaeological features will be undertaken in advance of the construction phase, comprising either preservation in-situ or preservation by record. As such, there will be no impacts from the operational phase on the majority of the subsurface archaeological features as they will have been excavated prior to this phase. No archaeological assessment is required at the operational stage of the proposed development.

## 17.6.2 Cumulative

This EIAR will also consider the cumulative impact from the following developments;

- **Portmarnock South Phase 1D (ABP Ref. ABP-312112-21 as amended by FCC Reg. Ref. LRD0037/S3) – Under Construction**

172no. residential units, provision of Skylark Park, provision of new road connection to Moyne Road and upgrade of existing temporary foul water pumping station and 24 wastewater storage tank (under construction).

Extension south of the Phase 1A railway linear park.

Permission was granted by An Bord Pleanála on 10 May 2022 subject to 31no. condition

Construction for this phase of development commenced in December 2023.

- **Portmarnock Pumping Station (FCC Reg. Ref. F21A/0389 – ABP Ref. ABP-314663-22)**

Permission was sought by Irish Water (now Uisce Éireann) on 19 July 2021 for a Wastewater Pumping Station. The proposal generally comprised of modification of Portmarnock Bridge pumping station including decommissioning of redundant above and below ground plant and equipment, including the demolition of the control building.

Permission was granted by An Bord Pleanála on 27 June 2024.

- **Racecourse Park (ABP Ref. JP06F.311315)**

FCC applied to An Bord Pleanála under Section 177AE of the Planning and Development Act 2000, as amended, to carry out a park development project at the Racecourse Park located between Baldoyle and Portmarnock, Co. Dublin. Broadly, the proposal includes: -

- 4.5km of new walking and cycling routes including a bridge over the Mayne river and the repair to the railway underpass.
- Public lighting along key walking and cycling routes.
- Expanding the existing car park to cater for up to 161no. car parking spaces. Upgrading and expanding the existing playground.
- A Skate park and Teenage Adventure Playground.
- A Multi use games area.
- A dog run.
- A Bowls green.
- Four grass football pitches.
- A viewing platform.
- Tracing of circular archaeological feature through soft landscaping and removal of existing fence.
- Extension of existing reedbed south of Mayne river and creation of new brackish grassland north of Mayne river.
- All landscaping works in the park. This new substantial park amenity will be within c. 1 – 5 km of the proposed development (and wider Portmarnock lands) once completed.
- This new substantial park amenity will be within c. 1 – 5 km of the proposed development (and wider Portmarnock lands) once completed.

Permission was granted by An Bord Pleanála on 20 September 2022.

- **Portmarnock South Phase 1E (Ref. LRD0002/S3)**

- 195no. residential units consisting of 26no. duplex / apartments and 169no. houses ranging in heights between 1.5 and 3 storeys.
- Linear public open space along 'Monument View'.
- A total of 189no. car parking spaces and 1,028no. bicycle parking spaces.
- Vehicular access to serve the development is proposed off the existing / under construction access points on roads serving the St. Marnock's Bay development.
- Upgrade of existing temporary foul water pumping station and storage tank to increase capacity.
- All associated and ancillary site development, infrastructural, landscaping and boundary treatment works.
- This development also comprised minor amendments to permitted site development works (road design / layout) at Phase 1D (ABP Ref. ABP-312112-21 as amended by FCC Reg. Ref. LRD0037/S3 refers).

Permission was granted by Fingal County Council on 5 December 2024 subject to 27no. condition.

Construction for this phase of development commenced in December 2024.

- **DART+ Coastal North Railway Order 2024 (ABP-320164-24)**

Córas Iompair Éireann (CIE) applied to An Bord Pleanála under Section 37(1) of the Transport (Railway Infrastructure) Act 2001 (as amended and substituted) for the DART+ Coastal North Railway Order. The DART+ Coastal North (Northern Line) involving railway improvement works from Connolly Station to Drogheda Station, inclusive of the Howth branch line from Howth Junction Station to Howth Station from East Wall Junction (to the north of Connolly Station) through to Drogheda.

Case is due to be decided by 3 October 2025.

- **Greater Dublin Drainage Strategic Infrastructure Development (SID) (ABP-312131-21)**

Irish Water applied to An Bord Pleanála under Section 37E of the Planning and Development Act 2000, as amended for the development of a new wastewater treatment plant, sludge hub centre, orbital sewer, outfall pipeline and regional biosolids storage facility and is referred to as the Greater Dublin Drainage project.

Part of the route passes through the open space / bird quiet zone south of Phase 1D, 1E and 1F.

Case is ongoing.

#### 17.6.2.1 Construction Stage

Construction activities which are likely to cause an effect include excavation and ground reducing works which will be required for the preparation of foundations, road construction, landscaping, drainage, substations, the rising main etc.

##### **Portmarnock South Phase 1D**

In compliance with Condition 22 of the permitted strategic housing development (SHD) known as Portmarnock South Phase 1D (Planning Ref. ABP 31212-21), this area has been archaeologically monitored (McLoughlin 2024; Licence 22E0418) during construction and no finds or features were detected.

##### **Portmarnock Pumping Station**

The rising main for the new pumping station crosses the 'avenue' feature on the east side of enclosure RMP DU015-055. Condition 21 of the approved scheme states that the applicant shall engage with the Community Archaeologist to determine the possibility of an alternative route to reduce the

impact on the monument. Should avoidance not be possible then a full excavation of the impacted area will be undertaken, prior to development works.

Condition 22 also requires the archaeological monitoring of topsoil stripping of the remainder of the wayleave. Part of this wayleave coincides with the route of the rising main which is part of the Phase 1F EIAR.

#### **Racecourse Park (ABP Ref. JP06F.311315)**

Racecourse Park includes in its plans a proposal to set back the existing fencing around enclosure RMP DU015-055 to make the site more visible by placing a 1m high and 1.5m wide embankment on a terram surface on the outer perimeter of the monument with the embankment sown with wildflowers. Signage is proposed at the enclosure to provide more information on the monument.

Development proposals within the area of high archaeological potential around the two enclosures (RMP DU015-055; SMR DU015-130), such as surface only paths skirting the buffer zone of known archaeological monuments, require minimal intervention in this area to reflect the high archaeological potential here with minimal impact arising.

The area south of the Mayne Road where playing pitches are proposed (where the rising main is located) is described as of unknown archaeological potential in the Racecourse Park documentation. There may be a requirement for levelling of the ground and installation of drainage in this location.

#### **Portmarnock South Phase 1E**

In compliance with Condition 18 of the permitted LRD known as Portmarnock South Phase 1E (Planning ref. LRD0002/S3), this area is currently undergoing archaeological monitoring of all ground reduction (McLoughlin *forthcoming*; Licence 24E1233). Two pits / troughs have been identified and have been fully excavated. Should any other features be identified they will also be excavated in compliance with the planning conditions and in consultation with the National Monuments Service of the Department of Housing, Local Government and Heritage.

#### **DART+ Coastal North Railway**

A construction compound will be located at Grange / Stapolin approximately 13m west of the rising main. It will be accessed via the existing entranceway on Mayne Road and along the existing track and bridge which run parallel to the rising main. This area had been unsuitable for geophysical survey because of the overgrown vegetation and uneven conditions underfoot.

The railway bridge on the Mayne River will require earthworks and piling and insitu concrete formation to construct the new abutments. There will be no impacts on the river.

#### **Greater Dublin Drainage SID**

The route of the Drainage SID will impact the south edge of enclosure DU015-118, continuing on to cross the Drumnigh / Maynetown townland boundary and the route of the rising main. and clipping the edge of the ZoN of enclosure DU015-130. A construction compound will be located to the south-east close to the coast.

### 17.6.2.2 Operational Stage

Mitigation measures for all subsurface archaeological features will be undertaken in advance of the construction phase, comprising either preservation in-situ or preservation by record. As such, there will be no cumulative impacts from the operational phase on the majority of the subsurface archaeological features as they will have been excavated prior to this phase.

## **17.7 Potential Impact of the Proposed Development**

### **17.7.1 Proposed Development**

#### **17.7.1.1 Construction Stage**

##### **Phase 1F Lands**

Numerous phases of archaeological investigations including geophysical survey, test excavations, excavations and archaeological monitoring have established a detailed baseline of the archaeology and archaeological potential of the Phase 1F lands. Much of the area has already been archaeologically resolved through excavation related to previous phases of the development, and an ongoing programme of archaeological monitoring (Figure 17-6).

The medieval settlement (SMR DU015-136001/002/003, DU015-154) and the burnt mound (SMR DU015-157) have been fully excavated and archaeologically resolved. There will consequently be no impact to these sites from the proposed development and no further mitigation is required.

The Phase 1F lands can be roughly divided into four areas for assessment purposes.

- The enclosure site (RMP DU015-055) and the associated features around T2 and T3 on the south of the Phase 1F lands is an area of high archaeological potential;
- The compound area on the north of the Phase 1F lands is very disturbed and mostly archaeologically resolved through previous monitoring;
- The west side of the Phase 1F lands have been topsoil stripped under archaeological supervision revealing two pits which have been archaeologically resolved;
- The remainder of the Phase 1F lands is of rough pasture and previous investigations suggest it is of low archaeological potential.

### Enclosure

The most significant area of archaeological heritage potential within the Phase 1F lands is the enclosure (RMP DU015-055). Geophysical survey has revealed an enclosure site of approximately 70m diameter with an entrance to the east facing the sea, two linear features forming a splayed formal approach, and possible pits and burnt features in the interior (Shiel et al. 2000; Leigh 2022; Licence 00R0037; 22R0112). Archaeological testing has confirmed the existence of the enclosure ditch of approximately 7.1m in width and a maximum of 2m deep, with entrance features to the east (Wallace 2000; Moriarty 2009a; McLoughlin 2023; Licence 00E0732; 07E0574 22E0509). One of the avenue ditches measured up to 5.5m wide and 1.4m deep and a large internal oval-shaped pit measured 8.3m long, but could not be excavated deeper than 1.25m because of ingress of water. Finds have included a segmented cylinder bead, butchered animal bone, a ferrous nail shank, vitrified clay which may have represented kiln fabric, a possible fragment of a knife blade, smithing hearth cakes and a large annular iron ring which may have been a pull handle or suspension loop. Human remains were revealed within the enclosure, numbering a minimum of ten individuals, and a disarticulated arm was found in one of the avenue ditches. Three separate radiocarbon dates have revealed dates from the late-7<sup>th</sup> to the mid-10<sup>th</sup> centuries, dating the site to the early medieval period.

Two linear ditches and two smaller linear features which are likely to be associated with the enclosure were identified by McLoughlin (2023; Licence 22E0509) in Trenches T2 and T3 to the north-east of the enclosure. These features are therefore of archaeological potential, and as they lie outside of the protective fence which currently protects the enclosure, there is the potential for them to be impacted by the proposed development.

The area of the enclosure is to be protected *in situ* and will be landscaped to create a public amenity area that includes seating and signage. Along the buffer zone, areas such as play and active areas will be created, this will be carried out by introducing soil and raising the existing ground level, thereby ensuring that no ground reduction works occur at or in the vicinity of the below ground enclosure site. The area will be overlooked by adjacent housing.

In the absence of appropriate mitigation, there would be the potential for this to negatively impact the underlying features, particularly as human remains have been identified as little as 0.40m below the surface.

### Remainder of Phase 1F Lands

The remainder of the lands have undergone numerous phases of archaeological investigations and is deemed to be of low archaeological potential. The entire area was scanned as part of a geophysical survey, and those areas which produced significant responses were subject to detailed scanning (Areas 1, 4, 5, 7; Nicholls 2002; Licence 02R0020). Archaeological testing of anomalies in these areas revealed the majority to have been related to former field systems which were not deemed to have been of archaeological significance (Phelan 2004; Licence 04E1415). A single feature in Area 4 comprised a pit which was interpreted as the trough of a fulacht fiadh. This site was subsequently fully excavated and added to the SMR, and is consequently archaeologically resolved (McLoughlin 2020b; Licence 18E0016; SMR DU015-157). The linear features in Area 1 were found to represent a medieval settlement which was also subsequently added to the SMR and excavated (SMR DU015-136001/002/003 and DU015-154; Moriarty 2009b; McLoughlin 2020b; Licence 08E0376, 18E0016).

Other phases of archaeological testing across the Phase 1F lands (McLoughlin 2017; 2020a; 2023; Licence 17E0597; 20E0598; 22E0509) have not revealed any features of archaeological significance. A large portion of the northern extent of the lands have also been archaeologically monitored (Walsh 2014; McLoughlin 2019a; 2020a; 2022b; *forthcoming*; Licence 12E0358; 16E0101; 20E0180; 20E0598; 24E1233). This activity has shown that the area has been considerably disturbed, with up to 1m of compressed overburden from deposited spoil in places, and the site compound is now located in this area. Two pits / troughs have been found in the most recent programme of monitoring along the route of the rising main where it coincides with a residential road which is part of the Phase 1E development (McLoughlin *forthcoming*; Licence 24E1233).

The results of the archaeological testing and monitoring have been consistent with the results of the original geophysical survey, and it is therefore unlikely that any features of archaeological significance (apart from the enclosure site and related features) are within the remainder of the Phase 1F lands. It is therefore not considered that there will be likely and significant effects from the proposed development.

### **Rising Main**

The route of the rising main travels along the south-west edge of the Phase 1F lands and around the west side of the enclosure (RMP DU015-055) where archaeological monitoring was undertaken of the route of a residential road associated with Phase 1E where two pits were identified (McLoughlin *forthcoming*; Licence 24E1233). They have been excavated and fully resolved and there will consequently be no impact along this section of the rising main.

It exits the south-west corner of the Phase 1F lands on an east-west axis through the ZoN of an enclosure (SMR DU015-130). Geophysical survey (Harrison 2008; Nicholls 2008; Licence 07R0230; Figure 17-9) identified this enclosure and the site is in fact 45m from the planning boundary of the rising main. This has been confirmed through archaeological monitoring of topsoil stripping of approximately 150m of this section of the rising main route where it coincides with the Phase 1E residential road (McLoughlin *forthcoming*; Licence 24E1233).

The route then continues south-west where it crosses Area E from the same geophysical survey which was undertaken for a proposed re-alignment of Mayne Road (*ibid*; Licence 07R0230; Figure 17-9). A north-south ditch feature was identified in this area which represents a former field boundary which is depicted on the First Edition six-inch OS map (Figure 17-31).

The route then turns south, parallel to the haul road which was archaeologically tested (McLoughlin 2020a; Licence 20E0598; Figure 17-17), and meets the wayleave of the future Uisce Éireann rising main which has also been archaeologically tested (Kavanagh & Whitaker 2019; Licence 19E0449; Figure 17-16). Nothing of archaeological significance was found in any of these test trenches. It is therefore not considered that there will be likely and significant effects from the proposed development.

### **Summary of Potential Construction Stage Effect**

As a result of previous geophysical survey, archaeological testing and archaeological monitoring, the archaeological potential of Phase 1F (excluding the enclosure RMP DU015-055) is considered to be low and archaeological assessment in the form of licensed monitoring will take place at the site preparation stage and construction stage of the proposed development.

Mitigation measures as set out in Section 17.8.1.1 will prevent any potential negative effect on the enclosure (RMP DU015-055).

There will be no direct effects on any recorded archaeological sites, any other sites which have been revealed within Phase 1F lands as a result of works associated with previous phases have already been resolved. Permanent, temporary and enabling works that involve topsoiling stripping or earth moving activities will be archaeological monitored to ensure that all subsurface archaeological features (if present) will be identified and appropriately mitigated during the site enabling and construction stages of the project. The development Phase 1F will not result in a negative, likely significant, direct, indirect or cumulative effect when assessed in relation to the proposed works necessary for the construction and operational phases of the residential development from an archaeological, architectural heritage and cultural heritage perspective.

#### 17.7.1.2 Operational Stage

All archaeological heritage issues will be resolved by mitigation during the early construction or construction phase, in advance of the operational phase, through one or more of the following:

- Preservation by record (archaeological excavation);
- Preservation in situ;
- Preservation by design; and
- Archaeological monitoring.

As the enclosure (RMP DU015-055) is a below ground monument which will be preserved in-situ, there will be no operational stage impacts from the proposed development.

#### 17.7.1.3 Do-Nothing Impact

In the 'Do-Nothing' scenario the development would not proceed and the land would remain in use for agricultural purposes. No archaeological monitoring would take place in order to identify below ground remains (if present) and no further archaeological sites would be identified and recorded.

### 17.7.2 Cumulative

#### 17.7.2.1 Construction Stage

##### **Portmarnock South Phase 1D**

All potential archaeological impacts related to the Phase 1D development have been fully mitigated through archaeological monitoring which did not identify any archaeological finds or features. There will consequently be no cumulative impact from the construction stage of the Phase 1F development.

##### **Portmarnock Pumping Station**

The rising main for the new pumping station will have an impact on the 'avenue' feature on the east side of the enclosure (RMP DU015-055). While there is the potential for this to have a negative impact, the Portmarnock 1F development would not contribute to any cumulative effect as the enclosure is to be preserved in-situ within the Phase 1F lands.

Archaeological testing where the rising main for the new pumping station coincides with the temporary rising main associated with the Portmarnock development did not identify any

archaeological features. Consequently, there will be no cumulative impact from the construction stage of the Phase 1F development and the temporary rising main.

### **Racecourse Park**

The Racecourse Park development will provide landscaping and signage set back from the enclosure (RMP DU015-055) using protective terram. This means there would be no construction related negative impact on the enclosure. There will be no cumulative impact from the construction stage of the Phase 1F development which will similarly employ protective measures for all landscaping.

While the potential impact of Racecourse Park south of Mayne Road is described as unknown in the application for the park, testing along the route of the rising main has demonstrated that there are no archaeological features along the route of the rising main. There will consequently be no cumulative effect from the construction stage of the rising main.

### **Portmarnock South Phase 1E**

All potential archaeological impacts related to the Phase 1E development will have been fully mitigated through the ongoing archaeological monitoring. The identified features have been excavated and fully resolved, as will any additional identified features (and in consultation with the National Monuments Service of the Department of Housing, Local Government and Heritage). There will consequently be no cumulative impact from the construction stage of the Phase 1F development.

### **DART+ Coastal North Railway**

The area of the construction compound at Grange / Stapolin was deemed in the EIAR to have been an area of archaeological potential owing to the proximity of the potential longphort (SMR DU015-152). There is the potential to impact unknown subsurface archaeological features in the course of topsoil stripping for the compound, but the pre-existing track and bridge reduce potential impact closest to the rising main.

Should there be an impact to this area from the DART+ Coastal development, archaeological testing (Kavanagh & Whitaker 2019; Licence 19E0449) along the route of the rising main has demonstrated that the rising main will not contribute to any cumulative effect.

### **Greater Dublin Drainage SID**

The EIAR for the SID predicts a significant negative potential impact to enclosure DU015-118. It predicts a neutral impact to enclosure DU015-130 and a moderate impact to the townland boundary. Owing to the nature of this archaeologically rich coastal area, it is seen as an area of archaeological potential with potentially significant negative impact.

The Portmarnock 1F development and the rising main avoid any impact to these features as it is not considered that there will be likely and significant effects from the proposed development, it will therefore not contribute to any cumulative effect.

### **Summary of Cumulative Construction Stage Effect**

When assessing this development, all previous archaeological findings and features of a cultural heritage and built heritage interest within the Portmarnock lands were considered. There is no significant potential cumulative effect to archaeology or cultural heritage features from the construction stage of the Phase 1F development or the temporary rising main.

#### 17.7.2.2 Operational Stage

### **Portmarnock South Phase 1D**

There are no recorded monuments or upstanding features of heritage value within Phase 1D that require ongoing management during the operational stage of the project. As such there will be no cumulative effect from the operational stage of the Phase 1F development

#### **New Portmarnock Pumping Station**

While there is the potential for the rising main to have a negative impact on the 'avenue' feature of the enclosure (RMP DU015-055), this does not have an effect on operational stage impacts from the Phase 1F development as the enclosure will be preserved in-situ within the Phase 1F lands.

#### **Racecourse Park**

The provision of landscaping and signage around the enclosure (RMP DU015-055) as part of the Racecourse Park development will complement the preservation in-situ and landscaping of the enclosure within the Phase 1F development. This monument is of Medium sensitivity and the magnitude of impact is considered to be Medium positive, resulting in a Moderate positive cumulative effect.

There will be no operational impact from Racecourse Park on the enclosure (RMP DU015-055), and as it is a below ground monument which will be preserved in-situ, there will be no operational stage impacts from the proposed development either. There will consequently be no cumulative effect from the operational stage of the Phase 1F development.

#### **Portmarnock South Phase 1E**

There are no recorded monuments or upstanding features of heritage value within Phase 1E that require ongoing management during the operational stage of the project. As such there will be no cumulative effect from the operational stage of the Phase 1F development.

#### **DART+ Coastal North Railway**

All potential cultural heritage issues related to both the DART+ and the rising main relate to the construction stage and will have been resolved by the time of the operational stage of both developments.

#### **Greater Dublin Drainage SID**

All potential cultural heritage issues related to both the Drainage SID and the rising main relate to the construction stage and will have been resolved by the time of the operational stage of both developments.

#### **Summary of Cumulative Construction Stage Effect**

When assessing this development, all previous archaeological findings and features of a cultural heritage and built heritage interest within the Portmarnock lands were considered. There is no significant negative potential cumulative effect to archaeology or cultural heritage features from the construction phase of the Phase 1F development or the temporary rising main.

### **17.8 Mitigation Measures (Ameliorative, Remedial or Reductive Measures)**

#### **17.8.1 Proposed Development**

##### **17.8.1.1 Construction Stage**

The development of the Portmarnock South lands is an opportunity to provide a coherent vision for the integration, preservation and management of archaeological features into the development of a

new vibrant residential, civic and commercial community. There is a need to understand the archaeological remains as a significant heritage resource and its vulnerability and the need for protection. This means that development control measures can be proactive, location-specific and sensitive to the particular requirements of the remains.

Individual attempts at preservation and interpretation can be of limited value without the existence of an overall vision for the treatment of these sites. Without that larger picture, a mechanism for linkage between the remains does not exist. In effect, appropriate protection and presentation of the remains can only be successfully achieved with a strong and secure long-term 'vision' for the proposed development context of the lands at Portmarnock South. As such, the lands have been designed to incorporate the archaeological remains (preservation in situ and preservation by record).

Construction stage mitigation measures will comprise the following:

### Archaeological testing and monitoring

In keeping with recommendations from the latest phase of archaeological testing of the enclosure (RMP DU015-055; McLoughlin 2023; Licence 22E0509), the following mitigation measures will be undertaken.

- The linear features from T2 and T3 thought to be associated with the ditched enclosure will be fully archaeologically resolved in advance of development. This will entail the full archaeological excavation of an area measuring approximately 40m SW-NE x 30m NW-SE under licence to the DHLGH;
- The buffer zone currently surrounding the monument will be maintained during construction, and no construction related activity or storage of materials will take place within this area.
- A plan for landscaping the area will be agreed in advance with the statutory authorities to ensure that the methodology proposed will allow suitable protection to the below ground archaeological remains, with particular emphasis on human skeletal remains which were identified at 0.4m below the current ground level.

In addition, archaeological monitoring under licence will be carried out of topsoil stripping and earth-moving activities in the remaining portions of the Phase 1F lands which have not been subject to previous programmes of monitoring. This will be performed by a suitably qualified archaeologist under licence to the National Monuments Service of the Department of Housing, Local Government and Heritage (DHLGH). Archaeological monitoring is recommended to identify the presence of any further dispersed and small-scale archaeological sites and features which have not been detected through previous investigations. Given the extent of previous investigations, it is envisaged that the below-ground archaeological potential in the remaining lands of Phase 1F is low and can be ameliorated through archaeological monitoring.

In areas that have been previously resolved through excavation or monitoring no further mitigation is required, these areas are indicated on Figure 17-6 and are:

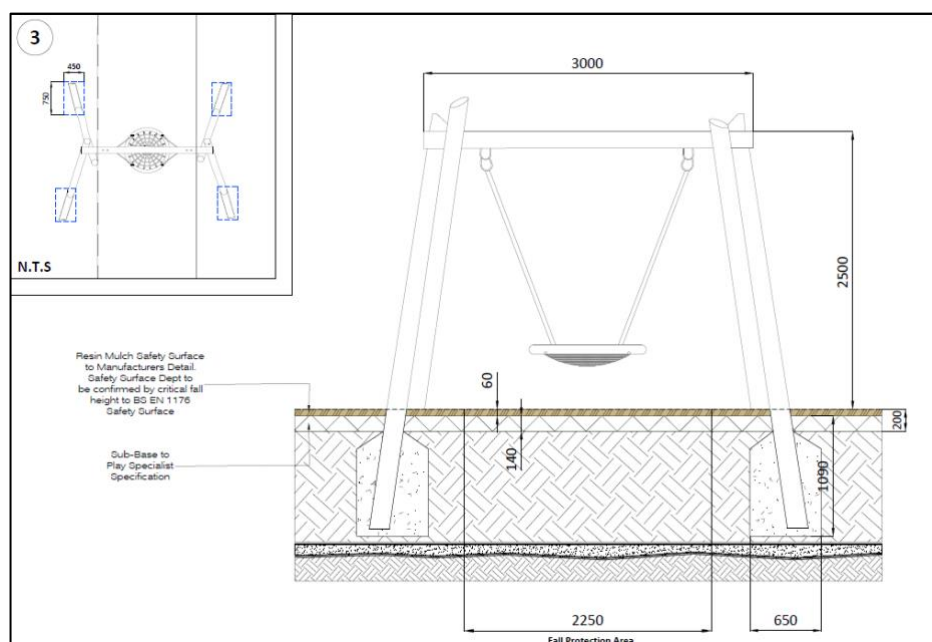
- Temporary pumping station (Moriarty 2009b; McLoughlin 2020b; Licence 08E0376, 18E0016);
- Sewer pipeline (McLoughlin 2019a; Licence 16E0101);
- Compound, foul water pipe (McLoughlin 2020a; Licence 20E0598);
- Haul road (McLoughlin 2022b; Licence 20E0180);
- Foul water pipe (McLoughlin 2023; Licence 22E0509);
- The route of the rising main / residential road and all areas stripped as part of Phase 1E enabling works for spoil storage etc. (McLoughlin *forthcoming*; Licence 24E1233)

The developer, Portmarnock Real Estate Developments Limited is aware of their responsibility to fund all necessary archaeological work. All recommendations are subject to approval by the National Monuments Service of the DHLGH and the Heritage Officer from Fingal County Council.

### Preservation in-situ

The enclosure (RMP DU015-055) will be preserved in-situ in a public open space within the Phase 1F development. The landscaping of this monument has been designed by Brady Shipman Martin to protect the underlying archaeology while reflecting the character and extent of the site within the appearance of the open space.

Archaeological testing established that human remains survive as little as 0.40m below the present surface. Protective measures will comprise a geotextile layer over the existing ground level, above which a further protective layer of between 0.30-0.80m as necessary will support the play structures and upright features. No upright supports will penetrate the geotextile or the subsurface archaeological features as sufficient infill will be introduced. Planted trees will be locally mounded to achieve sufficient topsoil above the protective layer (Figure 17-33; See Chapter 13 for further details). Works will be subject to archaeological monitoring by a suitably qualified archaeologist under licence to the National Monuments Service of the Department of Housing, Local Government and Heritage.



**Figure 17-33** Example geotextile and infill material introduced to protect underlying archaeology and support upstanding play infrastructure

The design is intended to reflect the underlying archaeology as informed by the results of the archaeological investigations set out in this chapter (Section 17.5.4). The planting regime will reflect the outline of the below ground monument through planting of feature tall grasses, shrubs, gravel surrounds and differentiated paving. The ditch will be mounded to protect the area and create a sense of enclosure, with a feature entrance area on the east in keeping with the subsurface entrance to the monument. Information lecterns will describe the archaeological discoveries, set out for child and adult audiences. Also included to the lands immediately south and west of the enclosure, natural play areas, playground infrastructure, a teenager hangout, sensory play, kickabout area and lookout binoculars will be created. All of these measures will be implemented over a protective layer of geotextile and introduced material as set out above and discussed further in Chapter 13.

### Conservation Management Plan

A conservation management plan has been prepared to accompany this planning application and to create a strategy for the protection and conservation of the below ground enclosure DU015-055. This strategy will also discuss the presentation of the site within the development and the neighbouring Racecourse Park. This document is informed by a number of plans such as

- Portmarnock South Local Area Plan (LAP) 2013
- Conservation Plan: Proposed neighbourhood centre development at Station Road/ Mayne Road, Portmarnock, Co. Dublin (Gowen 2009)

and is in keeping with the existing archaeological and heritage policies and objectives in the Fingal County Development Plan 2023-2029.

The plan is included in Appendix 17.3 of this EIAR.

#### 17.8.1.2 Operational Stage

Archaeological heritage issues will be resolved by mitigation during the early construction or construction phase, in advance of the operational phase, through one or more of the following:

- Preservation by record (archaeological excavation);
- Preservation in situ;
- Preservation by design; and
- Archaeological monitoring.

As the enclosure (RMP DU015-055) is a below ground monument which will be preserved in-situ, there will be no operational stage impacts from the proposed development. No mitigation measures are required during the operational stage of the proposed development.

The open space area where the monument is located will have to be maintained and will be taken in charge by Fingal County Council who will oversee the maintenance of this area.

### 17.8.2 Cumulative

#### 17.8.2.1 Construction Stage

No additional mitigation measures are proposed in relation to cumulative effects from the construction stage of Phase 1F development. The mitigation related to the other developments to be considered are set out below.

#### **Portmarnock South Phase 1D**

Mitigation which comprised archaeological monitoring has already been completed within the Phase 1D development.

#### **New Portmarnock Pumping Station**

It has been communicated to the Community Archaeologist that Uisce Éireann will not be able to provide an alternative rising main route and it will consequently be a requirement that a full excavation of the part of the 'avenue' feature of the enclosure (RMP DU015-055) be undertaken in compliance with Condition 21.

It is also conditioned (Condition 22) that archaeological monitoring of topsoil stripping of the remainder of the wayleave should be undertaken. Part of this coincides with the route of the temporary rising main associated with the Phase 1F development.

#### **Racecourse Park**

The Racecourse Park development will use protective terram to install an 1m high and 1.5m wide embankment around the outer perimeter of the enclosure. The embankment will be sown with wildflowers and signage will provide more information about the monument. This is in keeping with the landscaping proposals for the enclosure within the Phase 1F lands, and Brady Shipman Martin are liaising with Fingal County Council to ensure a consistent approach.

As the area south of Mayne Road is of indeterminable archaeological potential, Fingal County Council have set out that sample areas should have geophysical surveys undertaken which will inform the need for further investigation.

In addition, the Board Order from An Bord Pleanála set out a monitoring condition for regrading and excavation works.

### **Portmarnock South Phase 1E**

Mitigation which comprises archaeological monitoring is ongoing within the Phase 1E development.

### **DART+ Coastal North Railway**

The DART+ development will include test excavations in advance of construction at the site of the construction compound at Grange / Stapolin. If features are detected, a decision will be made as to whether or not preservation by record or insitu will be required. This assessment is to take place prior to construction within the footprint of the proposed ground breaking works.

### **Greater Dublin Drainage SID**

The Drainage SID will include a programme of test excavations at the (DU015-118) and across the area of archaeological potential prior to construction, enabling the compilation of a programme of works to ensure the sites are fully preserved by record.

A written and photographic survey, to include testing, will be undertaken at the townland boundary.

#### **17.8.2.2 Operational Stage**

No cumulative mitigation measures are proposed in relation Phase 1F during the operational stage.

## **17.9 Residual Impact of the Proposed Development**

### **17.9.1 Proposed Development**

#### **17.9.1.1 Construction Stage**

No residual effects during construction phase were identified during the course of the assessment on archaeological or cultural heritage. Should any archaeological remains be uncovered, they will be fully resolved by preservation in situ or by record under advice from the National Monuments Service prior to the main construction stage.

#### **17.9.1.2 Operational Stage**

The conservation and management of the enclosure (RMP DU015-055) which will include landscaping and signage will transform the monument from its current overgrown and fenced off condition to a public amenity. The wider Portmarnock development includes an interconnector monumental routeway which provides a visual link and an access route between the enclosure and the mound (RMP DU015-014) which was conserved as part of the Phase 1B development.

The sensitive presentation of this monument will enhance public awareness and accessibility of archaeology and cultural heritage, having an overall positive effect. This monument is of Medium

sensitivity and the magnitude of impact is considered to be Medium and positive, resulting in a Moderate positive residual effect.

No other residual impacts were identified from the operational stage of the Phase 1F development.

#### 17.9.1.3 Worst Case Impact

Within the worst case scenario an archaeological site would be removed without full recording taking place and there would be no record or archive of the site. Archaeological monitoring mitigates against scenario from occurring.

### 17.9.2 Cumulative

#### 17.9.2.1 Construction Stage

##### **Portmarnock South Phase 1D**

No residual cumulative effects have been identified in relation to the construction stage of the Phase 1F development.

##### **New Portmarnock Pumping Station**

The rising main for the new pumping station will have an impact on the 'avenue' feature on the east side of the enclosure (RMP DU015-055). While there is the potential for this to have a negative impact, there will be no cumulative residual effect from the as the enclosure is to be preserved in-situ within the construction stage of the Phase 1F development.

Archaeological testing where the rising main for the new pumping station coincides with the temporary rising main associated with the Portmarnock development did not identify any archaeological features. Consequently, there will be no cumulative residual impact from the construction stage of the Phase 1F development and the temporary rising main.

##### **Racecourse Park**

The Racecourse Park development will provide landscaping and signage set back from the enclosure (RMP DU015-055) using protective terram. This means there would be no construction related negative impact on the enclosure. There will therefore be no cumulative residual impact from the construction stage of the Phase 1F development which will similarly employ protective measures for all landscaping.

While the potential impact of Racecourse Park south of Mayne Road is described as unknown in the application for the park, testing along the route of the rising main has demonstrated that there are no archaeological features along the route of the rising main. There will consequently be no cumulative residual effect from the construction stage of the rising main.

##### **Portmarnock South Phase 1E**

No residual cumulative effects have been identified in relation to the construction stage of the Phase 1F development.

##### **DART+ Coastal North Railway**

No residual cumulative effects have been identified in the Construction Stage of the DART+ Coastal development.

### **Greater Dublin Drainage SID**

No residual cumulative effects have been identified in the Construction Stage of the Drainage SID development.

### **Summary of Cumulative Construction Stage Effect**

When assessing this development, all previous archaeological findings and features of a cultural heritage and built heritage interest within the Portmarnock lands were considered. There is no significant negative potential cumulative effect to archaeology or cultural heritage features from the construction phase of the Phase 1F development or the temporary rising main. However, there will be a Moderate positive cumulative effect arising from the interactions of both the Racecourse Park and the Phase 1F development with the enclosure (RMP DU015-055).

## 17.9.2.2 Operational Stage

### **Portmarnock South Phase 1D**

No residual cumulative effects have been identified in relation to the operational stage of the Phase 1F development.

### **New Portmarnock Pumping Station**

As mitigation measures associated with the rising main of the new pumping station will comprise an excavation on the impacted portion of the 'avenue' feature of enclosure RMP DU015-055, it is expected that this will result in additional information on the character and extent of this feature. The conservation and management of the enclosure as part of the Phase 1F development will include heritage signage, and this provides an opportunity to present the results of the rising main excavation. This would be a positive cumulative impact arising from the Phase 1F development.

### **Racecourse Park**

The provision of landscaping and signage around the enclosure (RMP DU015-055) as part of the Racecourse Park development will complement the preservation in-situ and landscaping of the enclosure within the Phase 1F development. This will result in a positive cumulative impact.

### **Portmarnock South Phase 1E**

No residual cumulative effects have been identified in relation to the operational stage of the Phase 1F development.

### **DART+ Coastal North Railway**

No residual cumulative effects have been identified in the Operational Stage of the DART+ Coastal development.

### **Greater Dublin Drainage SID**

No residual cumulative effects have been identified in the Operational Stage of the DART+ Coastal development.

### **Summary of Cumulative Construction Stage Effect**

When assessing this development, all previous archaeological findings and features of a cultural heritage and built heritage interest within the Portmarnock lands were considered. There is no significant negative potential cumulative effect to archaeology or cultural heritage features from the construction phase of the Phase 1F development or the temporary rising main.

However, the potential to use information from an excavation of the 'avenue' feature where it will be impacted by the rising main, and the opportunity to develop a consistent approach with the Racecourse Park development in relation to the landscaping the presentation of the enclosure (RMP DU015-055) results in an overall positive cumulative residual effect. The monument is of Medium sensitivity and the magnitude of effect is Medium and positive, resulting in a Moderate positive effect.

#### 17.9.2.3 Worst Case Impact

Within the worst case scenario an archaeological site would be removed without full recording taking place and there would be no record or archive of the site. The extent of archaeological investigation including excavation within the Portmarnock lands protects against this scenario from occurring. Archaeological monitoring mitigates against this scenario from occurring.

### 17.10 Monitoring

#### 17.10.1 Proposed Development

##### 17.10.1.1 Construction Stage

Archaeological monitoring will take place during any ground disturbance and excavation works on site at the site preparation stage of the proposed development as discussed above.

##### 17.10.1.2 Operational Stage

It may be necessary to monitor the condition of the signage during the operational phase and to ensure it is replaced as necessary.

#### 17.10.2 Cumulative

No monitoring will be required of cumulative effects.

### 17.11 Reinstatement

There will be no requirement for reinstatement at any stage of the proposed development.

### 17.12 Difficulties Encountered

No difficulties were encountered during the assessment process.