

Appendix 14.3

Local Cultural Heritage of Study Area

14.3 Archaeological, Architectural and Cultural Heritage – Local Cultural Heritage of Study Area

The proposed development site is located approximately 15km southeast of Cork City, in the townland of Ringaskiddy on the Ringaskiddy Peninsula in Cork's Lower Harbour. Ringaskiddy townland lies in the Parish of Barnahely and the Barony of Kerrycurrihy. The nearest extant settlement to the proposed development site is the village of Ringaskiddy, situated 800m to the west of the site. Lewis (as cited in Cadogan, 1998) described early 19th-century Ringaskiddy as “a small village on the shore... resorted to in summer for sea-bathing.” He also referenced the building of yachts and boats in the village, as well as the fishing of yawls during the winter season. Lewis further noted the good quality of land in Barnahely parish.

In the 19th century, a settlement known as Rock Village was located to the northeast of, and adjacent to, Rock Cottage, approximately 200m northwest of the proposed development site (Sweeney, 2007). The 1st edition Ordnance Survey (OS) map of 1841 shows several houses in the area (see **Figure 14.3; Volume 3**). Griffith's Valuation of 1851 lists the names of residents in the village; however, by 1855, 90% of the residents had disappeared. According to local tradition, a fire that began in one of the mud-walled, thatched cottages spread rapidly, destroying much of the village (Sweeney, 2007).

Land reclamation undertaken in 1979–1980 to the north of the proposed development site significantly altered the landscape. Originally, the proposed development site lay adjacent to the shoreline. In the mid-19th century, the road from Ringaskiddy extended only as far east as Rock Village. During reclamation works, three offshore islands north of the villages of Ringaskiddy and Rock, were incorporated into the newly reclaimed tract of land.

The following is a chronological account of the cultural heritage of the study area. It presents an archaeological and historical overview of human activity in the area, spanning the prehistoric period to modern times. The archaeological timeline is generally divided into two major periods, each with multiple sub-periods:

Prehistoric Period: Mesolithic (c. 8000–4000 BC); Neolithic (c. 4000–2400 BC); Chalcolithic (c. 2450–2200 BC); Bronze Age (c. 2400–700 BC); Iron Age (c. 700 BC–AD 400)

Medieval Period: Early Medieval (5th–12th century); High Medieval (12th century–c. 1400); Late Medieval (c. 1400–16th century); Post Medieval (17th century onwards)

The pace of landscape change in Ireland accelerated significantly in the latter half of the 20th century. Many archaeological sites have been levelled due to modern development, including housing schemes, infrastructural projects, and the intensification of agricultural and industrial practices. Prior to this period, changes to the landscape occurred more gradually. Nevertheless, even in earlier times, significant alterations are evident in the archaeological record. These cumulative changes mean that the current archaeological landscape is not fully representative of the country's long history of human occupation, which spans approximately 10,000 years. Surviving archaeological remains may take the form of upstanding structures, earthwork monuments, or subsurface features.

There are no recorded archaeological monuments listed in the Record of Monuments and Places (RMP) within the boundary of the proposed development site. However, a recorded Martello tower (CO087-053---) is located approximately 70m south of the site. Part of the southern perimeter of the proposed development site falls within the Zone of Notification (ZON) for this tower. The Martello tower is also listed as RPS 575 in the Record of Protected Structures (RPS) in the Cork County Development Plan (2022–2028). A path that crosses part of the proposed development site is associated with the tower and forms part of its curtilage as a protected structure.

There are 50 recorded archaeological sites listed in the RMP and Sites and Monuments Record (SMR) database within the 2km Study Area (see **Figure 14.1; Volume 3** and **Table 14.1** below). Of these 50 sites, 6 have no known location. Information on all the recorded archaeological sites within the Study Area is taken from the ASI database which derives its data from the Archaeological Inventories of County Cork; Volume 2: East and South Cork (Power et al. 1994) and Volume 5 (Ronan et al. 2009) with some entries updated because of more recent research. Extensive archaeological investigations have taken place in recent times in advance of the N28 motorway (currently under construction) connecting to the Port of Cork in Ringaskiddy.

Table 14.1 RMP and SMR sites within a 2km radius of the proposed development site

RMP	Site Type	Townland	Distance from Development Site
CO099-023	Cairn	Curraghbinny	2.1km to the S
CO087-044	Souterrain	Coolmore	2.3km to the SW
CO087-045	Standing stone	Coolmore	2.3km to the SW
CO087-046	Ringfort	Raheens	2.2km to the SW
CO087-047	Ringfort	Raheens	2km to the SW
CO087-048	Ringfort	Barnahely	1.6km to the SW
CO087-049	Possible church	Ballintaggart (unlocated)	NA
CO087-050001	Redundant record	Barnahely	1.3km to the W
CO087-050002-	Gate lodge	Barnahely	1.5km to the W
CO087-051001-	Graveyard	Barnahely	1.1km to the SW
CO087-051002-	Church	Barnahely	1.1km to the SW
CO087-052001-	Tower house	Barnahely	1.2km to the SW
CO087-052002-	Ornamental tower	Barnahely	1.2km to the SW
CO087-052003-	Bawn	Barnahely	1.2km to the SW
CO087-052004-	<i>Sheela-na-Gig</i>	Barnahely	1.2km to the SW
CO087-053	Martello tower	Ringaskiddy	70m to the S
CO087-054	Midden	Ringaskiddy	650m to the S
CO087-055	Midden	Curraghbinny	1.4km to the S
CO087-056	Midden	Curraghbinny	1.8km to the S
CO087-057	Midden	Curraghbinny	2km to the S
CO087-059001-	Barracks	Haulbowline Island	1.1km to the N
CO087-059002-	Martello tower	Haulbowline Island	1.2km to N
CO087-059003-	Bastioned fort	Haulbowline Island	1.2km to N
CO087-060	Vernacular house	Barnahely	1.2km to the SW
CO087-061	Ecclesiastical enclosure	Ballintaggart	2km to the NW
CO087-064	Redundant record	Coolmore	2.5km to the SE
CO087-065001-	Burial ground	Spike Island	830m to the E
CO087-065002-	Ecclesiastical site	Spike Island	1.2km to the E
CO087-065003-	Fortification	Spike Island	1.2km to the NE
CO087-068001-	Possible ringfort	Ballybricken (unlocated)	NA

RMP	Site Type	Townland	Distance from Development Site
CO087-068002-	Possible souterrain	Ballybricken (unlocated)	NA
CO099-074	<i>Fulacht fiadh</i>	Coolmore (unlocated)	NA
CO087-096	Standing stone	Raheens (unlocated)	NA
CO087-101	Enclosure	Coolmore	2km to the SW
CO087-102	Souterrain	Raheens	2.2km to the SW
CO087-103	Souterrain	Raheens	2.2km to the SW
CO087-104	Souterrain	Raheens	2.2km to the SW
CO087-105	Magazine	Rocky Island	690m to the N
CO087-111	Country house	Barnahely	1km to the W
CO087-120	Midden	Barnahely	1.3km to the SW
CO087-132	Burnt pit	Barnahely	1.3km to the W
CO087-143	Settlement Cluster	Barnahely (unlocated)	NA
CO087-145	<i>Fulacht fiadh</i>	Barnahely	1.6km to the SW
CO087-146	Kiln – corn drying	Barnahely	1.6km to the SW
CO087-147	Excavation Miscellaneous	Barnahely	1.2km to the SW
CO087-148	Excavation Miscellaneous	Barnahely	1.1km to the SW
CO087-155	Enclosure	Barnahely	1km to the W
CO087-156	Kiln – corn drying	Barnahely	1.6km to the SW
CO087-161	Midden	Ringaskiddy	400m to the S
CO087-162	Midden	Ringaskiddy	510m to the N
CO087-163	Midden	Ringaskiddy	510m to the N
CO099-023	Cairn	Curraghbinny	2km to the S
CO099-105	Possible <i>Fulacht fiadh</i>	Curraghbinny	1.9km to the S

14.3.1 Mesolithic Period (c.8000-4000BC)

The Mesolithic marks the first confirmed human presence in Ireland, beginning around 8000 BC. These early inhabitants were nomadic hunter-gatherers who relied on a broad spectrum of natural resources including game, fish, shellfish, and wild plant foods. Their tools were predominantly made of flint and other hard stones, fashioned into blades, scrapers, and projectile points. Mesolithic sites are often located near water sources such as lakes, rivers, or coastal margins and are typically identified through the recovery of flint scatters in ploughed fields or through coastal midden sites.

While no Mesolithic sites are currently known within the boundaries of the study area, this absence may reflect limitations in visibility and preservation rather than a genuine lack of activity. The estuarine and low-lying coastal environments of Cork Harbour would have been attractive to Mesolithic communities.

14.3.2 Neolithic Period (c. 4000-2500BC)

The Neolithic period in Ireland saw the introduction of agriculture, animal husbandry, pottery production, and the construction of permanent dwellings and ceremonial monuments. This major social and economic transition brought significant changes to settlement patterns and landscape use. Neolithic communities cleared woodland for farming, cultivated cereals, and kept domesticated livestock including cattle, sheep, and pigs. Monumental architecture such as portal tombs, court tombs, passage tombs, and wedge tombs began to appear, often situated in prominent positions within the landscape and sometimes used for generations.

Archaeological monitoring and excavation in Ringaskiddy, carried out in advance of the Haulbowline East Tip Remediation Project, revealed evidence of multi-period prehistoric activity across a large tract of farmland overlooking Cork Harbour (Miller 2018). The site, situated approximately 100m south of the proposed development area, encompassed five fields on elevated ground above the harbour. The earliest phase of occupation is represented by fragments of Early Neolithic pottery, providing the most direct evidence for settlement of this date in the Study Area. Later activity included Late Bronze Age pottery, post-built structures, ditches, hearths, and pits, together with Iron Age bowl furnaces, indicating that the location was repeatedly settled and utilised across successive prehistoric periods.

The M28, currently under construction, will extend from the N40 South Ring Road at Bloomfield Interchange to Ringaskiddy, with one section of the route passing through the northwestern edge of the proposed development site. Preliminary findings from excavations along this route are summarised in the M28 Cork to Ringaskiddy Project StoryMap (Long & Millar 2023) and on Excavations.ie (see **Appendix 14.2**), with full reports to be published following completion of post-excavation analysis. These excavations have revealed early prehistoric activity within the Study Area. Evidence for Neolithic occupation was identified in the townlands of Ringaskiddy and Barnahely. At Ringaskiddy 1, a cluster of pits and a post-hole produced prehistoric pottery, lithics, stone beads, a possible spindle whorl, and charred plant remains, interpreted as domestic or settlement-related activity of Neolithic date (Long & Millar 2023). At Barnahely, a series of pits and linear features yielded charred grains, including naked barley and probable emmer, suggesting early prehistoric cultivation and food processing (Gooney, 2025).

Evidence for Neolithic activity in the wider Cork Harbour region is well attested. A simple megalithic structure is recorded at Rostellan (CO088-101), approximately 8.5 km northeast of the development site. Further in the harbour, Neolithic settlement evidence has been uncovered at Ballinure on the Mahon Peninsula (CO074-130) and at Foaty on Fota Island (CO075-077), located 9 km and 7 km from the site respectively. These discoveries suggest that the inner harbour area was already a focus for early farming communities.

14.3.3 Bronze Age and Iron Age (c. 2400-700BC)

The Bronze Age introduced the widespread use of metal, first copper, then bronze (an alloy of copper and tin), which revolutionised toolmaking, weaponry, and craft production. The period also saw a significant expansion in settlement and farming, and new burial practices including pit and cist burials, frequently involving cremation. Monumental burial mounds (tumuli or cairns) were constructed, although many survive today as ploughed-out or unrecognisable features.

The Bronze Age is particularly well represented in and around the study area. A stone cairn or tumulus (CO099-023---), located on Curraghbinny Hill approximately 2 km southeast of the site, was excavated in 1932 and yielded cremated human remains enclosed by a dry-stone wall. Several standing stones are recorded in the area, including examples in Coolmore (CO087-045---) and Raheens (CO087-096---), likely Bronze Age in origin, although the exact location of the latter remains unverified.

Excavations at Ringaskiddy (Miller, *ibid.*), c.100 m south of the proposed development, revealed a concentration of later prehistoric features, including four possible post-built house footprints and three substantial east–west linear ditches, one of which (C44) contained a diagnostic sherd of Late Bronze Age pottery. Additional finds of Early Neolithic and Late Bronze Age date were recovered, and numerous stake-holes, pits, and other features suggested a settlement focus in this area. Together with local fulachtaí fiadh – recorded in Coolmore (CO099-074---), Curraghbinny (CO099-105---), and Barnahely (CO087-145---) – these discoveries confirm the wider harbour landscape as a focus of Bronze Age settlement and subsistence activity.

Further Bronze Age evidence has been identified through excavations on the M28 Cork to Ringaskiddy Project. At Barnahely, remains included a ring-ditch, a possible circular house, pits, and an extensive assemblage of saddle querns and grinding stones, alongside a blue glass bead indicating both craft production and wider regional connectivity (Long & Millar, 2023). At Barnahely 4 (Gooney, 2025:214), additional prehistoric features, possibly dating to the Neolithic–Bronze Age transition, were uncovered, with environmental samples containing naked barley and emmer. At Barnahely 3 (Gooney, 2025:215), a burnt mound and associated troughs were recorded, reinforcing evidence for Bronze Age settlement and activity in the area. In the townland of Loughbeg, a cremation pit, prehistoric pits, and post-holes were identified (Quilty, 2025:217). At Loughbeg 2, a cluster of pits and a charcoal-rich spread produced tentative Bronze Age pottery, lithics, rubbing stones, and rare charred cereal grains (Hourihan, 2025:219). At Loughbeg 3, features including a trough, burnt spread, oxidised area, and stake-holes were recorded, with a sherd of pottery also recovered (Quilty, 2025:218). Together, the evidence from Loughbeg and Barnahely demonstrates that the Ringaskiddy peninsula was a focus for burial, domestic activity, agriculture, and industrial processes throughout the Bronze Age, continuing into the Iron Age.

The Iron Age in Ireland is less visible archaeologically, owing to the ephemeral nature of many site types and the difficulty of dating unenclosed settlement remains without diagnostic artefacts. Nevertheless, the period is marked by major technological innovation, particularly the introduction of iron tools and weapons, which improved agricultural efficiency and contributed to social change. The La Tène artistic tradition, associated with continental Celtic groups, also appears during this period, with brooches, weapon fittings, and decorated objects occasionally recovered.

Although securely dated Iron Age sites are rare in the study area, the excavations at Ringaskiddy (Miller, 2018) revealed two adjacent bowl furnaces with associated slag, interpreted as evidence of Developed Iron Age iron-working (c. 4th century BC–1st century AD). This industrial activity appears to have been directly associated with nearby settlement remains at the same site. Additional features, including pits and stakeholes (CO087-132---, CO087-147, CO087-148---), 1.4 km west of the proposed development, are undated but considered potentially prehistoric.

The significance of Barnahely as a long-term habitation zone is underscored by the multiphase evidence uncovered during M28 route excavations. These revealed prehistoric features, including a circular structure, along with domestic and industrial artefacts, although full interpretation awaits publication of post-excavation analysis (Long and Millar, 2023). The clustering of settlement and production evidence near the Martello tower, Barnahely church, and tower house points to continuity of occupation into the Iron Age and beyond.

14.3.4 Early Medieval Period (5th to 12th Century)

The early medieval period in Ireland, beginning around the 5th century AD, was defined by the introduction and widespread adoption of Christianity. By the 6th century, monasticism had become a central feature of Irish religious life. From their monastic foundations, Irish monks embarked on missionary journeys across Europe, spreading Christianity and establishing new communities. These monasteries also became influential centres of learning, culture, and craftsmanship, often surrounded by secular settlements in the form of ringforts, crannógs, and clusters of simple dwellings.

Ringforts, also known by regional terms such as rath, lios, cathair, or caiseal/cashel, are the most characteristic secular monuments of the early medieval Irish landscape. These enclosed farmsteads typically consist of a circular or sub-circular area bounded by a single or multiple earthen banks and ditches (fosses), ranging in size from 25 to 50 metres in diameter. Excavations frequently uncover evidence of domestic activity, such as the remains of timber houses, outbuildings, and souterrains—manmade underground passages likely used for refuge or storage. Occasionally, artefacts related to craft production indicate the presence of higher-status occupants.

The main period of ringfort construction and use spans from the early 7th to the late 9th century AD. They were usually occupied by elite families, while those of lower social status lived in less substantial dwellings outside the enclosures. Cattle dominated the economy and were not only central to subsistence (mainly dairying) but also served as currency in a society that lacked widespread coinage. Tillage was a secondary activity, with crops such as wheat, barley, oats, rye, and flax cultivated. Land was valued according to the number of cattle it could sustain, and cattle raiding was common. Ringforts therefore provided secure overnight enclosures for livestock (Feehan 2003, 55, 62).

Numerous ringforts have been recorded in the study area, several of which include associated souterrains. In 1989, two ringforts (CO087-046--- and CO087-047---) in Raheens townland, approximately 2 km southwest of the proposed development site, were excavated during the construction of the Sandoz factory (Power et al. 1994, 157–158). Three souterrains (CO087-102---, CO087-103---, and CO087-104---) were uncovered in one of the ringforts (CO087-046---). Another ringfort in Barnahely townland (CO087-048---), located 1.7 km west of the proposed site, was investigated and revealed a quern stone and a possible souterrain or kiln (Cummins, 2012). Nearby, two early medieval corn-drying kilns (CO087-146 and CO087-156---) were discovered during earlier works (Cummins 2004), further indicating agricultural processing. A possible collapsed souterrain (CO087-044---) was identified in ploughed soil in Coolmore townland, approximately 2 km to the southwest. A ringfort (CO087-06801-) and a possible souterrain (CO087-06802-) are also recorded in Ballybricken townland, although their precise locations are unknown.

As part of the N28 Bloomfield–Ringaskiddy route selection process, a geophysical survey was undertaken approximately 900m west of the proposed development site, near Castle Warren tower house (CO087-052001). The survey identified a complex of interlocking enclosures defined by fosses, interpreted as Bronze or Iron Age unenclosed settlement (Roseveare and Roseveare 2004). Subsequent excavations revealed two additional ringforts, one of which showed evidence of early medieval metalworking and included a souterrain, a hearth, and finds such as an iron spearhead. The second ringfort featured a substantial ditch over 5m wide and contained a souterrain along with a remarkable assemblage of artefacts: a copper alloy brooch, bone combs, glass beads, iron pins, a billhook, animal bones, marine shells, and metalworking debris. These discoveries point to industrial activity, skilled craftsmanship, and the exploitation of both terrestrial and estuarine resources. In total, over 500 artefacts were recovered, alongside environmental samples including charcoal, seeds, and faunal remains.

Excavation at Barnahely 3 (Gooney, 2025:215) corroborated and extended these results: Area C revealed a souterrain with three passages, a penannular ditch, and a circular house (c. 6m in diameter), with associated finds including a partial rotary quern and fragments of a bone comb. Preliminary palaeo-environmental analysis supports an early medieval date for these features, further demonstrating Barnahely’s importance as a settlement and craft centre in this period. Additional early medieval activity was identified at Loughbeg 1 (2025:217, Quilty), where a series of pits and post-/stake-holes, together with cereal grain, were provisionally dated to this period. This complements the Barnahely evidence and indicates wider contemporary settlement and agricultural use of the landscape.

The term enclosure is often applied to ambiguous archaeological sites that fall outside the typical size or form of ringforts. These can vary widely in date—from the Bronze Age to as late as the 19th century—and may have served a variety of functions. One such possible enclosure (CO087-101---) in Coolmore townland, approximately 2 km southwest of the site, has been identified through aerial photography. It comprises a low circular bank with internal and external fosses, possibly bounded by small irregular fields to the west and southwest (Power et al. 1994).

Ecclesiastical activity is also represented in the study area. While not all sites can be securely dated to the early medieval period, documentary and cartographic sources suggest that several may have early Christian origins. It is believed that there was an ecclesiastical enclosure (CO087-061---) in Ballintaggart townland (Power et al. 1994, 168), now occupied by the Pfizer chemical facility, approximately 2 km northwest of the proposed site. This may have been the site of an early church and graveyard (CO087-049), once regarded as one of the principal early church sites in southwest Ireland (ibid.). Its exact location is uncertain; however, the RMP places it tentatively in the adjoining Ballybricken townland.

The graveyard at Barnahely (CO087-051001-), situated approximately 1.3 km west of the proposed development site, surrounds the site of the former Barnahely parish church (CO087-051002-), now no longer extant. A 1700 source describes the church as being “built with stone, lime and clay...about 18 foot long and 17 broad” (ibid. 259), offering a rare insight into vernacular church construction.

On Spike Island, the ecclesiastical site (CO087-065002-) has been identified by Hurley (1980) as Inispicht, an early Christian site. According to Power et al. (1994, 290), a 1625 map appears to depict the remains of a ruined church on the island, supporting this interpretation.

Although no archaeological evidence for Viking settlement has been uncovered in the Cork Harbour area to date, several local placenames - such as Dunkettle and Foaty - are of Scandinavian origin, suggesting Norse

presence or influence. The possibility of Viking occupation on Haulbowline Island has also been raised, though it remains speculative (Jefferies 1985, 14, 16).

14.3.5 High Medieval and Late Medieval Periods

The ruins of a tower house and part of a bawn wall (CO087-052001-, CO087-052003-) are the remaining structures of a 16th-century castle located in Barnahely, approximately 1.2 km southwest of the proposed development site. This site is listed as RPS 1260 in the CCDP (2022-2028). A sheela-na-gig (CO087-052004-), discovered at the castle in the 19th century, is now lost (Power et al. 1994). In addition, a two-storey, gable-ended structure was added to the castle in the 16th or 17th century. Castle Warren House, built in 1796, now stands on the same site.

Tower houses are generally dated to the 15th and 16th centuries and were erected as fortified residences by both Gaelic and Old English families. Although not castles in the earlier Anglo-Norman sense, they incorporated many defensive features, including battlements and slit windows, reflecting the turbulent social and political conditions of late medieval Ireland.

Archaeological investigations at Barnahely have revealed little evidence for occupation layers associated with the castle. In 1999, testing undertaken around the perimeter of the site during the erection of a security fence produced no finds or features of note (O'Donnell 1999). In 2004, further testing associated with the proposed re-routing of the N28 involved geophysical and topographic survey followed by the excavation of 63 test trenches. The area was found to be largely devoid of archaeological remains, with the exception of garden soils, drainage features, agricultural furrows, and a single possible prehistoric pit (Hanley 2004).

There is also a record of a possible castle in Shanbally townland (CO087-128---), to the west of the proposed development site. However, its precise location is unknown.

A sheela-na-gig (CO087-052004-) was discovered at Barnahely tower house (CO087-052001-) in the 19th century. Sheela-na-gigs are medieval stone carvings of naked female figures exposing their genitalia, likely intended to ward off evil. They are often found built into the walls of castles and churches. The stone is now lost (Power et al. 1994).

Shell middens are mounds or spreads of discarded shells, usually found along coastlines. While shell middens can date from many periods, including as early as the Mesolithic, the Cork Harbour middens are generally believed to be later, with some confirmed to date to the medieval period (ibid.).

There are eight recorded shell middens in the Study Area. There are four in Ringaskiddy: two (CO087-054--- and CO087-161---) located approximately 650m and 400m south of the proposed development site, respectively, and two (CO087-162--- and CO087-163---) at Paddy's Point, Gobby Beach, approximately 500m to the north of the site. Three middens are recorded in Curraghbinny, between 1.4 km and 2km south of the proposed development site. These are located along the shoreline at Lough Beg (CO087-055---) and on the northern slope of Curraghbinny Hill (CO087-056--- and CO087-057---). The eighth midden is in Barnahely (CO087-120---), approximately 1.3 km southwest of the proposed development site. These middens attest to long-standing exploitation of coastal resources in Cork Harbour. While some may be prehistoric, the tradition of shellfish collection and midden deposition continued into the early historic and medieval periods, reflecting continuity of subsistence practices along the estuarine shoreline.

The remains of Barnahely tower house, the possible castle at Shanbally, and the numerous shell middens highlight the later medieval continuing use of this area of the harbour into the later medieval period.

14.3.6 Post Medieval Period

There are several sites in the Study Area that date to the post medieval period. These include military structures associated with the defense of Cork harbour, as well as the site of a possible 17th century settlement. Other post-medieval features include country houses with associated structures, and a vernacular house.

14.3.6.1 Folklore and Tradition

Smuggling was widely practiced in Cork Harbour during the 18th century, with Spike Island being a favoured location (Sweeney 2007, 13). At high tide, small vessels could land unseen on the island, facilitating such activity (Fitzgerald 1992, 123). According to Fitzgerald (ibid.) both Spike and Haulbowline

Islands were renowned refuges for pirates. Fitzgerald also refers to a ‘Gold Rock’ at the eastern extremity of the island where smugglers were said to have buried a crock of gold along with the body of a black man whom they had slain. The existing rock on Gobby Beach is named as ‘Golden Rock’ on the 1st, 2nd and 3rd editions of the Ordnance Survey (OS) maps of the area.

During the 18th century smuggling was widely practiced in Cork harbour and Spike Island was a favoured location (Sweeney 2007, 13). At high water small vessels could land unseen on the island, facilitating this activity (Fitzgerald 1992, 123). According to Fitzgerald, both Spike and Haulbowline Islands were renowned refuges for pirates. He also refers to a ‘Gold Rock’ at the eastern extremity of the island where smugglers were said to have buried a crock of gold along with the body of a black man whom they had slain. There is a rock on Gobby Beach named as ‘Golden Rock’ on the 1st, 2nd and 3rd editions of the Ordnance Survey (OS) and perhaps this is ‘Gold Rock’.

14.3.6.1.1 Military Defences

From 1793 until the defeat of Napoleon in 1815 Europe experienced a period of turbulence and conflict (Kerrigan 1995, 150-6). Threats of invasion, along with French landings at Bantry Bay, Killala and Rutland Island, created fears of a successful French attack launched from Ireland. Alliances between the French and Irish insurgents such as Wolfe Tone and the United Irishmen led to concerns that a successful invasion of Ireland supported by local insurgents would provide a strong foothold for an invasion of Britain. The attempted insurrections in Ireland in 1798 and again in 1803 assured the presence of a considerable local force of Irish insurgents willing to take up arms against Britain. In addition a number of surveys of the condition of military defences across the country highlighted numerous weaknesses which could be exploited by invaders. The combination of these factors led to a large scale programme of defensive military works constructed in several phases focused on the coast and other strategic locations along the Shannon etc. (ibid.). These events coincided with Cork harbour becoming the “principal naval base and merchant shipping anchorage in Ireland” (ibid. 197-8) and led to the augmentation of existing defences in the harbour and the construction of new elements.

Early maps show that there were defensive fortifications on the east side of the harbour entrance in the townland of Carlislefort and on the west side in the townland of Crosshaven Hill. The earliest known defences at Carlislefort, 4km to the southeast, were constructed between 1552 and 1571 and they are thought to have been the earliest bastioned fort in Ireland (Power et al. 1994, Kerrigan, 1980). The earliest known defences at Crosshaven Hill, 2.5km to the southeast, were built by 1690 and were known as ‘James Battery’ (Power et al. 1994, ibid.).

The earlier fortifications at Carlislefort were replaced in 1798 by the current star-shaped fort named Carlisle Fort (CO087-058---), which in turn was renamed Dún an Dáibhisigh or Davis Fort when it was handed over to the Irish Government in 1938. At Crosshaven Hill, opposite Carlisle Fort, James Battery was redeveloped and brought back into service after 1793 under the new name Ram Head Battery (Kerrigan 1995, 191). Around 1798, the much larger Camden Fort (CO099-024---) was constructed, incorporating and superseding these earlier defensive works (Power et al. ibid.). In the 1830s Lewis records that the excavations undertaken during the construction of this new fort destroyed “a nearly perfect tumulus” (Cadogan 1998, 415). Camden Fort was handed over to the Irish Government in 1938 and renamed Dún Uí Mheachair (Fort Meagher). A major restoration programme, focused on the casemate block, was completed in early 2024, and the fort reopened to the public in April 2024 with new facilities including a café, gift shop, and guided tours.

There was also a fortification in Carrignafoy on the Great Island to the east of Cobh and approximately 3.5km to the northeast of the proposed development site, called Covefort (CO087-109). A star-shaped fortification was built here in the 1740s commanding views of the entrance to the harbour (Rynne 1993, 70) and was brought back into service during the Napoleonic wars (Kerrigan 1995, 187). Together, these successive batteries and forts illustrate the sustained strategic importance of Cork Harbour from the 16th century through the Napoleonic era, with each phase of construction adapting the defences to contemporary military needs.

Closer to the Ringaskiddy peninsula, there are fortifications on both Haulbowline Island (CO087-05903-) and Spike Island (CO087-065003-); both are approximately 1km north of the proposed development site. The bastioned fort on Haulbowline Island (CO087-059003-) dates from the early 17th century. Construction of the fort began in 1602, and the contemporary plans show “an irregular work based on a quadrangle with demi-bastions on the north, or cliff edge, and two bastions on the southern corners”; other structures

including a keep and gatehouse were added over the following decade (Gowen 1978, 246). The fort was abandoned in 1624 and remained out of use for most of the following two centuries (ibid.). In 1806 the island was divided between the Admiralty and the Board of Ordnance and a number of military buildings were erected including a barracks (CO087-059001-) and six large storehouses which were constructed at the naval victualling yard (Kerrigan 1995, 194). A Martello tower (CO087-059002-) was built between 1813 and 1815 on the western side of the island in the Ordnance grounds. The Martello tower and limestone warehouses and offices on Haulbowline are listed in the RPS as RPS 578 and RPS 670, respectively. The island and buildings are occupied by the Irish Naval Service, and the island is a naval base.

The fortification of Spike Island is later in date than that at Haulbowline. A battery was built there in 1779 but was abandoned by 1783. A more defensive star-shaped fortification, Westmoreland Fort, was built under the direction of Colonel Vallancey in 1791 (Power et al. ibid.). Writing in the 1830s, Lewis described it as “an extensive artillery barracks” with a military hospital and noted that “forts, bomb-proof, have been constructed to defend the entrance to the harbour” (Cadogan 1998, 411). Construction work appears to have proceeded slowly, the barracks was erected in 1806 and by 1811 an ordnance depot was established, the fort had reached its present form by 1842, although work continued until at least 1860 (Power et al. ibid.). Upon completion the star-shaped fort occupied over half the island and comprised “six bastions connected by ramparts and surrounded by a broad dry ditch” (Kerrigan 1995, 192). Spike Island was first used as a prison sometime in the 17th century when it was used to hold mainly women and children of the families of exiled Irish troops until they were transported as slaves to the West Indies (Report of the Inspection of Fort Mitchell Place of Detention by the Inspector of Prisons and Places of Detention 2003-2004: www.justice.ie). From 1847 until 1883 it was again used as a convict prison and convict labour was used for construction (Kerrigan 1995, 193). In 1985 it was opened as a civilian prison by the Department of Justice until its closure in 2004 (www.spikeislandcork.ie). There is a military cemetery on the south-western corner of Spike Island (CO087-065001-). This is marked as a (disused) Convicts’ Burial Ground on the 25 inch OS map of 1902. The fort is listed in the RPS as RPS 1272.

Rocky Island, located south of Haulbowline Island and north of Ringaskiddy, was the site chosen for the construction of two large magazines (CO087-105---) for use as a store for gunpowder for the naval base on Haulbowline Island. Rocky Island is approximately 700m north of the proposed development site. The magazine was built between 1808 and 1818 and consisted of two identical buildings each of three interconnecting vaulted brick built structures with flanking corridor (Power et al. ibid.). Kerrigan (ibid.) notes that a watch house and guard house were also built and were still under construction in 1814. The gunpowder for the mill was supplied from Ballincollig Gunpowder Mills. The eastern building was filled in during the construction of the bridge to Haulbowline in 1966 (Power et al. ibid.). The western magazine on Rocky Island has been conserved and is now in use as a crematorium. Excavations, carried out during the course of conservation works in 2006, recovered some disarticulate human remains at the site (Purcell, 2007).

One of the new defensive elements constructed in Cork harbour during the Napoleonic period was the Martello tower. Martello towers were independent gun towers capable of firing on enemy naval vessels while also sustaining an attack from shipborne ordnance (Rynne 1993, 74). They were named after a similar tower which stood against a sustained British naval attack in 1794 at Cape Mortella in Corsica. A number of Martello towers were built in Dublin Bay in 1804 while the majority of the British coastal Martello towers were built between 1805 and 1812. Five Martello towers were built in Cork harbour between the slightly later dates of 1813 and 1815 (ibid.). The Cork harbour towers were built at strategically important locations, three on the northern shore of the Great Island (Manning Tower at Marino Point, Belvelly and Rossleague), one on high ground on the northwestern side of Haulbowline Island and one at Ringaskiddy on the highest point of the Ringaskiddy peninsula. The Martello tower on Ringaskiddy (CO087-053---), overlooks the proposed development site lying 70m to its south. The towers were built to a fairly uniform design. They are generally oval or circular in plan and two storeys high (Power et al. ibid.). The Cork harbour towers are mainly elliptical in plan with walls 2.5m thick of cut limestone. They were generally accessed at first floor level via a moveable ladder (Rynne, ibid.). The Ringaskiddy tower is unusual being surrounded by a rock cut ditch and accessed by a small footbridge which may have replaced an original drawbridge (Rynne, ibid. and Kerrigan ibid.). They could accommodate a small garrison of men, and the flat roof was designed to support one or a pair of 32-pounder muzzle-loading guns mounted on traversing carriages (Power et al. ibid.). In 1859 the Royal Commission on the Defence of the United Kingdom noted that each of the Cork harbour towers mounted just one gun (Kerrigan, ibid.). The three towers on the northern side of the Great Island were

located to defend the approaches to Cork harbour from an attack from the mainland in the event of an enemy landing elsewhere and assaulting the harbour from inland. The tower on Haulbowline had a clear field of fire over parts of the harbour not visible from Fort Westmorland on Spike Island or targets not within range of it. The Ringaskiddy tower was located to provide for "some defence of the high ground on the western side of the harbour, with a field of fire over the harbour to the east and to the north-west, the area west of Haulbowline Island" (Kerrigan, *ibid.*).

The Martello tower at Ringaskiddy (CO087-053--- and RPS 575) is the largest of the Cork harbour towers and is in IDA ownership. It is the only one of the Cork harbour towers to be enclosed by a ditch. A walled circular enclosure, 100m in diameter, and marked by 4 ordnance stones, encloses the tower and ditch. The actual tower stands 70m to the south of the southern perimeter of the proposed development site. The walled enclosure is 30m south of the southern boundary of the proposed development site and overlooks it. The 1st (1841), 2nd (1902) and 3rd (1934) edition OS maps for the area all show a path leading north-east from the tower across the proposed development site to Gobby Beach (Figures 14.2, 14.3 and 14.4). The path shown on the 1st edition map leads to an 'Ordnance Stone' at Gobby Beach, and the path appears to have been laid out at the same time as the construction of the Martello tower. The Martello tower on Haulbowline (CO087-059002- and RPS 00578), is approximately 1.3km to the north of the proposed development site and is in the ownership of the Irish Naval Service.

All of the Martello towers in Cork harbour are located on ground marked as Ordnance Ground and the Ringaskiddy, Belvelly and Rossleague towers are defined by Ordnance Stones. The Ringaskiddy Martello tower is the only tower in Cork harbour to have a path marked by ordnance stones. There is no legal registered right-of-way along this path.

Although depicted on historic maps, there is no visible surface evidence for it within the proposed development site, most likely due to past soil removal. Its former line is now heavily overgrown with dense vegetation, rendering it virtually impenetrable. The path extending from the tower to the beach, across the proposed development site, forms part of the curtilage of the Martello tower.

14.3.6.1.2 Demesne Features

The country house and associated demesne was a prominent feature of the Irish landscape during the 18th and 19th centuries. At one time, demesnes occupied nearly 6% of the country (Aalen, Whelan & Stout, 2000, 197). The typical demesne consisting of the big house with associated buildings, ornamental grounds, landscaped gardens and woodlands, often enclosed by high walls and belts of trees still remains the dominant man-made feature of the post medieval landscape in Ireland (Reeves-Smith, 1997, 552). The first edition OS maps, drawn up in the 1840s, depict the features of these demesnes in great detail; subsequent maps generally depict their contraction back into the landscape. Country houses and their demesnes had many associated features such as demesne walls, walled gardens, gate lodges, ornamental towers, tree-lined avenues, tree rings, deer parks, ice houses and lime kilns.

A former country house was located in Barnahely townland (CO087-111---), approximately 1.1 km west of the proposed development site. It appears on the OS maps as Prospect Villa and was described as "two-storey, weather slated, with hipped roof; of late eighteenth-century appearance" (Power et al. 1994, 260). The entrance front was noted as six bays wide with a central round-headed doorway framed by a classical surround and broken pediment (*ibid.*). The house was demolished in 1981 and the site now lies within an industrial premises (ASI File, CO087-111). The estate entrance was flanked by a pair of single-storey cut-stone gate lodges (CO087-050002), apparently hexagonal in plan. These were described as overgrown but surviving in 1986 (ASI file, CO087-050002), although they have since been demolished. Historic sources record successive occupants. Lewis (1837) listed Prospect Villa as the seat of Lieutenant-Colonel Burke. At the time of Griffith's Valuation, Thomas Burke was leasing the property from Mary and Catherine Rogers (Griffith's Valuation, Barnahely townland). The house was subsequently included in the sale of the Rogers estate in 1862 (Landed Estates Database, NUI Galway). By 1943, the Irish Tourist Association survey noted G. Hosford as resident (Irish Tourist Association Topographical Files, 1943, Cork, Barnahely).

A belvedere is recorded in the RMP within the townland of Barnahely, as part of the Castle Warren demesne. Coleman (1915) describes it as "a curious little turret built to cover in a former well." It is not detailed in the Archaeological Inventory of County Cork, Vol. 2: East and South Cork (Power et al. 1994), and the files of the Archaeological Survey of Ireland state that the tower has since been demolished.

14.3.6.1.3 Vernacular Features

There is a single story vernacular house, formerly thatched and now with a corrugated iron roof, in Barnahely townland (CO087-060---) approximately 1.2 km southwest of the proposed development site. The 1st edition of the OS map for the area indicates that there was a small settlement at this location. A settlement (CO087-143) is shown in the area of ‘Bernehely’ Barnahely church in Barnahely on the Down Survey Barony maps (1654-9). The house is the only surviving structural element of this former settlement.

14.3.6.1.4 Protected Structures

Sixteen structures within the 2km Study Area are listed in the RPS. These are the Martello tower at Ringaskiddy (RPS No. 575) and Haulbowline (RPS No. 578), a range of limestone warehouses and offices on Haulbowline (RPS No. 670), the Castlewarren strong house at Barnahely (RPS No. 1260) and twelve structures on Spike Island Westmoreland Fort (Fort Mitchell) (RPS No. 1272), the prison jail (RPS No. 1422), three barracks (west, south and east) (RPS No. 1423, RPS No. 1424, RPS No.1426), the battery or gun room (RPS No. 1425), a store or warehouse (RPS No. 1427), a former barracks including chapel (RPS No. 1428), two officers houses (RPS No. 1429, RPS No. 1430), Bleak House the admirals house (RPS No.1431), and the graveyard or cemetery (RPS No.1432). In addition to this, the three other Martello towers in Cork harbour, which lie outside the 2km study, area are included in the record. These are Rosslague (RPS No. 512), Belvelly (RPS No. 505) and Manning Tower (also in Belvelly) (RPS No. 1366). The Cork County Development Plan (2022-2028) also lists Architectural Conservation Areas. These areas have been designated to allow for the conservation and enhancement of the built heritage in areas of special character. Haulbowline Island has been designated an Architectural Conservation Area – ”Haulbowline Conservation Area”.

The NIAH for East Cork lists the additional buildings to those included in the RPS in the study area. Four buildings in Ringaskiddy townland are included in the inventory: the Martello tower (Reg. No. 20987047), Ring House (Reg. No. 20987046), Rock Cottage (Reg. No. 20987045) and Ringaskiddy Oratory (Reg. No. 20987044). All are designated of Regional importance. A total of twenty-seven building and features are listed in the Inventory on Haulbowline Island. These range from the Martello tower (Reg. No. 20908769), several stores or warehouses (Reg. Nos. 20908745, 20908746, 20908747, 20908748, 20908749, 20908750, 20908754 and 20908768), officer’s houses (Reg. Nos. 20908755, 20908756, 20908760 and 20908762), offices (Reg. Nos. 20908751, 20908763, 20908766 and 20908770), boathouses (Reg. Nos. 20908758 and 20908759), a church (Reg. No. 20908752), a miscellaneous building (Reg. No 20908753), a post box (Reg. No. 20908761), an RIC Barracks (Reg. No. 20908764), an officers mess (Reg. No. 20908765), a fortification (Reg. No. 20908767), a harbour or dock (Reg. No. 20908775) and a workshop (Reg. No. 20908776). All twenty-seven are designated of Regional importance. A total of twelve buildings are included in the Inventory for Spike Island, all of which are also included in the RPS. These demonstrate the military and penal history of the island and include officers’ houses (Reg. Nos. 20908777, 20908779 and 20908780), barracks (Reg. Nos. 20908782, 20908785, 20908787 and 20908788), a store or warehouse (Reg. No. 20908781), a graveyard (Reg. No. 20908783), a prison (Reg. No. 20908784), a battery (Reg. No. 20908786) and a fortification (Reg. No. 20908789). The fortification is Westmorland Fort a star-shaped fort designated to be of National importance, while all of the other buildings are designated of Regional importance. A total of twenty-two buildings are included in the inventory for Curraghbinny. All are located outside the 2km study area. The other three Martello towers in Cork harbour are also included in the Inventory and they too, are outside the study area. There are two towers in Belvelly (Reg. No. 20907592 Manning Tower and 20907579), both of which are rated to be of National importance in the Inventory, and the tower in Rosslague (Reg. No. 20907582) is rated as of Regional importance.

The NIAH Garden Survey for County Cork includes two gardens shown on the first edition OS 6” map which are within the study area, these are Castle Warren and Prospect Villa, both in Barnahely. Both no longer exist.

14.3.6.1.5 Cartographic Sources

A small number of later medieval and post medieval maps of the harbour were consulted and these are provided in **Volume 3**. The earliest of these is Candell’s map of Cork harbour (**Figure 14.6**), dated to 1587, which shows the Ringaskiddy peninsula and names the castle located on the peninsula as Berneyele. This is likely to be Barnahely castle. No features are either depicted or named in the area of the proposed development site.

The Down Survey map of 1654-1659 (**Figure 14.7**) names Ringaskiddy (Reniskydy) and Barnahely (Bernehery parish) immediately to the west. There are two structures shown in Barnahely. One appears to be a tower and is likely to be a depiction of the tower house and bawn (CO087-05201-) still extant in Barnahely townland today. Haulbowline (Howbolin fort) is also indicated. No features are either depicted or named in Ringaskiddy.

The Taylor and Skinner maps of the Roads of Ireland, which date to 1778, were consulted but do not extend south as far as the area of the proposed development site.

Cartographic sources from the nineteenth and early twentieth century show the area of the development site in agricultural use. The 1st edition of the OS map (1841) shows up to 32 small fields in the area of the proposed development site (**Figure 14.3**). These are mainly in the upper, southern part of the site.

An east-west line of narrow fields along the central part of the area of the proposed development site are shown as poor ground (this designation is retained on the 2nd edition map.). The Ringaskiddy Martello tower (CO087-053---) is clearly indicated, lying approximately 70m to the south of the southern boundary of the proposed development site. The ditched enclosure around the base of the tower is depicted. A walled circular area around the tower is described as ‘Ordnance Ground.’ A concentric dotted line outside the area defined as the ‘Ordnance Ground’ may be a path around its edge. There are seven ‘ordnance stones’ marked around the perimeter of the ordnance ground. Two stones mark the start of a path that leads to Gobby Beach. This path is clearly marked extending north-eastwards from the ordnance ground surrounding the Martello tower. The path extends across much of the area of the proposed development site and terminates at Gobby Beach on the eastern site boundary where there are two more Ordnance Stones at each side of the terminating point of the path. A second path or lane to the Martello tower is shown extending south from Rock Village (the village is not named but is referenced by Sweeney, 2007- see above). The path turns due east for some distance before turning south towards the tower. The path extends as far as the field boundary to the north of the Martello tower, terminating at a gap in the boundary, and was probably the main access to the tower from Rock Village. The road east from Ringaskiddy Village only extended as far as Rock Village and this is the only road access to the tower from Ringaskiddy. The northern boundary of the area of the proposed development site is the southern shore of Cork harbour at this point (**Figure 14.3**).

By the time of the 2nd edition of the OS map (1902) the fields in the area of the proposed development site have been consolidated into nine larger field (**Figure 14.4**). The road from Ringaskiddy is shown extending east as far as Gobby Beach and this road defines the northern boundary of the area of the proposed development site. The path from the Martello tower to Gobby Beach is indicated only as a dotted line and the path or lane to Rock Village (no longer shown on the map) is also shown as a dotted line along its southern section, although its east-west leg is clearly shown extending between two fields (**Figure 14.4**).

There are very few changes to the area of the proposed development site on the third edition map of 1934 (**Figure 14.5**). There are some minor changes to fields, through the removal of a small number of boundaries. The path from the Martello tower to Gobby Beach is indicated as it is on the 1902 map. The path to the former area of Rock village is no longer defined along its southern section, although its east-west section is still shown, and there is a new path extending diagonally across this field which continues to the south as a dotted line to the Martello tower.

An examination of online aerial photographs (OSI 1995, 1996-2000, 2001-2005, 2006-2012, 2011-2013, 2013-2018 and Google Maps 2025) of the proposed development site did not indicate any new features of archaeological potential. The partial line of a path on the 2006-2012 photographs (**Plate 2; Fig. 14.9**) lies in the approximate area of part of the original path that led from the Martello tower to Gobby Beach. This is not discernible on any of the other photographs and was not apparent during field walking. `

The Martello tower at Ringaskiddy is depicted in several historic paintings of Cork’s lower harbour. One such painting, by R.P. Atkinson and dating to circa 1870, prominently features the Martello tower positioned on the hill overlooking Ringaskiddy (**Plate 3; Figure 14.10**). In most instances, including the work by Atkinson, the tower appears in the background and is not depicted in architectural detail. No additional features of cultural heritage interest are illustrated in these artworks.

14.3.7 Summary of Archaeological Investigations (Further details given in Appendix 14.2)

An intertidal and metal detector survey were carried out on the eastern site boundary along the foreshore at Gobby Beach in 2015 (Purcell, 2015) following correspondence with the Underwater Archaeology Unit of the NMS. The surveys were carried out in May 2015 under licence numbers 15D0046 and 15R0050 to assess the archaeological potential of the foreshore in advance of proposed beach nourishment works which form part of the development. One item of archaeological significance, a small cannon ball measuring 62mm diameter, was found during the metal detector survey. No features of archaeological potential were noted and no other archaeological objects were found. A number of modern metal objects were noted. No archaeological features or finds were visible in the cliff face at the west of the beach. In 2010 an intertidal and metal detector survey of the same foreshore was undertaken in response to a request for further information from An Bord Pleanála (Purcell, 2010). This followed an oral hearing (in 2009) on the planning application for a waste-to-energy facility and waste transfer station at the site (submitted in 2008). No features of archaeological significance were identified along the eastern boundary of the proposed development site. A number of modern features were identified along the foreshore to the north of the area where remedial coastal protection works were considered.

In 2006, an underwater archaeological survey of a portion of the West Channel of Cork harbour was undertaken as well as an intertidal survey at Gobby Beach and Spike Island (Boland, 2006). These investigations were undertaken as part of a proposal to construct a bridge to Spike Island from the public car park at Gobby Beach. Two features (a pipeline and timbers) were identified on the foreshore at Gobby Beach to the north of the eastern boundary to the proposed development site. Both were identified again during the intertidal and metal detector survey in 2010 to the north of the area being considered for coastal protection works. The underwater survey comprised a bathymetric survey, a magnetometer survey and a side scan survey of the sea bed and. While a large number of anomalies were revealed all were submerged in the channel several hundred metres from the eastern site boundary.

A number of archaeological investigations have been undertaken in the study area, some of which have been discussed above. Archaeological testing of an elongated mound was carried out on the site in 2001 in the high southern part of the site during a pre-planning assessment (Lane, 2001:230). This was determined to be of no archaeological significance and was instead the result of land improvement works. Monitoring of the construction of a jetty and pontoon as part of the construction of the National Maritime College to the north, also in Ringaskiddy, was carried out in 2003 (Gleeson, 2003:336). No features or finds of archaeological significance were revealed. An underwater assessment was undertaken at the ADM jetty and Oysterbank in Ringaskiddy in 2006 on 33 no. sea-bed anomalies identified by side-scan sonar survey in advance of development. None of the anomalies were of archaeological significance (Bangerter, 2006:283). As mentioned above, disarticulated human remains were identified during the course of an excavation as a component of conservation work on the former magazine on Rocky Island in 2006 (Purcell, 2007). An intertidal and metal detector survey was carried out on an area of the northwestern foreshore of the island at that time and no features or finds of archaeological significance were revealed (Purcell, 2006).

Archaeological investigations were carried out in 1996 in Barnahely in advance of the construction of the Merfin factory (O'Donovan, 1996:038). One complete millstone and two broken examples were found on the site. Archaeological testing at Castlewarren, Barnahely tower house and bawn (CO087-052001-, CO087-052003-) in 1999 revealed no features relating to the medieval occupation of the site (O'Donnell, 1999:079). Further archaeological testing was undertaken in the vicinity of the tower house in 2004 in advance of a possible road re-routing project (Hanley, 2004:0204). A total of sixty-three test trenches were excavated and it was concluded that the area was largely devoid of archaeological remains. A number of garden, drainage and agriculturally derived features were revealed as well as one possible prehistoric pit.

Archaeological testing in 2004 on a land bank in Barnahely revealed no features or finds of archaeological significance (Cleary, 2004:0202). Archaeological monitoring was undertaken in three areas within the naval base at Haulbowline Island in 2004. No features or finds of archaeological significance were revealed (Gleeson 2004:0279). In 2012, an underwater assessment of a stone causeway on Haulbowline Island indicated it as being encased in stonework (Brady, 2012:095). In 2004, archaeological testing was undertaken in the vicinity of a ringfort in Barnahely (CO087-048) following a geophysical survey. A levelled fulacht fiadh (CO087-145) and two possible corn drying kilns (CO087-146 and CO087-156) were identified in the surrounding ground (Cummins, 2004:0203). In 2012, archaeological testing of the same ringfort was undertaken. Three trenches were hand excavated across the ringfort (CO087-048). The bank and ditch were investigated and a number of internal features were revealed including a possible souterrain (Cummins,

2012:096). Two ringforts were excavated in the adjoining townland of Raheens (CO087-046---; CO087-047---) during the construction of the Sandoz factory in 1989. Three souterrains (CO087-102---; CO087-103---; CO087-104---) were exposed during the excavation of one of the ringforts (CO087-046---) (Power et al. 1994, 157-158).

In 1992, archaeological testing was carried out in Ballintaggart in advance of further development at the Pfizer facility. Nothing of archaeological significance was revealed (Gowen, 1992). In 2007, archaeological testing was carried out in Ringaskiddy adjacent to the Pfizer facility on a circular anomaly identified on an aerial photograph (Moore, 2007). Nothing of archaeological significance was revealed. Archaeological monitoring of the subsequent development found nothing of archaeological significance. Archaeological monitoring along the southern foreshore at Lough Beg, Curraghbinny during coastal protection works revealed nothing of archaeological significance (Purcell, 2011; 098).

More recent excavations for the M28 Cork to Ringaskiddy Project have revealed prehistoric, medieval and post-medieval activity in the Study Area. At Loughbeg 1 (Quilty, 2025:217), a cremation pit of probable prehistoric date was uncovered alongside medieval pits, post-holes, and later agricultural features. At Loughbeg 2 (Hourihan, 2025:219), Bronze Age pottery, lithics, and rubbing stones were recovered from pits and a charcoal spread, with later evidence for a post-medieval laneway. At Loughbeg 3 (Quilty, 2025:218), a trough, burnt spread and stake-holes were identified, interpreted as prehistoric in date.

Archaeological investigations at Barnahely have revealed a broad sequence of activity ranging from prehistory to the 19th century. Pipeline and WWTP testing in 2019 (Coen, 2019:598) revealed no archaeological features. More extensive excavations for the M28 scheme identified multi-phase sites. At Barnahely 4 (Gooney, 2025:214), Neolithic–Bronze Age cultivation and possible Iron Age/medieval metalworking were recorded, with charred barley and emmer wheat suggesting prehistoric farming. At Barnahely 3 (Gooney, 2025:215), evidence included a prehistoric burnt mound, pits, post-holes and troughs, truncated by later drainage, as well as an early medieval house, souterrain, and associated features; finds included a rotary quern and bone comb. At Barnahely 5 (Quilty, 2025:216), remains of a trackway and a small rectangular dwelling were dated to the early 19th century, associated with the Warren estate and recorded in Griffith's Valuations.