

Appendix 14.3

Archaeology Architecture &
Cultural Heritage - Local
Cultural Heritage of Study
Area

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The proposed development site is located approximately 15km to the south-east of Cork City, in the townland of Ringaskiddy on the Ringaskiddy Peninsula in Cork's lower harbour. Ringaskiddy townland is in the Parish of Barnahely and the Barony of Kerrycurrihy.

The nearest extant settlement to the proposed development site is the village of Ringaskiddy, located to the west of the site. Lewis (Cadogan, 1998) describes early 19th century Ringaskiddy as "a small village on the shore... resorted to in summer for sea-bathing". He also refers to the building of yachts and boats at Ringaskiddy and the fishing of yawls in the winter season. He describes the land of Barnahely parish as good. In the 19th century, a village, known as Rock village, was located to the north-east of and adjacent to Rock Cottage, approximately 200m north-west of the proposed development site (Sweeney, 2007). The 1st edition (1841) of the Ordnance Survey (OS) map of the area shows a number of houses in the area (Figure 14.2). Griffith's valuation of 1851 named the residents of various houses in the village. By 1855, 90 percent of the residents had disappeared. Local tradition suggests that a fire in one of the mud-walled thatched cottages in the village spread to nearby houses, destroying them (Sweeney, 2007).

Reclamation in 1979-80 of the area to the north of the proposed development site has altered the landscape in this area. The proposed development site was once adjacent to the shoreline. The road from Ringaskiddy only extended east as far as the Rock village in the mid-19th century. Three offshore islands, to the north of Ringaskiddy and Rock villages, were incorporated into the large tract of land which was reclaimed in 1979-80.

The following is a chronological account of the cultural heritage of the study area. It provides an archaeological and historical overview of human activity in the study area from the prehistoric period to modern times. The archaeological timescale can be divided into two major periods, each with a number of sub-sections:

- The prehistoric period: Mesolithic - (circa 7000 to 4000 BC); Neolithic - (circa 4000 to 2400 BC); Bronze Age (circa 2400 to 500 BC) – Iron Age (circa 500 BC to AD 400)
- The medieval period: Early medieval 5th – 12th century, high medieval 12th century – circa 1400, late medieval circa 1400 – 16th century.

The pace of landscape change in Ireland accelerated in the second half of the 20th century, and many archaeological sites have been levelled by activities associated with modern development, such as housing and infrastructural improvements, and by the intensification in agricultural and industrial practises. Prior to this, the landscape changed at a slower pace, but, despite the relatively slow pace of this change, significant alterations to the landscape are in evidence since the earlier human occupation of the island. These changes and alterations to the landscape mean that the present-day archaeological landscape is not fully

representative of the human occupation of the island of Ireland, which has spanned circa nine thousand years. Archaeological sites survive today as upstanding structures, earthwork monuments or subsurface remains.

There are no recorded archaeological monuments listed in the RMP within the site of the proposed development. A recorded Martello tower (CO087-053---) stands 70m to the south of the proposed development site. Part of the proposed development site along the southern perimeter is located within the Zone of Archaeological Potential or zone of notification for this Martello tower. The Martello tower is listed as RPS 00575 in the Record of Protected Structures in the Cork County Development Plan, 2014. A path crossing part of the area of the proposed development site is associated with the tower, and is part of the curtilage of the Protected Structure. There are 50 no. recorded archaeological sites listed in the RMP and SMR database for the 2km study area (Figure 14.1 and Table 14.1). Of these 50 sites, 7 no. have no known locations. Descriptions of most of these sites are included in the Archaeological Inventory of County Cork and these are provided in Appendix 14 .4.

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

RMP	Site Type	Townland
CO087-053	Martello tower	Ringaskiddy
CO099-023	Cairn	Curraghbinny
CO087-045	Standing stone	Coolmore
CO087-096	Standing stone	Raheens (unlocated)
CO099-074	Fulacht fiadh	Coolmore (unlocated)
CO099-105	Possible Fulacht fiadh	Curraghbinny
CO099-023	Cairn	Curraghbinny
CO087-145	Fulacht fiadh	Barnahely
CO087-155	Enclosure	Barnahely
CO087-132	Burnt pit	Barnahely
CO087-148	Excavation Miscellaneous	Barnahely
CO087-147	Excavation Miscellaneous	Barnahely
CO087-046	Ringfort	Raheens
CO087-047	Ringfort	Raheens
CO087-102	Souterrain	Raheens
CO087-103	Souterrain	Raheens
CO087-104	Souterrain	Raheens
CO087-048	Ringfort	Barnahely
CO087-146	Kiln – corn drying	Barnahely
CO087-156	Kiln – corn drying	Barnahely
CO087-044	Souterrain	Coolmore
CO087-068001-	Possible ringfort	Ballybricken (unlocated)
CO087-068002-	Possible souterrain	Ballybricken (unlocated)
CO087-101	Enclosure	Coolmore

RMP	Site Type	Townland
CO087-061	Ecclesiastical enclosure	Ballintaggart
CO087-049	Possible church	Ballintaggart (unlocated)
CO087-051001-	Graveyard	Barnahely
CO087-051002-	Church	Barnahely
CO087-065002-	Ecclesiastical site	Spike Island
CO087-052001-	Tower house	Barnahely
CO087-052002-	Ornamental tower	Barnahely
CO087-052003	Bawn	Barnahely
CO087-128	Castle – unclassified	Shanbally (unlocated)
CO087-052004-	Sheela-na-Gig	Barnahely
CO087-060	Vernacular house	Barnahely
CO087-054	Midden	Ringaskiddy
CO087-161	Midden	Ringaskiddy
CO087-055	Midden	Curraghbinny
CO087-056	Midden	Curraghbinny
CO087-057	Midden	Curraghbinny
CO087-120	Midden	Barnahely
CO087-059003-	Bastioned fort	Haulbowline Island
CO087-065003-	Fortification	Spike Island
CO087-059002-	Martello tower	Haulbowline Island
CO087-059001-	Barracks	Haulbowline Island
CO087-105	Magazine	Rocky Island
CO087-065001-	Burial ground	Spike Island
CO087-111	Country house	Barnahely
CO087-050002-	Gate lodge	Barnahely
CO087-143	Settlement Cluster	Barnahely (unlocated)

14.3.1. Mesolithic and Neolithic

The earliest evidence for human colonisation and settlement in Ireland can be dated to 7000 BC, the Mesolithic Period. The people of this era were hunter-gatherers, entirely dependent on what food could be obtained through hunting and gathering, amongst other things, edible plants and shellfish. They used flint and other hard stone to manufacture their tools, and their settlements can often be identified by scatters of these discarded stone tools in ploughed fields. The transition of these early settlers from hunting and gathering to farming in the Neolithic Period was revolutionary. It led to more permanent settlements and substantial houses, the construction of monumental megalithic structures for the dead, and a more complex and structured social hierarchy. A steady food supply meant that people had more time to increase their toolkit and domestic equipment, and to develop specialised crafts.

There are no known archaeological sites dating to the Mesolithic Period within the Study Area. Recent investigations in 2017 and 2018 in a green field site approximately 100m to the south in lands adjoining the Martello tower have identified possible Early Neolithic pottery as well as later prehistoric activity (Tony Miller, pers comm). Further investigations may be undertaken in due course.

Within the broader area of Cork harbour, there are a number of Neolithic sites, including a simple megalithic in Rostellan (CO088-101) on the modern shoreline, approximately 8.5km to the northeast. Within the inner reaches of the harbour, Neolithic settlement activity was discovered during development at Ballinure on the Mahon peninsula (CO074-130), approximately 9km to the northwest (Purcell 2005) and at Foaty on Fota Island (CO075-077), approximately 7km to the north (Rutter and O'Connell 1992 in Power et al. 1994, 365).

14.3.2. Bronze Age and Iron Age

The Irish Bronze Age is characterised by the introduction of metallurgy to the Island of Ireland. With this technological change came changes in material culture, such as pottery styles and burial traditions. The construction of megalithic monuments for the dead came to an end, although many of these monuments continued to be used as burial places for some time. The predominant burial rite in the Bronze Age was either cremation or inhumation in simple subterranean pits or stone-lined cists with no above ground expression.

During this time, the population increased. The transition from bronze to iron-working marked the onset of the Iron Age. Iron-working was a significant technological innovation that had a major impact on agricultural efficiency and productivity, thus having an effect on society as a whole. During this period, the La Tene style of art, practiced by the Celtic peoples of Europe, was adopted in Ireland. Although there are few sites that date definitely to the Iron Age in the study area, a number of the sites discussed below may be of Bronze Age or Iron Age date.

The Bronze Age is well represented within the study area. The recent excavations in land adjoining the Martello tower approximately 100m to the south have added to this picture. Late Bronze Age deposits possibly associated with settlement activity were revealed (Tony Miller pers comm.) Further analysis of this material will be required to confirm the chronology of these features. In the broader study area several sites, including a cairn, standing stones, fulachta fiadh, pits and a settlement cluster have been identified which date to the Bronze Age. A number of these are new sites that were located during recent archaeological investigations in the study area.

The term tumulus or cairn usually refers to a mound of stone or earth that covers either one or more burials. The tradition of the construction of mounds of earth or stone over burial sites can date to the Neolithic period, but more commonly goes back to the Bronze Age. The tumulus or cairn in Curraghbinny (CO099-023---) is situated in woodland on top of Curraghbinny hill, approximately 2km to the south-east of the proposed development site. O'Riordán's excavation in 1932 (Power et al. 1994, 52) exposed a cairn of stones with an enclosing dry-stone wall and some fragmentary cremated human remains.

Standing stones are a common feature of the Irish countryside and had varied functions, from prehistoric burial markers, to boundary markers along ancient routeways. They are generally thought to date from the Bronze Age, but may also be later. There is one standing stone within the study area, in Coolmore townland (CO087-045---) approximately 2km to the south-west of the proposed development site. The Archaeological Inventory (ibid. 22) lists a standing stone (CO087-096---) in Raheens townland to the south-west of the proposed development site, but this remains unlocated.

Fulachta fiadh are the most common prehistoric site type in the country, and have generally been interpreted as cooking places, typically dating from the Bronze Age. Large quantities of water could be heated at these sites which may also have been used for brewing, dyeing fabric or as sweat houses. They are recognisable as horseshoe-shaped mounds of heat-shattered stones, often located near a stream or in waterlogged areas with a centrally placed water filled trough often lined with wood, wattle or stone. Stones heated in a nearby fire were immersed in the water which could be heated to boiling point. The stones often broke or shattered during this process. After each cooking session, the stones were removed from the trough and thrown to the side, finally forming the characteristic mound of stones. Regular ploughing of the mound often reduces it to a spread of blackened soil and heat-shattered stones extending across a field. There is one fulacht fiadh in Coolmore (CO099-074---) townland (the location of which is unknown), and a possible fulacht fiadh in Curraghbinny (CO099-105---) approximately 2km south of the proposed development site. A third fulacht fiadh (CO087-145---) was located during archaeological testing of a site in Barnahely townland in 2004 (Cummins 2004).

An enclosure (CO087-155---), which probably represents the remains of a Bronze Age or Iron Age settlement site, was identified during investigations in Barnahely (Rossaveare and Rossaveare, 2004 and Ronan et al. 2009, 123) approximately 1km west of the proposed development site. Two pits (CO087-132---) (O'Donovan, 2004 and Ronan et al. 2009, 57) (CO087-148---) (Hanley, 2004 and Ronan et al. 2009, 357) of indeterminate date were exposed during separate archaeological investigations in Barnahely townland. A third site that revealed a pit and a stakehole (CO087-147) was located nearby also in Barnahely townland (Ronan et al. 2009, 357). All were located between 1.2 and 1.4km west of the proposed development site and they may be of prehistoric date.

14.3.3. Early Medieval Period

This period in Ireland is characterised by the influx and influence of Christianity, which had become widely established by the 6th century AD. A distinctive feature of the development of early Irish Christianity was the important role played by monasticism. From their monasteries, Irish monks set out as pilgrims preaching the gospel and establishing new communities across the continent. Monasteries became a focal point for the lay communities spread throughout the countryside in settlements such as ringforts/raths, crannogs and simple huts.

Ringforts, also known by the names rath, lios, cathair or caiseal/cashel, are enclosed farmsteads dating to this period and are one of the most characteristic monuments of the Irish countryside. They consist of circular or sub-circular areas enclosed by an earthen bank, itself made up of material thrown up from a concentric fosse outside the bank, generally between 25m and 50m diameter. During excavation of ringforts, the sub-surface remains of circular dwelling houses and associated outbuildings are frequently revealed. Some ringforts have associated souterrains, or man-made underground tunnels leading to a chamber or series of chambers; these were defensive elements of the settlement. Occasionally, evidence of specialised craft working is found, indicating the possibility of higher status sites. The main phase of construction and occupation of these sites dates from the beginning of the 7th century AD to the end of the 9th century. Ringforts would have been occupied by the elite and their families of the time while others of lower social status lived in small huts outside the ringfort.

Cattle dominated the agricultural economy of the period, with dairying being the primary pursuit. Tillage was secondary, the most important crops being wheat, oats, barley, rye and flax. In the absence of money (coinage did not become widespread until the medieval period), cattle were the indicator of status and were the currency for payment of fines, rent, tributes and gifts. Land was valued on the basis of the number of cows it could support (Feehan, 2003, 55). Cattle-raiding was widespread, and the ringfort provided protection for the animals at night when they would have been kept within its defensive palisade (ibid. 62).

Several ringforts have been recorded in the study area, and some of these have associated souterrains. There are two ringforts (CO087-046---; CO087-047---) in Raheens townland approximately 2km to the west of the proposed development site, both of which were excavated during the construction of the Sandoz factory. Three souterrains (CO087-102---; CO087-103---; CO087-104---) were exposed during the excavation in 1989 of one of the ringforts (CO087-046---) (Power et al. 1994, 157-158). There is a ringfort in Barnahely townland (CO087-048---) 1.7km to the west on which archaeological investigations were recently undertaken; a possible souterrain or kiln along with a quern stone were found within the ringfort (Cummins 2012). Two corn drying kilns (CO087-146 and CO087-156---) were identified during earlier archaeological investigations adjacent to the ringfort (CO087-048---) (Cummins 2004). Corn drying kilns date from the early medieval period onwards and are sometimes found in close association with ringforts. A possible collapsed souterrain (CO087-044---) was noted in ploughed soil in Coolmore townland approximately 2km to the southwest. The location of a ringfort (CO087-06801-) and possible souterrain (CO087-06802-) are noted in Ballybricken townland, but the precise location of the monument is unknown.

The term enclosure is applied to archaeological sites that cannot be definitively classified. Very often these enclosures are ringforts or cashels that fall outside the accepted size range for these monuments (i.e. less than 20m or more than 60m in diameter). Sometimes they can be of indeterminate shape and may date to as early as the Bronze Age or as recently as the last century, when they were used as sheep shelters. One such circular enclosure has been identified within the study area from an aerial photograph. A possible small circular enclosure (CO087-101---) in Coolmore approximately 2km south-west of the proposed development site is defined by a low bank with narrow external and internal fosses. Short fragments of a low bank to the west and south-west of the enclosure seem to indicate small and irregular fields.

There are several church or possible church sites within the study area. Some may have early medieval origins, but documentary and upstanding remains suggest later dates for some of these sites. An early ecclesiastical enclosure (CO087-061---) may have stood in Ballintaggart townland on the site of the Pfizer chemical facility approximately 2km to the northwest. This may also have been the site of an early church and graveyard (CO087-049) that may have been one of the 'principle sites' of an early church in southwest Ireland (Power et al. 1994, 168). Its precise location is unknown, although a possible church (CO087-049) is shown in the adjoining Ballybricken townland on the RMP map of 1998. The graveyard at Barnahely, (CO087-051001-) approximately 1.3km west of the proposed development site, encloses the site of the former parish church of Barnahely (CO087-051002-) of which there is now no visible trace. Documentary sources describe the church in 1700 as "built with stone, lime and clay...about 18 foot long and 17 broad" (ibid. 259).

Hurley describes the ecclesiastical site on Spike Island (CO087-065002-) as “identifiable with the early ecclesiastical site of Inispicht”. A map of 1625 appears to show the remains of a ruined church on the island (1980 quoted in Power et al. 1994, 290).

Although, there is no evidence at present for Viking settlement around the harbour, a number of place names such as Dunkettle and Foaty reflect Scandinavian influence and the presence of Viking occupation of Haulbowline is mentioned as a possibility (Jefferies 1985, 14 and 16).

14.3.4. High Medieval and Late Medieval Periods

There are a small number of sites dating to the medieval period within the study area. The ruins of a tower house and part of a bawn wall (CO087-052001-, CO087-052003-) are all that remain of a castle reputedly built in 1536 by Richard de Cogan in Barnahely townland approximately 1.2km south-west of the proposed development site. The site is listed as RPS 01260 in the Record of Protected Structures in the Cork County Development Plan (2014). A two-storey gable-ended structure was added in the 16th/17th century. Castle Warren house, constructed in 1796, stands on the same site. Tower houses generally date to the 15th/16th century and were built as residences by both Gaelic and Old English families. They are not castles in the military sense, though they maintain many of the defensive features typical of castles, such as battlements and narrow slit windows. In 1999, archaeological investigations were undertaken around the perimeter of the site in order to erect a security fence (O'Donnell in www.excavations.ie). No features or finds relating to the occupation of the site were revealed. In 2004, extensive archaeological testing was undertaken in the general vicinity of the site to investigate a proposed re-routing of the N28 Cork Ringaskiddy Road (Hanley in www.excavations.ie). Geophysical and topographic surveys were initially carried out, followed by test trenching across six discrete areas. The testing, comprising 63 test trenches, revealed the area to be largely devoid of archaeological remains. A number of garden, drainage and agriculturally derived features were revealed, as well as one possible prehistoric pit.

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

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

There are a number of shell middens in the vicinity of the proposed development site. These are mounds or spreads of discarded shells, usually found along the coastline. These sites can date from many periods, sometimes as early as the Mesolithic, but the Cork harbour middens are generally thought to be much later, and medieval dates have been recorded for some of them. There are six shell middens located within the study area, two in Ringaskiddy townland (CO087-054-- and CO087-161) on the eastern shore of the Ringaskiddy peninsula, approximately 400m and 200m respectively to the south of the proposed development site. Three middens are recorded in Curraghbinny townland between 1.2 and 1.8km to the south of the proposed development site. These are

strung out along the shore line at Lough Beg (CO087-055---) and on the northern shore of Curraghbinny hill (CO087-056---, CO087-057---). A sixth midden has been identified in Barnahely townland (CO087-120---) 1.3km to the west of the proposed development site.

14.3.5. Post Medieval Period

There are several sites dating to the post medieval period within the study area. These include military structures associated with the defence of Cork harbour. Other post medieval features include the site of a possible 17th century settlement, country houses and associated structures, and a vernacular house.

14.3.5.1. Folklore and Tradition

During the 18th century smuggling was widely practised in Cork harbour and Spike Island was a location favoured for this (Sweeney 2007, 13). At high water small vessels could land unseen on the island which facilitated this 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.

14.3.5.1.1. Military Defences

From 1793 until the defeat of Napoleon in 1815 Europe experienced a period of turbulence and conflict (Kerrigan 1995, 150-6). Threats and plans of invasion of Britain and some successful landings by the French at Bantry Bay, Killala and, Rutland Island, Donegal led to real fears of a successful invasion of Britain 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 at Carlislefort and on the west side at Crosshaven Hill. The earliest known defences at Carlislefort, 4km to the southeast, were constructed between 1552 and 1571 and may have been the earliest bastioned fort in Ireland while those at Crosshaven Hill, 2.5km to the southeast, were built by 1690 and known as 'James Battery' (Power et al. 1994, 288-9). The earlier fortifications at Carlislefort were replaced by Carlisle Fort (CO087-058---) in 1798, and this in turn was renamed Dún an Dáibhisigh or Davis Fort when it was handed over to

the Irish Government in 1938. At Crosshaven Hill, across the harbour from Carlisle Fort, Ram Head Battery was brought back into service after 1793 (Kerrigan 1995, 191) and circa 1798 Camden Fort (CO099-024---) was built (Power et al. 1994, 289). In the 1830s Lewis notes that the excavations undertaken during the construction of this new fort destroyed "a nearly perfect tumulus" (Cadogan 1998, 415). Camden Fort was also handed over to the Irish Government in 1938 and renamed Dún Uí Mheachair or Fort Meagher. It is currently undergoing a programme of restoration. There was also a fortification in Carrignafoy on the Great Island to the east of Cobh and approximately 3.5km to the northeast 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).

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 in Power et al. 1994, 287). 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 Record of Protected Structures in the Cork County Development Plan, 2014 as RPS 00578 and RPS 00670, 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 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. 1994, 290). 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. 1994 290). 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 Record of Protected Structures in the Cork County Development Plan, 2014 as RPS 01272.

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. 1994, 291). Kerrigan (1995, 197) 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 which was constructed in 1794 and later came under the control of the Board of Ordnance when the complex was considerably expanded (ibid.) The eastern building was filled in during the construction of the bridge to Haulbowline in 1966 (Power et al. 291). 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 towers were built to a fairly uniform design. They are generally oval or circular in plan and two storeys high (Power et al. 1994, 287). 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 1993, 74). 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 1993, 74 and Kerrigan 1995, 195). 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. 1994, 287). In 1859 the Royal Commission on the Defence of the United Kingdom noted that each of the Cork harbour tower mounted just one gun (Kerrigan, 1995, 196). 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 1995, 196).

The Martello tower at Ringaskiddy (CO087-053--- and RPS 00575) is the largest of the Cork harbour Martello 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. 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 it is shown on historic maps, much of it is no longer in existence due to soil removal in the recent past. The path leading from the tower to the beach across the proposed development site is part of the curtilage of the Protected Structure of the Martello tower.

14.3.5.1.2. 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 within 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. There is one country house within the study area, in Barnahely townland (CO087-111---) approximately 1.1km west of the proposed development site. It is named Prospect Villa on the OS maps, and is described as “2 storey, weather-stated with hipped roof; of late 18th century appearance”, and was demolished in 1981. An overgrown gate lodge (CO087-050002) survived at that time, but has since also been demolished (Power et al. 1994, 317).

There is one ornamental tower listed in the RMP within the study area. The tower (CO087-052002-) in Barnahely townland is not detailed in the Archaeological Inventory for East and South Cork (Power et al. 1994). The files of the Archaeological Survey of Ireland record that the tower has been demolished.

14.3.5.1.3. 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). No visible trace of this settlement survives.

14.3.5.1.4. Protected Structures

Sixteen structures within the 2km study area are listed in the Record of Protected Structures in Cork County Development Plan (2014). These are the Martello tower at Ringaskiddy (RPS No. 00575), the Martello tower at Haulbowline (RPS No. 00578), a range of limestone warehouses and offices on Haulbowline (RPS No. 00670), the Castlewarren stronghouse at Barnahely (RPS No. 01260) and twelve structures on Spike Island Westmoreland Fort (Fort Mitchell) (RPS No. 01272) the prison jail (RPS No. 01422), three barracks (west, south and east) (RPS No. 01423, RPS No. 01424, RPS No.01426), the battery or gun room (RPS No. 01425), a store or warehouse (RPS No. 01427), a former barracks including chapel (RPS No. 01428), two officers houses (RPS No. 01429, RPS No. 01430), Bleak House the admirals house (RPS No.01431), and the graveyard or cemetery (RPS No.01432). 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. 00512), Belvelly (RPS No. 00505) and Manning Tower (also in Belvelly) (RPS No. 01366). The Cork County Development Plan (2014) 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 National inventory of Architectural Heritage for East Cork lists the protected structures included in the study area, as well as 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 now 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 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, although 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 as 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.

14.3.5.1.5. Cartographic Sources

A small number of later medieval and post medieval maps of the harbour were consulted. The earliest of these is Candell's map of Cork harbour (Figure 14.5), 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 14.6) 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 under agricultural use. The 1st edition of the Ordnance Survey (OS) map, dated to 1841, shows up to 32 small fields in the area of the proposed development site (Figure 14.2). These are mainly in the upper, southern part of the site. The fields had been consolidated into a smaller number of larger fields (9) by the time of the 2nd edition of the OS map (1902) (Figure 14.3). An east-west line of narrow fields along the central part of the proposed development site are shown as poor ground on the 1st edition map and this designation is retained on the 2nd edition map. The Ringaskiddy Martello tower (CO087-053---) is clearly indicated on the 1st edition OS map 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 the edge of the ordnance ground. 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 north-east across much of the proposed development site and terminates at Gobby Beach on the eastern site boundary where two more Ordnance Stones are marked on the map 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 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. At the time of the 1st edition OS map the road east from Ringaskiddy Village only extended as far as Rock Village and there would have been no other road access to the tower from Ringaskiddy. The northern boundary of the proposed development site was the southern shore of Cork harbour at this point (Figure 14.2). By the time of the 2nd edition of the OS map the road from Ringaskiddy is shown extending east as far as Gobby Beach and this road defines the northern boundary of the proposed development site. The path from the Martello tower to Gobby Beach is indicated only as a dotted line within the proposed development site. The path or lane to Rock Village (no longer shown on the map) is also shown as a dotted line along the southern section, although the east-west leg of the path is clearly shown extending between two fields (Figure 14.3).

There are very few changes to the proposed development site shown on the third edition map of 1934 (Figure 14.4). There are some minor changes to field boundaries, 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 the southern section although its east west section is still shown, but a new path is shown as a dotted line extending diagonally across this field which continues to the south as a dotted line to the Martello tower.

An examination of online aerial photographs (Ordnance Survey of Ireland 1995, 2000, 2005 and Google Maps 2013 and 2018) of the proposed development site did not indicate any new features of archaeological potential. The partial line of a path indicated on the 2005 photographs (Plate 2) lies in the approximate area of part of the original path that lead 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 paintings of Cork's lower harbour (Plate 3, Murray, 2005). The majority of paintings show the tower in the distance and do not show details of the tower. No other features of cultural heritage interest are depicted in these paintings.

14.3.6. Archaeological Investigations

An intertidal and metal detector survey were carried out on the eastern site boundary along the foreshore at Gobby Beach in 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. 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 (Purcell 2010). 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 are submerged in the channel several hundred metres from the eastern site boundary (Boland 2006).

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 in www.excavations.ie). This was determined to be of no archaeological significance and was instead the result of land improvement works. In 2017 and 2018 archaeological investigations were undertaken in land approximately 100m to the south and adjoining the Martello tower as part of the Hawboline Island rehabilitation works. A geophysical survey undertaken in 2015 identified a number of features of archaeological potential which were subsequently investigated by archaeological test trenching and then retained in situ pending progress of the rehabilitation works (Cummins 2016). In 2017 and 2018 these features were further investigated and additional ground was opened around them under archaeological supervision to reveal an area of prehistoric activity (Miller 2017). The features revealed include Late Bronze Age deposits possibly associated with settlement activity and a possible bowl furnace of Iron Age date. Early Neolithic pottery was also found. Further archaeological work may be carried out on the site (Tony Miller pers comm).

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 in www.excavations.ie). 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 (Bangertter in www.excavations.ie). As mentioned above, disarticulate 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 in www.excavations.ie). 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 in www.archaeology.ie). 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 www.excavations.ie). A total of sixty-three test trenches excavated revealed the area to be 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 in www.excavations.ie). 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 2007). In 2012, an underwater assessment of a stone causeway on Haulbowline Island indicated it as being encased in stonework (Brady www.excavations.ie). 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 www.excavations.ie). 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 www.excavations.ie). 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 in www.excavations.ie). In 2007, archaeological testing was carried out in Ringaskiddy adjacent to the Pfizer facility on a circular anomaly identified on an aerial photograph. Nothing of archaeological significance was revealed. Archaeological monitoring of the subsequent development revealed nothing of archaeological significance (Moore www.excavations.ie). Archaeological monitoring along the southern foreshore at Lough Beg, Curraghbinny during coastal protection works revealed nothing of archaeological significance (Purcell, 2011).