

Environmental Impact Assessment Report

Appendix 16.1

Volume 3 Part 8







Appendix 16-1

Catalogue of Cultural Heritage Assets

1

Compiled by Niall Brady and Dominick Gallagher

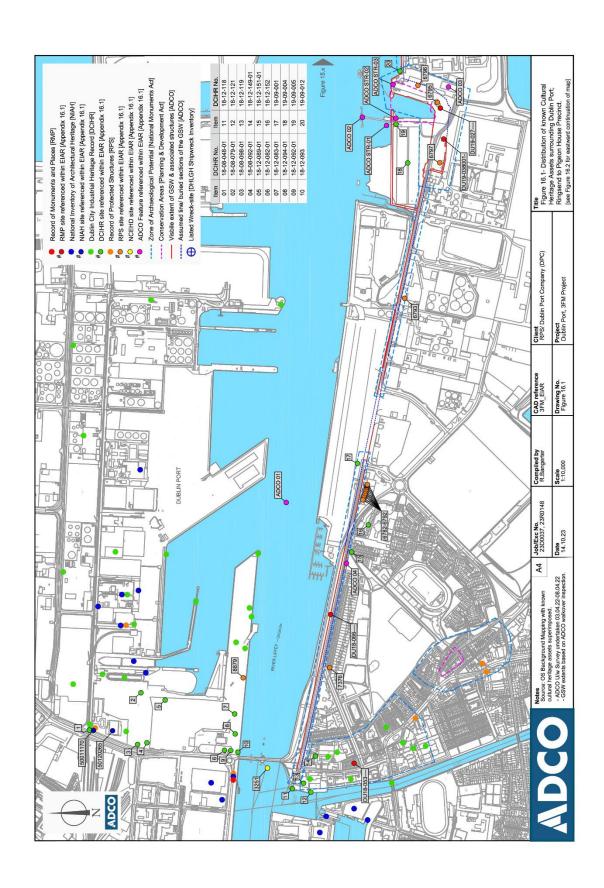
The catalogue is based on the known cultural heritage sites recorded within the development area and adjoining it. The entries are drawn from the National Monuments Service's Register of Monuments and Places (RMP), the National Inventory of Architectural Heritage (NIAH), Dublin City Council's Record of Protected Structures (RPS), the Dublin City Industrial Heritage Record (DCIHR), the National Civil Engineering Database (NCEHD) and Dublin Docklands Industrial Archaeology Survey (DDIAS).

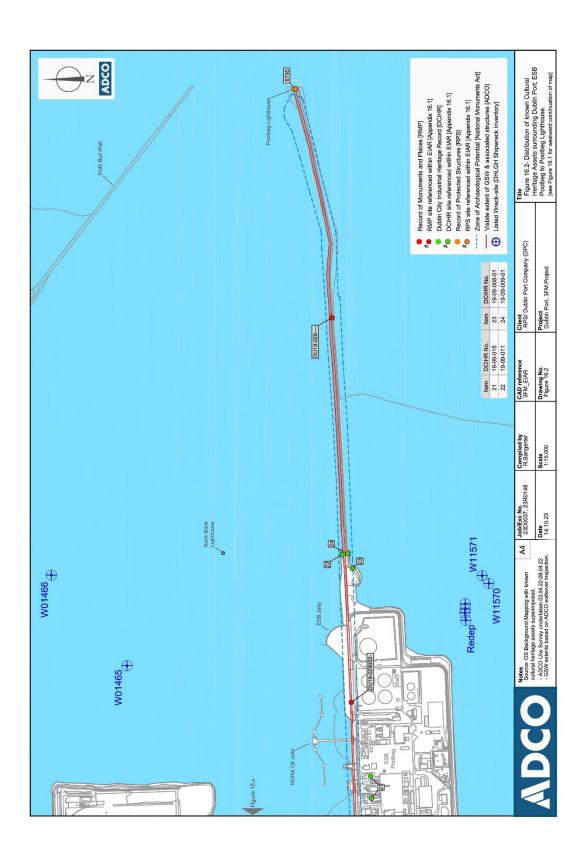
Supplemental information is provided where appropriate from the Dublin Port Archives and from field walkover inspection carried out to inform the 3FM project. Additional information based on record taken during archaeological monitoring of Site Investigations works for the 3FM project is described in Appendix 16-4, and on record taken during the underwater archaeological impact assessment for the 3FM project is described in Appendix 16-5.

Historic images are sourced from Dublin Port Archives unless otherwise indicated. Present-day photographs are sourced from ADCO's field inspections for DPC unless otherwise indicated.

The catalogue provides the official site registration reference; site name; site type; positioning data based on ITM Easting and Northing; Site Description; Proximity to the 3FM development area; Likely impacts and Recommended mitigation arising from the 3FM project. Where sites are included that have no official site reference number, they are given a project specific number; namely, ADCO #.

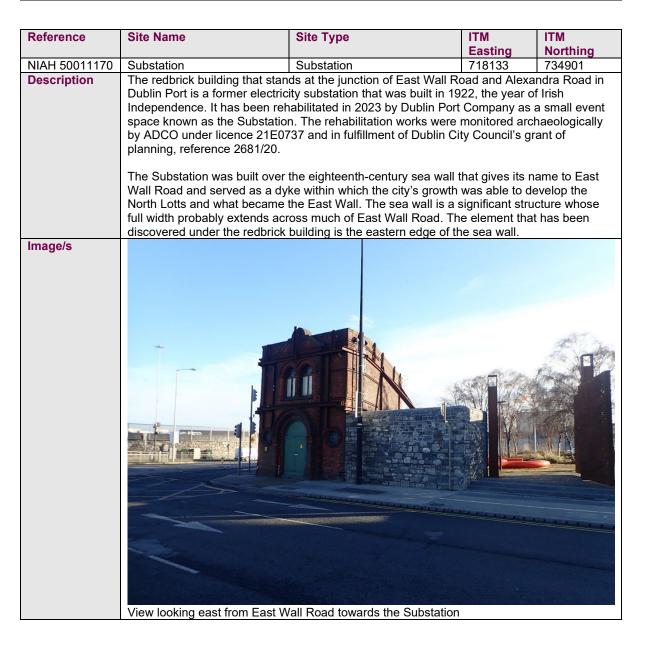
The catalogue entries are summarised in Chapter 16 Table 16-3, and are presented below following same order. The locations of each site are presented in Figures 16-1 and 16-2, which are included in Chapter 16 and are repeated in this Appendix for ease of reference.

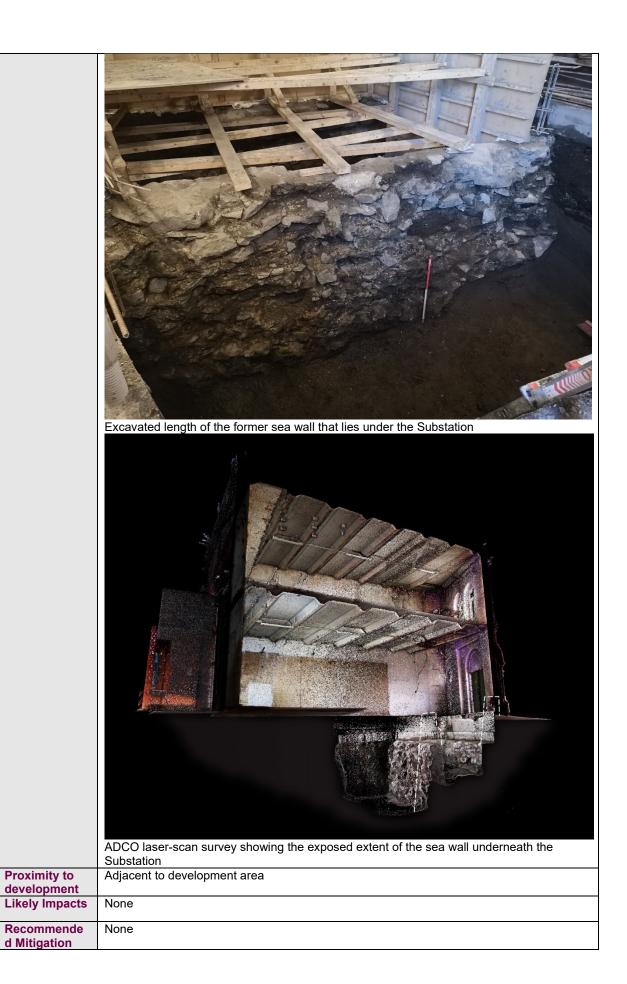




North Side of the Channel

Reference	Site Name	Site Type	ITM Easting	ITM Northing	
DCIHR 18-08- 048-01	Level Crossing	Level Crossing	718129	734913	
Description	Railway continues to crossroads though no trace of level crossing survives. Traffic lights now regulate crossing of road				
Image/s	None				
Proximity to development	Adjacent to development area				
Likely Impacts	None				
Recommended Mitigation	None				





Reference	Site Name	Site Type	ITM Easting	ITM Northing	
NIAH 50120265	Port Centre	Building	718138	734827	
Description	Designed by Scott Tallon Walker and completed in 1981, Port Centre is a detached six-storey office building over basement, supported on single-height podium and is considered to be a prominent and striking office building that creates an architectural focal point at the entrance to Dublin Port, marking the transition between the urban fabric of the city to the west and the industrial landscape to the east. Construction of Port Centre was within the former shipbuilding yard.				
Image/s		I Road to Port Centre and including ograph by Enda Kavanagh for DPC	elements of	f the	
Proximity to development	Adjacent to development area	-			
Likely impacts	None				
Recommended Mitigation	None				

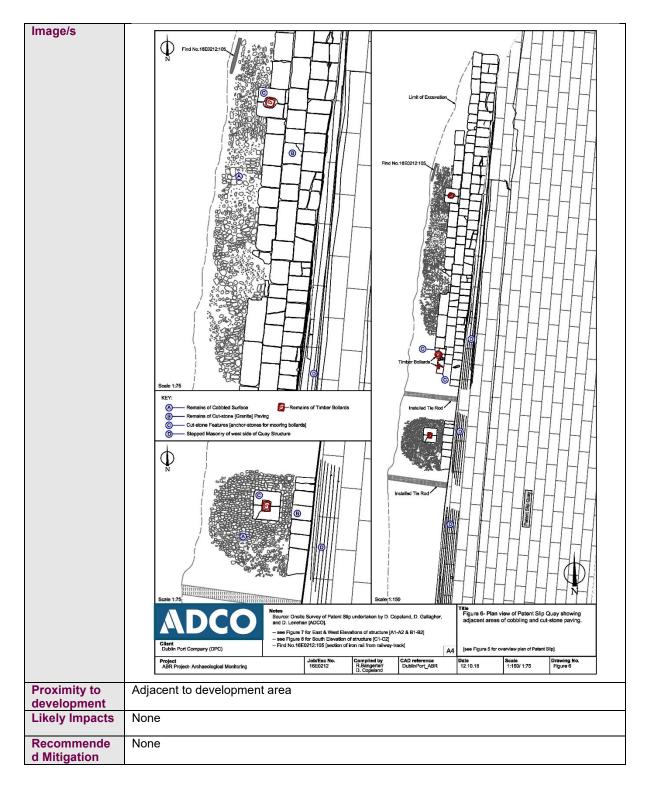
Reference	Site Name	Site Type	ITM Easting	ITM Northing	
DCIHR 18-08- 079_01	Port and Docks Depot	Building, site of	718254	734736	
Description	Building recorded on OS 3rd Edition 6-inch map. No trace upstanding.				
Image/s	None				
Proximity to development	Adjacent to development area				
Likely Impacts	None				
Recommended Mitigation	None				

Reference	Site Name	Site Type	ITM Easting	ITM Northing
DCIHR 18-08- 098_01	Light House	Light House, site of	718073	734746
Description	Light house recorded on OS 1847	⁷ map. No trace upstanding		
Image/s	None			

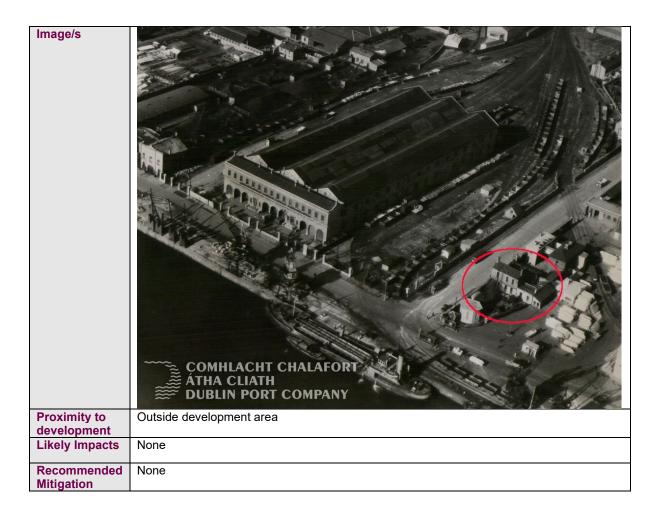
Proximity to development	Adjacent to development area
Likely Impacts	None
Recommended Mitigation	None

Reference	Site Name	Site Type	ITM Easting	ITM Northing	
DCIHR 18-08- 092_01	Gasometer	Building, site of	718075	734721	
Description	Gasometer recorded on OS 1910 map. No trace upstanding				
Image/s	None				
Proximity to development	Adjacent to development area				
Likely impacts	None				
Recommended Mitigation	None				

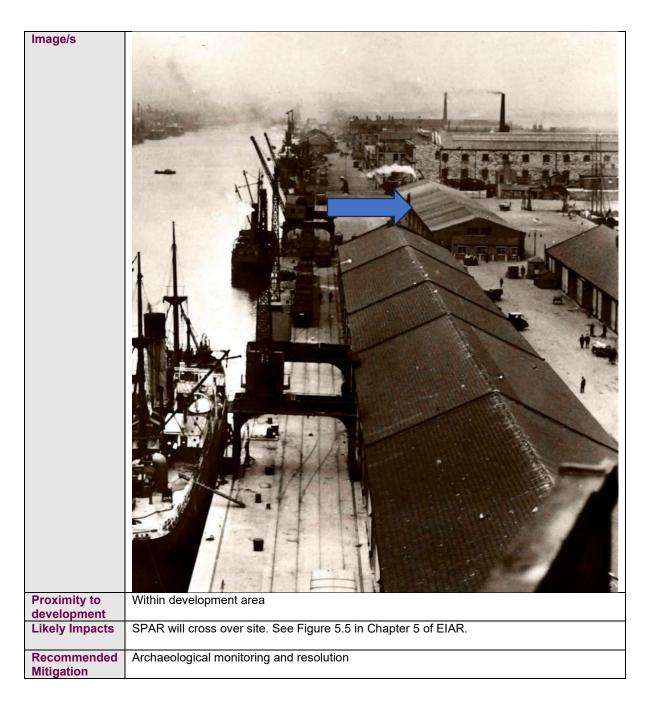
Reference	Site Name	Site Type	ITM Easting	ITM Northing
DCIHR 18-12- 089_01	Patent Slip No 2	Slip	718225	734627
Description		d on historic OS maps and was permitted Alexandra Basin Rec 12.		



Reference	Site Name	Site Type	ITM Easting	ITM Northing		
DCIHR 18-12- 082-01	Harbour Master's Office	Building	718060	734451		
Description	Constructed <i>c</i> . 1880, the building was located along East Wall Road at Crossberth Quay, close to the entrance of the North Wall Quay Extension. Possibly replaced earlier office buildings at this location. In 1890, the roof of the Harbour Master's Office was taken down, and the building was raised and enlarged to give greatly improved accommodation. An enclosed yard and new sanitary appliances were also provided. The building was demolished in <i>c</i> . 1992 and area now functions as a car park.					



Reference	Site Name	Site Type	ITM	ITM
			Easting	Northing
DCIHR 18-12- 083-01	Goods Shed	Goods Shed	718181	734407
Description	One of the sheds of the North Wall Quabuilt on North Wall Quay Extension should be shown 1990s.	` ` '	,	



Reference	Site Name	Site Type	ITM Easting	ITM Northing
DCIHR 18-12- 094-01	Landing Stage	Landing Stage	718109	734403
Description	Historic record of feature that was demolished presumably when NWQE was constructed.			

Image/s	Fort William Flass Works Building Fairt Francisco Fatent Slip Patent Slip Fatent Slip Light Ho. Light
Proximity to	Adjacent to the development area
development	
Likely Impacts	None
Recommended Mitigation	None

Reference	Site Name	Site Type	ITM Easting	ITM Northing	
DCIHR 18-12- 092-01	Lighthouse		718062	734414	
Description	DCIHR Description and identified.		, ,		
	From available cartographic sources, no lighthouse is illustrated close to this location until the publication of the 1832 County of City, Boundary Commission and the OS 6-inch map. The Lighthouse Directory dated a lighthouse at the east end of the North Wall to 1820. However, it does seem plausible that some form of light was positioned here before 1820. There is a Revenue Watch House depicted in several paintings (1745 and 1793) at the junction of the North Wall Quay and East Wall and in neither is there a sign of a lighthouse. Taylor's map of 1816 shows this watch tower to have been switched to the opposite side of the river to Ringsend point, however no lighthouse is depicted to have taken its place.				
	for lighthouses in the impassumed responsibility for Ireland. This responsion is probable that the lighth Corporation and disman. In a survey of sailing direction.	lished the Corporation for Preserving and Improving the Port of Dublin e immediate area of the Port, and later in 1810 the Corporation lility for the erection and maintenance of all lighthouses along the coast consibility was transferred to the Commissioner of Irish Lights in 1867. It lighthouse at the east end of the North Wall was erected by the mantled by the Commissioner of Irish Lights. It direction along the Coasts of Ireland dated 1842, a reference is made hthouse of a gray stone colour on the south-east angle of the North			

	Wall, directly opposite Ringsend shows a fixed white light at an elevation of 29 feet, visible in clear weather 10 miles'. It is possible that lighthouse was moved at some time. Maps have slightly differing locations for a lighthouse at this location. It is possible that this lighthouse is an earlier or later iteration of lighthouse DCIHR 18-12-093.
Image/s	None
Proximity to development	Outside development area
Likely Impacts	None
Recommended Mitigation	None

Reference	Site Name	Site Type	ITM	ITM Northing
DCIHR 18-12- 093	North Wall Quay Light	Lighthouse	718042	Northing 734390
Description	Wall Road. Built c. 1820. Show from a distance of 8 miles. Light Lighthouse was still present in	ne Liffey at the junction of the North Wed a steady light at a height of 33 feet at height of 33 feet at house contained a 5th order fixed ler	t and could nticular light mmander ai	be seen :. nd was
		construction of North Wall Quay Exte slighthouse. Not visible of Taylor's ma location.		
Image/s	Historic image showing the Light Cormac Lowth	ht house and Dublin Bay Gabbards. Ir	nage courte	esy of

	A view of the North Wall, City of Dublin. Dublin Penny Journal 1834
Proximity to development	Outside development area
Likely Impacts	None
Recommended Mitigation	None

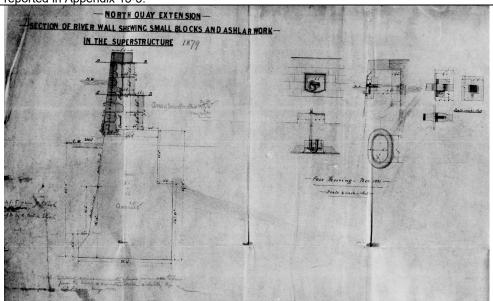
Reference	Site Name	Site Type	ITM	ITM Northing
RPS 8879; DCIHR 18-12- 084-01	North Wall Quay Extension	Quay	718113	Northing 734378
Description	new deepwater basin that was bubegan in 1869 and adopted the in who used Portland cement along strengthened with iron girders. The shore of the deepwater basin and Stoney's purpose-built vessel, his workers could prepare the seabed block measured 21'4" wide at the blocks had a stepped profile in croof varied height, between 9'6" and of the NWQE, with dredged sands blocks above the Low Water Mark Stoney's construction continued to Completion of the NWQE had to widirection of Joseph Mallagh, the	RE) was constructed to enclose the silt off the seaward side of East Wall I movative design of Port Engineer Bir with stone to make 350-tonne foundate blocks were cast on a block wharf were floated across and then lowere Shears Float. He also designed the din advance of lowering the blocks in base and varied in height between 2 coss-section that was recessed by 3'6 did 13'. The blocks form a continuous first filling the interior. Granite ashlar was, in keeping with the style of the city until 1885 at which point 700m of the wait until the early twentieth century wastern terminus was completed in tirefferent method of construction that early twentieth century wastern terminus was completed in tirefferent method of construction that early twentieth century wastern terminus was completed in tirefferent method of construction that early the state of the control of the	Road. Consider Blood ation blocks located on ed into position blocks and 29'. " at the read açade on bras added to quays upsiquay was by when, under for the E	struction Stoney, s the north ition, using so that Each The ar and was ooth sides oo the tream. built. er the Eucharistic
	Dublin Port Archives retains a series of engineering drawings that provide measured concerning the quay design and its furnishings as well as information on repairs.			
	confirmed the essential detail of the facades of the quay survive largel wall are retained and elegant cut-	ted for the Alexandra Basin Redevel ne quay wall above and below sea le ly untouched. The original mooring ri stone steps are still in use. The gran of deterioration. The coping stones o	vel. The ex ngs set into ite blocks o	posed the quay of the quay

¹ Ronald Cox, *Bindon Blood Stoney. Biography of a Port Engineer* (Dublin, 1998).

survive in places along the quay edge. The interior surface of the deck is masked by cobble-lock brick that conceals the earlier features on the quay's working surface but lengths of rail line are retained that speak to earlier uses. Underwater inspection (completed under licence 13D0019) also revealed the concrete foundation blocks, the toes of which can be partly buried in silt or exposed.

Further underwater archaeological inspection was carried out for the 3FM project, including detailed measured survey of an 80m-long stretch of the quay and supporting description is reported in Appendix 15-5.

Image/s



Detail from Dublin Port Archive engineering drawing reference 7929 dated 1879, showing section of quay wall highlighting a foundation block and the ashlar coursing placed above, and detail of a mooring ring.



Photograph shows the top of two mass concrete foundation blocks and the join between both at the base of the image, with the granite ashlar coursing constructed above and a recessed mooring ring

Proximity to development

Within development area

Likely Impacts

SPAR Bridge will cross over the NWQE. See Figure 1.2 in EIAR Impacts arising:

	 Capstones and upper courses of granite ashlar to be removed across bridge footprint Excavation of NWQE surface to working depth of xxm across bridge footprint Impact with one recessed mooring ring and associated stonework anticipated
Recommended Mitigation	 SPAR Bridge designed to minimise impact on NWQE Supplemental detailed archaeological topographic survey prior to construction Avoid impact with recessed mooring ring and associated stonework Archaeological monitoring and resolution Retention of ashlar granite for sympathetic re-use Rebuild recessed mooring ring and associated stonework if impacts are unavoidable

Channel

Reference	Site Name	Site Type	ITM	ITM
			Easting	Northing
ADCO 01	Liffey	Riverbed	7181093	734292
Description	The Liffey channel within the developmed impacted on by dredging, by the development of the Tom Clarke Bridge southern foreshore. The channel was in was recently inspected archaeologically 15-5.	pment of the quaysides on the in the 1970s with the associat spected archaeologically for t	e south Port ed reclamat he ABR pro	and by tion of the ject and
Image/s	Photograph from 1970s showing construences along the south bank in advance			
Proximity to development	Within development area. See Figure 1.	.2 in EIAR		
Likely Impacts	SPAR Bridge will cross over site, site. SPAR will continue along the south Temporary relocation of Poolbeg Y secured by a series of weighted bloomiverbed deposits and no impacts ooologically capital dredging works will take play Maritime village The Turning Circle proposed in from dredging, and construction of a review of the Sludge Jetty and adjacent time. Area N will be constructed on piles Some element of capital dredging in the south of the	a shore as an elevated road sure acht and Boat Club Marina mocks off the NWQE, with no imports to the NWQE ace to facilitate new berths assent of Pigeon House Harbour wetment for a portion close to the per pier will be removed.	pacts into the control of the contro	be he buried h the
Recommended Mitigation	Archaeological monitoring and resolutio			

Reference	Site Name	Site Type	ITM Easting	ITM Northing
NCEHD 3251	Liffey Services Tunnel	Tunnel	717995	734285
Description	Tunnel constructed across the Liffey ch serve as a services tunnel bringing water tunnel was dug 100 feet below ground of	er and electricity from the south	n side of the	e city. The

	Harbour Master's Office () under the river to York Road.Thorncastle Street. The tunnel measured 830 feet long (253m) and 11 fee in diameter (3.4m), and was constructed in brick. It was completed in 1929. Archaeological monitoring in 2007 in the vicinity of the tunnel encountered stone walls, possibly former quay walls.
Image/s	none
Proximity to development	Outside the development area, crossing the river channel upstream of the East Link Bridge.
Likely Impacts	None
Recommended Mitigation	None

South side of the Channel: Great South Wall and Pigeon House Fort and Precinct

The Great South Wall (GSW) today is an amalgamation of three principal elements: the Ballast Office Wall; Pigeon House Harbour and Fort, and the GSW east of the fort to Poolbeg Lighthouse. Though recorded in the official registers as separate features, they are considered here as a contiguous whole. A series of other sites and features that are built on to the GSW are described in this section as well. To ease orientation, the GSW and the attendant features along it will be presented in three blocks:

- 1. GSW to Pigeon House Harbour
- 2. Pigeon House Harbour, Fort and Precinct
- 3. GSW east to Poolbeg Lighthouse

1. GSW to Pigeon House Harbour

Reference	Site Name	Site Type	ITM Easting	ITM Northing
DU018-066; RPS 6797	Sea Wall/Ballast Office Wall	Sea Wall	Various	Various
Description	The Ballast Office Wall is the seco Wall. In 1748, the Ballast Board ar would extend 2,100m from the wes in 1759 and is recorded on John R of Dublin' map of 1757 as 'The Sor and the intervening space (varying wall was furnished with parapets a between the road and the sea for thouse harbour. A cross-section of the wall is included this has served as a principal source. Today this length of wall lies under orientation, the description and accessive and the sea for the wall is included the wall is included the sea for the wall is included the sea for the wall is included the wall is include	anounced plans to construct a st end of The Piles to Ringser ocque's 'Survey of the City, Huth Wall'. The wall was built will between 37 and 48 feet in wild bove the road surface, which hose who travelled along the ded in Isaac Mann's essay on the certain wild between 37 and 48 feet in will bove the road surface, which hose who travelled along the ded in Isaac Mann's essay on the certain seed of the subsequently by Desert York Road and Pigeon House companying images is divided at the Ringsend Park of MTL Yard see Harbour Ringsend Park: eing open-ended on its most rection of what is today Thorry/Dodder confluence dates from the street in the property of the Piles to Ringsend Park:	double wall in stand Point. It was collarbour, Bay and vith two parallel ruidth) filled with sa served as a barr wall to and from the Dublin Bar (Courcy (1996). See Road. For ease into three section upstream point, who castle Street. Comment of the Point in the the Point i	one that ompleted Environs ubble walls and. The ier Pigeon 1881), and e of ons:

An aerial photograph taken in the early 1930s shows a slight outward kink into the quay wall upstream of Thorncastle Street, supporting the view that waterfront at the Liffey/Dodder confluence is a later addition. The photograph also shows the shallow nature of the channel against the base of the GSW and a series of floating moorings in the river much as moorings are present today at this location.

The north-facing parapet of the sea wall survives today along York Road, where it can be seen as far west of St Patrick's Rowing Club, and as far east as the adjoining section of Pigeon House Road that runs alongside Ringsend Park. The parapet is the boundary wall between York Road and the R131 toll road. While there are several breaches in the wall along this stretch, it also retains a recessed vertical quay ladder.

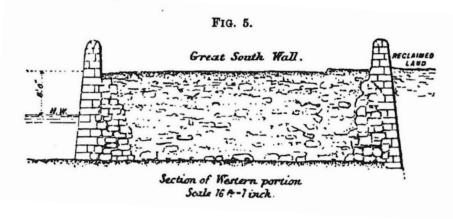
In contrast, the south-facing parapet is largely absorbed into the current building fabric, where the houses that front on to York Road are constructed directly on top of the parapet. However, a portion survives at the junction of York Road and Pembroke Cottages. Further elements survive as the boundary wall of Ringsend Park.

A Slipway is recorded off the south-facing side of the wall on Rocque's map of 1757, labelled St. George's Slip (ADCO 04 in this catalogue). A second slipway recorded by Rocque, Mackarel's Slip is recorded as DCIHR 19-09-001.

Image/s



Detail from Rocque 1757, showing the South Wall as constructed prior to its completion in 1759. Note the two slipways attendant to the wall, referenced ADCO 04 and DCIHR



Cross-section of the Ballast Office Wall recorded in Mann, 1881.



Detail from aerial photograph taken in early 1930s looking upriver, with the GSW/Pigeon House Road on the left, and the NWQE and Alexandra Basin on the right side



Two views of northern parapet looking south, showing quay wall ladder retained



View showing breach in north-facing parapet, and view looking east along north-facing parapet from York Road



Views of surviving south parapet wall at junction of York Road and Pembroke Cottages



View looking east along York Road where the south-facing parapet does not survive above ground but is replaced with the curtilage fencing of Ringsend College



View looking east along Pigeon House Road where the south-facing parapet survives as the standing boundary wall with Ringsend Park



View looking east along Pigeon House Road where the south-facing parapet survives as the front garden boundary wall to residential properties at junction with Cambridge Avenue Poolbeg Yacht and Sail Club to MTL Yard:

Description

The R131 has breached the GSW and cuts across the sea wall at an oblique angle.

Pigeon House Road continues to the east of the R131 and the front garden walls of the former coastguard cottages (RPS 6782–RPS6792, see below) follow the line of the southern parapet. In contrast, the northern parapet is not upstanding but is most probably underneath a low concrete retaining wall that serves as the boundary with the northern reach of the MTL yard.

Within the MTL Yard, a length of the GSW is apparent where a green verge extends for *c*. 122m. The north-facing wall that retains the grassed area is the southern parapet of the GSW. The northern limit of the GSW does not survive upstanding across the Yard.

Images



<u>View looking east where R131 (to right) breaches the GSW, and where Pigeon House Road (left) continues</u>



View looking west along Pigeon House Road, The parapets of the GSW are not upstanding at this point, and have been built over



View looking west along Pigeon House Road, showing the southern parapet of the GSW as it survives serving as the boundary wall to the Ringsend Sea Scouts den



View looking east along upstanding southern parapet of the GSW that retains the north side of the grass verge in the MTL Yard



The south parapet of the GSW within the MTL Yard has been breached in several places, in this instance to insert step access



Detail showing fabric of the south parapet of the GSW in the MTL Yard where the wall core is exposed

Description

Murphy's Yard to Pigeon House Harbour:

At the junction of Whitebank Road and Pigeon House Road, the parapets of the GSW reemerge. The southern parapet is preserved and serves as the northern boundary to Murphy's Yard. A 32 m-long stretch has been surveyed in detail. The long façades of the wall are slightly battered, or sloped, and rise to a height of 800 mm above the current pavement. At this point, the top of the wall has a rounded cap that is 250 mm high and is made from stone cobbles. The main stone of the wall appears to be a schist, and the

² Niall Brady, 'Archaeological assessment, boundary wall, Pigeon House Road. CP1501-026, Compound Wall'. Report of ADCO for Dublin Port Company, 2019.

average stone size measures 550 mm long and 850mm high. A dirty white coloured mortar with small stone inclusions bonds the stone. The wall has no formal coursing but three layers of stonework are evident, with smaller stone chips used to fill in the gaps. The wall is not plumb and, as one proceeds eastwards, various patches are evident. There is no brickwork evident but modern concrete is used to cover over the stonework that creates the rounded cap. The wall top is at 5.31 m above Ordnance Datum. The parapet is breached and brick gateposts are inserted across a 3.4 m-wide entrance into Murphy's Yard. A second break further east provides entrance to the ESB substation. From this point onwards, the eastward extent of the southern parapet is not upstanding and has been replaced with modern blockwork.

The northern parapet survives opposite Murphy's Yard but is more ruinous. The footings for the stone wall stand to a height of 330 mm below a dilapidated cement breeze-block-built low wall. The original width of the stone wall above the current pavement appears to be 580 mm. The stone is the same type as seen on the southern parapet. The northern wall is breached at an entrance to the MTL Yard. East of the MTL Yard entrance, the northern parapet wall is once again evident and it continues as a low stone wall along the remaining length of the MTL Yard, at which point it is breached by the roadway leading to Hammond Lane. The low wall height suggests that much of this stretch is rebuilt as a dwarf wall.

An historical photograph taken in 1922 and showing the departure of British cavalry from Pigeon House Fort indicates the height of the parapets above the original road surface. The image may have been taken in this general location. The detail confirms the battered profile recorded at Murphy's Yard and also suggests the parapets stood perhaps 1.5 m above the original road surface. Given that the wall at Murphy's Yard is 800 mm above the current road surface, it suggests that the modern road fill may be in the order of *c*. 700 mm deep.

Between Hammond Lane and Pigeon House Harbour, there is no upstanding element of the southern parapet, where the south side of the road is taken up mostly by the remains of the Fever Hospital (RPS 6793) whose boundary wall is red brick. Low stone footing is evident to the west of the Hospital but it is not clear what period the footing belongs to. Following the breach created by South Bank Road, the southern boundary of Pigeon House Road is a simple metal fence that serves the Waste to Energy facility.

In contrast, the full depth of the sea wall survives and is visible on the north side of Pigeon House Road, as the sea wall drops over 5 m to the seabed that is now used as the cooling water area for the Waste to Energy facility. Archaeological monitoring of services redirection for the South Quay Access project in 2009 along the north side of Pigeon House Road recorded the corner of some of the inner coping stones of the GSW below the current footpath surface of Pigeon House Road.³ While none of the coping stones were fully exposed, the archaeologist believed the sea wall to be a later addition, measuring 750 mm wide with a semi-circular mortared top, built flush to the outer face of the GSW. The report does not indicate how much later the parapet was added and does not include clear section drawings to explain the observation and conclusion. It remains possible that the parapet as a later addition may be a construction detail that was included to complete the GSW. Alternatively, it was added some time later. Either way, it is today an integral part of the GSW and provided a safe barrier for those travelling along the wall from Ringsend to the harbour and fort.

Archaeological monitoring of site investigations trenches associated with the Dublin Waste to Energy project in 2014 on Pigeon House Road recorded a metalled surface and walling, and were interpreted as the remains of the causeway leading to the Fort. What is of note is that the work encountered a metalled surface rather than laid granite slabs, which supports the record of Isaac Mann in 1881.

³ David O'Connor, 'Archaeological monitoring of the proposed South Quay Bridge and Access Road at Pigeon House Road, Dublin Port. 08E0961', report of CRDS for Dublin Port Company, 2010.

⁴ Fintan Walsh and David McIlreavy, 'Dublin Waste to Energy Project, Poolbeg, Dublin 4. 13E0066'.





View looking west along ruined wall base over northern parapet opposite Murphy's Yard



Historical photograph showing British cavalry on Pigeon House Road, departing the Fort in 1922. At this stage, the road would have been in existence for over a century-and-a-half and no doubt had seen certain adaptation and repair works. It shows a footpath on the south side of the road. Note the height of the parapet walls above what is likely to be original road surface. Source image: Dublin Port Archives



View looking east along Pigeon House Road with Fever Hospital (RPS 6793) in distance, and northern parapet on left side



View looking south at sea wall as it drops over 5 m to active seabed opposite the Fever Hospital

Proximity to development

Within development area

Likely Impacts

York Road-Pigeon House Road to Ringsend Park:

- Pedestrian crossing of R131 from Ringsend Park to be established as part of the creation of a public plaza that celebrates the GSW and allows safe access to the Maritime Village from the south. See Figure 1.2 in EIAR.
- Breach across line of GSW for the new pedestrian crossing at a location where there
 is currently no upstanding remains.
- Resurfacing of current road surface for new planting and new surface for public plaza.

Poolbeg Yacht and Sail Club to MTL Yard:

 Breach across line of GSW to provide vehicular access to Maritime Village. The impact will be on the north side and central part of the GSW. The southern parapet area will not be impacted. See Figure 1.2 in EIAR. Breach across line of GSW within MTL Yard where the grass verge and southern parapet will be reduced in height by 400-500 mm over a horizontal area of xx m to facilitate vehicular movement. See Figure 1.2 in EIAR.

Murphy's Yard to Pigeon House Harbour:

- Breach across line of GSW at Murphy's Yard to provide vehicular access. The impact will be on the south side and central part of the GSW. The southern parapet area will by removed over a length of *c*. 32 m. See Figure 1.2 in EIAR.
- Widening of junction with access road into Ecocem and Berth 47.
- Widening of junction with Shellybanks Road. See Figure 1.2 in EIAR.

Recommended Mitigation

York Road-Pigeon House Road to Ringsend Park:

- Detailed supplementary archaeological survey prior to construction
- Design of access point to incorporate surfacing to allow for legibility and interpretation
 of the line of the GSW
- Interpretive/ wayfinding proposal to be provided in Area K
- View corridor to be incorporated through Area K that includes changes to surfacing and visual indicators to mark line of GSW
- · Archaeological monitoring and resolution.

Poolbeg Yacht and Sail Club to MTL Yard:

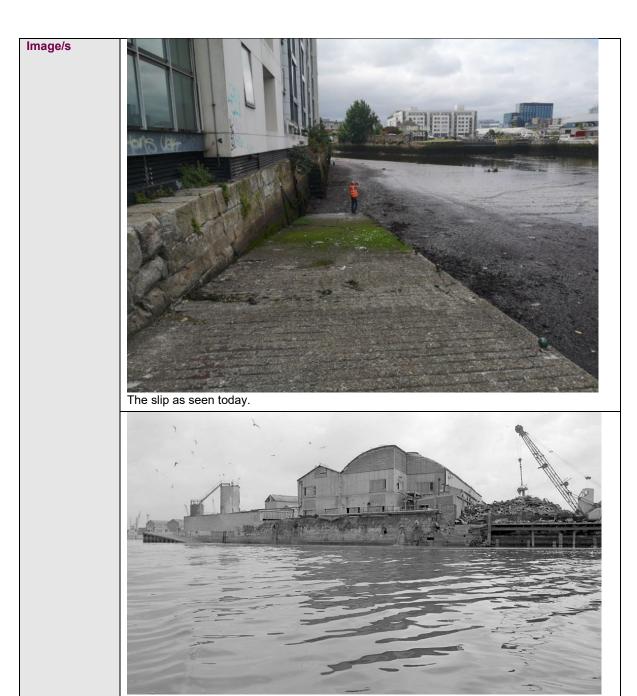
- Detailed supplementary archaeological survey prior to construction to record upstanding parapet elements
- Design of access point to incorporate surfacing to allow for legibility and interpretation of the line of the GSW
- Interpretive/ wayfinding proposal to be provided in Area K
- View corridor to be incorporated through Area K that includes changes to surfacing and visual indicators to mark line of GSW
- Archaeological monitoring and resolution.

Murphy's Yard to Pigeon House Harbour:

- Supplementary detailed archaeological topographic survey prior to demolition of parapet wall at Murphy's Yard, to record the upstanding south parapet.
- Re-use of demolition stone to rebuild/rehabilitate the north parapet wall opposite Murphy's Yard.
- Rehabilitate/make good the parapet wall along Pigeon House Road where the wall is in DPC ownership.

GSW to Pigeon House Harbour, attendant features

Reference	Site Name	Site Type	ITM Easting	ITM Northing
DCIHR 18-12- 118	Boat slip	Boat Slip	717920	734198
Description	Exterior Description: Concrete boa mooring blocks. Cast iron lamppos borders to east. This early twentie important surviving example of ma redeveloped. Slip built on the site 6-inch map of 1912.	st to northwest corner. Limesto th-century boat slip retains oric aritime construction within an a	ne masonry q jinal railings, e rea that has b	uay wall etc. and is an een largely



Slipway in 1950s at left. Hammond Lane Metal works now at Hibernian Bott	le site and
Landing Stage (DCIHR 18-12-121) to right.	

Proximity to	Outside development area
development	
Likely Impacts	None
Recommended	None
Mitigation	

Reference	Site Name	Site Type	ITM	ITM		
			Easting	Northing		
DCIHR 18-12- 121	Landing Stage	Landing Stage	717909	734127		
Description	Remains of a landing stage built <i>c</i> .1900, possibly to serve coal yard located to the east. Later served Hammond Metals from 1950s. Timber planks forming deck supported on metal framework, tied into stone revetment wall to eastern bank of river. Though no longer used and having fallen into disrepair, this landing stage provides an important reminder of the industrial heritage of the River Dodder. Located at the mouth of the river as it enters the					

	River Liffey, the landing stage is also close to the Grand Canal and would have provided a
	River Liffey, the landing stage is also close to the Grand Canal and would have provided a vital loading and unloading position for industries in Ringsend.
Image/s	vital loading and unloading position for industries in Ringsend.
Proximity to	Outside development area
development	
Likely Impacts	None
Recommended	None
Mitigation	

Reference	Site Name	Site Type	ITM Easting	ITM Northing	
DCIHR 18-12-119	Hibernian Works	Factory Bottle	717947	734159	
	Bottle works	works			
Description	Bottle Works. Glass Bottle making was a major industry at Ringsend. The Hibernian				
	Works Bottle company was owned originally by John Little, and was acquired by John				
	Burke's whiskey distillery in the early 1890s, possibly after an uninsured fire in 1892.5				

⁵ The Tablet, Volume 80 - 1892

The factory would later become a meat processing plant and was still later occupied by Hammond Metals. An apartment complex now occupies this location (Portview House). Archaeological investigations in advance of the apartment complex recorded reclamation activity dating from the late eighteenth century and associated this with dredging activities led by the Ballast Office and perhaps associated with the construction of the 'South Wall' (00E0744, 00E0744 ext). Image/s Ger Byrne-Ringsend-1940-Hiberian Bottle Works Building Outside development area **Proximity to** development **Likely Impacts** None Recommended None Mitigation

Reference	Site Name	Site Type	ITM Easting	ITM Northing
DCIHR 18-12- 149-01	Rope Walk	Building	718043	734112
Description	Variety of nineteenth- and twentieth-cappears on the OS historical 6-inch 1 rope and canvas.			

Image/s	Rope Walk Lime & Salt Works Salt Works Ringsend
Proximity to	Outside development area
development	
Likely Impacts	None
Recommended	None
Mitigation	

Reference	Site Name	Site Type	ITM Easting	ITM Northing		
RMP DU018-053	Ringsend Settlement	Settlement cluster	718006	734002		
Description	Ringsend developed as a port for Dublin in the seventeenth century. A bridge was built to Ringsend in 1650 and by 1660 there were 59 inhabitants of English origin and 21 Irish living in the village. A view of Ringsend shows a cluster of buildings around the Church of Ireland erected in 1704. In 1845 Ringsend was described as being in a dilapidated appearance, having fallen into decay since the discontinuance of its extensive salt-works. The same source describes other Industries including Iron Works, Glass making, chemical works and a distillery.					
Image/s		gsend (red arrow) in 17	745- Giles King			
Proximity to development	Outside development	t area				
Likely Impacts	None					

Recommended	None
Mitigation	

Defenses	0:4-	0:4-	ITA Faction	ITAA Ni a adia ka aa
Reference	Site Name	Site	ITM Easting	ITM Northing
RPS 7376	Drinking	Type Drinking	718340	734070
KF3 /3/0	fountain	fountain	710340	734070
Description			। ected in 1906 with the Ringsend co	ttages behind the fountain being
Description	built in 19	22.6 Fount	ain located at the end of garden wa	all of 103 Ringsend Park, Dublin 4.
Image/s				
Proximity to	Outside d	evelopmen	t area	
development				
Likely Impacts	None			
Recommended Mitigation	None			

Reference	Site Name	Site Type	ITM Easting	ITM Northing	
ADCO 04	Landing Slip	Landing Slip	718700	734008	
Description	A landing slip is recorded on John Rocque's map as 'St George's Slip', and on the First Edition OS 6-inch series as 'Landing Slip'. It lay on the south side of the South Wall, and provided access to the channel leading to Cock Lake. The slip is recorded on the OS map as being rectangular in shape with an angle edge on its downstream (east-facing) side. Measured 69m long. The slip is not visible today. Its recorded location places it beneath the community gardens in Ringsend Park and the Syphon House (DCIHR 18-12-151-01). The slip is not referenced in the DCIHR.				
Image/s	Detail from Rocque 1757 showing St. George's Slip Detail from OS First Edition, with the red dot being				
Proximity to	Adjacent to developm	ent area	DCIHR overlay		
development	Aujacent to developin	iciit aica			

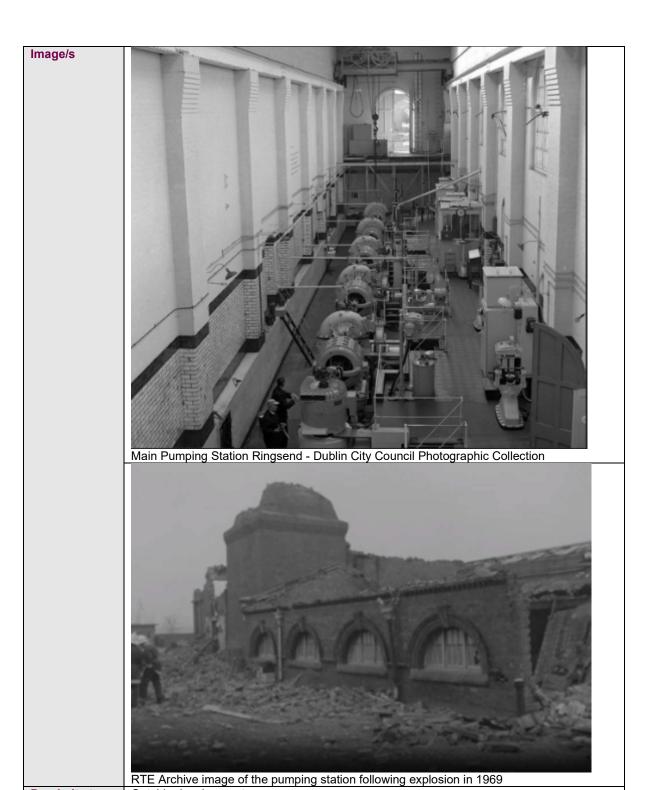
⁶ Four Sisters: The History of Ringsend, Irishtown, Sandymount. Kurt Kullmann 2017

Likely Impacts	 None. The closest development works is a hard landscape zone and tabletop crossing point to Cambridge Ave. junction, which will take place c. 14.5m away.
Recommended Mitigation	None.

Reference	Site Name	Site Type	ITM Easting	ITM Northing	
DCIHR 18-12-151-	Syphon house	Syphon House	718758	733985	
01	, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,			
Description	Detached two-bay single-storey masonry syphon house, built <i>c</i> .1900 as part of the Rathmines and Pembroke Main Drainage Scheme. Now disused. Pitched slate roof with air vent and cast-iron rainwater goods on timber eaves board. Squared roughly coursed rock-faced granite walls with rock-faced limestone quoins. Segmental-headed window openings with block-and-start limestone surrounds and granite sills; now blocked. Square-headed door opening with granite lintel and threshold and block-and-start limestone reveals. The building is one of a group of structures built as part of the Rathmines and Pembroke Drainage Scheme, which was completed in 1881 and was the first main sewage system in Dublin. Situated at the end of a long embankment, the construction of which had a major impact on the geography of Ringsend, the building exhibits an attractive design that belies its functional role. The use of varied stone displaying a mixture of finishings and also skilfully executed, enhances its symmetrical design.				
Image/s					
Proximity to development	Adjacent to developn	nent area			
Likely Impacts	 Incorporated into landscaping of pedestrian crossing to Maritime Village from Ringsend Park. There will be no direct impacts with the Syphon House. The closest development works is a hard landscape zone and tabletop crossing point to Cambridge Ave. junction, which will take place c. 14.5m away. 				
Recommended	Photographic r	ecord	•	•	
Mitigation	Avoid direct impacts				

Reference	Site Name	Site Type	ITM Easting	ITM Northing	
DCIHR 18-12-	Dublin Corporation	Pumping Station	718866	733934	
152	Main Drainage	-			
	Pumping Station				
Description	Dublin Corporation purchased Pidgeon House Fort, which was then in possession of the War Department. With the fort, the Corporation also purchased 60 acres for the purpose of constructing a pumping station and settlement tanks. Dublin Corporation Pumping Station was built in 1906. A 120-foot-high ventilation chimney was one of the striking features of the building. The building badly damaged in an explosion in 1969. It was replaced in 1985 with a modern pumping station located to the south of the original site. Though the original pumping station is no longer extant, it is possible that power and				
	plant survive within the ne		igor oxidiri, it io possii	no that power and	

⁷ RTE Archive 1969



Proximity to	Outside development area
development	
Likely Impacts	None
Recommended	None
Mitigation	

Reference	Site Name	Site Type	ITM Easting	ITM Northing
DCIHR 19-09- 001	Boat slip	Boat slip	719072	733952

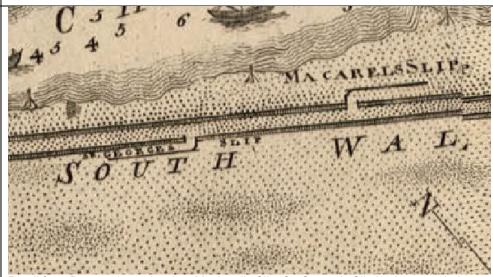
Description

Landing slip off the Great South Wall approximately 1km from start of wall. Visible on John Rocque's map dated 1757 where it is referred to as 'Macerals Slip'. Referred to as 'Landing Slip' on the OS Historic 6 inch and as 'Boat Slip' in the OS 25 inch.

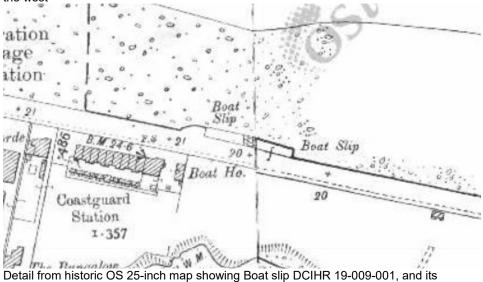
The coastguard station *c.* 1868 (RPS 6792) on Pigeon House Road probably used this slip. Located at the east end of Pigeon House Road opposite Ringsend Sea Scouts den, the slipway may still lie beneath the green verge abutting the MTL Yard.

A reference to the South Wall in 1791 describes three wharfs between the watch tower and the block wharf and seven more between it and the lighthouse.

Image/s



Detail from Rocque 1757 showing Mackarel's Slip. St. George's Slip is also recorded to the west

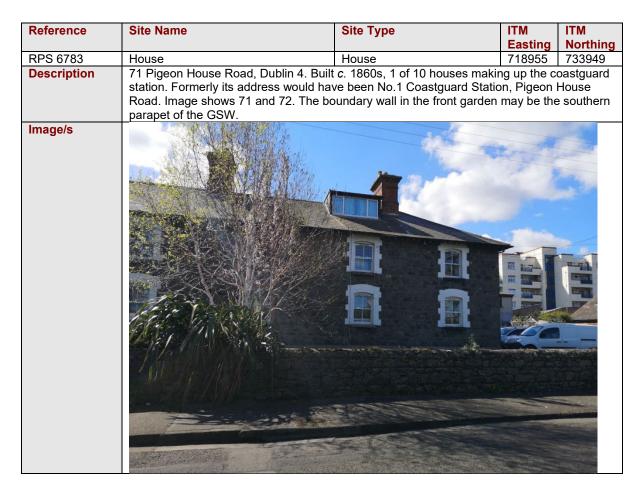


Detail from historic OS 25-inch map showing Boat slip DCIHR 19-009-001, and its relationship to the Coastguard Station on Pigeon House Road

	The location of the slip is recorded in this aerial image dated early 1930s. The slip was buried during the construction of the container terminal which became operational in 1974.
Proximity to	Within development area
development	Adjacent to CDAD in Area I/
Likely Impacts	Adjacent to SPAR in Area K
Recommended Mitigation	Archaeological monitoring of ground disturbance activities, with full archaeological recording and preservation <i>in situ</i> if exposed where possible.

Reference	Site Name	Site Type	ITM	ITM
			Easting	Northing
RPS 6782	House	House	718933	733951
Description	70 Pigeon House Road, Dublin 4. This c. 1896, it has a similar design to the C complete with a lookout tower. The buil houses. Built by George Prescott it was Club. The building, Sandefjorde does a is on a site between the coastguard sta Pumping Station (DCIHR 18-12-152). A property. The original property is now to beneath the site of Ringsend Recycling	coastguard Station at 80 Pigeon Iding was not part of the earlier is sometimes referred to, by him appear named on the OS 25-incution and Dublin Corporation Mark Small slip was located at the struncated by the R131 and the struncated by the stru	House Ro coastguard , as Graph th map. Thi ain Drainag couthern en	ad, d station ic Cruisers s property e id of this

Image/s	
Proximity to development	Adjacent
Likely Impacts	Anticipated reduction in noise due to changed use profile of DPC container area opposite. Likely increase in recreational traffic using new maritime centre. No physical impacts
Recommended Mitigation	None



Proximity to development	Adjacent
Likely Impacts	Anticipated reduction in noise due to changed use profile of DPC container area opposite.
	Likely increase in recreational traffic using new maritime centre. No physical impacts
Recommended	None
Mitigation	

Reference	Site Name	Site Type	ITM Easting	ITM Northing
RPS 6784	House	House	718960	733948
Description	coastguard s	station. Formerly its add se Road. The boundary	Built c. 1860s, 1 of 10 hous dress would have been No wall in the front garden m	o.2 Coastguard Station,
Image/s				
Proximity to development	Adjacent			
Likely Impacts			o changed use profile of E ional traffic using new mar	
Recommended Mitigation	None			

Reference	Site Name	Site Type	ITM Easting	ITM Northing
RPS 6785	House	House	718964	733947
Description	coastguard station. F	ormerly its address wo	60s, 1 of 10 houses ma uld have been No.3 Co he front garden may be	astguard Station,

Image/s	
Proximity to development	Adjacent
Likely Impacts	Anticipated reduction in noise due to changed use profile of DPC container area opposite. Likely increase in recreational traffic using new maritime centre. No physical impacts
Recommended Mitigation	None

Reference	Site Name	Site Type	ITM Easting	ITM Northing
RPS 6786	House	House	718969	733946
Description	coastguard station. F	ad, Dublin 4. Built c. 18 Formerly its address wo The boundary wall in	ould have been No.4 C	oastguard Station,
Image/s				
Proximity to development	Adjacent			
Likely Impacts	opposite. Likely incre impacts	n in noise due to chang ease in recreational traf	ed use profile of DPC of the strain of the s	container area centre. No physical
Recommended Mitigation	None			

Reference	Site Name	Site Type	ITM Easting	ITM Northing
RPS 6787	House	House	718973	733944

Description	75 Pigeon House Road, Dublin 4. Built <i>c.</i> 1860s, 1 of 10 houses making up the coastguard station. Formerly its address would have been No.5 Coastguard Station,
	Pigeon House Road. The boundary wall in the front garden may be the southern
	parapet of the GSW.
Image/s	
Drovimity to	Adjacent
Proximity to development	Adjacent
Likely Impacts	Anticipated reduction in noise due to changed use profile of DPC container area opposite. Likely increase in recreational traffic using new maritime centre. No physical impacts
Recommended Mitigation	None



Likely Impacts	Anticipated reduction in noise due to changed use profile of DPC container area opposite. Likely increase in recreational traffic using new maritime centre. No physical impacts
Recommended Mitigation	None

Reference	Site Name	Site Type	ITM Easting	ITM Northing
RPS 6789	House	House	718982	733942
Description	coastguard station	Road, Dublin 4. Built c. 18 . Formerly its address wo ad. The boundary wall in W.	ould have been No.7	Coastguard Station,
Image/s				
Proximity to	Adjacent			
development Likely Impacts		ion in noise due to chang crease in recreational trat		
Recommended Mitigation	None			

Reference	Site Name	Site Type	ITM Easting	ITM Northing
RPS 6790	House	House	718986	733941
Description	coastguard station. F	ormerly its address wo	60s, 1 of 10 houses muld have been No.8 Co he front garden may be	pastguard Station,

Image/s	
Proximity to development	Adjacent
Likely Impacts	Anticipated reduction in noise due to changed use profile of DPC container area opposite. Likely increase in recreational traffic using new maritime centre. No physical impacts
Recommended Mitigation	None

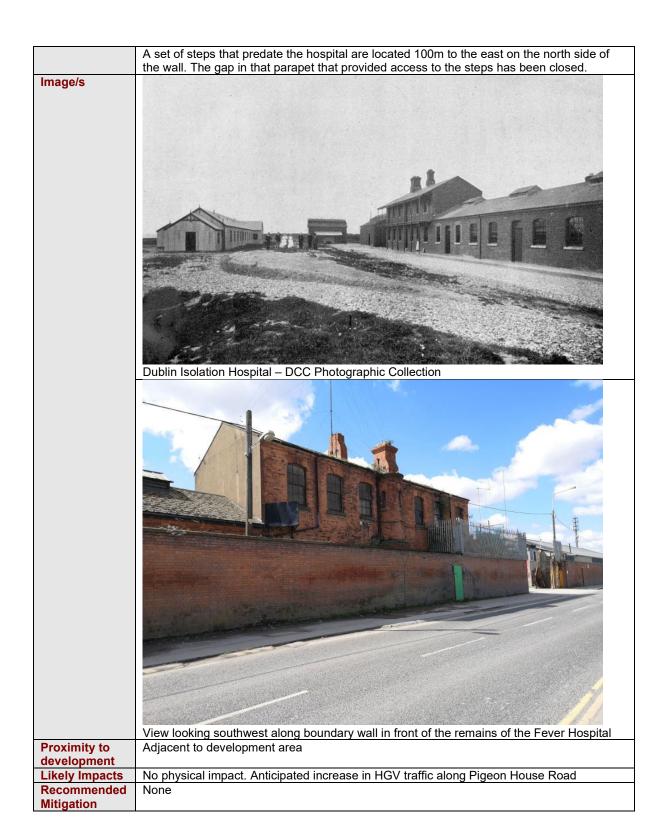
Reference	Site Name	Site Type	ITM Easting	ITM Northing		
RPS 6791	House	House	718990	733940		
Description	coastguard station. F	ormerly its address wo	860s, 1 of 10 houses mould have been No.9 Co the front garden may be	pastguard Station,		
Image/s						
Proximity to development	Adjacent					
Likely impacts	Anticipated reduction opposite. Likely incre impacts	n in noise due to chang ease in recreational tra	ed use profile of DPC of the contract of the c	ontainer area centre. No physical		

Recommended	None
Mitigation	

Reference	Site Name	Site Type	ITM Easting	ITM Northing
RPS 6792	House	House	718999	733940
Description	1860s, 1 of 10 house have been No.10 Coa within the grounds of southern parapet of the Samuel Carr was pro in June 1870 and Jur the buildings address	ad, Dublin 4. House, in s making up the coaston astguard Station, Piged this property. The bounder GSW. Indicate the Chief Officer as 1879. Thom's Irish Ases were given as York Reference to coastgual	guard station. Formerly on House Road. A boa ndary wall in the front of in 10/05/1867 and app Almanac and Official Di Terrace, Pigeon Hous	to its address would thouse is contained garden may be the cointment to Ringsend irectory 1870, records to Road, 1 to 10
Image/s				
Proximity to development	Adjacent			
Likely Impacts	opposite. Likely incre impacts	in noise due to change ase in recreational traf		
Recommended Mitigation	None			

Reference	Site Name	Site Type	ITM Easting	ITM Northing
RPS 6793	Fever Hospital, former	Building	719662	733801
Description	founding be It consisted Sisters of C is now occu A later build the bounda	enefactor, and was official of a two-storeyed red brocharity of St Vincent de Pupied by All Away Waste. The state of the	ed the Allan R Ryan Hospital Ily opened on 23rd August 19 ick building, which by 1918 c aul, who had a chapel added he west of the hospital and we n perimeter. The building is re side of the present compour	910 to treat Tuberculosis. ame under the care of the to the complex. The site within the compound where ecorded as St Catherine's

⁸ Alan Carthy, 'The treatment o tuberculosis in Ireland from the 1890s to the 1970s, a case study of medical care in Leister', PhD thesis, NUI Maynooth, 2015, pp 167–173.



2. Pigeon House Harbour, Fort and Precinct

Reference	Site Name	Site Type	ITM Easting	ITM Northing
RPS 6797;	Pigeon	Harbour	720185	733792
DDIAS 181.1	House			
	Harbour,			
	walls and			
	basin			

Description

Pigeon House Harbour as planned in 1791 formalised a landing place that had developed on the natural islet known as the Green Patch since the late seventeenth century. The harbour forms a large L-shaped area defined by a stone-built quay that measures 335m long east-west by 95m long north-south, and was constructed to serve the packet ferry services. De Courcy argued that the Ballast Office Wall formed the south and east quays, while the west and north quays that project into the river channel date from 1791.

When the military requisitioned Pigeon House Precinct in the late 1790s, the harbour's function was redirected to serve military needs and certain adaptations were made to incorporate defensive elements (see description of Pigeon House Fort, DU019-027, RPS 6794).

A Lifeboat House (DCIHR 19-09-005) was built inside the north quay of the harbour close to the harbour entrance.

When the military departed the precinct and it was bought back by Dublin Corporation in 1897, the harbour was adapted for use and the large western part of its basin filled in with a series of concrete-formed tanks that served as Outfall Tanks (DCIHR 19-09-001) for the city's main drainage scheme. A large culvert that breaches the bottom of the north-facing quay wall is associated with the installation of the Outfall Tanks.

The active harbour basin is reduced to a small area at the harbour entrance. From 1902, construction of the Electricity Works complex (RPS 6796) absorbed the eastern side of the harbour basin, and a timber wharf was constructed along this side to provide access.

In c. 1982, Dublin Corporation built the Sludge Jetty against the north-facing quay wall.

In 19<mark>96</mark> the channel area to the north of the harbour was reclaimed and was formerly a recorded oyster fishery for Dublin City. ¹⁰

An archaeological walkover survey conducted in 2018 at Low Water recorded the west-facing harbour wall as a rough stone-faced wall footing that has had more recent construction built above it. It is possible to trace the line of the former Pigeon House Harbour quay on the ground surface of the reclaimed land to the north, where two parallel lines of stonework are evident, representing the internal-facing and the seaward-facing sides of the former quay. The two lines of stonework lead eastwards to the active harbour basin, where the quay wall is fully exposed. Within the active basin of the harbour, the quay is defined as a well-built granite-block wall.

Underwater archaeological survey for the 3FM project recorded a short (*c.* 50m) section of fully exposed (internal) quay wall along the southeast corner of the harbour area (Appendix 16-5, Feature F03). The quay wall that formed the east side of the historic harbour area is largely obscured by a sheet-pile wall (northernmost part) and a partially collapsed concrete quay. Construction of the sludge jetty has impacted the upper part of the quay wall (along a 15m section) and the culvert for the adjacent Outfall Tanks has removed a 4m by 5m section of the structure's façade.

A c. 37m-long section of the east-west quay wall remains fully visible/intact, positioned to the east of the sludge jetty where it forms a pier head at the harbour entrance. Neat-cut, granite, capping adorns the top of the quay-wall along this section, laid north-south to form the surface (deck level) of the quay; ranging in length between 1.1m (min.) and 165m (max.). The vertical face of the capstones measures 250mm in width (horizontal dimension) and 400mm in depth (vertical dimension). The quay wall is composed of uniform courses of granite ashlar, measuring 300 mm in depth (vertical dimension) and between 550 mm (min.) and 1.07m (max.) in length). Fifteen courses of masonry are visible forming the façade at Low Water, upstanding to a maximum height of 4.48m from the foreshore. The masonry courses retain a stepped-prolife, in keeping with the construction of the GSW to the east, with each outward step in the course measuring 30mm, 50mm, or 70mm in width.

The pier-head measures 8.4m in width and is flanked by opposing flights of river access steps, positioned on the north (external) and south (internal) side of the structure. The

⁹ De Courcy, Liffey in Dublin, p. 299.

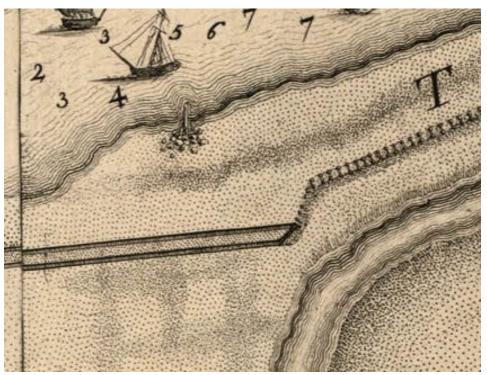
¹⁰ The records survive among the Expired Leases 1462-1869, that form part of the Dublin City Archives, and date to 1705, 1790, 1795, 1799, 1803 and 1832, references exp/1252, exp/1151a, exp/1151, exp/1152b, exp/1152, and exp/1152c respectively

channel side access steps are only partially intact, the topmost seven steps remaining *in situ*. These are formed by masonry that has been set into the quay's façade, the steps extending from the quay wall by 1.24m. The internal steps remain better preserved, extending the full height of the quay wall.

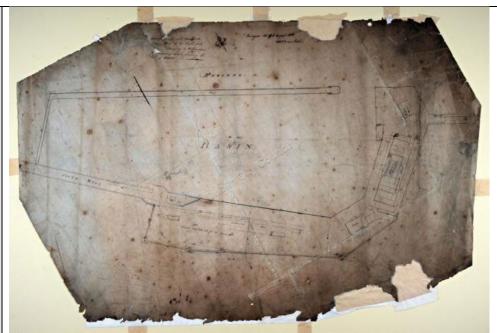
Two mooring bollards are inset into the upper surface of the quay. Both are of an identical (mushroom-cap) design, forming robust cast-iron bollards that stand 500mm from the quay's deck-level. The moorings, which are also located elsewhere within the existing harbour area, are a later addition and are contemporary with the development of the Outfall Tanks.

The east side of Pigeon House Harbour has been substantially altered from the original, where a *c.* 50m-long section of quay wall (oriented north-south) has been removed and replaced with a sheet-piled wall, set back up to 15m from the original. Extensive rock-armour protection has been placed along the base of quay wall. The timber wharf is in a state of dereliction.

Image/s



Detail from Rocque's map of 1757 showing the area between the Piles (on the right) and the South Wall (on the left) where Pigeon House Harbour was subsequently developed. The slight kink between the two breakwater elements is where the southeast angle of the later Fort is nestled



Plan of Pigeon House Harbour. Source: wsc-maps-312.preview_DubCityPubLibs



Historic painting showing Pigeon House Harbour, and citizens and soldiers travelling along the GSW to the Fort. Note the height of the parapet walls and the presence of the stockaded entrance to the Fort



View looking south at northwest corner of Pigeon House Harbour wall, built c. 1791



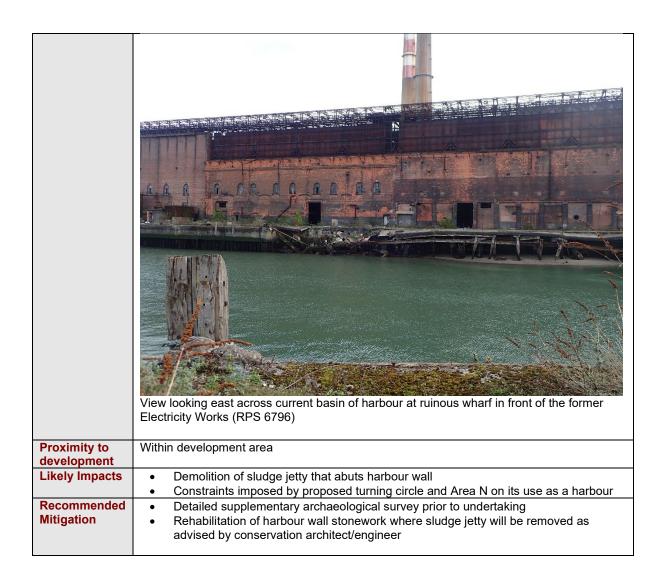
View looking west across reclaimed land, showing the line of the former harbour wall still evident on the ground surface



View looking south at north-facing elevation of Pigeon House Harbour wall



Detail view of north-facing elevation of harbour wall showing the stepped profile that it typical of the construction of the GSW.



Reference	Site Name	Site Type	ITM Easting	ITM Northing	
RMP DU019- 027, RPS 6794	Blockhouse	Building	720140	733719	
Description	According to De Courcy, a blockhouse was built in 1760 in the Pigeon house precinct. The blockhouse was located close to what would be the western entrance into the Fort (RPS 6794). The blockhouse was used for the storage of tools and materials and as a repository for flotsam and jetsam claimed by the Corporation. In 1761, John Pidgeon became its resident supervisor and caretaker. Many of the people passing through here would stop for refreshments at the resting place established by Pidgeon and his family, and the blockhouse became known as the Pigeon House. The building was timber built and was recorded as being 7,938 feet from the king's Watch House at the Point (Ringsend) to the block-house. New blockhouse accommodation was developed in 1787, when the existing structure appears to have been extended. The blockhouse does not survive above ground today.				
Image/s	None				
Proximity to development	Adjacent to development area				
Likely Impacts	No physical impacts. Road and traffic use will alter character				
Recommended Mitigation	Archaeological monitorir	ng and resolution of all	ground works in the vio	cinity	

¹¹ De Courcy, *The Liffey in* Dublin, 1996, 299).

¹² Encyclopaedia Britannica; Or, a Dictionary of Arts, Sciences – 1791,

Reference	Site Name	Site Type	ITM Easting	ITM Northing
RPS 6795	Former Pigeon House Hotel, Pigeon House Rd	Building	720343	733686
Description	The Pigeon House Hotel is a signific built c. 1793 to the design of Robert cross-channel passengers, replacing House Hotel became part of the mili until 1897. It currently serves as officers	Pool and constructed to provide a g the former blockhouse. During 1 itary fortifications and remained page 1.	iccommoda 798 the Pig	ation for geon
Image/s				
Proximity to development	Adjacent to development area			
Likely Impacts	 No physical impacts, New perin 	neter boundary treatment betweer	hotel and	pubic road
Recommended Mitigation	Archaeological monitoring and	resolution of all ground works in th	e vicinity	

Reference	Site Name	Site Type	ITM Easting	ITM Northing
RMP DU019- 027, RPS 6794	Pigeon House Fort	Building	720133	733678
Description	Shortly before the outbre requisitioned from the Ba until 1897. 13 According to and as a refuge, with its reports earlier in the eight as a suggested site: the principle of an isolated s. The Fort was entered from extended around the sour recorded in various map De Courcy. The curtilage south. The Parade Groublockhouse, and a prison over use of the Hotel. Of offices stores and a mag Draw Bridge led from the Landing Slip, both overloce ased within the harbout Elements of the Fort still concluded that the wester visiting and orientation s are recorded as individual much is buried under late 1995 is quite compreher	allast Board for use as a concernigan, the Fort was own harbour for the Dunteenth century had streestablishment of the Pittrong-point with its own of a fortified west gate of the many strees as including the OS First is recorded as being found lay inside the west gate of house and barracks lather buildings occupied the puildings occupied the point of the eastern extra boked by a protective gour, which now was devolved the fort gatehouse of the fort pace for the fort completed monuments (Signal Ter development. Paul K	a temporary military forts intended to serve as a blin administration and essed the need for a citageon House Fort follow harbour. defended by two draw be soft the Harbour. The get Edition 6-inch series, a criffied with two gun emate, extending across the space to the north, becated close to the harbour the GSW (DU019 an parapet. The ferry parted to military matters. haeological study of the triangle in particular, could be ex. 15 Some of the upstar ower DU019-038001), errigan's description of	, which would last a citadel for Dublin garrison. 14 Military adel, with Ringsend ed on the same oridges, and round plan is and is annotated by abrasures facing he site of the former cers Quarters took including clerical four entrance. A 9-029002), next to a acket services

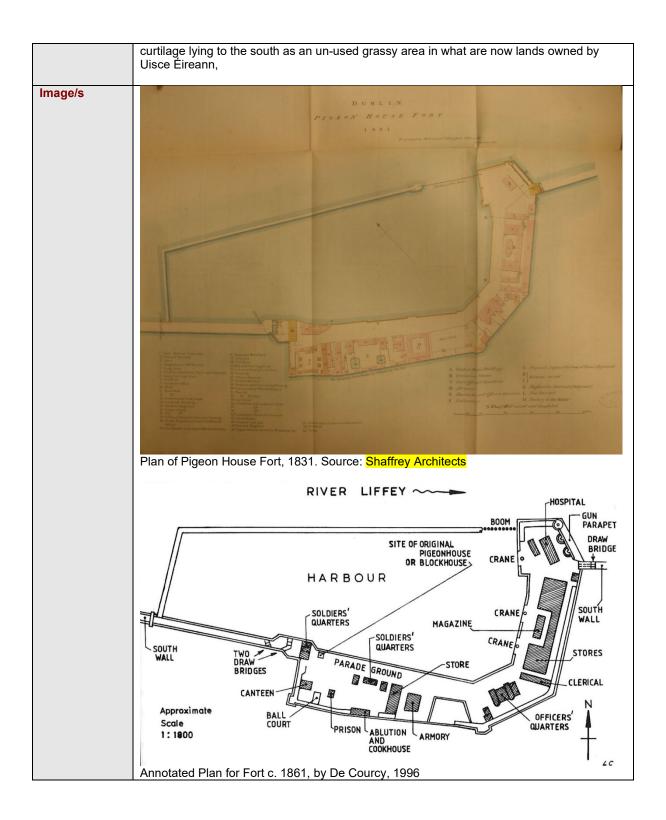
¹³ De Courcy, *Liffey in Dublin*, 299-301; Gráinne Shaffrey, et al, *Pigeon House Precinct, Conservation Plan and Re-use Study*, report for Dublin City Council, 2011.
14 Paul Kerrigan, *Castles and fortifications in Ireland 1485-1945* (Cork, 1995), pp 176-178.
15 Antoine Giacometti, 'Archaeological and architectural survey of the Pigeon House Fort, and 18th century artillery fort on the Poolbeg Peninsula. 09E0259', unpublished report of ArchTech for Dublin City Council, 2009.

Parts of the perimeter wall or rampart on the west and south still survive. The sea originally came up to the wall at high tide. Entrance to the fort on the west was by means of a drawbridge, which was at the position where the present road enters the fort. Immediately to the north is a gun embrasure, the gun platform some feet above the general ground level. South of the drawbridge were two more gun-embrasures in a length of wall now demolished: the south corner of this part of the west front ended in a triangular salient. loopholed for musketry, which no longer survives. The loops in the northern face flanked this advanced part of the west front and the drawbridge. The perimeter of the fort ran eastwards from the musketry salient for a distance of some 40 feet, then southwards about 145 feet. This north-south length of wall survives, with two arched gun-embrasures of regular masonry in the northern section. The guns were placed on the rampart, approached by steps from the interior of the fort; like those in the advanced part of the west front at the fort entrance, they had a field of fire westwards over the approach from Dublin. Of the south wall of the fort about half survives, a length of some 400 feet. Farther east the road crosses the site of the wall; to the east of the road a length of the south wall with three arched gunembrasures was demolished in the mid-1980s. From this eastern end of the south wall the perimeter of the fort ran northeast and then northwards to the junction with the eastern extension of the South Wall [Kerrigan is referring here to the GSW running east from the Fort to Poolbeg Lighthouse]. The entrance to the fort here was by means of a drawbridge and through the passageway of a two storey gatehouse. North of the gatehouse on the rampart were three guns on traversing platforms, two front-pivoted and the northernmost gun rear-pivoted in a circular emplacement at the northern corner of the fort. These guns had a field of fire to the east and northeast, commanding the harbour wall and the approach of shipping sailing upstream. To the south of the gatehouse were a large magazine and stores. An element of the fort that survives is a wall forming the southern and eastern perimeter of the Pigeon House Basin, where musketry loops in the wall commanded the harbour. In June 1804 there was a detachment of thirty-five artillerymen in a new ordnance barrack and sixty soldiers in a large house in the eastern part of the fort. Another large house was occupied by officers and civilians, and there was a magazine and naval storehouses and a bombproof capable of accommodating 200 soldiers in an emergency; this must have been a vaulted structure of masonry or brickwork to resist shellfire. The guns were seven 24-pounders, three on traversing platforms; one 18-pounder, three 12pounders and one howitzer on garrison carriages, and four 12-pounders, two 6-pounders and two howitzers on field carriages. There were in addition eight mortars. A parapet had recently been added to several parts of the fort and a stable built for fourteen horses. A plan of the Pigeon House Fort, with the addition of a much larger proposed fort, drawn to accompany a report of a committee of Royal Engineers in Ireland of November 1805, indicates the outline of the fort much as it appears on later plans.

The underwater archaeological impact assessment conducted for 3FM (Appendix 15-5, p. 54) recorded one of the circular gun-emplacements (ADCO STR0-03) located immediately above the quay wall, at ITM 720406E, 733844N (centre-point). The feature is positioned at the terminus of a 'rampart' feature depicted on the OS First Edition Map and as a distinct structure on the OS 25-inch edition map. The structure measures c. 7 m in diameter and is delineated on its seaward circumference by a masonry wall (limestone fabric) comprising six courses of masonry upstanding to a height of 2.9 m. The masonry appears to have undergone repair (historic) in a number of places. Neat-cut, angled, capstones adorn the wall top. Two access steps are visible on its south (landward) side; a third step remaining buried within the modern surface of the quay at this location. A modern concrete structure has been built within STR-03 and is thought to be a pillbox (guard-post) of twentieth-century date.

In addition, the dive survey reaching east of the fort along the base of the GSW observed three concreted iron spheres (probable cannon balls) at ITM 720480E, 733813N (Find Nos. 23D0037:01-03), and provide a tangible reminder of the military development of the Fort in the 1800s.

If the Fort is the second principal component of the Pigeon House Precinct following the construction of the Harbour (RPS 6797; DDIAS 181.1), the layered history that is incorporated into the precinct sees further change when the precinct was re-acquired by Dublin Corporation and the site becomes part of the utilities hub that distinguishes Poolbeg Peninsula in the late nineteenth and twentieth centuries. The works associated with the sewerage settlement tanks would infill much of the harbour basin, while those associated with the Power Generation stations from 1902 would both demolish and bury many elements of the Fort. The routing of Pigeon House Road across the site effectively severed the connection between Pigeon House Precinct and the eastern section of the GSW. It also cut the Fort's southern extent in two, with the former barracks and associated buildings and





View looking south-southeast along current west-facing wharf of Pigeon House Harbour. The wharf is supported by a mass concrete quayside that was likely added to the original line of the GSW when constructing the generating station.



Historic photograph showing the western entrance to the Fort. Image courtesy of Cormac Lowth



View looking northeast to the remains of the western entrance today, much of which is now. Only the very northern gatepost of the entrance is standing. The area is planted to provide a degree of landscaping



In contrast, the area of the fort that lies south of the Pigeon House Road and would have included the barracks and the southern perimeter wall is effectively abandoned under rough secondary growth that has developed over what appears to be heaps of dumped soil, on lands owned by Uisce Éireann



Historic photograph showing a selection of the gunports within the Fort. Image courtesy of Cormac Lowth



View looking west along Pigeon House Road that is cut through the Fort, across the former Parade Ground. The stone wall on the right is part of the fortified elements of the GSW that would have overlooked the harbour basin and are furnished with a series of gun loops



Historic photograph showing the eastern entrance to the Fort. Note the GSW leading directly from there, and the Landing Slip to the right (DCIHR 19-09-012). Image courtesy of Cormac Lowth



Looking westward towards the eastern entrance to the Pigeon House Fort as seen today



Photograph showing a pair of the Pigeon House Fort guns that formerly served there. Image courtesy of Cormac Lowth



Photograph showing the former gun emplacement located, ADCO STR-03, above the harbour wall. The concrete structure built within the gun emplacement is thought to be a pillbox (guard-post) of twentieth-century date. Image courtesy of Cormac Lowth



Photograph from UAIA (Appendix 15-5, Plate 51, showing ADCO STR-03 today, where it is subject to graffiti and general neglect

Proximity to development	Within Development area, see Figure 1.2 in EIAR
Likely impacts	 Landscaping to verge of existing road with new perimeter boundaries New road markings and surfacing with proposed roundabout on location of SE perimeter of fort Interventions to provide for road safety measures will alter character SPAR road to access proposed Area N at eastern entrance to Fort Active travel connection to Area N will traverse along eastern perimeter of fort
Recommended Mitigation	 Detailed archaeological survey prior to undertaking Appropriately scaled and detailed drawings of proposed Area N bridge interaction with quay wall Designed to avoid direct and indirect impacts with all standing elements of the Fort At Western Gate: Change in surface and creation of raised table at location of western gate to mark entry into the precinct. Interpretative/ wayfinding proposal to be provided in this location Archaeological monitoring of demolition and excavation of below ground elements General repair works to the GSW in DPC ownership Site specific boundary treatments which recognize the character of this location At Eastern Gate: Change in surface and creation of raised table (bridge) at location of eastern gate to mark entry into the precinct. Archaeological monitoring of demolition and excavation of ground and seabed works. General repair works to the GSW in DPC ownership.

Reference	Site Name	Site Type	ITM Easting	ITM Northing
RMP DU019- 038001	Signal Tower	Signal Tower	720215	733670
Description	have been the only no signal crew were likel demolished barracks end of the fort comple. The signal station wa British Board of Ordnapproach of a French naval signal post. The	ew feature constructed y accommodated in ex shown on the OS First ex. s part of a system of or ance in the first decade i invasion fleet. Signallic e system formed a con	Pigeon House Fort. A s specifically for the sign isting buildings on site. Edition 6-inch map of ver 80 signal stations of e of the nineteenth cent ing between sites was a tinuous chain from Mal -1810s when the treat	nal station. 16 The perhaps at the now 1843, on the south onstructed by the tury to warn of the accomplished using a in Head in Donegal

Kerrigan, Castles and fortifications in Ireland, p. 276.
 Kerrigan, Castles and fortifications in Ireland, pp 157-166.

Image/s	Aerial photograph of Pigeon House Precinct in c. 1950. The red arrow points to the location of the Signal Tower (RMP DU019-038001) according to record.
Proximity to development	Adjacent to development area, see Figure 1.2 in EIAR.
Likely Impacts	None. The charted location lies within Irish Water lands and consequently is outside the 3FM project footprint
Recommended Mitigation	Archaeological monitoring and resolution of all landscaping works associated with 3FM in this adjacent area because the exact location of the Signal Tower is not confirmed

Reference	Site Name	Site Type	ITM Easting	ITM Northing	
DCIHR 19-09-004	Outfall works, Pigeon	Settlement tanks	720120	733795	
	House Rd				
Description	Outfall works, completed in 1906 as part of Dublin's main drainage scheme and occupying the west side of the former Pigeon House Harbour basin. In <i>c.</i> 2003, concrete tanks replaced the original settlement tanks.				
	Corporation commence was completed in 1906 the first such scheme in	lowing the departure of the army from Pigeon House Precinct in 1897, Dublin reporation commenced work on a long-awaited Municipal Sewerage Scheme, which is completed in 1906, with a large outfall works at the Pigeon House site. Though not first such scheme in Ireland, it was amongst the earliest and the site represents a jor engineering achievement on the part of Dublin Corporation.			

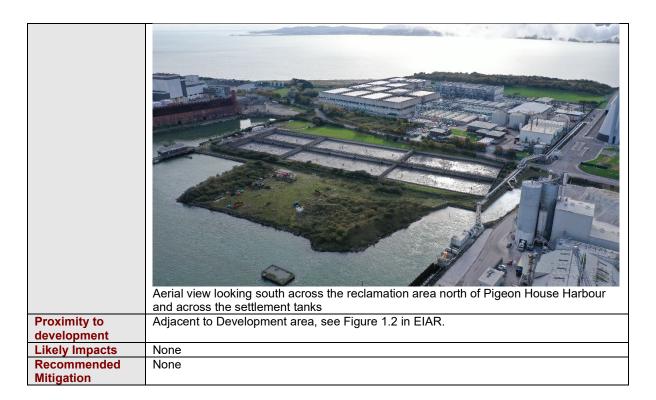
Image/s



Sewer works under construction 1904



Settlement tanks today



Reference	Site Name	Site Type	ITM Easting	ITM Northing
RPS 6796; DCIHR 19-09- 006-01; NCEHD 3271	Electricity Works/ Power Station	Building complex	720398	733755
Description	The electricity station was built at a time of increased requirement to meet the needs of the rapidly growing city. The station was officially opened in 1902 and in 1903 became the first generating facility in the world to generate three-phase electricity. It was transferred from Dublin Corporation ownership to the newly-created ESB in 1929 and continued to supply electricity to the national grid until it was finally decommissioned in 1976. It is described as a multiple-bay three-storey red brick former coal-fired power station, with octagonal chimney (rising from square-profile base) attached to south end and cast-iron coal hopper running length of west elevation at roof level. Mid-twentieth-century concrete-rendered extensions to southeast and northeast. Surviving tramlines to yard. Machine-made red brick throughout with variety of square- and round-headed window opes. Palladian style window opening to south gable and metal frame windows throughout. 18			
	As the country's earliest major power production facility and the world's first three-phase generating station, it is a site of national industrial heritage interest. It is also of considerable architectural significance in its own right and presents what has aptly been described as a 'brick assembly of almost sculptural interest', in particular to its south end, where the combination of gable-front, octagonal chimney and graded massing surmounted by cast-iron coal hopper create a striking set piece. The long east and west elevations also form impressive vistas and the coal-hopper is an important survival. The later twentieth-century additions are not without some merit also and the whole forms a most impressive composition with the Pigeon House Hotel to its southwest and the chimney's of the new Poolbeg Generating Station (opened 1971) to its east. Construction of the station initially lay within the footprint of Pigeon House Fort but subsequently was extended east beyond the fort's perimeter wall. It was built over the elements of the Fort in this area. The standing remains do not include the full footprint of			

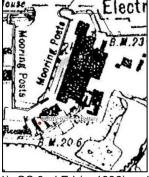
¹⁸ UCD School of Architecture, Dublin Docklands Area Master Plan: Inventory of the Architectural & Archaeological Heritage, Vol.2, pp.378-79; Brendan Delaney et al, A Heritage Inventory of ESB Buildings in Ireland (2005); Shaffrey, Pigeon House Precinct Conservation Plan, pp 23-33.

the electricity works. Elements along its east side have been demolished, presenting a largely open space. It is this open space that will serve to accommodate the new HGV access road to Area N.

Five site investigations trenches excavated within Pigeon House Precinct along the proposed HGV access road corridor were monitored archaeologically (Appendix 15-4, section 3). The excavation depths achieved were shallow, not exceeding 700 mm, and consistently recorded a surface layer of sand over silt. The silt layer retains inclusions of red brick and metal. Trench 4 included an additional layer of black silt overlying a fine brown-coloured silt. The results indicate the potential for demolished elements of the former electricity works to survive as foundations.

Image/s







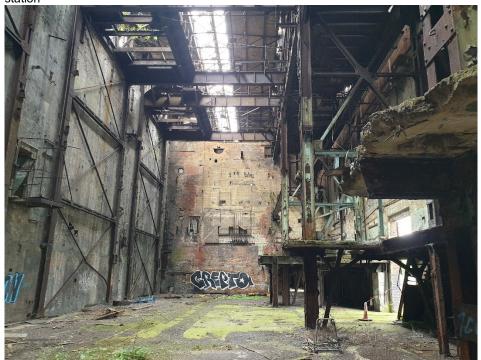
Detail from OS 25incn (c. 1911), OS 3ed Ed (c. 1936) and OS Ortho (2018) showing the footprint of the electricity works through time



View looking north towards the redbrick Electricity Works site with the base of its distinctive octagonal chimney. Pigeon House Hotel (RPS 6795) stands to the right, and the later Pigeon House Chimneys in the background



View looking south along the west-facing façade of the Electricity Works building, and the concrete quayside likely added to the original line of the GSW to facilitate the generating station



The interior of the Electricity Works building is a vast open cavern with a multitude of levels supported by steel frames



View looking west at former electricity works building with later extensions in foreground



View looking west at later extension to electricity works building, north end



View looking south along open space to east of electricity works building, showing large workshop on right side of picture that was added to the southeast corner of the power station *c*. 1945. Two gable ends of the former GSI laboratories are visible in the middle of the picture. The proposed new access road to Area N requires the demolition of the GSI laboratories and will run north across the open space in this picture



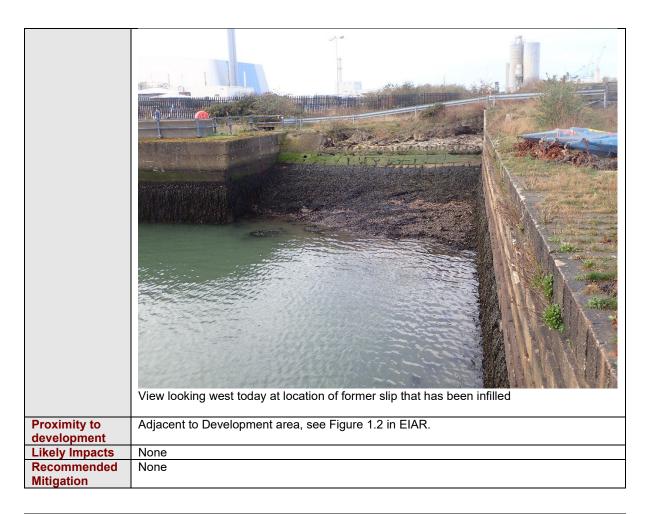
View of eastern gateway from Pigeon House Precinct on to the GSW today. Formerly this retained a draw bridge from the Fort

	View of trough at the eastern entrance to the Fort from the GSW. It is unclear if this was associated with the draw bridge or is a more recent barrier feature
Proximity to development	Adjacent to Development area, see Figure 1.2 in EIAR.
Likely Impacts	 Loss of open area to east of former Electricity Generating Station. Proximity of Area N requires protective mitigation measures during construction and operation due to poor condition of former Power Station building. Change in character of area.
Recommended Mitigation	 Construction Management Plan review and approval by Architect/ Engineering conservation Consideration of fencing design, road surfaces of access road, and access bridge from Precinct to Area N to absorb heritage importance of the Precinct area Vibration monitoring of protected structure (RPS 6796) during construction of access road and bridge Archaeological monitoring and resolution

Reference	Site Name	Site Type	ITM Easting	ITM Northing	
DCIHR 19-09-	Lifeboat House,	Building	720278	733835	
005	Pigeon House Rd				
Description	In a 1907 edition of 'The Builder' there is an invitation to tender for the construction of a				
	timber and corrugate	d Lifeboat house ar	nd timber slipway upon a :	site near Pigeon House	
	Fort. This construction	n would have been	on land reclaimed for the	settlement tanks for the	
	Corporation's Outfall	works.			
	The DCIHR record su	uggests that an ash	lar masonry pier located t	to east of site may be	
	related to the lifeboat	house. The buildin	g and timber slip are no lo	onger visible and were	
	possibly removed when Sludge jetty was installed in the 1980s.				
	The underwater archaeological impact assessment completed for 3FM (Appendix 15-5) observes that the OS-25 inch map depicts a 'Lifeboat House' and associated launching slip at this location, which is at the western pier head, just east of the settlement tanks. It				
			presents the remains of a		
	timber-framed (or sin	nilar) superstructure	from which a life-boat wa	as launched/ recovered.	

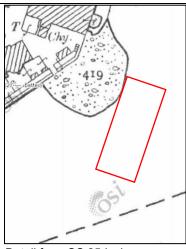


View looking north today at location of former slip that has been infilled



Reference	Site Name	Site Type	ITM Easting	ITM Northing
ADCO 03	Sheds/GSI	Building complex	720396	733647
	Laboratories			
Description	Series of two conjoined electricity works and su and were most recently. The units were built post Precinct but outside the standing remains of the An oblique aerial photo two long sheds with sin sheds have been reroof four. The older element sheeting, and retain two The roofs of the newer formed using concrete support window lights a windows, while those owest-facing and north-fainspected.	bsequently as laborated used to support Film set-1945 on reclaimed later footprint of Pigeon Hotel electricity works protested and the original with a recorded in either control elevated ventilation uselements appear to be frames that are infilled and doors. The windown the newer elements	ories for the Geologica studios. and that lies within the cuse Fort (RPS 6794) acted structure (RPS 6794) works dated c. 1952 solvents. Since then, the ndows replaced, dividing corrugated concrete shants and are punctuated felt sheets. The walls with poured concrete so on the older elementare either aluminium o	Pigeon House and outside the 796). hows the units as southern half of the ng the two units into eets or asbestos ed with roof lights. of the sheds are wall panels that its are tall sash r PVC frames. The

Image/s



Detail from OS 25-inch map Showing approx.location of future sheds as open water *c*. 1911



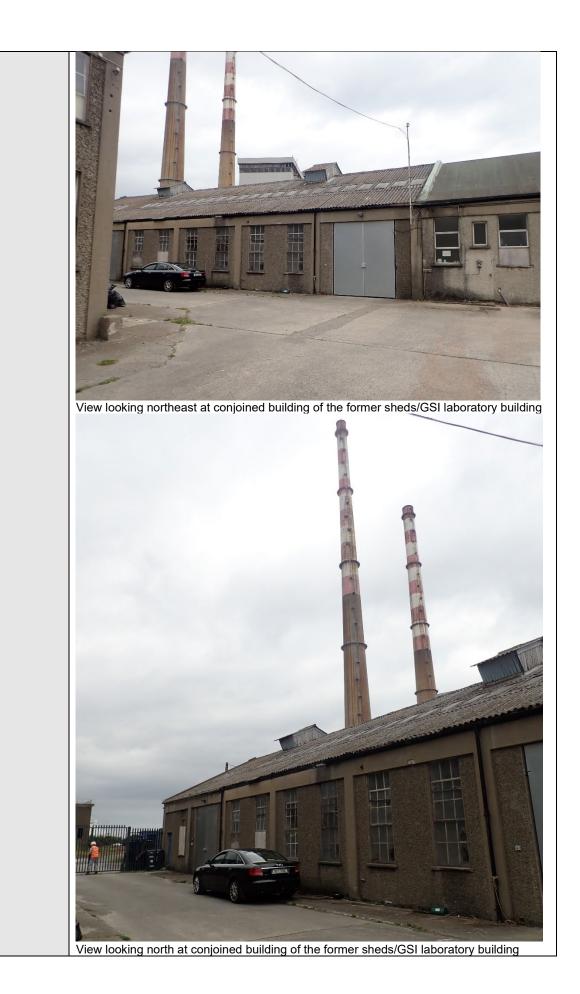
Detail from OS Ortho image showing location of the sheds



Aerial photograph of the electricity works in *c.* 1952, with the buildings location highlighted. DPC Archive ref 0519



View looking east at former sheds/GSI laboratory building



Proximity to	Within development area, see Figure 1.2 in EIAR.
development	
Likely Impacts	The building complex will be demolished to facilitate HGV access road to Area N
Recommended	Detailed archaeological survey prior to construction phase
Mitigation	Site specific boundary treatments which recognize the character of this location
	Removal of the formalization of the IW/DCC construction access rout
	Archaeological monitoring and resolution during construction

	Site Name	Site Type	ITM Easting	ITM Northing
Reference ADCO 02	Sludge Jetty	Jetty	720290	733941
Description	from its principal Outfall Works tha disposal at sea. It is a simple function forced concret where a series of the north wall of I former deck area 3FM (Appendix 1 extent of the eight.) The jetty is c. 106	purpose being the load at would be transported at would be transported at would be transported at would be transported at lintel which support of service rooms are concluded at line	nstructed on its downstruct, and its construction im underwater archaeology act area extending over ed north-northeast – so	waste generated by the asilgate at the jetty for a are furnished with a sy is wider at its shore end eam side. It was built on to apacts extend across the sy impact assessment for a 15m-long (east-west)
Image/s				



View looking east at Sludge Jetty. The timber structure in the foreground is described below as STR-01 and is separate from the Sludge Jetty



View looking west at Sludge Jetty, with the service buildings in the foreground

	View looking west at where Sludge Jetty is built on to the north wall of Pigeon House Harbour
Proximity to development	Within development area, see Figure 1.2 in EIAR.
Likely Impacts	The Sludge Jetty will be demolished to accommodate the turning circle, and repairs to north wall of Pigeon House Harbour made good
Recommended Mitigation	 Detailed archaeological survey prior to undertaking Archaeological monitoring and resolution during demolition Building conservation-led rehabilitation and rebuild of north wall of Pigeon House Harbour

Reference	Site Name	Site Type	ITM Easting	ITM Northing
ADCO STR-01	Timber structure	Jetty, site of	720262	733622
Description	(Appendix 15-5, Figur north (channel side of structure is formed by by a horizontal timber (mearing 300 mm x 30 sides. Each element is Each of the piles is preast-west by 1.35 m northe exact function of and is depicted on OS undergone modern re	es 29-30). It comprises the culvert associated two square-shaped tir frame. Each column is 20 mm) with a lattice-we state and together us otected by an iron pile north-south. STR-01 remains uncles 25-inch Map of the an pair as part of the mood part of the earlier world.	ater archaeology impacts a timber structure that with the Pigeon House mber columns, spaced is composed of four vertwork of internal cross-being large (recessed) irocap. The overall structers. However, it appears rea. Moreover, the adjacternisation of the outfalks at this location. It is lasimilar date.	t is positioned c. 14 m e outfall works. The 5 m apart, conjoined tically-set timber posts eams forming the on-bolt fastenings. The measures 8.32 m as to retain some age coent culvert, having I works in c. 2003,

Image/s	View looking east at the timber structure STR-01, with the Sludge Jetty in the background
Proximity to development	Within development area, see Figure 1.2 in EIAR.
Likely Impacts	ADCO STR-01 will be demolished in order to facilitate the Turning Circle
Recommended Mitigation	Archaeological monitoring and resolution during demolition

3. GSW from Pigeon House Precinct to Poolbeg Lighthouse

Reference	Site Name	Site Type	ITM	ITM
DLI010 020002	Sea wall. Great South Wall to	Sea Wall	Easting Various	Northing Various
DU019-029002, DCIHR 19-09- 010, RPS 6797,	Poolbeg Lighthouse	Sea wall	various	various
RPS 6798				
Description	The first attempt to construct a brinavigable access upper the Liffey Patch and Poolbeg Light, and is right Ballast Office decided to continue Poolbeg to the recently construct Smith of Dublin. Progress was slowed Construction was completed 1792. The main wall length has a different comprising a dry rubble core with form the two façades of the wall anot have parapets as it was not coperational breakwater. The final runs from Ringsend out to the Pocompleted, the GSW was the long In c. 1770, two slipways were add 19_09_012_01) was added next (DCIHR 19_09_011_01) was add In 1793, the Half-Moon Battery (DCIHR 19-09_011_Model In 1793).	r channel to the city quays recorded by Rocque (1757) the double masonry walled Ballast Office Wall. The town and only a length of 50 (2-1795). The construction to that of the granite ashlar in distinctive and has a 24-feet wide deconstructed as a protected configuration has lent its rolbeg Lighthouse as the Great constructed breakwalded to the GSW east of the to the eastern entrance to led at White Bank, giving a second content of the	occurred betw as the Piles. from the east a construction volume om was completed the Ballast Office elinear-shaped ck surface. This roadway. It sen name to the who SSW. At the time ter in the world. e Fort. The first the Fort, and the access to the L	een the Green In 1759, the abutment at was by John ete by 1787. De Wall, d blocks that s wall length did eved as an able length that e it was E (DCIHR he second iffey Channel.

Other features were added in the nineteenth century, including the Sluice House (DCIHR 19_09_009_01) and a Life Boat House (DCIHR 19_09_008_01).

A letter dated 12/1/1801 details proposals by Captain William Bligh for the repair of the wall from the lighthouse to the battery, involving raising the wall 1.3m higher than the Ballast Office Wall. Mention is also made of additional rock armour to protect the wall. A length of 1,307m was completed by 1803 and the further 1,347m were commissioned thereafter. By about 1805 the Great South Wall as we know it was complete.

In 1861, following damage caused by an extreme weather event at Poolbeg Lighthouse that dislodged stonework, Bindon Blood Stoney had a series of rock armour protection measures applied below the waterline.

An extreme weather event in 1981 resulted in the exposure of the remains of wooden kishes associated with The Piles on the south side of the GSW, and damage to the decking of the GSW. Dublin Port Company responded by adding further rock armour protection, and such protection is seen now on both sides of the GSW; that on the south side reaches level with the deck area in places, while that on the channel side tends to lie lower. Dublin Port Company carries out regular monitoring of the GSW to ensure its stability, and this monitoring is achieved by annual LiDAR and multibeam surveys, yielding robust metrically accurate data.

There have been some archaeological inputs to investigations conducted on this section of the GSW. A programme of Site Investigations (SI) conducted in 2015 permitted insight to its construction and state. ¹⁹ Five boreholes were cut through the wall between the Slipway DCIHR 19-09-11 and Poolbeg Lighthouse. The archaeological report concluded that the wall was built as a solid structure using cut granite blocks and gravel or shingle as fill, with some limestone and sandstone evident in the lower layers. Cut granite blocks were set dry on the seabed, flanked by two retaining walls. The seabed surface was sand that reaches depths of up to 10m. The sand in turn overlies strata of gravel, share and boulder clay. Bedrock was recorded 30-45m below the surface of the wall. In BH3, which lies close to the Half Moon Battery (DU019-028), timber was observed underneath the wall and this was interpreted as the possible remains of wreckage

In 2020, a section of the original revetment and inner and outer walls of the GSW were removed under archaeological supervision to accommodate a pipeline crossing the GSW opposite the NORA tanks, at approximately ITM721031E 733823N.²⁰ Following the insertion of the pipeline, the revetment and walls were reinstated. No other features of archaeological significance were observed during the monitoring works.

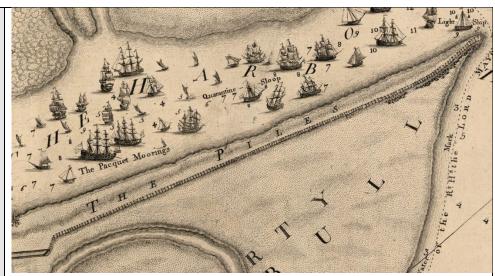
As part of SI works carried out for the 3FM project (Appendix 15-4, section 3, Trench 7 and BH-212), one location was excavated against the south side of the GSW to inform engineering design for the ESB access bridge that will cross on to Area N. The Borehole recorded sand, gravel and cobble extending to 10.2 m depth on the south side of the wall, while the trench exposed the stepped profile of the wall to a depth of 2 m as anticipated, at which point seawater encroached into the trench. The GSW at this location was recorded as being built of dry rubble-stone, with its surface and sides faced with granite ashlar blocks. The blocks are well bonded, but laid dry, except on the top where the joints are pointed. The sides of both the inner and outer walls are battered; approximately 1 in 7. Each course of granite masonry measured 400 mm in depth, with a horizontal offset of 50 mm from the underlying blockwork.

The underwater archaeology impact assessment carried out for the 3FM project (Appendix 16-5) completed measured survey along 990 m of the GSW that lies within the development footprint, and provides detailed and measured descriptions of the exposed surfaces. The supporting drawings include laser-scan detail.

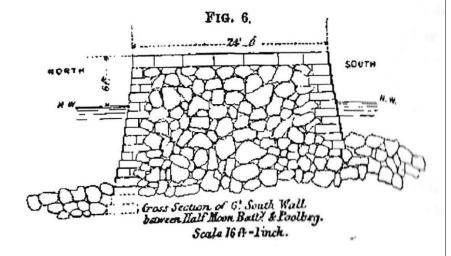
¹⁹ Anon, 'DPC historical structures studies, Great South Wall, Port of Dublin. Site Investigation report', Irish Drilling Ltd, unpublished report for Dublin Port Company 2016; David O'Connor, 'Archaeological monitoring of ground investigations (boreholes) at Great South Wall, Poolbeg, Dublin 2. 15E0454', Magnus Archaeology report for Dublin Port Company.

²⁰ Siobhan Deery, 'Archaeological monitoring at the South Sea Wall, Dublin 2. 19E0654'. Courtney Deery report for Dublin City Council.

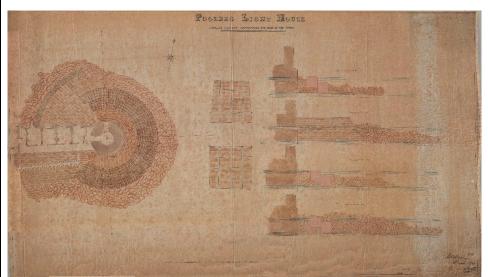




Detail from Rocque 1757, showing The Piles.



Cross-section of the Great South Wall recorded in Mann, 1881.



Bindon Blood Stoney engineering plan to show proposed rock armour protection measures to be added to the base of the GSW at Poolbeg Lighthouse in 1861 following destruction wrought by an extreme weather event. DPC Archive 8437



Photograph taken after the storm in 1981 shows damage to the GSW and a line of timbers off the south side, which appear to be the remains of 'The Piles'. Source: Dublin Port Company, Port Engineer



View looking east along GSW today just past White Bank Wharf Slipway ((DCIHR 19_09_011_01). The rock armour protection placed at the base of the wall on the foreshore, and reaching the deck level on the south side are modern interventions



View looking east along GSW today alongside the Lifeboat House site (DCIHR 19_09_008_01). The low concrete barrier supporting the vertical ranging rod is a modern addition



View looking west along GSW at the NORA tanks (left). The new wharf Area N will lie on the channel side (right)

	North-facing view of the southern side of the GSW, recorded during SI works for the 3FM project, Trench 7 (BH-212)
Proximity to development	Within development area, see Figure 1.2 in EIAR.
Likely impacts	 Proposed signal junction at Pigeon House Rd and Shelly Banks Rd 3 No. proposed crossings above GSW at proposed Area N. These will restrict potential for future access from Pigeon House Fort to eastern section of GSW (currently inaccessible)
Recommended Mitigation	 Creation of a physical separation between the new berth and the GSW Area N designed to be reversible View corridor to be incorporated along length of inaccessible portion of GSW alongside Area N New bridge design to be appropriate to the context and designed to be reversible Design of boundary railings to allow for maximum transparency Detailed supplementary archaeological survey prior to undertaking All survey data to be lodged in the Dublin Port Archives Sample panel for conservation pointing, grouting and reconstruction works to be approved by Heritage team and DCC Architect conservation inputs into the design elements of the Area N bridges Archaeological monitoring and resolution of ground and seabed activities Rehabilitate/ make good the GSW deck surface along its length

Reference	Site Name	Site Type	ITM Easting	ITM Northing
DCIHR 19-09- 012	Landing Slip	Landing Slip	720462	733814
Description	A substantial, masonry boat-slip (DCIHR 19-09-012) adjoins the GSW beside the eastern entrance to Pigeon House Fort. The slipway was constructed <i>c</i> . 1770 and is recorded on both the OS First Edition 6-inch series and OS 25-inch maps. It is contemporary with the construction of the GSW and is catalogued in the underwater archaeological survey completed for 3FM as STR-04 (Appendix 16-5, Figure 37).			
	The slipway measures 25m long and 4.3m wide. It slopes gently from west to east at a 10° angle. The slip's surface compromises rectangular granite masonry, retaining similar dimensions to the blocks used to face the surface of the adjacent GSW. The structure is upstanding to a maximum height of 1.6m from the foreshore, where four courses of granmasonry are visible. The slipway has similar dimensions to the ashlar used in the GSW		nry, retaining similar SW. The structure is our courses of granite	

also retains a stepped profile. A series sheet piles protrude (max. height of 500mm) from the silty-sand on the channel side of the slipway. Image/s View looking southeast at slipway adjoining GSW outside eastern entrance to Pigeon **Proximity to** Within Development area, see Figure 1.2 in EIAR. development Likely Impacts No direct impacts Area N main access bridge will traverse above slipway and GSW Recommended Avoid impacts direct and indirect Mitigation $\label{eq:decomposition} \begin{picture}(20,20) \put(0,0){\line(0,0){100}} \put(0,0){\line(0,0){10$ All survey data to be lodged in the Dublin Port Archives Archaeological Monitoring and resolution

Reference	Site Name	Site Type	ITM	ITM Northing
			Easting	
DCIHR 19-09-	Poolbeg Generating Station,	Chimneys	720535	733751
015	Chimneys		and	and
			720617	733752
Description	Twin concrete chimneys of Poc City's maritime skyline. Built ar		are an iconic syl	mbol of Dublin

Image/s	View looking west towards the Pigeon House Chimneys from the GSW at White
	Bank Wharf
Proximity to	Outside development area
development	Nana
Likely Impacts	None
Recommended Mitigation	None

Reference	Site Name	Site Type	ITM	ITM
			Easting	Northing
DCIHR 19-09- 011	Slip, White Bank Wharf, South Wall	Slipway	721402	733860
Description	Slip, believed to have been const inch and later maps. The slipway access steps located upstream. I rectangular masonry (measuring angles to the sea wall. The north collapse. The damage appears to Dublin Port at Low Water	he stonework on the slipway com between 1m-1.30m long) that hav west corner of the slipway has suf	s close to a f prises long l e been laid a fered erosion	light of lengths of at right n and partial
Image/s	View looking east at access steps	s and slipway, with Sluice House i	n the distance	ce
Proximity to development	Outside development area			

Likely Impacts	None
Recommended Mitigation	None

Reference	Site Name	Site Type	ITM Easting	ITM Northing
DCIHR 19-09- 008	Lifeboat House	Building	721370	733814
Description	Lifeboat house, c.1850, site of. A lifeboat existed at Pigeon House as early as 1815, although apparently was later transferred to Bullock. ²¹ Standing remains are evident in historical photographs but today only lengths of ruined wall stubs stand above ground level to indicate the presence of buildings. Red brick as well as granite occurs in the surviving fabric. An enclosure wall also survives as an old concrete construction that has been breached in places. The wall stands inside a perimeter path whose concrete surface is also ruinous and reflects dereliction from coastal processes.			
Image/s	standing remains with	hin the site of the Lifel	corical photograph from boat station (on right). Te centre, along with the	he Sluice House
Proximity to	Outside Developmen	t area		
development Likely Impacts	None			
Recommended Mitigation	None			

Reference	Site Name	Site Type	ITM Easting	ITM Northing
DCIHR 19-09- 009_01	Sluice House, South Wall	Sluice House	721427	733833

²¹ H.A. Gilligan "A History of the Port of Dublin" - 1988

Description Detached three-bay single-storey masonry former sluice house, built c.1881, in association with Londonbridge Road Pumping Station, now abandoned. Squared-random rubble stone walls with concrete coping and rusticated quoins. Segmental-headed window openings with rusticated block-and-start surrounds, now blocked. Square-headed door opening with rusticated granite surround and steel door c.1990. The sluice was constructed as part of the Rathmines and Pembroke Main Drainage Scheme, which was completed in 1881. The structure housed machinery to operate two penstock valves which managed sewage flow and the pressure of seawater at the sewer outlet. Though no longer in use, the structure retains much of its original form and features, while its fine stonework attests to the highly skilled engineers and craftsmen involved in the construction of the scheme. This was the first such scheme to be completed in Ireland and as such is of both historical and social, as well as industrial, significance. Image/s Proximity to Outside Development area development **Likely Impacts** None Recommended None Mitigation

Reference	Site Name	Site Type	ITM Easting	ITM Northing	
RMP DU019- 028	Half Moon Battery Swimming Pool and slipway	Battery	722275	733893	
Description	In 1793 the Board of Ordnance built a gun battery on the GSW, <i>c</i> . 800m from the Poolbeg lighthouse. The Half Moon or Five Gun battery was armed with five 24-pounder guns, and it controlled the channel of the river and the water around the Poolbeg lighthouse. The battery was subsequently dismantled, and the site is used as a swimming-place. ²² An addition was made to the battery in 1795. Part of the structure survives, but not enough to establish how the guns were arranged.				
	The south-facing perimeter wall is granite-built and is the most intact upstanding element of the former battery. A curvature in the ground surface of the GSW is believed to mark the swivel position of the gun battery.				
	Two ranges of white-washed buildings today serve the swimming club. The more substantial range is on the south side and comprises the Ladies changing rooms to the east, and the Men's changing rooms to the west. The interior of both changing rooms is				

²² Kerrigan, Castles and Fortifications, p. 176; De Courcy, Liffey in Dublin, p. 185.

finished in concrete blockwork but the external façades indicate stone work surviving to some height that is likely associated with the battery. The ceiling is a continuous flat concrete pad that is set back from the granite blocks along the south side. The concrete ceiling has cracked and bitumen applied as repairs to fill the cracks but these are now failing with resulting water ingress.

The second range of buildings stands on the north side of the site and comprises two small concrete-built and concrete-roofed structures, one of which serves as the office for the swimming club, the other for storage.

A stone-built slipway extends westwards from the west end of the battery, and is recorded on the OS First Edition map series.

Image/s



View from north



View from east



View looking west, showing upstanding south-facing wall element of the former battery that now houses the changing rooms for the swimming club



View looking west across the concrete roof of the bathing club, showing bitumen repairs



Interior view of the Men's changing rooms, showing blockwork interior and concrete roof



View from roof of bathing club looking north at ground level. The curvature is believed to be that of the former gun emplacement

	Detail from OS First Edition map showing extent of slipway associated with the battery	View looking west with element of stone slipway showing
Proximity to development	Outside Development area	
Likely Impacts	None	
Recommende d Mitigation	None	

Reference	Site Name	Site Type	ITM	ITM
			Easting	Northing
RPS 7379	Lighthouse	Lighthouse	723102	734025
Description	The provision of a navigation aid where the River Liffey maintained a natural gap across the Dublin Bar was initially satisfied by the presence of a buoy from the late Medieval period, and then by a light ship as recorded by John Rocque on his map of 1757, marking the end of The Piles. Following the decision to replace The Piles with a stone wall, work started on building the eastern terminal abutment close to the lightship in 1761 and it was quickly realised that the abutment would serve as the foundation for a lighthouse. John Smyth was engaged to design and build the structure in 1763. He strengthened the foundation, using caissons filled with stone and protected by a masonry buttress, and used this on which to construct a three-storey lighthouse building surrounded by an octagonal lantern of eight windows. Access was provided by an external staircase furnished with an iron balustrade that led to an iron gallery.			
	The lighthouse was operational from September 1767. An apron of heavy masonry bound with cast iron was applied from 1769 and into the 1770s, and such protective works have continued to be required. In the nineteenth century, Bindon Blood Stoney deployed a series of 100-ton blocks around the base of the breakwater terminus, while the Port today has added further protection in the form of rock armour or rip-rap. The different phases of protection to the foundations are clearly visible underwater.			
	In 1810 the Ballast Board assumed resp and in 1817 Port Engineer George Halp inadequate and required a new lantern The changes were effected in 1819-20. the same today. Resident lighthouse ke was automated and unattended.	oin Senior deemed Poolbeg Lig system and additional amenitie The remodelled lighthouse rer	hthouse to es for the ke mains subs	be eepers. tantially

Image/s	
Proximity to development	Outside Development area
Likely Impacts	None
Recommended Mitigation	None

South side of the Channel: Other

A series of shipwreck remains are located in the sea area south of the peninsula. None of the sites will be impacted by the 3FM project and they lie some distance from the development area. They are included to complete the wider context but it is not necessary to provide more than the essential location detail on each site.

Reference	Name	Detail	ITM E	ITM N
W11566	Unknown	Recovered ship's timbers that are reburied as an archaeological storage location.	721221	733411
W11567	Unknown	Recovered ship's timbers that are reburied as an archaeological storage location.	721208	733412
W11568	Unknown	Recovered ship's timbers that are reburied as an archaeological storage location.	721197	733410
W11569	Unknown	Recovered ship's timbers that are reburied as an archaeological storage location.	721181	733409
W01734	'Ringsend Wreck'	Wooden wreck exposed during dredging operations in 2001. Oriented E-W, composite construction of timber and metal, keelson observed, carvel construction, musket balls and bullets recovered from wider area.	721314	733325
W11570	Unknown	Wooden wreck.	721314	733325
W11571	'Ringsend Wreck'	Wooden wreck.	721342	733350
W18522	Unknown	Wooden wreck measuring 16.4m long, 5.5m wide, standing 20cm proud of the seabed. Identified during a geophysical survey.	723445	733770