

## 5.11 Architectural Heritage

The following are the contents of this Chapter:

5.11.1 Introduction

5.11.2 Methodology

5.11.3 Receiving Environment

5.11.4 Assessment of Significance

5.11.5 Relevant Statutory Context

5.11.6 Characteristics of the Proposal

5.11.7 Impacts of the Proposal

5.11.8 Key Reference Documents and Bibliography

5.11.Appendix 5.11.1: Dún Laoghaire Harbour Heritage Management Plan

### 5.11.1 Introduction

This section of the EIS has been prepared by Shaffrey Associates Architects, RIAI Grade 1 Conservation Architects and addresses the Architectural Heritage Impacts of the Proposal, which incorporates impacts on the Cultural and Industrial Heritage importance of the Dún Laoghaire Harbour.

The proposal is for construction of a new Quay and Berth to facilitate large vessel cruise ships within Dún Laoghaire Harbour (the Harbour) which will require dredging works to facilitate this new structure and safe access for berthing. Landside works are also proposed to accommodate operational aspects of the new cruise facility in addition to extending the existing public realm amenities within the Harbour. The proposals are further detailed in section 5.11.6 of this Chapter.

### 5.11.2 Methodology

The Methodology applied to assess impacts comprised the following:

- Research: comprising review of published and unpublished sources of information on the architectural history of the Harbour.
- Site inspections and field surveys of the general Harbour environs and specific site where works are proposed to be carried out. In this regard number of specialist surveys which were carried out as part of the Engineering design development and the Archaeological impact assessment have been reviewed. Specifically, those surveys which provided information on the current condition of the East and West Piers (breakwaters), in particular the roundheads at each of the Pier ends.
- Assessment of Architectural Heritage Significance of the Harbour and site
- Review of current statutory context relating to architectural heritage. In addition to the statutory context, regard has been given to a number of international conservation charters which, although voluntary, are of relevance in their influence on evolving conservation practice (ref section 5.11.5 below). Two other non-statutory documents which has informed this EIS and the overall design proposals are the Dún Laoghaire

Harbour Masterplan 2011-2030 and the Dún Laoghaire Harbour Heritage Management Plan. Both date to 2011 and were commissioned by the Dún Laoghaire Harbour Company. These Plans were carried out at the same time and in consideration of each other. It is also noteworthy that both Plans were the subject of a comprehensive consultation process.

- Review of Landscape Visual Impact photomontage impacts and input into design modifications following review of preliminary photomontages
- Consultation with key statutory bodies comprising An Bord Pleanála (Shaffrey Associates Architects attended 1 No consultation meeting); Dún Laoghaire Rathdown County Council Planning and Conservation Departments and, the Architectural Heritage Advisory Unit of the Department of Arts, Heritage and The Gaeltacht (DAHG).
- Assessment of potential and predicted impacts during construction and operational phases setting out mitigation measures
- Input into Design Development of the proposed new quay, berth and landside facilities, including proposed new public realm works (permanent and temporary).

In carrying out the assessment of Architectural Heritage Significance within this context primarily includes all categories of architectural heritage special interest as set out in the Department of Arts Heritage and The Gaeltacht's statutory Guidelines for Protection of Architectural Heritage, 2011, namely:

- Architectural
- Archaeological
- Historical
- Artistic
- Cultural
- Scientific
- Social
- Technical

These categories are not mutually exclusive, for examples, a structure may be of historical, as well as architectural interest. On the basis that a building can be considered as of particular significance under any of these headings the Building or Structure could be deemed to be of either "Local", "Regional", "National" or "International" importance and considered worthy of inclusion in the Local Authorities' Record of Protected Structures.

Section 5.11.4 below sets out further criteria taken into consideration with regard in assessing the Architectural Heritage Significance of the site.

The Archaeological Impacts are covered separately in Section 5.10 of this EIS and so are not addressed in this section. Within the above, the industrial heritage values associates with the Harbour are implicitly addressed.

### 5.11.3 Receiving Environment

This section provides a description of the architectural historical development of Dún Laoghaire Harbour followed by a description of the current presentation/condition. These descriptions address the overall Harbour area followed by a more focussed description of the site where the works associated with the proposed Cruise Berth terminal will be carried out.

#### 5.11.3.1 Architectural Historical Development

The following text is primarily extracted from the Dún Laoghaire Harbour Heritage Management Plan, 2011 (prepared by Shaffrey Associates Architects).

Dún Laoghaire Harbour was built between the years 1817 and 1842. The Harbour, and the railway that was built to service it, transformed the character of the small fishing village then known as Dunleary. In a very short period a suburban town of considerable scale developed. The town was formally renamed 'Kingstown' after the visit to the Harbour by George IV in 1821. The mail boat service that was transferred from Howth to Dún Laoghaire in 1826 gave added significance and importance to the town, while the railway built by James Pim, which serviced the mail boat, also made it possible for great numbers of civil servants, bank officials, merchants and tradesmen to commute daily into Dublin while retiring in the evening to the pleasant environs of the sea.

ORIGINS AND DEVELOPMENT OF THE NINETEENTH CENTURY HARBOUR (ref historic Maps at Figures 5.11.1 to 5.11.8)

Dún Laoghaire Harbour was built as an asylum harbour to give safe refuge to ships on their way to Dublin stranded at sea during bad weather or poor tide conditions. The disastrous loss of up to four hundred lives during a storm in 1807 resulted in a public outcry. Persistent campaigning by means of petitions to the government and to local landowners, letters to newspapers and public meetings, orchestrated in large part by a local seaman named Captain Toutcher, resulted finally in an agreement that an asylum harbour would be built. Nonetheless it was the very poor nature of Dublin Port itself, with its sandbars and difficult tides, which raised the possibility that Dún Laoghaire Harbour's function might be considerably expanded. From the very beginning, during the time when ideas for the Harbour were first raised (c. 1800), the idea of a ships canal to connect it to Dublin was considered as a realistic possibility. While the debate raged on about whether an asylum harbour should be built at Sutton, or on the north side of Howth or at Dunleary or, indeed Sandycove, designs and costings were often included for a ships canal to link each of these to the capital. However it was finally decided, by an Act of Parliament in 1815, that five Commissioners should be appointed to oversee the erection of 'an harbour for ships to the eastward of Dunleary, within the port and harbour of Dublin' [55 Geo. III Cap. 191]. The following year it was enacted that the Harbour should be built and a considerable sum of money was set aside for this purpose.

One of the first decisions made by the Kingstown Harbour Commissioners was the appointment of John Rennie as Directing Engineer for the Harbour. Renowned for his considerable experience in the building of bridges, canals and harbours throughout Britain and Ireland, his work was marked by a thoroughness of planning and a solidity and firmness of execution. John Aird who had been the engineer on site at Howth Harbour, to which Rennie was also connected, acted in the same role at Dún Laoghaire. Toutcher, as well as being the most ardent agitator for the Harbour's construction, also made the singular contribution of securing the rights to the stone at Dalkey, and elsewhere, free of charge. It was estimated at the time that a saving of £80,000 was made as a result. Granite was excavated on Dalkey Hill and delivered to the Harbour via a new truckway built for that purpose, using horse-drawn

wagons on a dedicated railroad (a short, steep section of the route near the quarry was served by a funicular railway - connected by a continuous chain the weight of the granite-filled trolleys going down was sufficient to pull the empty trolleys up). Granite was also quarried at what is now known as the People's Park in Glasthule at the site of the now disappeared Martello tower, and in Churlfield, or Churl Rocks, now known as Moran's Park.

The first stone of the Harbour was ceremonially laid by Lord Lieutenant Whitworth on 31st of May 1817. A handful of coins and newspapers from the previous ten days were placed in a hole under the stone and this was sealed in turn by a plate with a memorial inscription. Rennie's original scheme provided for a two-piered harbour, but the one first agreed to by Parliament was a single pier to the east of what was later known as the Old Pier. This latter pier had been built in 1767, but had quickly dried up and was sometimes known as the Dry Pier [this is now known as the Coal Quay and where tenders serving current visiting Cruise Ships berth temporarily]. However, during the course of construction it was decided that a second pier to the west should be built and this was constructed substantially in line with Rennie's initial scheme. Decisions by Parliament to proceed, and the arrival of money to do so, came in stages and both piers were brought to a penultimate state of construction around the year 1831. There was considerable disquiet after this about how the Harbour mouth should be finished. Rennie's son, Sir John Rennie, who took over the responsibility for the construction of the Harbour after the older Rennie's death in 1821, believed that the original design, with an opening of 450 ft, should be adhered to. Others, such as engineer William Cubitt suggested an opening considerably larger. Cubitt also proposed that a breakwater of 1200 ft be placed east of the Harbour in the open sea. The solution that finally came to pass in the early 1840's, was for an opening of 750 ft with rounded pier-heads. This larger opening left entering ships vulnerable to north-easterly winds; a danger that Rennie's original plan had sought to overcome. Although there had been a moveable floating lighthouse at the end of the East Pier throughout the progress of the works, the permanent lighthouse with its battery was built in 1842. This brought to completion the construction of the great asylum harbour, which had been begun in 1817 under the direction of the Harbour Commissioners and was completed in 1842 by the Board of Works, who took over construction in 1831 and continued to be responsible for maintenance up until the establishment in 1997 of the Dún Laoghaire Harbour Company. At the time of completion, Dún Laoghaire Harbour was one of the most magnificent in what was then the British Empire. The East Pier reached a length of 4231 ft and the West Pier was 5077 ft. They enclosed an area which comprises 251 acres of water.

In 1834 a railway was built from the city of Dublin to Dún Laoghaire (amongst the first passenger railways in the world). Despite the government report one year earlier that decided in its favour, the idea of a ships canal was finally laid to rest as a result. The Mail Packet was transferred to Dún Laoghaire in 1826. It was first accommodated at a wharf near the present bandstand on the East Pier, then on the so-called 'Traders Wharf', immediately to the east of the Old Pier, which was built in 1855, and, finally on Carlisle Pier which accommodated the Mailboat until recent times. Carlisle Pier, which was begun in 1853, was built to accommodate the largest types of steamboat then being built. When the railway was extended from Dún Laoghaire to Wexford a connecting spur to the new pier was added. This was a considerable addition to the mail service itself while it provided added comfort and ease to passengers.

While the primary purpose behind the construction of the Harbour was to provide temporary and safe berthage for ships on their onward journey to Dublin Port, as the town developed around the Harbour and train service to the city centre, the Harbour became a place of marine

leisure activity. The Royal St George Yacht Club was established in 1843 (the world's second oldest yacht club, after Cobh), followed not long after by the Royal Irish Yacht Club (1850), with the National Yacht Club clubhouse built in 1870. The Piers themselves were used from the outset as promenades (which early illustrations show) and the late 19th century Bandstand and Shelter on the East Pier provided a focus for seaside entertainment as again visible in some of the early photographs digitally available in the National Photographic Archives ([www.nli.ie](http://www.nli.ie)) and also contained in the Heritage Management Plan (Appendix 5.11.1). Over the years, small boating, fishing, diving are all related leisure activities which happen either within or out of the Harbour.

The Harbour has also been a location for scientific and technical innovation. Of particular note was the construction of the world's first Anemometer to the design of Professor Robinson of Trinity College in 1852 and more recently restored as an active weather station as well as the Harbour being the location of the first telegraphed broadcast of a sporting event (Kingstown regatta) by Marconi in 1897.



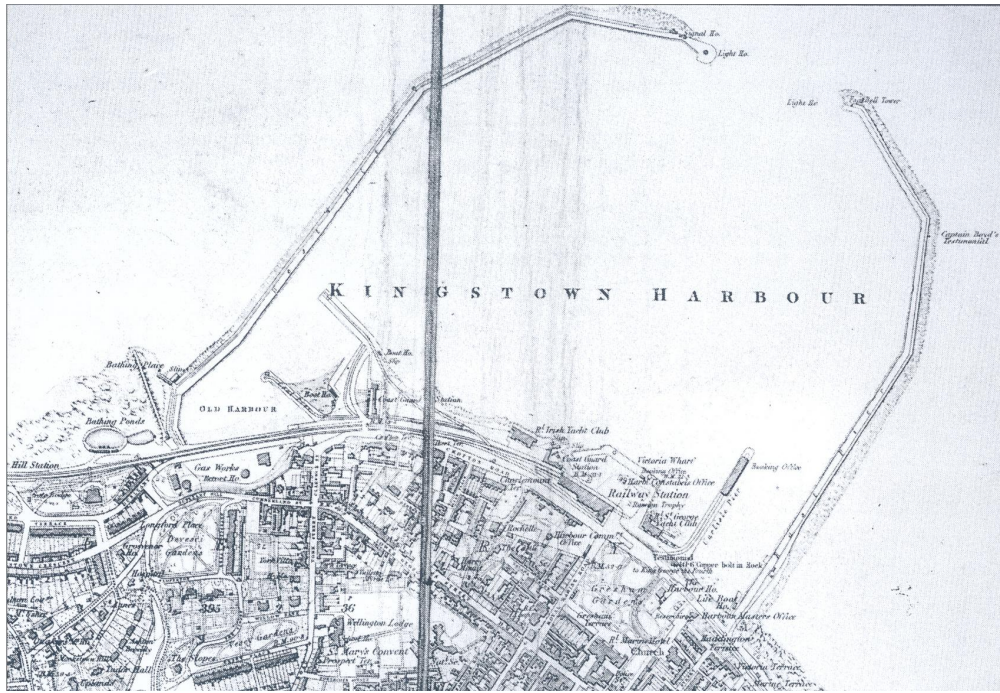
**Figure 5.11.1: Extract from John Rocque's "An actual survey of the county of Dublin, 1760". Note the original pier (titled "New Quay" on this map and now called the 'Old Pier') is under construction. A grant to construct this Pier was made in 1755 and it was completed in 1767, under the supervision of Captain Charles Vallancy. (SOURCE: Archinfo)**



**Figure 5.11.2: 1816 Map showing the proposed single (East) pier of the Asylum Harbour (which it is called on this map), which was the subject of the 1815 Act. (It was only in 1818 that John Rennie's preferred two pier harbour was permitted through an Act of Parliament).**



**Figure 5.11.3: First edition Ordnance Survey (OS) map of 1843: The construction of the harbour (here called Kingstown Harbour) has just been completed at this stage. This map shows temporary lighthouses at each pier end. The railway line has been built as far as Kingstown station (now Mallin Station) and a 'New Wharf' constructed beside this—later to become Victoria Wharf and St. Michael's Wharf). This is where the Mailboat would have berthed after its transfer from Howth harbour in 1826 and before Carlisle Pier was built. The railway line was built across the original harbour. Bathing places marked in the 'gut' area to the west of the West Pier. Original Pier, now called 'Coal Pier'. Royal St. George Yacht Club completed (1843—the second oldest yacht club in the world, after Cobh). Mariner's Church completed. The town of Dún Laoghaire has expanded considerably, between 1831 and 1861 the population of Dún Laoghaire doubled from 5,500 to 11,500, the harbour and the railway driving this growth**



**Figure 5.11.4: 1867 OS Map:**

**Carlisle Pier (1853) is shown with its original terminal shed building (1859-60) and railway extension.**

**Trader's Wharf and its boathouse and slip constructed (1855). Coastguard Cottages and Station built (c. 1845). (A second Coastguard Station is shown north of the railway station, this no longer survives). Royal Irish Yacht Club completed (1850). The 'New Wharf' of the 1843 OS Map has been renamed Victoria Wharf following the visit of Queen Victoria. The Boyd Monument (1861 and here titled Capt. Boyd's Testimonial). Section of old harbour south of railway line infilled and gas works developed on this site.**





**Figure 5.11.5: 1902 Map of Dún Laoghaire Harbour:**

**1894 replacement shed at Carlisle Pier indicated. 1852 Anemometer designed by Trinity's Professor Robinson (first of its kind in the world) indicated on East Pier. Battery (1859-1860) at end of East Pier clearly indicated**

**Bandstand and Shelter shown on East Pier (c. 1894). National Yacht Club (1870) adjacent to East Pier boathouse and Lifeboat boathouse (at location of current RNLi building). 'Sewage tanks' indicated in gut area west of West Pier. Rocket House (1867) adjacent to Trader's Wharf. Railway line titled, 'Dublin, Wicklow and Wexford Railway'.**

**Irish Lights depot indicated in its current location east of the Coastguard cottages and station.**





Figure 5.11.6: 1907-09 OS Map:

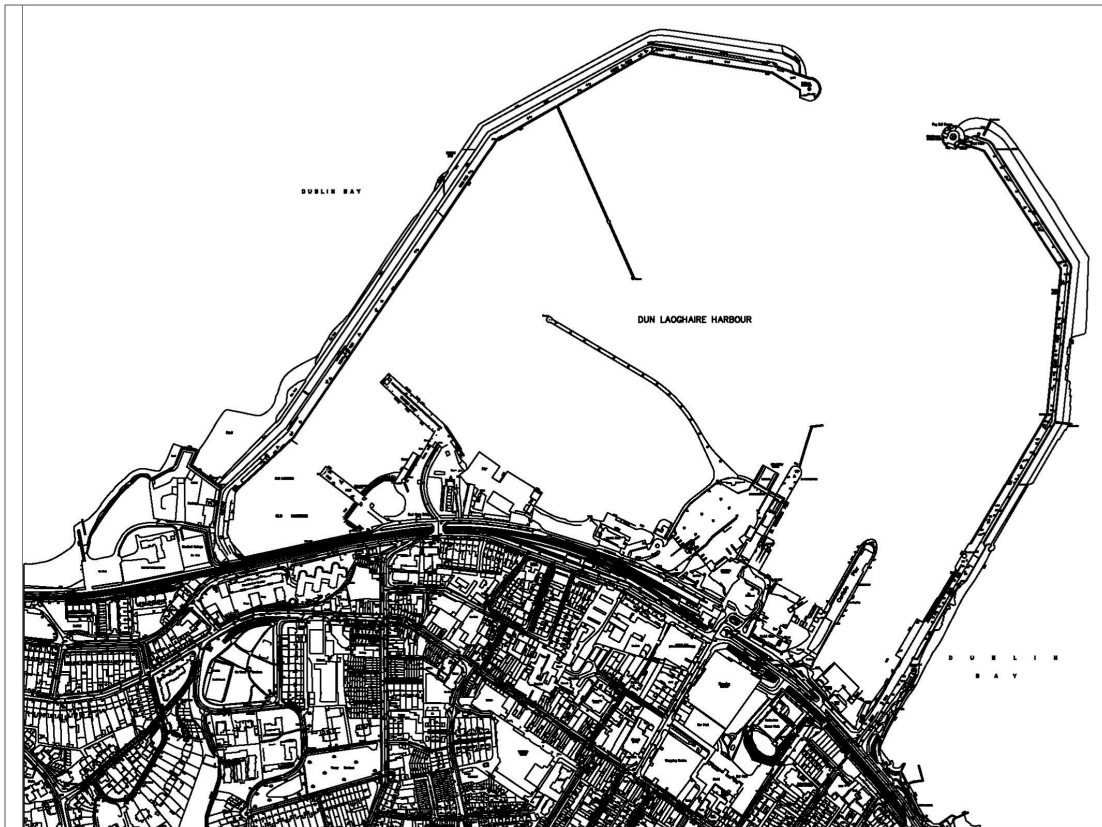
Coal Pier has is shown as 'Dunleary Pier' and the harbour here is called 'Old Harbour'



Figure 5.11.7: 1939 OS Map

Harbour renamed Dún Laoghaire Harbour. Victoria Wharf has been renamed as St. Michael's Wharf. Outer dolphins at Berth No. 1 (on East Pier) constructed. An infill section was constructed here in the 1860's.

Industrialisation of the gut area with a marble works.



**Figure 5.11.8: 2000 OS Map**

**Infill around St. Michael's Wharf and new ferry terminal building. Infill at Irish Lights to provide mooring wharf**

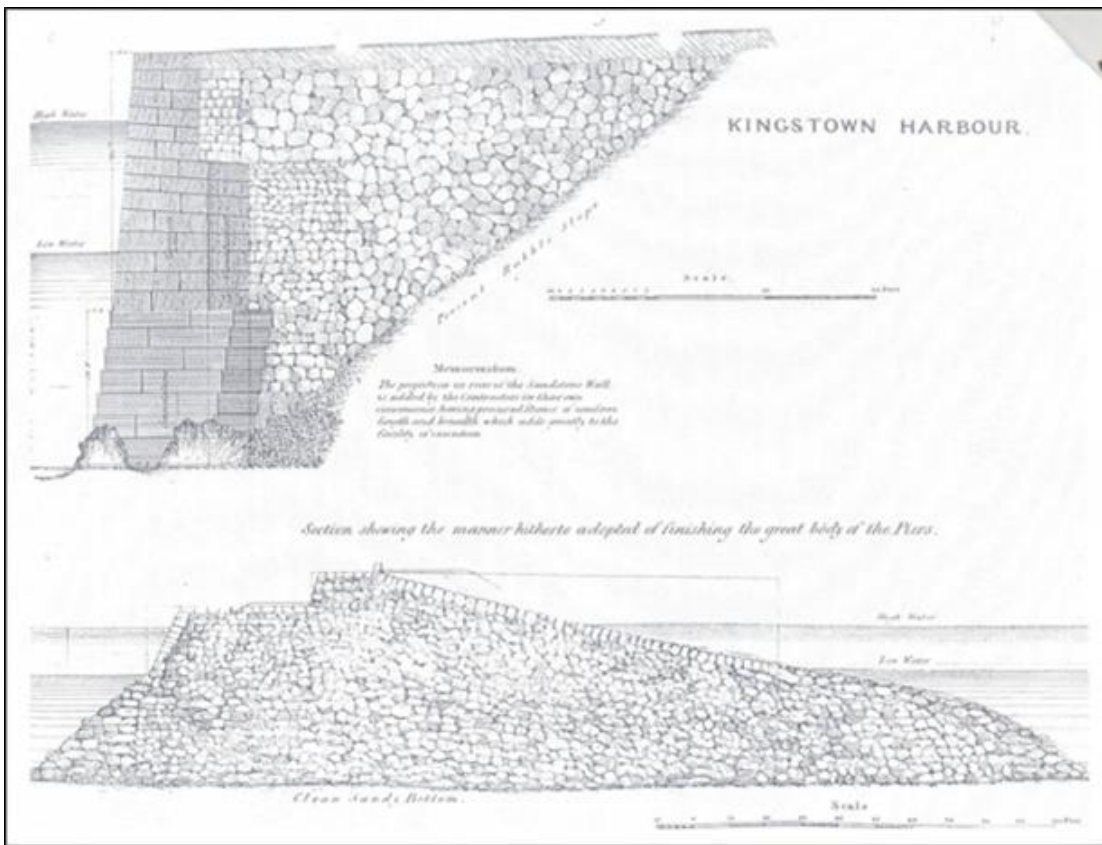
**Extension of Carlisle Pier terminal shed and wharf. Expansion of yacht clubs' boat standage areas into harbour area. Motor Yacht Club building constructed at West Pier. Marine Activity Centre and other buildings constructed at West Pier. Pumping Station constructed in gut area. East and West breakwaters constructed to facilitate new Marina.**

#### CONSTRUCTING THE HARBOUR

As detailed above, there was much debate about the location, form and design of the harbour. Eventually two piers were constructed, built together and brought to a state of near completion until another debate occurred regarding the size and design of the mouth of the harbour. Sir John Rennie's design included an opening of 450ft but this was not how it was eventually constructed.

There is an important surviving record of drawings and maps which illustrate many of the proposed designs, some constructed others subsequently abandoned. The Heritage Management Plan (Appendix 5.11.1 contains a number of examples of these, e.g., the proposal submitted anonymously by Richard Toutcher for the design of a single pier east of the Old Pier (built 1767) and an 1817 drawing of the single pier as it was proposed to be constructed at that time).

Figure 5.11.9 is an important record from the archives of the OPW (to whom responsibility for completing the harbour was handed over in 1831), and shows two cross sections through the (East) pier. The bottom section describes the then 'as built' structure and the top section illustrates the proposal for the round-headed Pier end (which appears to be substantially in accordance with how the Piers were eventually constructed). These sectional drawings give an idea of the tremendous amount of stone that was used in the construction of the piers and the sheer mass of the structures. The construction technique used was that known as à pierrie perdue (literally 'lost stone'), which involved the deploying of loose stones on top of each other, with stone dimensions diminishing as the height of build up advanced. In this way a honeycomb structure was constructed with a battered rubble face on the Harbour interior and a shallowing inclined rock armour extending outwards along the seaward side. Both the structure and its form – aided also by the kanting arms of each breakwater) - allows for the absorption and dissipation of wave energy. This structure also depends on its sheer mass – the Pier width is 90 metres (300 feet) at its base, with a foundation depth of 7.5 metres (24 feet) below low tide level. The Pier ends, in contrast to the main length of the breakwaters, have an ashlar face, formed with massive stones carved to the curvature of the round-head, which is also carefully (and beautifully) formed to dissipate the more vigorous wave energy at the mouth of the Harbour.



**Figure 5.11.9: Cross Sections through the pier and wharf walls indicating their build-up and structure. The bottom section is an 'as built' record prepared by Board of Works, the top section shows proposed construction for pier ends. SOURCE: OPW Library**

The great quantity of stone used in the Harbour was mostly excavated from Dalkey Quarry and transported to the harbour using a specially-built truckway known as 'the Metals'.

### THE METALS

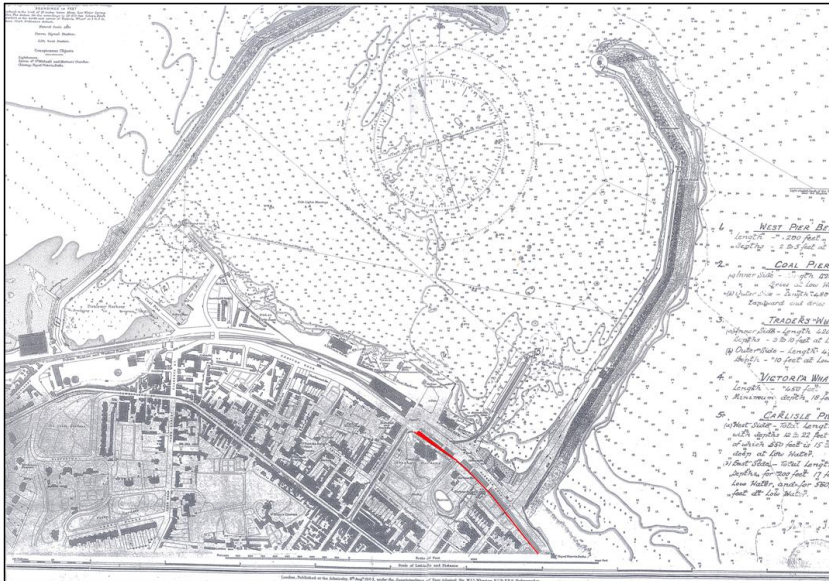
The 'Metals' was the popular name given to the railroad or truckway which was laid out between Dalkey Quarry and Dun Laoghaire Harbour and facilitated the transport of the granite used in the construction of the piers.

The route of the Metals was extended and altered as the construction of the piers took place. The earliest section ran from Dalkey Quarry to what is now Queen's Road, east of the East Pier. It was soon extended westward, once the decision to construct a second pier was made. Various spurs and branches were made to access different parts of the harbour, as was necessary throughout the construction process.

Figure 5.11.10 shows the extent of the Metals in 1843 at its greatest and Figure 5.11.11 shows the extent surviving in 1902. It is thought that some parts of the track remained in use by the harbour authorities until the 1880s. In the early twentieth century, the tracks were removed from along the seafront and it appears that the route came to be used predominantly as a pedestrian route.



**Figure 5.11.10: 1842 map with the extent of the Metals trackway marked in red, as in place at this time.**



**Figure 5.11.11: 1902 Map which shows in red the extent of the Metals trackway which was still visually in place at this time (note while the routes substantially survive, however only fragments of the historic trackway survive).**

Sections of the original route of the track survive and are a significant public amenity in the form of a dedicated pedestrian/cycle path through this now well-populated suburban area. These sections of pathways are still popularly known as 'the Metals'. A book, by Rob Goodbody, was published in 2010 by Dun Laoghaire Rathdown County Council which covers this subject in detail.

#### RECENT DEVELOPMENT HISTORY

In more recent times the increasing transportation of cars to and from Holyhead necessitated a reappraisal of facilities in the Harbour. At the beginning of the twentieth century cars could be lifted onto the Mailboat using derricks, but the maximum capacity of the ferry boats was about twenty-five cars. From the 1960s the need for a ferry service with drive-on and drive-off facilities became apparent. Although temporary facilities for a car ferry were located at the base of the East Pier, in 1969 a new permanent ferry terminal located at St Michael's Wharf (formerly Victoria Wharf), to the west of Carlisle Pier, was built. Construction, which began in 1969, involved the loss of the granite neo-classical Sailor's Reading Room at that time the home of the Museum and Headquarters of the Maritime Institute of Ireland. A new pier, which absorbed St Michael's Wharf and involved the filling in of the old Depot Harbour, was built, with a customs hall, departure point and car parking facilities. However the Mailboat continued to operate from Carlisle Pier until 1976, when this official function ceased (international mail subsequently transferred by air). When the St Columba, a considerably wider vessel than those that had docked at Dún Laoghaire until then, was introduced in 1977, facilities for it were provided at Carlisle Pier and only smaller vessels used St Michael's Wharf.

In 1989-90 the Department of the Marine took over running of the Harbour from the OPW (the Board of Works, as the OPW was then known, had assumed responsibility for the Harbour in 1834, which involved completing its construction and its subsequent maintenance), and



established an Interim Harbour Board. This Board was responsible for commissioning the Ferry Terminal Building and associated new public plaza (constructed over a new underground car park), which facilitated the new HSS ship run by Stena. This major construction project added to the previous landfill associated with St Michael's Wharf, creating a significant reclaimed area around, and subsuming, the original Victoria Wharf<sup>1</sup>. It also involved the construction by Stena of infrastructure, including the high level linkspan structure, required to facilitate access by both vehicular and pedestrian passengers to and from the vessel.

The 1997 Harbour Act established Dún Laoghaire Harbour Company as a semi-state commercial company with responsibility to manage and maintain the Harbour and to be financially independent from public subvention. In 2001, the new Marina facility was developed which included construction on 2 new breakwaters within the Harbour as an engineering solution for providing the necessary calm water conditions to accommodate safe berthage for the range of boats which the Marina was to serve.

Since 2001, Dún Laoghaire Harbour Company has carried out a number of repair/refurbishment projects which include repairs to the original East Pier structure; repairs to St Michael's Pier; restoration of the Victorian Monument and associated public realm works; resurfacing of the East Pier; phase 1 conservation works to the East Pier Battery and preliminary conservation works to the Coastguard Cottages. These works were underpinned by the Inventory of Buildings, Structures and Elements, first published in 2003 and since updated in 2007 and 2011 which also included a general status of condition.

In April 2015, Stena announced its decision to discontinue its service to Dún Laoghaire resulting in the absence of an international connection to Dún Laoghaire for the first time since the Mail Packet transferred from Howth in 1826. While Dún Laoghaire Harbour Company are currently seeking other ferry companies to provide a service to and from Dún Laoghaire nothing has been secured at the time of writing this report. The demise of this international ferry connection marks not only a significant moment in the Harbours shipping history (its original 'raison d'être'), it also results in the loss of critical funding revenue for the Dún Laoghaire Harbour Company, revenue which has in recent years been used for the programme of maintenance and repair works which have been and continue to be essential for the functional integrity of the Harbour.

In 2011, Dún Laoghaire Harbour Company prepared a Masterplan and, as part of this process, a Heritage Management Plan. While neither are statutory documents, they do provide a future strategy for the Harbour and the preparation of a Masterplan for Dún Laoghaire Harbour was included as a Specific Policy Objective of the Dún Laoghaire –Rathdown Development Plan 2009-2015.

### **5.11.3.2 Architectural Heritage Description - Current Context**

The following provides a summary architectural description of the Dún Laoghaire Harbour as it exists today. For further description, reference should be made to the 2011 Dún Laoghaire Harbour Heritage Management Plan which is appended to this EIS Chapter (ref Appendix 5.11.1).

---

<sup>1</sup> This expanded area is referred to in this section as St. Michael's Wharf. The proposed landside facilities will be located within the western part of St. Michael's Wharf.

The physical character of the harbour is today mainly derived by its form, materiality, and its various uses.

The scale of the harbour registers at many levels. Within, or as part of Dublin Bay it reads from the air, from the sea, from a height or from a distance. As a single entity its scale is best observed from further away—along Sandymount Strand or from a train along the coast; above on Dalkey Hill and Three Rock mountain; across from Howth Head; from those at sea in Dublin Bay and from the air on frequent flight paths for those travelling across the Irish Sea to Dublin. This is the scale of infrastructure; the harbour as a significant interchange in the transport network of the country.

On a closer scale is the harbour as a place; as a significant area within a large town. Yet it has its own identity and character that is distinct from the rest of the town of Dún Laoghaire. This character is derived from its form, materials, views, uses, sounds, smells...

It also has a smaller scale - the scale of the boats; the seaward side of the yacht clubs; boatyards; cranes and other equipment; jetties, wharfs etc.

Finally, it also has a more intimate human scale which is can be identified by the numerous strollers, walkers, joggers, cyclists who populate the harbour. This is the scale of the paths and steps; the town-facing sides of the yacht clubs; railings and gates; bandstand, shelter and fountain.

The form of the harbour is generated by its two enormous arms and their sheer mass, which holds and encloses the great expanse of water. In a sense the strongest spatial quality is the mastering of water through mass (massiveness), rather than overcoming gravity or space. The 'space' created is water. The architecture of the harbour is primarily that of infrastructure—piers, slips: these read as a massive base, or groundscape onto which the buildings, as objects, are placed. The buildings sit on the place as objects, rather than enclosing space; in the main they are pavilion buildings, providing shelter in space, rather than forming enclosure or streetscape.

### **5.11.3.3 Description of the Proposed Development Site**

While the proposed works take place within the Harbour and their impact along with the operational impacts (with regard to Architectural Heritage) of the proposed Cruise Berth facility will register at the scale of the Harbour and immediate town environs, it is useful to describe the specific site areas where works are proposed. In this regard there are four principal areas of development activity (ref Figure 5.11.12):

- A. New Quay and Berth: This will be constructed within the existing Harbour water body extending northwards towards the mouth of the Harbour, from the eastern end of the Eastern Marina breakwater, where this breakwater connects to the landfill mass of St Michael's Wharf. Currently this area is open water and forms a fairway (route) for incoming and outgoing vessels. Proposed works in this part of the site involve the primarily concrete jetty structure of post, beam and deck in addition to the steel monopiles with concrete infill.
- B. The Channel: This is the area of water where dredging is required to form the channel along which the cruise vessels will enter and leave the Harbour.
- C. St Michael's Wharf Landside Works: This site comprises an area to the west of the

larger St Michael's Wharf landfill area, which include the western edge overlooking the Marina extending eastwards to include part of the existing Stena standage area, which checked and accommodated vehicles embarking and disembarking from the Ferry. This area is all of modern construction (part of the major works in the late 1990's associated with the Ferry Terminal) and comprises concrete/tarmac surfaced roadways/parking areas; small areas of soft planting; a concrete pedestrian pathway giving access to the Easter Breakwater with an upstanding concrete wall for protection and boundary definition to the Stena standage area; the former trucker's rest facility building (now vacant on the suspension of the ferry service) and, various elements of street furniture - public lighting standards, security fencing. This part of the site will provide facilities for serve the new Cruise operation including access and temporary parking for coaches and service vehicles; accommodation for activities associated with the cruise ship – including temporary office, restrooms and security check (this will use existing trucker's building and a new structure). Also part of the proposed works will be temporary and permanent public realm works, the latter comprising a new boardwalk, public lighting and pathway along the western edge overlooking the Marina and the former comprising soft landscape, pathway and lighting providing a pedestrian route to the exiting plaza alongside the Ferry Terminal building.

- D. Landside area along Harbour Road. This part of the site comprises the existing road infrastructure which runs parallel to the DART line between the entrance to the Stena standage area and the current car park adjacent to the Coal Harbour/Quay and Boatyard. It includes a section of 'the Metals' which runs alongside the railway line. The works proposed in this part of the site are quite minimal involving realignment of a section of a low modern stone wall (which is poorly constructed) enclosing the parking area. Operationally, this part of the site will be used for supplementary coach parking to that to be accommodated within the current standage parking area, (this will be along the section of the Metals which runs along the railway) and associated access provision.



**Figure 5.11.12: Map showing the four principal areas of development activity. (Note the outlines are general to locate area. Please refer to EIS planning drawings for scaled statutory drawings).**

#### **5.11.4 Assessment of Significance**

##### **5.11.4.1 A note on Significance and the Architectural and Cultural Heritage Values of Dún Laoghaire Harbour**

Establishing the significance of a place, in terms of its cultural heritage, is guided by international charters and conventions and, nationally, by the DAHG Architectural Heritage Protection Guidelines. These latter guidelines have identified a range of categories of special interest which may pertain to places of architectural heritage significance. These comprise: Architectural; Historical; Archaeological; Artistic; Cultural; Scientific; Social and Technical. The National Inventory of Architectural Heritage (NIAH) sets out five importance rating values, International, National, Regional, Local and Record Only which can be applied to the special interest categories.

The ICOMOS Burra Charter for Places of Cultural Significance has defined cultural significance as meaning aesthetic, historic, scientific, social or spiritual value for past, present or future generations. It states that cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, record, related places and related objects. The Burra Charter advocates an holistic and integrated understanding of cultural significance and has enabled an understanding and valuing of cultural significance which embraces the intangible as well as the tangible.

In considering the architectural heritage significance of Dún Laoghaire Harbour, the assessment in this EIS is based on its area importance, It is noted in the following section (2.5) that the Harbour itself is not a Protected Structure (although it is a candidate Architectural Conservation Area in the current Dún Laoghaire Rathdown Development Plan), but instead there are 29 protected structures listed within the Harbour area. In assessing the area significance of the Harbour, it must also be noted that there are many parts of the Harbour which would be of record only interest and to not contribute positively to the architectural heritage importance. Indeed, some elements of the Harbour make a negative contribution to the special character.

The extent and nature of the significance of Dún Laoghaire Harbour, as an area, taking into account the above outlined guidance conventions and guidance, can be described as follows:

#### **DAHG/NIAH Special Interest Criteria**

##### ***Architectural Interest***

Dún Laoghaire Harbour, comprising the East and West Piers and several of the internal historic marine structures, buildings and artefacts, is of high architectural quality both in design and, foremost, construction. Both structures and buildings include those designed by architects and engineers of note (both Rennie and Skipton Mulvaney, amongst others). In terms of scale and quality the Harbour can be considered of International Importance rating.

##### ***Historical Interest***

The history of the development of the Harbour and the relationship of this to the wider Dublin Bay and Dublin region; its associated links with the railway line and consequential development of Victorian Dún Laoghaire; the association with many historic figures and events all contribute to the Historical Special Interest of the Harbour. In this regard the Harbour might be considered to be of National Importance.

##### ***Archaeological Interest***

(Refer also to section 5.10 of the EIS). The archaeological special interest of the Harbour derives from its containing the site of the promontory fort which gives its name to Dún Laoghaire (a recorded monument) and the recorded shipwrecks which lie within and around the Harbour. Outside, and beside the Harbour is the site of a former Martello Tower, also a recorded monument. From an archaeological perspective, the Harbour is of Regional importance rating.

##### ***Artistic Interest***

The Harbour contains a number of fine monuments (Boyd Monument; King George IV monument) in addition to the artistic qualities associated with the late 19th century Bandstand

and shelter pavilion on the East Pier. In terms of this Artistic interest, the Harbour is of Regional rating.

### ***Cultural Interest***

As a place, Dún Laoghaire Harbour became a focus for a wide range of events and activities, ranging from the sailing regattas to the quotidian practice of walking the piers. These activities contribute to the cultural interest of the Harbour which is of Regional rating

### ***Scientific Interest***

Robinson's Anemometer and Marconi's early telegraph broadcast are two examples of scientific interest which relate to the Harbour for which the Harbour is of Regional rating.

### ***Social Interest***

The social interest of Dún Laoghaire Harbour derives most notably from the story of its construction work and workers. It can be noted that the industrial heritage of a place is often deeply linked with its social interest, in particular as it often relates to a heritage of work. This story has been well documented in a publication and exhibition prepared by Dún Laoghaire Harbour Company in 2003 and is also reflected in the population growth witnessed in the town during the course of the Harbour's construction. At another level, the historic association with a range of social groups within the Harbour – the workers within the Harbour over the years; the sailors; sea scouts; the fishermen – contributes to this interest which is of Regional rating.

### ***Technical Interest***

Also linked to industrial heritage interest, the Technical interest aspects of the Harbour relate very much to its significance as an historic harbour and port. Certainly one of the largest artificial harbours within the Western world when constructed, if not the largest, it remains impressive in scale to this day. In this regard it is of National Importance.

### ***Summary Statement of Significance:***

Dun Laoghaire Harbour is a structure of international importance due to its scale, the quality of its construction, including the collection of significant buildings, monuments, industrial (marine) heritage artefacts and, its remarkable history. It is also an area of beauty, of maritime history, a cultural centre of numerous water and land-based recreational activities, a transport hub; it is, and has been, a place of work, of play and of relaxation, around which the Victorian town of Dún Laoghaire developed. It is important both in its role as a repository of historical information and cultural memory, in addition to continuing to form fundamental component of the town of Dún Laoghaire. Its historic importance as an international, working, port remains a contributory factor to the Harbour's cultural value and special character.

### ***Burra Charter on Places of Cultural Significance (ICOMOS Australia, 2013)***

Applying the Burra Charter on Places of Cultural Significance, the cultural significance of Dún Laoghaire derives from wealth of heritage values – built/cultural (as noted under the DAHG special interest criteria above) and natural - associated with the place. This diverse and rich heritage combines the historic with the contemporary in creating a very distinct identify and sense of place which transcends time.

## 5.11.5 Relevant Statutory Context

### 5.11.5.1 National Planning Legislation and Guidance

The Planning and Development Acts 2000-2010 are the principal statutory context for management and development of the Harbour and Part IV of these Acts relates specifically to Built Heritage Protection. Under Section 28 and Section 52 of the Planning and Development Act 2001 the Minister for the Environment Heritage and Local Government has issued guidelines on the protection of structures of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. These DoEHLG Architectural Heritage Guidelines define conservation as the process of caring for buildings and places and of managing change to them in such a way as to retain their character and special interest. The Guidelines set out a series of conservation principles to be applied in the process of conservation.

### 5.11.5.2 Dún Laoghaire Rathdown Development Plan 2010-2015

The promontory fort, or former dún of Dún Laoghaire, is the single Recorded Monument on the Dun Laoghaire Rathdown Record of Monuments and Places (Ref No. DU023-052001). The former Martello Tower, the site of which now lies outside the Harbour area, and which made way for the railway line, is also included on this Record (Ref No. DU023-052003).

The architectural and industrial heritage significance of Dun Laoghaire Harbour is enshrined in the Dun Laoghaire Rathdown Development Plan 2010-2015 in a number of statutory objectives and policies and, within the Conservation Area designation, and Record of Protected Structures of which there are twenty-nine separate entries for protected structures located within the Harbour area. Dún Laoghaire Harbour is also a candidate Architectural Conservation Area. The protected structures and relevant objectives and policies are listed below:

**Table 5.11.1: Record of Protected Structures.**

RPS No.	Description
726	National Yacht Club
599	Royal Saint George Yacht Club
127	West Pier
307	East Pier
401	Old Pier/Coal Quay
284	Traders Wharf
605	Victorian Chain Fencing and Bollards from RNLE Lifeboat House to the Bandstand

<b>RPS No.</b>	<b>Description</b>
102	Lighthouse, East Pier, Dun Laoghaire
103	Lighthouse Complex, East Pier, Dun Laoghaire
711	Bollards and Chains, East Pier, Dun Laoghaire, Co. Dublin
530	Bollards and Chains, East Pier, Dun Laoghaire, Co. Dublin
491	Bandstand, East Pier, Dun Laoghaire, Co. Dublin
499	Glass Shelter, East Pier, Dun Laoghaire, Co. Dublin
754	RNLI Lifeboat House, East Pier, Dun Laoghaire, Co. Dublin
95	Lighthouse, West Pier, Dun Laoghaire
90	Lightkeeper's House, West Pier, Dun Laoghaire
629	Harbour Lodge, Harbour Square, Crofton Road, Dun Laoghaire, Co. Dublin
388	Coastguard Station (former), Harbour Road, Dun Laoghaire, Co. Dublin
458	Royal Irish Yacht Club, Harbour Road, Dun Laoghaire, Co. Dublin
417	1 Coastguard Cottages, Harbour Road, Dun Laoghaire, Co. Dublin
414	2 Coastguard Cottages, Harbour Road, Dun Laoghaire, Co. Dublin
409	3 Coastguard Cottages, Harbour Road, Dun Laoghaire, Co. Dublin
406	4 Coastguard Cottages, Harbour Road, Dun Laoghaire, Co. Dublin
403	5 Coastguard Cottages, Harbour Road, Dun Laoghaire, Co. Dublin
400	6 Coastguard Cottages, Harbour Road, Dun Laoghaire, Co. Dublin
395	7 Coastguard Cottages, Harbour Road, Dun Laoghaire, Co. Dublin
393	8 Coastguard Cottages, Harbour Road, Dun Laoghaire Co. Dublin
360	Boat House Shed, Coal Quay, Harbour Road, Dun Laoghaire Co. Dublin
369	Boat House, Coal Quay, Harbour Road, Dun Laoghaire, Co. Dublin

Dún Laoghaire Rathdown County Council have issued 2 no. Declarations under Section 57 of the Planning and Development Act 2000 with regard to Dun Laoghaire Harbour: firstly in August 2002 which covers the entire area under the ownership of Dun Laoghaire Harbour Company and, more recently in 2010, for works relating specifically to the Battery Complex at



the seaward end of the East Pier (Ref. Appendix B of Dún Laoghaire Harbour Heritage Management Plan – Appendix 5.11.1)

Dún Laoghaire Harbour is identified as a candidate Architectural Conservation Area (ACA) and the specific policy objective relating to candidate ACA's is Policy AR10. Other related candidate ACA'S are 'The Metals'; Dun Laoghaire Seafront and, Pavilion Site/Moran Park, Dun Laoghaire. The following are the relevant other statutory policies relating to archaeological, architectural and built heritage within the Development Plan:

Archaeological Heritage Policies:

- Policy AH1: Protection of Archaeological Heritage: This refers to Council policy to protect sites on Record of Monuments and Places (RMP) and their settings.
- Policy AH2: Protection of Archaeological Heritage In Situ: This refers to Council policy to seek preservation of monuments in-situ, or as a minimum, preservation by record.
- Policy AH6: Underwater Archaeology: All developments with potential to have impact will require an archaeological assessment prior to works being carried out.

Architectural Heritage Policies:

- Policy AR1: Record of Protected Structures: It is Council policy to compile and maintain a Record of Protected Structures and will include in the Record every structure of parts of such structures which, in the Planning Authority's opinion, are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. The Council will ensure that interventions to Protected Structures shall have regard to the Department of Environment, Heritage and Local Government document "Architectural Heritage Protection Guidelines for Planning Authorities".
- Policy AR3: Funding & Assistance for Protected Structures: This refers to the Council's Conservation Grants scheme (which Dun Laoghaire Harbour Company is not eligible for as it is a public body). Other schemes identified include Civic Structures Grant Scheme, Heritage Council grant schemes and Section 482 of Taxes Consolidation Act (some of these schemes have changed/are temporarily suspended).
- Policy AR5: Energy Efficiency of Protected Structures: This flags future guidance from DoEHLG in this area, which Council will have regard to. The DoEHLG has recently published guidance on improving energy efficiency for historic structures as part of their Advice Guide Series.
- Policy AR6: Protection of Historic Street Furniture: It is Council policy to promote the retention of historic items of street furniture where these contribute to the character of the area.
- Policy AR7: Protection of Coastline Heritage: It is Council policy to promote the retention of features of the County's coastal heritage where these contribute to the character of the area.
- Policy AR10: Candidate Architectural Conservation Areas (c.ACAs): this policy states: "within a cACA the Council will have particular regard to the impact of a proposed development on the character of the area in which it is to be placed, The preservation of the existing character of an area does not preclude all forms of development. All proposals for new development should preserve or enhance the character and quality of the environment within a cACA.(Policy AR8 deals with designated ACA's and, while Dún Laoghaire Harbour is currently only a cACA, it is likely that within the life of the Master Plan, it will be duly designated an ACA. The implications of this are that works to the exteriors of structures which would materially affect the character of the area, in the opinion of Council, will require planning permission.

- Policy AR13: Industrial Heritage: This specifically identifies the Dublin-Kingstown Railway and the Atmospheric railway as being of industrial heritage value and identifies Dún Laoghaire Harbour as one of the largest harbours in the country.

Within the Landscape, Heritage and Biodiversity chapter (Chapter 9 of the Development Plan), there are a number of relevant policies as follows:

Policy LHB2: Views and Prospects: "It is Council policy to protect and encourage the enjoyment of views and prospects of special amenity value or special interests". A number of prospects have been listed for preservation and these include:

- Dalkey Hill from the East Pier
- Killiney Hill from the East Pier
  - The policy goes on to state that Council will prevent development which would block or obstruct the protected prospect and will address protection of other important views and prospect through day to day planning management and through Local Area Plans.
- Policy LH B5: Heritage and Protection of the Environment: This is a general policy statement embracing architectural, archaeological and natural heritage protection and makes specific reference to protection of national and EU designated areas such as Special Areas of Conservation Areas (SACs) and candidate SACs; Natural Heritage Areas (NHAs); Special Protection Areas.
- Policy LHB17: Coastal Zone Management and Dublin Bay: This refers to the Dublin Bay Task Force's preparation of a Dublin Bay Master Plan, which Council will co-operate with and refers also to a Dublin Bay Coastal Zone Management Plan. This policy refers to a Coastal Management Plan under preparation which will inform flood protection strategies. (These are likely to impact on the Harbour).
- Policy LHB18: Parks, Coastlines and Harbours: this specifically refers to protecting public access and amenity value of the Coal Harbour area.
- Policy LHB20: The Metals – this policy more particularly addresses the Metals walking route from the People's Park to Dalkey.

The Dun Laoghaire Urban Framework Plan, which forms part of the Development Plan, contains a number of specific local objectives (SLO) which affect the architectural, industrial and cultural heritage of the Harbour. These are:

- SLO 13: Development of the Harbour in accordance with a Harbour Master Plan
- SLO 14: 'The Gut'
- SLO15: Coal Quay – improved access
- SLO 16: Redevelopment of the Carlisle Pier
- SLO21: Environment Scheme for area between East Pier and Sandycove
- SLO 77: Local Area Plan for Dun Laoghaire
- SLO 93: Sutton to Sandycove Promenade and Cycleway (it can be noted that the Draft Development Plan 2016-2022 retains this objective subject to feasibility study, including assessment of route options and proposals shall be subject to Appropriate Assessment Screening in accordance with the requirements of the EU Habitats Directive).
- SLO95: Water leisure facilities at the Gut and rear of the West Pier.

### **5.11.5.3 Draft Dún Laoghaire Rathdown Development Plan 2016-2022**

Chapter 4.3.3.1 of this EIS sets out the relevant policy context for the Harbour as provided for in the Draft Dún Laoaghaire Rathdown Development Plan 2016-2022. This Plan provides a range of special land use objectives (SLO) which seek to enhance and expand marine related activities and improve public realm access in general. Of particular note with regard to the architectural/cultural heritage of the Harbour is the following SLO:

**SLO 136** - In order to promote and preserve the natural, marine and built heritage of Dun Laoghaire Harbour this Council will review the Harbour Heritage Management Plan 2011, with a view to considering same for inclusion in the County Development Plan 2016-2022, as appropriate.

The Draft Development Plan does not include and additions or deletions to the current protected structures within the Harbour and the designation of the Harbour as a candidate Architectural Conservation Area remains. The currently protected views and prospects which affect the Harbour also remain unchanged from the current Development Plan.

### **5.11.6 Characteristics of the Proposal**

#### **5.11.6.1 General Description of Proposal**

The Proposal is to construct and operate a Cruise Berth facility in Dún Laoghaire Harbour. Chapter 3 of this EIS sets out the planning and design description context in greater detail.

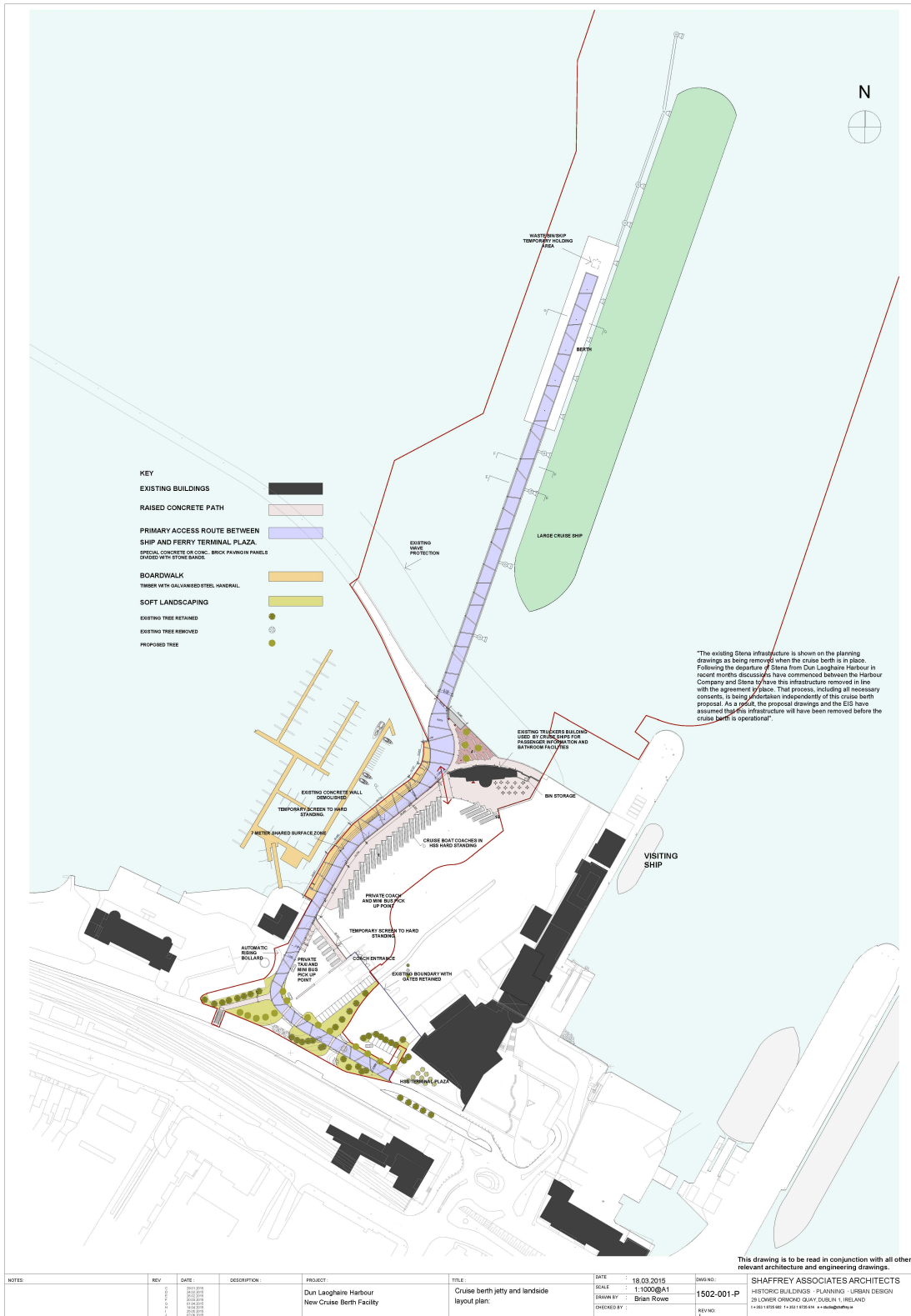


Figure 5.11.13: Drawing No 1502-001-P (not to scale) which illustrates the proposed new jetty and landside proposed at St. Michael's Wharf.

The following text describing the Proposal should be read in conjunction with the submitted drawings, in particular Shaffrey Associates Architects Drawing No's 1502-001/002/003/004/007 – P and Waterman Moylan Engineering Drawing No's: GN – 0100/0101/0102/0103/0104/0401.

The Proposal can be usefully described under four principal headings as follows:

#### **5.11.6.2 Construction of a New Quay and Berth**

This is probably the most significant new build aspect of the Proposal and involves the construction of a new concrete jetty which extends a total of 435 metres in length. The jetty comprises 3 elements:

- I. a causeway section which is 9 metres in width and 175m in length which will provide the primary access route between the Cruise ship berth and landside the existing landfill area
- II. the central berth section which is 20 metres in width and 120 metre in length
- III. a metal access walkway/gantry of 140 metres length and approximately 1.2 metres width, which is for servicing access only (width will be determined by required width for safe access and will be a restricted access area).

A series of 8 No 3 metre diameter dolphin monopiles of steel outer casing and concrete fill will run alongside the causeway and access walkway sections providing the necessary structural supports for the large Cruise ships to berth against. The berth structure will be sufficiently robust to support the ships without additional monopiles. 4.7m high by 2.5 m width approximately rectangular shaped fender panels are fixed to the jetty column heads at regular spacings, more frequent along the central berth section.

The jetty design has evolved following review of the Landscape Visual Impact photomontages, with the principal structural beams running perpendicular (crossways) to the jetty's length, thus allowing the horizontal edge beams to be reduced in depth. The structural rhythm of cross beams resting on circular columns with deep column caps expressed is consistent across the causeway and berth sections, The concrete deck is profiled along the edge to modulate the form and soften visual impact.

The ground surface of the concrete deck is to be finished in a special concrete finish, or concrete pavers, in panels which are separated by stone bands. This treatment will be continued from the central berth area along the causeway and landside public realm connecting to the existing public plaza in front of the Ferry Terminal building. This special finish paving will be generally no less than 7m along its entire length (approx 7.5 metres for the jetty section and approx 7m at the landside section) with a plain concrete strip running along the outer edges of the special paving at the central Berth and causeway sections of the jetty.

A simple metal guardrail will run either side of the causeway section for pedestrian protection and this will be of similar design to existing guardrails along the adjacent East Breakwater. A low metal protective crash barrier kerb will be fixed inside the guardrail as a primary safeguard for services vehicles which may use this causeway.

It is also proposed to run a series of vertical public light standards along the causeway and these will be continued along the edge of the special finish pathway to the Ferry Terminal Plaza. Larger public lighting standards will be located on the central berth area to provide the necessary light coverage at this wider section of jetty. The light levels emitted will be determined by established standards for pedestrian public areas.

Shaffrey Associates Architects Drawing 1502-003-P shows cross sections through the causeway and central berth sections of the jetty and illustrate visually what is described in text above. Drawing No. 1502-001-P provides a context layout plan which identifies the extent and alignment of the proposed special concrete and stone pavement.

#### **5.11.6.3 Dredging Works**

The new navigation channels and turning circle will comprise dredging below the existing bed surface to -10.5m Chart Datum (CD). (The dredging works are described in detail in Sections 3.2, 3.3 and 3.5 of the EIS). The navigation channel is located away from the historic structures, the closest 'pinch' points being at the mouth of the Harbour, where there will be no less than 50 metres clearance between the dredged channel and the face of the Pier end walls.

The stone roundheaded pier ends have been visually inspected by underwater divers as part of the EIS preparation surveys. The East Pier roundhead appears to be in sound condition with ashlar stone facing intact. With regard to the West roundhead there are a small number (within the order of 6 to 9 No in total) of locations where individual ashlar blocks are either missing or have been dislodged from original alignment and protruding beyond face of wall. It is proposed that these missing blocks will be replaced (using granite blocks taken from seabed in front of roundhead) and that the blocks which have become dislodged are reset. A conservation methodology for carrying out these works will be implemented which will address identification of suitable stone to replace missing ashlar, cutting/shaping of salvaged stone and resetting same and, methodology for resetting dislodged stones. This methodology will be developed by conservation architect/engineer and specialist contractor and will be carried out in advance of dredging works.

In addition to the capital dredging works during construction, there will be a regular requirement during the operational phase for maintenance dredging to maintain a channel depth at -10.5m CD.

#### **5.11.6.4 Landside Accommodation Works**

It is noted that the landside accommodation works have been designed to allow for the future implementation of the Dún Laoghaire Masterplan vision. In this way, some of the works to be carried out will be permanent and, in themselves, will deliver on some aspects of the Masterplan. Others will be more temporary in nature and alterations may be required in the future to allow for the realisation of a comprehensive redevelopment of St Michael's Wharf. Notwithstanding this, all proposals for the landside works have been designed to ensure they will comply with proper planning and sustainable development and the relevant objectives and policies of the County Development Plan.

It is also noted that while not part of this Proposal, the removal of some of the infrastructure associated with the Stena HSS (now no longer operational) will be carried out prior to completion of construction of this Proposal. In this way, the high level linkspan will be

removed thus ameliorating one of the more significant visual impacts of the HSS infrastructure.

The landside accommodation works are illustrated in Shaffrey Associates Architects Drawings Nos. 1502-001-P; 1502-002-P; 1502-004-P and, 1502-007-P.

The landside works comprise the following elements:

- I. Demolitions comprising the following:
  - a. Section of concrete boundary wall and adjacent concrete path which runs along the eastern edge of the Marina and currently provides pedestrian access between Harbour Road and the Eastern breakwater.
  - b. Demolition of other harbour infrastructure associated with the Ferry car park area including the canopy structures, removal of fencing and soft landscaping (to be replaced with new planting)
- II. New permanent public realm works along the western edge overlooking the existing Marina (ref Shaffrey Associates Architects drawings for more detail of proposed works, finishes and landscaping). These public realm works comprise:
  - a. a new metal boardwalk cantilevered out over the Marina to provide an extended area of pedestrian public realm. This boardwalk will be finished in timber decking with a metal protective guardrail. The boardwalk will be lower than the proposed new pathway which will connect the proposed jetty causeway with the existing Ferry Terminal Plaza, with stepped sections for sitting providing a westerly view onto the Marina and Harbour beyond. The boardwalk extends in width from approx 2.7m at its northern extremity to (generally) 5.5 metres.
  - b. Associated with permanent public realm works are proposed special finish concrete and stone pathway (as described in section 5.11.6.3 above). This path, together with the feature public lighting standards running at regular intervals along the path, will form a visual connector between Cruise Berth and the Ferry Terminal Plaza, aiding wayfinding for the visitor. The overall width of the new permanent public realm along this western edge will be approximately 7m (this excludes the adjacent boardwalk which adds another average 5 metre width of pedestrian public realm). The special pavement finish will, as a shared pedestrian/vehicular route, also accommodate service vehicles for the Cruise Ship and so will be of a robust construction, durability and finish. An automatic rising barrier located close to the junction with Harbour Road (ref Drawing No. 1502-001-P) will control vehicular access to the area of permanent public realm. Pedestrian access to the landside area of permanent public realm will not be restricted during operational phase, however there will be restricted access during construction phase.
  - c. At the northern end of the landside part of the site, adjacent to where the jetty begins, it is proposed to create a small public space with contrasting paving, new seating and mature tree planting. This 'node' is intended as a location where public might come to view a visiting vessel or a passenger might sit after arrival/before departure. It can become a location for temporary events and activities and will provide a new character of public space within the wider Harbour area. This public space has also been designed in consideration of the visual impact from arriving ships.
  - d. The Hobbler's monument, commissioned by Dún Laoghaire Harbour and the work of artist Fiona Mulholland will be moved as part of the works. The new public space as described in c above is designed to provide a new location for this fine bronze monument to an heroic, yet ultimately tragic, event which took place within Dún Laoghaire Harbour.

- III. As part of the landside accommodation a new single storey security building (Ref Drawing No 1502-004-P) of concrete, steel and glass will be located at the entry point to the new Jetty. This lightweight, contemporary, pavilion building will provide accommodation for security/validation and ancillary office. Integrated within the design of this structure is a metal gate which will allow operation and access to the Jetty to be controlled. It is envisaged that there will be no public access to the Jetty when the Cruise ships are visiting.
- IV. Running along the eastern side of the proposed new landside path which connects the new jetty causeway with Harbour Road, is a proposed temporary steel and timber boundary fence with a concrete/stone plinth, which will separate the permanent public realm works and pedestrian priority area, from the coach parking area which will serve the visiting Cruise ships. This coach drop off/pick up area will accommodate up to 22 coaches and 5 minibuses and is to be located in a dedicated section of the existing HSS ferry marshalling area. It is intended that any future development of the wider St Michael's Wharf landfill area will retain a coach park facility accommodated in a location which ensures it is appropriately screened from and separate to, the permanent public realm works. A new concrete path and associated road markings will facilitate the coach parking and this is to be accessed from the new public space described at iic above, via a sliding gate in the temporary boundary fence.
- V. The existing single storey motorist lounge building is to be retained and will provide toilet facilities, storage accommodation and ancillary accommodation for the Cruise Ship operation and associated local tour operators.
- VI. Temporary public realm works are proposed for the landside area running along Harbour Road and linking the pedestrian priority path (described at iib) with the existing Ferry Terminal Plaza and so providing a strong pedestrian connection towards the town centre. These temporary works comprise the continuation of the special finish pathway and associated public lighting, along with soft planting including mature trees and low level planting, similar to that currently planted in this area. Some realignment of the existing kerbing and access points between Harbour Road and the HSS car park (standage) area will be required to facilitate the priority continuity of the special finish pathway across the vehicular access points. Existing car parking within the HSS car parking area will be retained and reorganised to accommodate drop-off/collection point for taxis and tourist operator vehicles serving cruise visitors who may not have booked the formal coach tours. This area is identified as 'Private taxi and mini-bus pickup point' on Drg No 1502-001-P.
- VII. A coach overflow holding area is to be located within Accommodation Walk which straddles the Old Quay Bridge at the west of the Harbour. This underused area which is currently difficult to access, was part of the original Metals infrastructure. In providing this overflow coach park area, it is not proposed to alter the existing ground surface, walls and bridge. In order to facilitate turning movements of the coaches to access this holding area, modification of an existing low stone boundary wall to the car park adjacent to the Coal Quay (Old Quay) are required. This wall is a modern granite wall of no particular quality and its localized reconstruction offers an opportunity to improve its quality in alignment with adjacent stonework of vastly superior design and craftsmanship.
- VIII. To aid users/visitors using the cruise berth facilities, signage for vehicles and pedestrians will be provided. The design and location of this signage will conform with relevant Standards for Accessible Signage and regard will be given, where possible, in the design



of this signage to the standardised public information signage installed by Dún Laoghaire Rathdown County Council in the adjacent town centre.

- IX. Associated with the landside works will be construction of underground/buried utilities and services

#### **5.11.6.5 Operation of the Facility**

There are a number of aspects of the operation of the facility which are of some relevance regarding the architectural heritage of the Harbour and, in particular, the cultural heritage aspects:

- I. Section 5.1.3 of the EIS sets out the proposed extent of usage by Cruise ships of the Cruise facility. This would primarily be during a season extending from April to October. During the times when the Cruise facility is being actively used by visiting ships, it is anticipated that there will be a significant increase in population within the Harbour. A certain percentage of this number will remain on board the ship, others will avail of day tours outside of the immediate area and others will remain within the Harbour and town area. This is likely to generate more footfall within the Harbour and the adjoining town centre, in particular the cultural, amenity and retail facilities. It is anticipated that new activities, events and facilities will develop out of this new visiting population, albeit temporary.
- II. The visiting ships themselves will be moving in and out of the Harbour twice daily during visits. During these times, and when a Cruise ship is berthed, movement routes of other boats within the Harbour may be affected. An underpass facilitating movement of small craft under the jetty structure will be provided and designated. As noted in I above, Section 5.1.3 of the EIS provides a more comprehensive description with regard to Harbour Users during construction and operation phases.
- III. No significant change in vehicular use to that generally experienced when the HSS was operational, is envisaged during the cruise ship season. There will be some redistribution of vehicles when the overflow coach park is used.
- IV. When the Cruise Ships are not visiting the Harbour, the opportunity arises for alternative uses of the jetty (refer to Section 3.3.8 of the EIS for further detail). It is anticipated that it can serve a range of vessel types and sizes. The landside works will expand and enhance current public realm provision within the Harbour and provide new character of public realm spaces, i.e., the western facing boardwalk and the contemporary design public space at the access point to the Jetty (which is also the access point to the existing Eastern Breakwater).

#### **5.11.7 Impacts of the Proposal**

The purpose of the Environmental Impact Assessment for which this Environmental Impact Statement has been prepared, is to assess the impact on Dún Laoghaire Harbour of the proposed works as described under Section 5.11.6 above. In assessing impact on the architectural heritage of the Harbour, the significances identified in section 5.11.4 above have

been taken into account. In summary, the aspects of special interest ascribed to Dun Laoghaire Harbour, applying the criteria set out in the DoAHG Guidelines, are Architectural; Historic; Archaeological; Artistic; Cultural; Scientific; Social and Technical.

Potential impacts are firstly addressed in section 5.11.7.1 below, followed by the proposed ameliorative, remedial or reductive measures (5.11.7.2) and finally by the predicted impacts (5.11.7.3).

### **5.11.7.1 Potential Impact of the Proposal**

The impacts are assessed for the **construction** and **operational** phases. The particular special interest category which may be affected is noted in italics in brackets.

#### **Construction Phase**

With regard to the construction phase the potential Architectural Heritage Impacts are as followed:

- Physical damage to the historic East and West Piers, in particular the roundhead Pier ends as a result of dredging works (*Architectural, Technical*). It can be noted that where localised repairs may be carried out to the historic structures as part of, or in advance of, the construction works, then this may result in a positive impact (ref the works proposed under section 5.11.6.3 above). It should also be noted that the area of dredging and the proposed methodology indicate that this will be carried out well away from the existing structures. For further detail of the works refer to section 5.3.3.2.5 of the EIS which covers both construction and operational phases.
- The Hobblers monument will be moved from its existing location (*Artistic*). The new location is in the same general area and will involve a more considered and spacious setting. The more active uses to take place here will also mean greater accessibility to appreciate the monument.
- Impact on the some of the traditional functions of the Harbour, in particular sailing (*Cultural*). This is likely to involve temporary disruption during the construction works, specifically the works associated with the construction of the new jetty.
- The potential Archaeological impacts are addressed in chapter 5.10 of the EIS.
- There are no impacts anticipated with regard to the Historical, Scientific or Social special interest character of the Harbour.

#### **Operational Phase**

With regard to the operational phase the potential Architectural Heritage Impacts are as followed:

- Visual impacts of new jetty structure (*Architectural*). This is a significant new addition to the physical Harbour infrastructure, extending out into the expanse of water. This impact must be assessed in the context of the existing physical environment which includes the two late 20<sup>th</sup> century breakwaters constructed as part of the Marina in addition to the significant area of infill with associated seawall defence structure which accommodates the expansive HSS car park/standage area and the Ferry Terminal building, located on St. Michael's Wharf. The Landscape Visual Impact images suggest a variable impact depending on tidal conditions and whether there is a large cruise ship berthed or not. When a ship is docked, the visual impact of the new jetty reduces in contrast to the ship which dominates. The greater visual impact of the jetty occurs in

mid and low tide conditions and when viewed from closer locations such as the Easter Breakwater. As an essentially low level structure (the upper deck level approximately aligns with the existing walking level of the lower sections of East and West Piers), the visual impacts of the new jetty structure will occur principally from within the Harbour (the jetty will be visible from Killiney Hill and similar elevated areas, though these are remote). The proposed jetty is an open structure (horizontal deck supported on beams and columns) rather than a solid structure similar to the historic East and West Piers and the more recent inner breakwaters relating to the Marina. As such, there will be greater visual permeability. The new jetty will extend into a section of Harbour water which is currently unobstructed and so there will be some visual impact on some views across the Harbour from the outer sections of the historic East and West Piers.

- Visual Impacts of the Cruise Ships when berthed. This is a temporary impact (*Architectural*), and will only occur when ships are berthed in the Harbour. The visual impact will register at a much greater distance than the proposed jetty (refer to Landscape Visual Impact photomontages). With regard to nature of this potential impact, this is quite subjective so overall can be considered neutral. It might also be noted that before the Cruise facility becomes operational the existing high-level infrastructure of the HSS (i.e. the linkspan structure) will be removed, which will result in a positive visual impact<sup>2</sup>.
- The inward and outward movement of the large cruise ships have the potential to cause damage to the historic structures (*Architectural, Technical*). However, given the proposed controlled methods of entering and leaving, the geometry of the entry channel and the entry and exit route of the vessel, the very slow speeds at which such craft will be travelling and, the restrictions on access when weather conditions are unfavourable (e.g. high wind conditions will prohibit access), it is not anticipated that such damage is likely to occur.
- Once constructed and when cruise ships are operational in the Harbour, there will be restrictions on the current available access and routes for other vessels within the Harbour area. This may affect the nature of current usage (*Cultural*). However, it is understood from other surveys and studies (Ref 5.1) that any changes caused by the new jetty and Cruise operation will not reduce current sailing/boating capacity within the Harbour. New management procedures will be required in order to facilitate safe and ongoing access and usage by all craft. In terms, however, of its cultural character, the wide and diverse range of maritime and leisure activities which have taken place in the Harbour and which contribute to the intangible heritage of the Harbour, will not be diminished by the cruise operation. Indeed, the cruise operation will contribute to retaining the historic status of Dún Laoghaire Harbour as an international port, a status which is currently threatened following the suspension of ferry services in April 2015.
- The landside public realm works will add new public space to the Harbour and enhance an existing pedestrian route which is little used and of restricted environmental quality. The proposed works will potentially create more accessible and useable spaces with associated new uses and activities to animate and draw users (*Architectural, Cultural*)
- The proposed overflow coach resting area located on a section of the former Metals route (the Accommodation Walk which runs alongside the railway line), may impact on the character of this area (*Architectural, Technical*). However, the parking is a temporary impact and there are minimal physical works proposed to facilitate access to this area, which involve the localized realignment of a section existing low stone wall of poor quality stonework. This alteration can improve the existing wall quality

---

<sup>2</sup> The removal of the HSS infrastructure is not part of this Proposal. However it is understood that a considerable amount of the existing HSS infrastructure will be removed in advance of the operational phase of the Proposed Cruise Berth Facility.

## The 'Do Nothing' Approach

If the proposed development were not to proceed, the current water body; walkways, access routes and car parking/marshalling areas would remain in their present form. The potential economic implications for the Harbour as set out elsewhere in this EIS may result in limited funding for the necessary and ongoing maintenance and repair works to the Harbour, in particular its historic and protected structures. While the diverse range of traditional Harbour activities would continue to take place substantially as currently, following the suspension of the international ferry operation, it is possible that Dún Laoghaire Harbour would lose its historic status as an international port.

### 5.11.7.2 Ameliorative, Remedial or Reductive Measures

Underpinning all the works is a conservation strategy for Dún Laoghaire Harbour which provides a context for mitigation of potential negative impacts and is informed by the policies set out in the Heritage Management Plan (ref Appendix 5.11.1). Key principles to be adhered to are:

- Recording in advance and ongoing: Records of current condition and presentation of adjacent historic structures which may be affected by the Proposal are to be taken in advance of construction works and a further record on completion of construction works. As part of the regular review of the Harbour Inventory, further recording is to take place during the operational life of the Proposal.
- Monitoring during works: Provision of ongoing monitoring during construction and operational phases will be implemented and this will inform further mitigation measures to eliminate or minimise adverse impacts. The proposed monitoring will review any changes to the physical structure and fabric of the historic structures and is as set out in Chapter 3.5 of this EIS. The input of appropriately experienced and expert conservation professionals will be part of the team reviewing the monitoring and recommending any necessary ameliorative action should adverse changes be recorded.
- High quality design, specification and construction methodology for the new works. It is acknowledged that the Proposal involves some works which are significant in scale and extent. It is further acknowledged that the conservation principles of reversibility and minimal impact will not apply in this instance (specifically with regard to the permanent jetty and landside public realm works) and, therefore, there is a requirement to ensure that the more significant aspects of the Proposal are designed, specified and constructed to a high standard of quality which will endure well over time. The ongoing input of appropriately skilled and experienced architectural/civic design and conservation personnel will contribute to achieving this. It is noted that Dún Laoghaire Harbour Company has a good record in delivering projects of high quality.
- The implementation of an integrated design, supervision and monitoring approach which is conservation-informed if and as the project proceeds from planning to implementation and operation will help mitigate potential adverse impacts on the Architectural Heritage special interest character of the Harbour. As part of this, implementation of the proposed sequence of works as outlined in Section 3.5.3.2 and the construction methodology, has been developed by the multi-disciplinary design team to ensure good practice conservation and civic design can be achieved, in line with DAHG guidelines and the relevant international conservation charters and conventions.
- Management during use: Ongoing review of impacts arising during use is required and these should have regard to Architectural Heritage impacts and be overseen by suitably qualified and experienced professionals.

- Ongoing reference to the Dún Laoghaire Harbour Heritage Management Plan policies will provide a useful guide during detail design, construction and operational phases for this Proposal.

Taking each phase, further ameliorative, remedial or reductive measures are outlined below:

### **Construction Phase**

- Advance repairs to the historic breakwaters (East Pier structure) as set out at to be carried out. As described in Section 5.11.6.3 above, it is proposed that the missing ashlar blocks of the Roundheaded West Pier end will be replaced (using granite blocks taken from seabed in front of roundhead) and that the blocks which have become dislodged will be reset. A conservation methodology for carrying out these works will be implemented which will address identification of suitable stone to replace missing ashlar, cutting/shaping of salvaged stone and resetting same and, methodology for resetting dislodged stones. This methodology will be developed by conservation architect/engineer and specialist contractor and will be carried out in advance of dredging works.
- Monitoring during construction – any movement; visual and other techniques to identify real time changes and which allow change to be logged over time. Monitoring as set out in general principles above.
- Management of use of Harbour water during works to minimize disruption of traditional uses which contribute to the cultural character of the Harbour
- High quality design, specification and construction implementation. This relates to all aspects of the Proposal but in particular the following elements:
  - Concrete jetty structure – profiles; concrete colour, specification and finishes; design of guardrails
  - Specification, materiality and design of proposed special finish pathway running from the Cruise jetty to the Ferry Terminal Plaza
  - Specification of light standards
  - Specification, detail design and material selection of permanent public realm works, including proposed boardwalk structure and proposed new public space located adjacent to the new jetty causeway
  - Detail design, materiality and construction of proposed security building and integrated gate/guardrails.
  - Simplified and limited signage to assist in wayfinding
  - Overall, the avoidance of introducing clutter within the public realm spaces.
  - High quality mature planting where proposed to ensure early impact and likely survival.
- Integrated design team approach with input of relevant design and conservation expertise.

### **Operational Phase**

- Monitoring – regular assessment of condition of historic structures and recording of same. Implementation of relevant policies within Heritage Management Plan.
- Manage use of landside facilities to ensure orderly access and use of vehicles, in particular within the shared surface area which is proposed as a pedestrian priority area.

- Manage use of landside facilities to ensure ongoing activity and maximise opportunities to add cultural value to the expanded public realm space.
- Maintenance of public realm associated with the Proposal to ensure a quality environment is provided at all times.
- Manage use of overflow coach parking area so no adverse impacts on the physical fabric of historic walls and other aspects which form part of the industrial heritage character relating to the former Metals.

### **5.11.7.3 Predicted Impact of the Proposal**

#### **Construction Phase**

Taking on board the ameliorative, remedial or reductive ('mitigation'), measures outlined at 5.11.7.2. above and the key conservation principles set out at 5.11.7.2, the impacts at construction phase should be neutral. Where advance and appropriate conservation repairs to the historic piers structures are carried out, the impacts will be positive.

#### **Operational Phase**

Taking on board the ameliorative, remedial or reductive ('mitigation'), measures outlined at 5.11.7.2 above and the key conservation principles set out at 5.11.7.2, the following impacts during operational phase are predicted:

- Visual Impacts of Jetty: The proposed jetty will visually impact on the current setting of the Harbour. This impact will vary depending on tidal condition and proximity of viewer to jetty. The jetty can be considered as another element of Harbour infrastructure associated with the evolution of the traditional port functions of the Harbour. The nature of the visual impact of the proposed jetty on the architectural character of the Harbour in particular will depend on the quality of detail design, specification and construction. Subject to a high level of quality being achieved it is considered that the visual impacts of the proposal can be integrated acceptably within the historic Harbour without adversely impacting on its special interest character. It is considered that the visual impact of the jetty will be the most noticeable (palpable) impact in terms of architectural heritage.
- Visual impacts of cruise ships in berth: As these impacts are temporary and subjective, such impact is predicted to be neutral.
- Visual and public amenity impacts of the proposed permanent public realm works are predicted to be positive. The proposed temporary public realm works will be neutral/positive.
- Physical/Structural damage to historic structures<sup>3</sup>. Subject to implementation of the mitigation measures and the operational procedures set out in this EIS no damage is predicted during operational phases.
- Impact on the traditional uses of the Harbour as set out in the Heritage Management Plan policies<sup>4</sup>. It is not predicted that the diverse range of use within the Harbour will

---

<sup>3</sup> An Bord Pleanála (ABP), in their final report from the consultative process identified the potential for damage to the historic structures of the Harbour as an issue to address in the EIS submission, ABP did not raise other specific architectural heritage issues in this report.

<sup>4</sup>There are two relevant policies as follows:

be significantly curtailed by the proposed new Cruise facility such that the cultural heritage special interest will be adversely affected. Subject to implementation of appropriate protocols and management of Harbour use, the predicted impact should be neutral.

In conclusion, subject to implementation of the mitigation measures set out in this EIS, the impacts of the proposed development can be managed in a manner which prevents any significant adverse impact.

### **Worst Case Scenario**

The worst case scenario would be serious damage to the historic breakwaters as a result of collision of Cruise vessel and historic structure. However due to the controls which will be in place for Cruise ships entering the Harbour and the specific geometry of the access route which will demand very slow movement of vessels, it is highly unlikely an accidental collision would occur.

---

*MP41: To facilitate the traditional uses and users within the Harbour as part of the cultural heritage and character of the place, while implementing management procedures and protocols which ensure that continued or intensified use does not harm the cultural heritage significance of the Harbour.*

*MP42: To allow for new uses, including long-term and temporary, within the Harbour which reinforce, assist and enhance the character and long term sustainability of the place and which do not cause damage to the cultural heritage significance of the Harbour.*