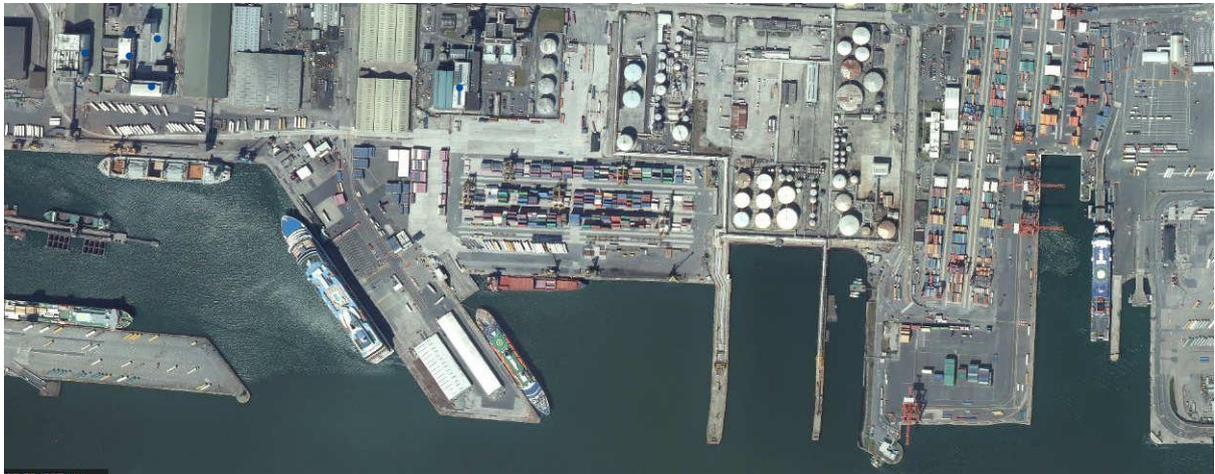




CONSERVATION STRATEGY AND INDUSTRIAL HERITAGE APPRAISAL





**CONSERVATION STRATEGY AND INDUSTRIAL HERITAGE
APPRAISAL**

**OF
MP2 Project**

FOR DUBLIN PORT COMPANY

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1 INTRODUCTION & SUMMARY

1.0 Introduction

Southgate and Associates have been engaged by Dublin Port Company (DPC) to provide a Conservation Strategy and Industrial Heritage Appraisal Report to assess the potential impacts of the MP2 Project at Dublin Port.

The area of the MP2 Project is an *historic place*, as defined by the Burra Charter.¹ This appraisal has been conducted in accordance with the ICOMOS²– TICCIH³ Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes which states as follows (The Dublin Principles – Section I –Article 1):-

I - Document and understand industrial heritage structures, sites, areas and landscapes and their values
. Researching and documenting industrial structures, sites, landscapes and the related machinery, equipment, records or intangible aspects is essential to their identification, conservation, and the appreciation of their heritage significance and value. Human skills and knowledge involved in old industrial processes are a critically important resource in conservation and must be considered in the heritage evaluation process.

The aims of the strategy and report are:

- To appraise and evaluate features of heritage significance within the MP2 Project area;
- To identify potential impacts of the MP2 Project;
- To make recommendations to DPC on the implementation of a cultural heritage strategy with particular reference to the interpretation of the cultural heritage of the Port and the creation of additional public realm linked to interpretation and access to surviving features of port infrastructure of cultural heritage significance;

1.1 Legislative and policy context

The principal Irish legislation, international charters, local development plans and guidelines relating to the protection, recording and enhancement of archaeology and the historic built environment in general may be summarised as follows:

Irish legislation

- National Monuments Act 1930 to 2014
- Heritage Council Acts 1995 and 2018

¹ The Burra Charter was adopted by Australia ICOMOS in 1979 and most recently updated in 2013. It defines the basic principles and procedures to be followed in the conservation of Australian heritage places.

² International Council on Monuments and Sites.

³ The International Committee for the Conservation of the Industrial Heritage.

- National Cultural Institutions Act 1997, as amended
- Planning and Development Acts 2000 to 2018
- Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999

International Charters and Conventions

- Granada Convention on the Protection of the Architectural Heritage of Europe, 1985
- Valetta Convention on the Protection of the Archaeological Heritage, 1992
- Joint ICOMOS-TICCIH Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes (The Dublin Principles), 2011
- The Burra Charter for Places of Cultural Significance, 1999
- The International Council on Monuments and Sites (ICOMOS), advisory body to UNESCO concerning protection of sites and recommendation, 1992

Local Authority Development Plans & Other Plans

- Dublin City Heritage Plan 2002-2006 (2002)
- Dublin City Development Plan 2016 – 2022
- Dublin Port Company Masterplan, 2012 – 2040
- Dublin Docklands Area Master Plan, 2008

Heritage Plans & Guidelines

- The National Heritage Plan (2002)
- Office of Public Works Statement of Strategy, 2005-2008
- Architectural Heritage Protection: Guidelines for Planning Authorities, 2011
- The Framework and Principles for the Protection of the Archaeological Heritage, 1999

1.2 Assessment methodology

The overview and archaeological evaluation of the site that follows was preceded by a desk-based assessment. Its primary aims are fivefold:

- (1) To ensure all surviving features of archaeological, techno-historical and architectural significance are recorded;
- (2) To appraise and evaluate its industrial archaeological/architectural/techno-historical significance,
- (3) To assess the impact of the proposed scheme;
- (4) To identify immediate conservation priorities;
- (5) To propose measures to mitigate any potential negative impacts on the built heritage of the area.

The principal sources consulted were as follows:

- Record of Monuments and Places (RMP)
- Sites and Monuments Record
- The Dublin City Industrial Heritage Record (and 2016 Review)

- Historic map collections
- Historic photographic collections
- Secondary sources (e.g. archaeological and architectural journals).

1.3 Previous archaeological research in the study area

Recorded Archaeological Monuments and Places: There are no recorded monuments in the RMP or in the Dublin City Record of Protected Structures within the study area. There are no recorded finds from the study area in the NMI topographical files, nor have any test excavations been conducted within the area under assessment here. In 2013, an extensive *Cultural Heritage Environmental Report, for the Alexandra Basin Redevelopment, North Wall Quay Extension*, was undertaken by Magnus Archaeology for DPC.

1.4 Protection status and significance of the structures

North Wall Quay, which is outside the study area, is identified as a Protected Structure (RPS 5835). Owing to a general lack of both documentary evidence and thematic archaeological surveys, the manner in which the importance of pre- AD 1700 archaeological sites in a small study area are assessed can often be a subjective process. In the period from about 1800 to the present, however, sites of monument value/importance can be more readily assessed, based on the increasing availability of written sources such as business records, correspondence, newspaper accounts and pre- and ordnance survey cartographic sources.

Other factors such as *rarity, group value, condition* and *historic, cultural or scientific associations* are also important. Table 1 below shows the designations of significance and types of mitigation considered in this report.

Table 1 Assessment of significance and expected type of mitigation

International significance (protected structure)	National significance (protected structure)	Regional significance (unprotected)	Local significance or Not rated
<i>To be avoided</i>	<i>To be avoided</i>	<i>Avoidance recommended</i>	<i>Avoidance unnecessary</i>

After a full consideration of the available evidence for the structures and features to be directly impacted upon by the proposed development, the assessment of their significance is summarised in Table 2 and the locations of the referenced sites is shown in Figure 1. None of the structures are officially rated and the following ratings are the opinion of Southgate Associates.

Table 2 Assessment of significance of structures and features within study area

SITE	Date of construction	Dublin City Industrial Heritage Record No.	Description	Significance
Terminus of the Eastern Breakwater , 1858-1884 – hereafter referred to as the pier head terminus	1858-1884	19-09-002	The granite ashlar masonry breakwater wall originally as the Eastern extent of, and to protect the Alexandra Basin. The wall itself has been subsumed into the port as it was infilled leaving only the pier head terminus visible. This is a curved protruding mass granite masonry terminus to the breakwater, tilted at an angle to the South East.	Nationally significant
Lighthouse, formerly located on the terminus of the Eastern Breakwater (Tolka Quay)	c.1884	19-09-003	Small glazed lighthouse	Regionally significant



Figure 1 late 19th century formation of the Alexander Basin including the Eastern Breakwater (Tolka Quay) and its terminus Extract from the 2nd Edition Ordnance Survey Maps (source: www.heritagemaps.ie accessed 05.07.2019)



Figure 2 Contemporary digital satellite image part of the Alexander Basin including the pier head terminus showing the extent of modern infill in the area. Hatched lines show approximate location of Eastern Breakwater. (source: www.heritagemaps.ie accessed 14.11.2018)

1.5 Potential Impacts

1. *Cultural Significance*

Dublin Port was systematically developed in the Victorian era as a deep water port and much of its cultural importance derives from this. However, the increasing size of ships means that this cultural significance could be lost in the future if Dublin Port is unable to adapt to continue to operate as a deep water port. The Port would become less relevant to the needs of the city. The cultural significance of Dublin Port as a deep water port is threatened by the lack of ability to berth deep water vessels.

2. *Development*

Modern development, insensitive to the age, character or heritage significance (architectural, cultural, technical or otherwise) of historic structures or settings, or the removal of features that define the character of an industrial archaeological heritage and development involving intervention which is not mitigated may be a threat to the significance of an industrial archaeological complex.

3. *Decay*

- Decay issues often involved with historic structures usually caused by uncontrolled water or perhaps inappropriate repairs and modifications.
- The action of tidal salt water on masonry in wetting and drying conditions can cause decay.
- Iron components need special care and attention to ensure correct corrosion treatment.

- Care needs to be taken during construction to ensure consequences of vibration are mitigated.

1.6 Dublin Port Company's development of its industrial heritage conservation strategy

In its Masterplan 2012 to 2040, Dublin Port Company set an explicit objective of trying to re-integrate the port with the city.

This objective stems from recognition across Europe that many ports have lost the support of the cities they had grown up with and had spawned. This loss of support and connection left the ports increasingly remote and detached from the urban areas that they helped to create.

It is DPC's objective to ensure that the requirement to facilitate the future expansion of Dublin Port respects the cultural significance of Dublin Port as a Deep Water Port.

The determination of cultural significance is guided by the Burra Charter (Articles 1.2, 1.4, 2.1, 2.2 and 3.1):-

- 1.2 *Cultural significance* means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.
- 1.4 *Conservation* means all the processes of looking after a *place* so as to retain its *cultural significance*.
- 2.1 *Places of cultural significance* should be conserved.
- 2.2 The aim of *conservation* is to retain the *cultural significance* of a *place*.
- 3.1 *Conservation* is based on a respect for the existing *fabric, use, associations* and *meanings*. It requires a cautious approach of changing as much as necessary but as little as possible.

There is also an appreciation on the part of DPC that the port has a long history which has generated a rich resource of industrial heritage.

Against this background, it is DPC's objective to ensure that, in re-engineering a substantial amount of old infrastructure which is still used for modern day port purposes, particularly from the late Victorian era, the industrial heritage of what is being redeveloped and renewed is respected and preserved appropriately and consistent with the need to expand the capacity of the Port. In the proposed development area, part of the existing port infrastructure consists of assets that were developed during the late Victorian period, and which have been modified and adapted through the installation of more recent interventions to facilitate the safe berthing and loading/discharge of cargo from modern vessels. These assets are at the limit for their operational function and require renewal and reconfiguration as a key part of a busy and dynamic working deep water port. In particular the berths on the quayside directly adjacent to the channel need to be dredged to a depth that can safely accommodate modern vessels. The required berthing depths cannot be achieved in the current structure as they would undermine the structure. Consequently, this structure requires re-engineering given its pivotal position at a central part of the deep water port.

1.7 Summary

In the context of the operational role played by the deep water facility at Alexandra Basin West, DPC wishes to undertake the sustainable development of the facility to meet current requirements. As indicated above, this was found to require significant interventions on the former Eastern Breakwater Wall. Dublin Port Company has set an objective that such interventions are carried out in a way that accords with best practice in conservation while preserving the cultural significance of Dublin Port as a functioning deep water port.

There is a conflict between preserving the built heritage of the Eastern Breakwater and preserving the cultural significance of the Dublin Port as a functioning element of the city's infrastructure. In this instance the recommended approach is to preserve by record the granite mass masonry pier head terminus, carefully deconstruct (allowing observation of Victorian construction methods) and reconstruction close by as part of a heritage amenity. A policy of legibility requires the memory of the location of the pier head terminus to be recorded in the surface finishes of the new deep water quay.

The major intervention of dismantling the pier head terminus is necessitated for the implementation of Dublin Port Company's operational programme and is being carried out in line with best conservation principles and is mitigated by the following conservation strategy which has been designed with due regard to the recent ICOMOS "Dublin Principles":-

- Best practice recording using 3D laser technology;
- Ensuring legibility of this intervention on the the original construction;
- Opening part of the area as a public amenity allowing access to a previously inaccessible area;
- Providing interpretation of the achievement in the original Victorian design and construction through an architecturally innovative interpretation scheme in the Public Realm area;
- Reconstruction of part of the removed element using the 19th century durable granite blocks and salvaged elements of the original lighthouse.

As mentioned above, part of DPC's commitment to reintegrating the Port with the City is to provide access to aspects of the cultural heritage of the Port. Southgate Associates have also coordinated with MOLA Architects to design an interpretive amenity area reinforcing the city's relationship with the port and water by incorporating re-located heritage elements, such as masonry of the pier head terminus and salvaged remains of the lighthouse, which was formerly located on the pier head terminus (this was removed in the early 2000s).

The public interpretation area will use granite blocks of the pier head terminus used by Bindon Blood Stoney in the original construction of the Quay. This has been incorporated into a contemporary design by MOLA Architecture. Details of this design appear in the appended report by MOLA Architecture.

2 THE INDUSTRIAL ARCHAEOLOGICAL ENVIRONMENT

Source Dr Colin Rynne Industrial Archaeologist Department of Archaeology, UCC Summary

The physical development of the north Dublin city docklands, in general, mirrors that of other important European ports in the eighteenth and nineteenth centuries. Almost invariably, port facilities were expanded upstream from a medieval core, to accommodate both a growing demand for additional quay space and the need for specialised berths, such as oil terminals, roll on roll off facilities and later, in 1960s, standard size 'inter modal' container terminals. Indeed, as with Dublin's Alexandra Basin, the need for additional berths led to construction of branch docks at right angles to main basin. Similar trends were in evidence in English ports, such as at Huskisson Dock and Langton to Alexandra group of docks at Liverpool in 1860s and 1870s, and also at Tilbury dock on lower Thames in 1884. In Dublin, these were increasingly built downstream as size of ships increased, and its scale of operations and expansion can be paralleled with Liverpool and London docks.

Throughout the eighteenth century, the engineering problems presented by the material deposited by the Liffey, Tolka and Dodder rivers (which formed two large sand banks, known as the North and South Bulls), was one of the greatest threats to the long term development of the port of Dublin. In the long term, if not properly dealt with, this would continue to create problems for shipping. Only with the construction the North Bull Wall, between 1820 and 1825, was this problem properly addressed.

Nonetheless, the costs of preparing quay walls below water could be prohibitive. In 1863, the engineer of Dublin port, Bindon Blood Stoney, undertook a series of tests which established that concrete was actually some 50% cheaper, and he proposed to manufacture monolithic blocks of concrete, up to 350 tons in weight, which would be laid on the river bed as the foundations of quay walls.

Stoney's scheme to provide new quay walls on the north side of the estuary of the River Liffey was novel in its execution. The conventional method of laying the foundations of quay walls involved the construction of expensive coffer dams, which were continually pumped dry to facilitate building work. However, in Stoney's scheme, the foundations for the concrete monoliths were first excavated by a dredger, while the final levelling off work was carried out on the river bed by men working within a massive diving bell, supplied with compressed air. The enormous concrete blocks, which were fabricated nearby, were lifted by a floating crane (or 'shears') and the first block was lowered into position in 1871. Stoney's method proved to be both expeditious and cheap, and by 1882, over 2,000 ft (609.6 m) of new quay wall, with a depth of 22 ft (6.70 m), had been laid by this means. This was the first of a series of innovations which brought the Port of Dublin to the forefront of dock and harbour design.

3 EVALUATION OF CULTURAL HERITAGE, POTENTIAL IMPACTS AND MITIGATION MEASURES

3.1 Description of construction and potential impacts

The proposed development area is the built up lands around what was the Eastern Breakwater built 1858-1884. This area was subsequently infilled to accommodate modern port facilities – see below:



Figure 3 19th century OS map extract compared with modern satellite image showing location of pier head terminus and modern infill to facilitate the port infrastructure.

The only remaining visible section of this Victorian breakwater is the terminus, known as the pier head. The visible elements are composed of granite capstones arranged in a blunt roundel angled South East. Some are visible on the modern surface and on the vertical water's edge. A small lighthouse stood on the pier head terminus and this was removed in the early 2000s.



Victorian lighthouse in situ in the late 1990s.



Granite capstones and steps.

The lantern and the bell were salvaged and stored at Dublin Port and are proposed for re-use in the public heritage amenity as part of the proposed conservation strategy.



The lantern and the bell of the Victorian lighthouse are stored on site. The remainder of the lighthouse was demolished.

Works around the Eastern Breakwater will involve the dredging of the adjacent riverbed and the excavation of surface material and removal of the pier head terminus. New deep water berths will be constructed.

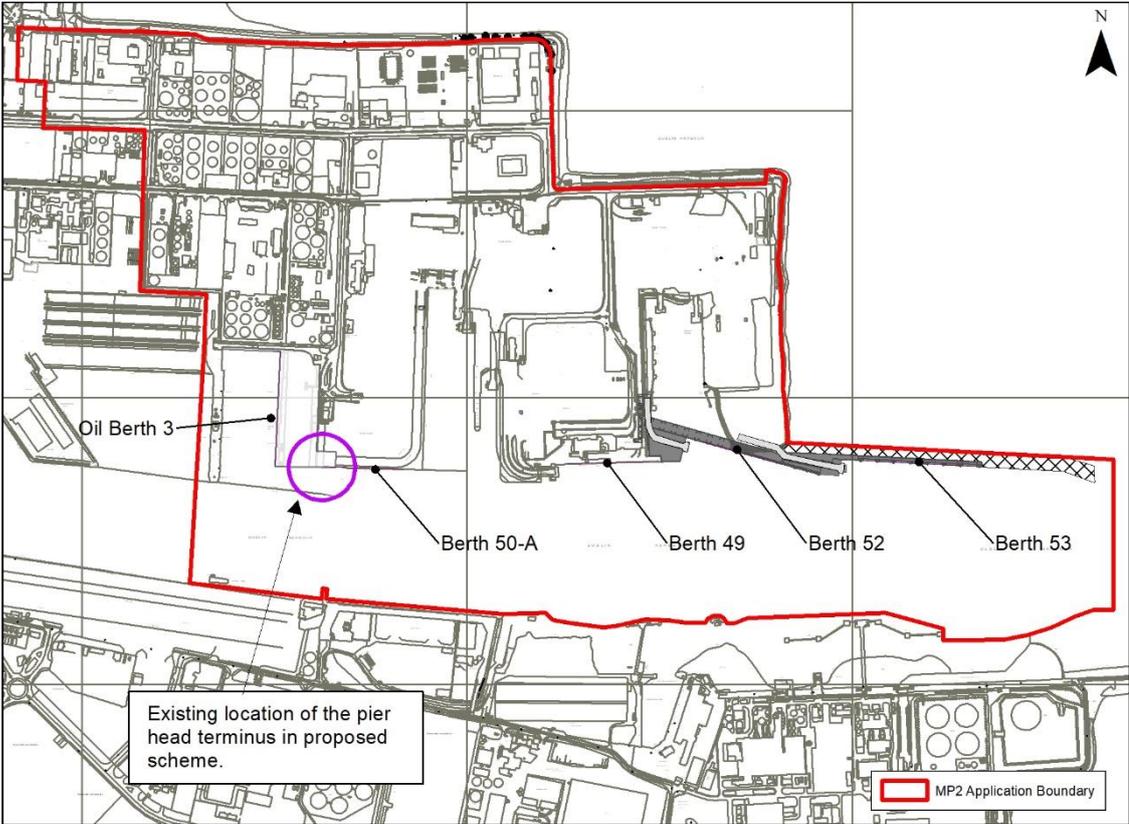


Figure 4 Proposed development area

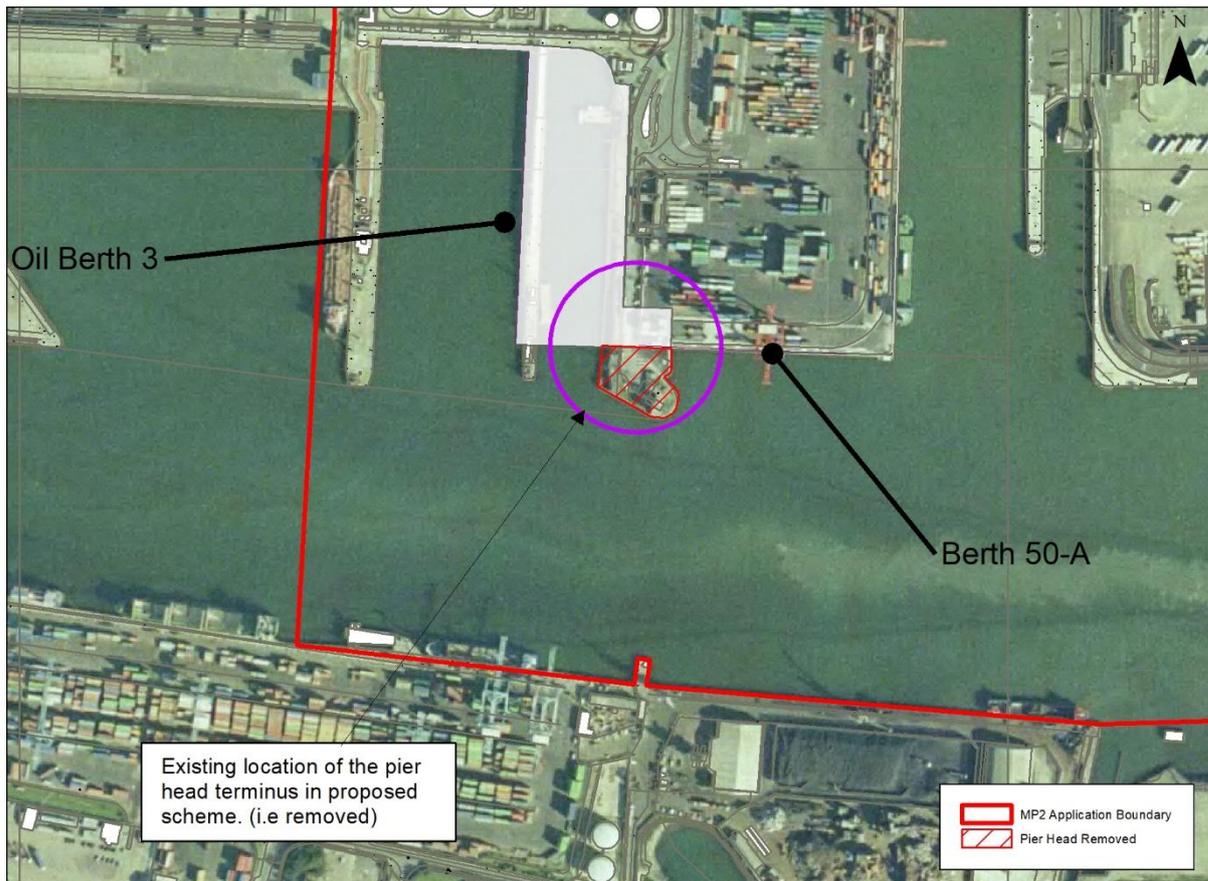


Figure 5 Current location of the pier head terminus in relation to the MP2 proposal (overlaid).

3.2 Proposed mitigations of impacts

The general conservation principles and methodology proposed is in accordance the ICOMOS – TICCIH Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes which states as follows:-

III - Conserve and maintain the industrial heritage structures, sites, areas and landscapes

12 In case of prospective redundancy, decommissioning, and / or adaptation of industrial heritage sites or structures, the processes should be recorded including, for example, where components have to be demolished and machinery has to be removed. Their material form as well as their functioning and location as part of the industrial processes should be exhaustively documented. Oral and / or written stories of people connected with work processes should also be collected.

To this end a conservation strategy, utilising policies based on ICOMOS Dublin Principles (2011/12), was formulated recommending:

1. laser recording of the pier head terminus
2. depositing a copy of these records to the Irish Architectural Archive in a readable format and hard copy.
3. Careful recorded deconstruction of the pier head terminus monitored by a qualified archaeologist experienced in industrial archaeology;

4. Labelling of each element as it is removed;
5. Recording (photographic, video and descriptive) of Bindon Blood Stoneys construction methods as deconstruction proceeds;
6. Careful storage of the ashlar elements;
7. Re-use of the ashlar elements in a public realm, industrial heritage interpretation incorporating the lantern and bell of the Victorian lighthouse.
8. Marking of the historic location of the pier head terminus on site after its removal, showing the location where the pier head terminus was removed from. This should also include a simple text as explanation and executed in a manner that would not compromise the structural integrity of the new quay wall or the logistics of Port operations.

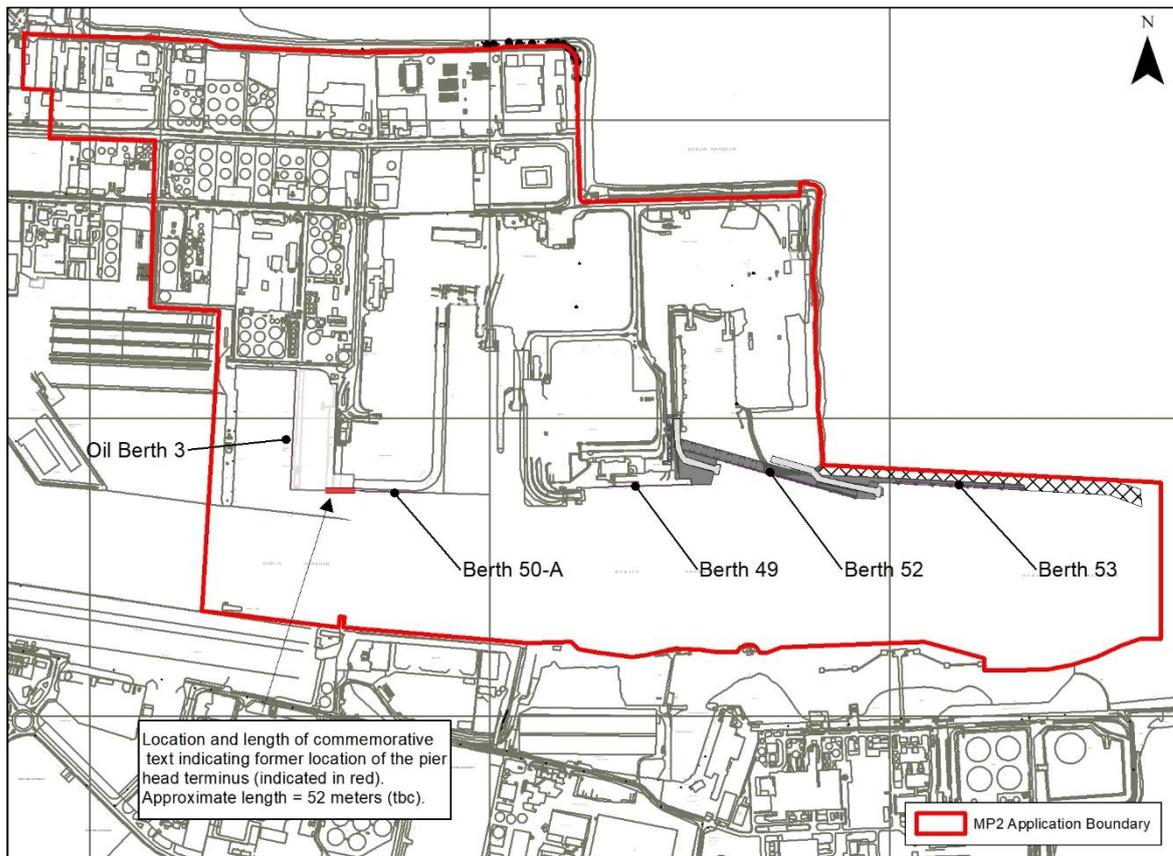


Figure 6 here shows the proposed location designated to host commemorative text to be incised in the quayside concrete, on an area of approx. 0.4m x 52m (the length of the point where the pier head terminus was removed).

While this intervention will not be generally accessible to the public it is a durable and sustainable means of denoting the historic location of the pier head terminus for future information. Wording should be succinct and factual, clearly denoting the location, dates of construction and demolition and its design attribution.

Suggested text:

This location is where the original entrance to Dublin Port's deep water basin stood. Designed by Port Engineer Bindon Blood Stoney and constructed using the innovative approach that was employed for the North Wall Quay Extension, the 'Breakwater' terminus was built between 1858-1884 and presented an elegant roundel on top of which was constructed Breakwater Lighthouse. It was carefully dismantled in 20XX to facilitate deep water port developments.

It is suggested that the incised text will be executed by sandblasting through a template of stainless steel in which the text will have been laser cut. While this proposal will commemorate the pier head terminus *in situ* its history and significance will be elaborated in the public realm "Heritage Zone" located to the East.



Figure 7 Example of sandblasted text onto concrete

4 CONSERVATION PHILOSOPHY AND STRATEGY

Conservation philosophy

This conservation proposal is intended to identify the constraints and options pre and post planning stage. Because conservation is an inter-professional discipline, the following professionals have been involved in developing the conservation strategy outlined in this report:-

Archaeologist: Niall Brady of ADCO Ltd
Architects; MOLA Architects
Conservation Consultants; Southgate & Associates.
Engineering Design: ABL
Environmental Consultants: RPS
Client: Dublin Port Company

The following general principles of conservation have been adopted in this document, and have resulted in a proposed conservation policy for Alexandra Basin, as follows:-

- Burra Charter I.C.O.M.O.S. 1979, revised 2013
- ICOMOS – TICCIH Principles for the Conservation of Industrial Heritage Sites, Structures, 2011
- Venice Charter I.C.O.M.O.S. 1964 Venice Charter I.C.O.M.O.S. 1964

In terms of **preserving** the cultural significance of Dublin Port as a deep water Port the following articles from the Burra Charter I.C.O.M.O.S. 1979 Revised 2013 have been considered:

- Article 2.1 Places of cultural significance should be conserved.
- Article 2.2 the aim of conservation is to retain the cultural significance of a place.
- Article 3.1 Conservation is based on a respect for the existing fabric, use, associations and meanings. It requires a cautious approach of changing as much as necessary but as little as possible.
- Article 7.2 a place should have a compatible use. The policy should identify a use or combination of uses or constraints on uses that retain the cultural significance of the place. New use of a place should involve minimal change, to significant fabric and use; should respect associations and meanings; and where appropriate should provide for continuation of practices which contribute to the cultural significance of the place.
- Article 10 Contents, fixtures and objects which contribute to the cultural significance of a place should be retained at that place. Their removal is unacceptable unless it is: the sole means of ensuring their security and preservation; on a temporary basis for treatment or exhibition; for cultural reasons; for health and safety; or to protect the place. Such contents, fixtures and objects should be returned where circumstances permit and it is culturally appropriate.
- Article 15.2 Changes which reduce cultural significance should be reversible, and be reversed when circumstances permit.

In terms of **recording** the site prior to development, the following articles from ICOMOS – TICCIH Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes have been considered:

I - Document and understand industrial heritage structures, sites, areas and landscapes and their values

(Articles 1 and 2 refer to definitions)

3. Researching and documenting industrial structures, sites, landscapes and the related machinery, equipment, records or intangible aspects is essential to their identification, conservation, and the appreciation of their heritage significance and value. Human skills and knowledge involved in old industrial processes are a critically important resource in conservation and must be considered in the heritage evaluation process.

4. Researching and documenting industrial heritage sites and structures must address their historical, technological and socio-economical dimensions to provide an integrated base for conservation and management. It requires an interdisciplinary approach supported by interdisciplinary research and educational programmes to identify the significance of industrial heritage sites or structures. It should benefit from a diversity of sources of expertise and information including site surveys and recording, historical and archaeological investigation, material and landscape analysis, oral history and/or research in public, corporate or private archives. Research and preservation of documentary records, company archives, building plans, and specimens of industrial products should be encouraged. The evaluation and assessment of documents should be undertaken by an appropriate specialist in the industry to which they relate to determine their heritage significance. The participation of communities and other stakeholders is also an integral part of this exercise.

5. Thorough knowledge of the industrial and socioeconomic history of an area or country or their links to other parts of the world is necessary to understand the significance of industrial heritage sites or structures. Single industry context, typological or regional studies, with a comparative component, aimed at key industrial sectors or technologies are very useful in recognizing the heritage values inherent in individual structures, sites, areas or landscapes.

In terms of ensuring the legibility of interventions at the pier head terminus in the context of the new quay wall the following articles from ICOMOS – TICCIH Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes have been considered:

11. Wherever possible, physical interventions should be reversible, and respect the age value and significant traces or marks. Changes should be documented. Reverting to a previous known state may be acceptable under exceptional circumstances for educational purposes, and must be based on thorough research and documentation. Dismantling and relocating are only acceptable in extraordinary cases when the destruction of the site is required by objectively proved overwhelming economic or social needs.

In terms of allowing for interpretation of the Industrial Heritage, particular reference has been made to the following articles from ICOMOS – TICCIH Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes

13 The industrial heritage is a source of learning which needs to be communicated in its multiple dimensions. It illustrates important aspects of local, national and international history and interactions over times and cultures. It demonstrates the inventive talents related to scientific and technological developments, as well as social and artistic movements. Public and corporate awareness and understanding for the industrial heritage are important means for its successful conservation.

14 Programmes and facilities such as visits of active industrial heritage sites and the presentation of their operations as well as the stories and intangible heritage associated with their history, machinery, and industrial processes, industrial or city museums and interpretation centres, exhibitions, publications, websites, regional or trans-boundary itineraries should be developed and sustained as means to raise awareness and appreciation for the industrial heritage in the full richness of its meaning for contemporary societies. These should ideally be located at the heritage sites itself where the process of industrialisation has taken place and can be best communicated. Wherever possible, national and international institutions in the field of research and conservation of heritage should be empowered to use them as educational facilities for the general public and the professional communities.

4.1 Conservation Strategy for Recording

The site has been recorded to Level 4 Inventory standard as defined by *English Heritage Recording Practice: Historic England, Understanding Historic Buildings, A Guide to Good Recording Practice*. A full measured laser survey has been carried of the pier head terminus by Hydromaster.

4.2 Conservation Strategy for Intervention

The development of the area of Berth 50A and Oil Berth 3 requires a substantial intervention, however, the proposed development maintains the cultural significance of the quay by continuing its tradition as a key part of the necessary infrastructure for a deep water port.

A policy of best practice contemporary design for the new quay edge was adopted with the location of the pier head terminus marked in the vertical surface of the new quay. This will ensure a policy of “legibility” where the use of materials and the setbacks allow the new intervention to be understood without explanation.

In addition, MOLA Architecture has devised innovative and contemporary interpretative designs for areas of public realm created as part of the conservation strategy to maintain the memory of the pier head terminus and the Victorian lighthouse (already removed).

4.3 Conservation Strategy for Interpretation

MOLA Architecture has designed an interpretive and public realm greenway terminating in a heritage element. The design is intended to promote the built heritage of the North Quay area and the relationship of the city with the water, incorporating the research conducted to date on the history and industrial archaeology of the site.

The central feature of this scheme is to house reclaimed blocks and the lantern and bell as a tangible experience of the totemic role of these features as part of the dock landscape.

4.4 Conservation Strategy for Salvage

As a result of dismantling a section of the North Wall Quay Extension a considerable quantity of 19th century durable granite blocks will become available. This stock of granite will be preserved and retained for use in this scheme, but also for other conservation projects, subject to the supervision and control of the relevant conservation statutory authorities.

5 CONCLUSION

The proposed development around the area of the Eastern Breakwater at Dublin Port is a response by Dublin Port Company (DPC) to the operational role played by the deep water facility and the requirement for sustainable development of the facility to ensure future use. This involves significant interventions to elements of the Victorian construction, however, without these developments there is a danger that the cultural significance of the port both past and future, would be lost.

DPC has adopted a best practice approach to conservation on the site to preserve the cultural significance of Dublin Port as a Deep Water Port. A detailed historical analysis with an Industrial Assessment by Southgate Associates have informed the process of developing a conservation strategy to best practice standards for the development.

As part of DPC's commitment to public interaction through a policy of "soft" values, Southgate Associates have coordinated with MOLA Architecture to design interpretive public realm elements at the Eastern boundary of the port which involves re-building an element of the pier head terminus and incorporating the salvaged lantern and bell from the now demolished Victorian lighthouse to reinstate the totemic elements of the port in a tangible way.

Having reviewed the operational requirements of the Port, the extent of the heritage assets in the proposed development area and taking account of the long history of DPC as a deep water port, I believe that the development proposals and the mitigation measures proposed under the Conservation Strategy accord with best conversation practice.

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June 2019

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