

Dún Laoghaire Harbour Master Plan



Dún Laoghaire Harbour Company

October 2011



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"Twenty years from now you will be more disappointed by the things that you didn't do than by the ones you did do. So throw off the bowlines.
Sail away from the safe harbour.
Catch the trade winds in your sails.
Explore.



Introduction

The Vision Statement for the harbour is:

"Dún Laoghaire Harbour will be recognised as an exciting marine, leisure and tourism destination of international calibre; one which elegantly integrates the local town with an historic 200 year old harbour, and which offers a striking blend of modern amenities mixed with a traditional marine ambience in a Dublin Bay setting, making it one of the most beautiful man-made harbours in the world."

Background Context

In order to assure the medium to long term sustainability of Dún Laoghaire harbour, its future must be considered and planned on a periodic basis. Dún Laoghaire Harbour is widely recognised as one of the finest man-made harbours in the world. As custodians of this valuable national asset, the Dún Laoghaire Harbour Company (DLHC) has a duty to actively plan and manage the function and heritage of the harbour estate.

The Harbour Company is seeking to bring the 200 year progression of the development of the harbour to the next stage and realise the potential of the harbour as a major marine, leisure and tourism destination. DLHC wishes to enhance its attractiveness as a major gateway for tourists to Ireland, to extend the recreational and amenity value of the harbour, to promote investment in the harbour and to generate sufficient revenue from commercial operations to ensure the long term sustainability of the maintenance programme and marine facility that the harbour provides.

To these ends DLHC has appointed an expert consultant team with a mix of local and international knowledge to prepare a masterplan. The core team is made up of relevant specialists experienced in their field, as follows:

Project Director Design Team Leaders - Team Management & Coordination Metropolitan Workshop MacCabe Durney Barnes Planning Consultancy Urban Design / Master Planning Metropolitan Workshop Heritage Management Plan Shaffrey Associates Traffic and Transport Advice / Car Parking Strategy Communications / Stakeholder Engagement Communique International Leisure Tourism Organisation Destination Definition / Harbour Visitor Attractors DKM Economic Consultants **Economic Impact Property Advice** DTZ Sherry FitzGerald Mulcahy McDonagh & Cost Advice

Figure 00.01 - Dún Laoghaire Harbour masterplanning team

Purpose of the Masterplan

The masterplan has been commissioned by the Harbour Company in order to:-

- position Dún Laoghaire Harbour as a major marine/leisure/tourism destination
- enhance Dún Laoghaire's attractiveness as a gateway for tourists to Ireland by offering state-of-the-art berthing and terminal facilities to ferry and cruise operators at Dún Laoghaire Harbour
- maintain and enhance the recreational amenity value of the harbour in the interest of all our stakeholders
- promote investment in the harbour
- generate sufficient revenue from commercial operations to secure the long term maintenance and development of the harbour and the government guideline dividend figure for commercial state companies

This document will put forward masterplanning principles that can be applied with a degree of flexibility responding to economic, planning or stakeholder concerns. The plan is derived from an understanding of the characteristics of the site, its history and its geography to suggest how a sense of place can be created and related to what is already there.

We want to preserve and celebrate the town's unique heritage, so the masterplan has been drawn up in parallel with a Heritage Management Plan, which is summarised in this document. The Heritage Management Plan sets out a series of policies aimed at enhancing and protecting the cultural heritage of the site while acknowledging that the harbour is a living, dynamic place which has changed and will continue to evolve over time.

Timescale of the Masterplan

Whilst the masterplan is a documented vision for the future, positive progression of the plan is an on-going matter requiring continued constructive engagement between harbour users and the Harbour Company.

The masterplan is a long term vision which will be carried out over a 15 to 20 year period and reviewed every five years.

Dún Laoghaire Harbour has a significant role to play in the future economic regeneration of the town. Dún Laoghaire Harbour Company believes that increased economic, cultural and leisure activity in the harbour will be good for business in Dún Laoghaire as a whole.

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Objectives

The team's task has been to produce the:

- Harbour masterplan
- Heritage Management Plan
- Strategic Environmental Assessment of the masterplan (see chapter 2)
- A Statement of Appropriate Assessment (habitats and species assessment) has been prepared and submitted to DLRCC for review and completion of the Appropriate Assessment
- Ensure an appropriate public and stakeholder consultation process

The masterplan provides a blueprint for the future and sets out the proposed development for the harbour estate including:

- Types of development to be proposed and land use flexibilities where appropriate
- Extent of development
- Proposals relating to design (heights, scale and massing)
- Proposals relating to transport (public transport, strategic road layout, parking and traffic management)
- Strategies relating to services
- Proposals to minimise impact on the environment
- Proposals for community amenities and facilities

This report includes a written statement addressing issues of concern relating to key objectives, key urban design strategies, consultation findings etc. in addition to succinct drawings illustrating physical features, access, circulation, zoning, services and infrastructural issues.

Outline of the document

This report will outline the following:

- Heritage
- Consultation
- Planning context
- The masterplan study areas and proposals
- Economics and impacts
- Access and transport
- Sustainability
- Next steps

Status of the Plan

The masterplan will be a non-statutory plan which has, however, been cognisant of EU, national, regional and local development plan policies. In particular, it has had due regard to the provisions of the Dún Laoghaire Rathdown County Development Plan 2010-2016, where Special Local Objective 13 is:

"To facilitate the continued development of the harbour in accordance with a harbour masterplan to be prepared by Dún Laoghaire Harbour Board in close conjunction with the Planning Authority. Any approved masterplan must adhere to the overall zonings, policies and objectives of the Development Plan."

A statutory Local Area Plan (LAP) for Dún Laoghaire Town is to be prepared by the planning authority. It is hoped that the Dún Laoghaire Harbour masterplan will form an input into this local area plan. It may also be used for considering development consent issued by An Bord Pleanala under the Strategic Infrastructure Act.



Figure 00.02 - Public event taking place at Dún Laoghaire Harbour

© Paul Crawley

Developing the brief

The brief has been informed by a number of competing elements as summarised in the table below.

Client brief	Planning context	Community brief	Contextual brief	Site brief	Combined Brief	
Marine, leisure and tourism destination	Regional Planning Guidelines for Greater Dublin Area	Call for ideas for the Harbour Masterplan including local, web and media promotion; E-survey +	Sensitivity regarding massing and views, especially views from end of East and West Pier	Sailing and Marine Activity	A Harbour For	
Enhance attractiveness as a gateway for tourists	Dun Laoghaire County Development Plan and Urban Framework Plan	pier survey Meetings with key stakeholders requesting ideas and submissions for the Masterplan	Acknowledgement of historical significance of area and Heritage Management Plan	Sutton to Sandycove Cycle Route	Revealing the past and securing its future	
Generate sufficient revenue from economic operations to ensure long term sustainability of the harbour	Upcoming Local Area Plan	Submissions analysed by the Masterplan team	Need for stronger physical connections back to the town	Possible cruise facility	Strengthening links with the Town for the benefit of both	
Respond to County Development Plan SLO 13	Strategic Environmental Assessment	Preview stakeholder meetings followed by public exhibition of the Consultation Masterplan.	Need for greater access to waterfront	Working ferry berth Change in levels across site	Encouraging Leisure and Tourism	
Retain flexibility for future port operations	Candidate Architectural Conservation Area	Review of stakeholder and public feedback	Need for wider area reinvestment and change	Size of site may allow economies of scale with regard to energy use	Welcoming Cruise and Ferry Passengers	
Actively engage with stakeholders		Public exhibition of the final Masterplan and SEA Review of comments and	Need to reconcile existing harbour activities with proposed masterplan uses	Site is large enough to accommodate mixed use development	Promoting investment and encouraging economic growth	
Promote sustainability in its widest sense		plan amended			Maintaining and enhancing recreational amenity	
	How the scheme has developed					

Figure 00.03 - Brief development



01 Consultation

The Public Consultation Process

Dún Laoghaire Harbour Company undertook an extensive public consultation exercise in preparation for the masterplan process for the harbour. The consultation took the form of a call for ideas, a harvesting of these ideas, and analysis and presentation of the ideas in the consultation masterplan, which went on public display over a period of six days in June 2011. From the outset of the process, it was deemed critical to engage with the relevant stakeholders in an open and transparent way to ensure clarity of understanding about the process. As a result, it was decided to approach the consultation in two phases.

Phase 1

- A call for ideas was announced accompanied by intensive local and media promotion
- An E-survey and face to face survey² was undertaken on Dún Laoghaire Pier over two weekends in January 2011. More than 500 responses were received. A synopsis of the survey analysis is available on www.dlharbour.ie/masterplan
- In excess of 75 meetings were held with stakeholders explaining the context for the consultation masterplan and the masterplan team's brief, and requesting submissions
- A dedicated masterplan web-page³ was established to provide essential information about the process

Issues raised by stakeholders in this initial phase of engagement included the following:

- More public access to the waterfront
- More public access to sailing, water sports and other recreational activities
- Recognition of the harbour's tourism potential
- Better berthing facilities
- Additional space to host major sailing events
- More integration between the town and the harbour
- More jobs to secure an improved local economy
- Heritage / maritime / diaspora centre and other cultural usages for the Carlisle Pier
- More recreational / leisure facilities reflecting the character of an urban waterfront destination
- Opportunities for developing a light marine industries' cluster to enhance the local economy
- Adequate facilities to meet the needs of a number of established voluntary organisations using the public areas around the Coal Harbour and the Gut⁴

Feedback from Phase 1 Meetings.

It became clear during the initial discussions that the majority of stakeholders were positive about the Harbour Company's vision to elevate the significance of the harbour as a marine leisure and tourism centre (for harbour vision see page 5). The possibility of increased public access to the waterfront also met with a very favourable response.

People agreed that strengthening links between the town and harbour were necessary for mutual gain. They believed that the harbour had positive leisure and tourism potential and acknowledged that youth and general sail-training activities should be protected and developed.

Retention of a traditional mix of marine uses, particularly to the west, was welcomed as was the proposal to enhance the harbour as a marine services centre in order to leverage economic advantage. The possibility that Dún Laoghaire might be a potential cruise liner destination received a mixed reaction. Local business interests were enthusiastic about its potential benefits to the town's economy while there was a degree of uncertainty among the sailing community, who were concerned about its impact on sailing activities. People also expressed a concern about residential impacts on public access at ground level.

Arising from the initial consultation between the Harbour Company and the local stakeholders, it became clear that much of the feedback related to the operational use of the harbour and its water space rather than the physical development of the harbour estate.

¹ Persons consulted included cross-party political representatives; sailing clubs; the business community; marine commerce interests; public boatyard user-groups; culture and heritage agencies and groups, local residents and Dún Laoghaire Rathdown Co Co.

² Synopsis of survey analysis available on www.dlharbour.ie/masterplan

³ www.dlharbour.ie/masterplan

⁴ St Michael's Rowing Club, the Sea Scouts, Sailing in Dublin and the Coal Harbour Users' Group (CHUG).







Figure 01.02 - Public consultation in June 2011

Phase 2

The second phase of the consultation process consisted of:

- A comprehensive analysis of the stakeholder submissions, their alignment with the consultation masterplan and the incorporation of these ideas into the draft masterplan
- A second series of stakeholder meetings offering a preview of the consultation masterplan with members of the design team prior to the public exhibition
- Further media activity locally and nationally publicising the public exhibition of the consultation masterplan;
- Production of a DVD contextualising the consultation masterplan and describing it in graphic form. Copies of this were subsequently issued to key stakeholders as well as being uploaded on the masterplan page of the Dún Laoghaire Harbour Company website
- A display of the consultation masterplan⁵ in the Terminal Building, hosted by members of the masterplan team who answered questions and clarified issues of concern to the public
- Publication of the consultation masterplan on the Harbour Company website provided further opportunities for the public to offer feedback and submissions were welcomed. Next steps in the process were also outlined at this point⁶.

Feedback from the Phase 2 Process

More than 1500 people visited the public display of the consultation masterplan and were given the opportunity to comment. 500 people shared their views on dedicated comment sheets at the exhibition. A variety of issues were raised including the importance of avoiding any privatisation of the ground level areas with residential uses, and a host of in-water matters relating to the detail of moorings, slipways and generally relating to the positive development of marine activities.

The masterplan team also received a number of additional submissions from key stakeholders reiterating concerns about provision of facilities, use of water space and the operational practicalities of opening up pre-existing or new pedestrian routes.

These issues in particular underline the reality that whilst the masterplan is a documented vision for the future, the progressive and positive development of marine leisure and recreational activities is an on-going matter requiring continued constructive engagement between users and the Harbour Company.

Phase 3 Consultation

The Draft Masterplan, Draft Environmental Report, Appropriate Assessment and Architectural Heritage Management Plan were placed on public display for 4 weeks from 3rd August in accordance with the requirements of S.I 435 of 2004. A total of 16 submissions were received and considered. A number of changes were made to the final adopted plan as a result of this consultation process. The Final Environmental Report and SEA Statement are also available with this masterplan

Wednesday 3rd August 2011: Publication of draft Masterplan, draft Heritage Management Plan and the Strategic Environmental Assessment (SEA). Public display of draft Masterplan, draft Heritage Management Plan and the Strategic Environmental Assessment during office hours at the offices of the Dún Laoghaire Harbour Company, Harbour Lodge, Crofton Road, Dún Laoghaire for a period of 4 weeks or on www.dlharbour.ie/masterplan.

 $^{^{5}\}mathrm{This}$ included the draft Strategic Environmental Assessment and a detailed draft Heritage Management Plan.

 $^{^{6}}$ Monday 18th July 2011 : Date for receipt of comments on the Consultation Masterplan via post or website

Improve public access to the water

Protect and develop youth and general sail training facilities

Position the Harbour as a marine, leisure and tourism centre

Residential development should not prevent public access to the waterfront

Protect the
Harbour's
unique
heritage

The Harbour has a very special heritage. It has to be preserved. It is a priceless legacy

There is room for subtle, tasteful development of the areas adjacent to the harbour - revamp existing buildings in the complex beside Irish Lights, the buildings and general area behind DMYC

Strengthen the links between the town and the Harbour

We should have a heritage centre on the pier with information about its past

the summer – I loved
Dun Laoghaire
festival - should have
more Art exhibitions
around the pier

It's all

for me

about jobs

Have more music in

Maintain the traditional marine-use emphasis, particularly along the West side

Developments should be in line with the

people should not be afraid of some new

and innovative ideas that improve the area

surrounding area. However, I think that

and allow access for all

Cruise liners will bring economic gain but must not undermine sailing activities in the Harbour

Make the Harbour more accessible for everyone. Make more space for swimmers and small boats. Have covered cafés with views of the sea and harbour. Provide parking and family-friendly amenities. More activities are needed on the pier to attract more people

As a harbour it should develop in a direction that will keep marine / recreational / leisure activity going at all times of the year. It should not be waiting for a sudden influx of activity that will disappear just as fast. Sustainability is the key factor

More recreational activities, including restaurants, coffee shops overlooking the harbour, and not feel you have to be a member of the yacht club to sit and view the sunset

Viewing the future primarily as a harbour for commercial traffic is denying the absolute potential of the harbour for leisure pursuits

More greenery, more focus on the area's natural beauty. Respect the green places and natural features of the coast and don't just concrete over things

We want to see more opportunities for local jobs, good business opportunities, integrate the town with the harbour so that we can broaden our retail offer

Make sure that the Harbour area is a focal point and central amenity that complements the town

More opportunities to allow the public,

access to sailing and watersports. Overall

the harbour should be recognised as the

national destination for watersports and

recreation

particularly school children, greater

Enhance the
Harbour's
capability to be
a marine
service's centre.
We need to
leverage its
economic
advantage

It is one of the nicest, if not THE nicest places in the greater Dublin area to experience the beauty of the sea. It should be one of the top visitor destinations in the greater Dublin area

Become a world-class leisure boating centre with public access at reasonable cost to get on the water. This should include 'pay-as-you-go' facilities and the opportunity to hire all sorts of leisure craft under appropriate supervision. People want better access to the water for boating and leisure activities

More initiatives to get more local people (especially young people from all social backgrounds) involved in water-based activities



02 Heritage

Dún Laoghaire Harbour was constructed over a 25 year period during the first half of the nineteenth century. It was originally conceived as a place where ships could take shelter on their way to Dublin Port, but ultimately was built as a much more substantial structure. A railway was soon put in place to service the harbour and these important pieces of infrastructure became a focal point around which a large town grew.

Historical Character and Context

Understanding the special character of Dún Laoghaire is an important element of the masterplanning process. We want to preserve and celebrate the harbour's unique heritage and to this end we have prepared a Heritage Management Plan. This has helped help the masterplanning team to work with the cultural heritage values of the harbour to ensure its long-term sustainable protection.

The Heritage Management Plan for Dún Laoghaire Harbour was commissioned by Dún Laoghaire Harbour Company in conjunction with the masterplan. While it is a stand-alone plan, it informs the masterplan proposals and its principal purpose is to guide management of the significant cultural heritage of the harbour in the context of current and future challenges and changes. The Heritage Management Plan is a non-statutory plan and exclusively addresses the cultural heritage aspects of Dún Laoghaire Harbour. However, as the contemporary character of the harbour owes so much to its cultural heritage, and this cultural heritage is a key asset to the future sustainability of Dún Laoghaire Harbour, these aspects also resonate within the masterplan proposals. The Heritage Management Plan is in three parts:

- Firstly, a description of the historic and current character of Dún Laoghaire Harbour which provides an understanding of the nature and origins of the cultural heritage of the harbour and culminates in a Statement of Significance
- Secondly, the various existing and likely/potential future challenges which threaten the cultural heritage significance of the harbour are described
- Thirdly, a series of heritage management policies have been developed which are aimed at enhancing and protecting the cultural heritage while acknowledging that Dún Laoghaire Harbour is a living, dynamic, place which has and will continue to change over time

The following section will primarily draw from the first part of the Heritage Management Plan so that the masterplan proposals are set out within its historical and cultural context. Readers should refer to the Heritage Management Plan for fuller descriptions and policies.

Historic Background

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 Dúnleary. In a very short period a suburban town of considerable scale sprung into existence. It became known as Kingstown after the visit to the harbour by George IV in 1821. The mail service that was transferred from Howth in 1826 gave added significance and importance to the town, while the railway built by James Pim, which serviced the mail, 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.

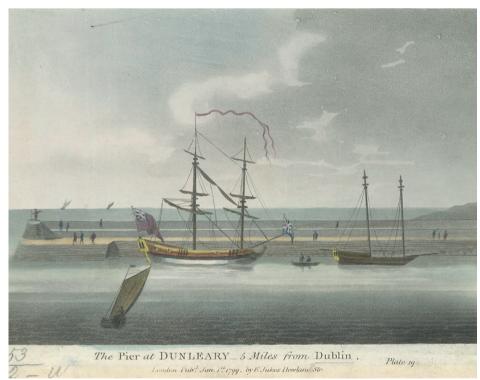


Figure 02.01 A view of the original 1767 pier

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Construction of the stone pier at the South Wall at Dublin Port

Captain Bligh makes the first proper survey of Dublin Bay 11 July: Passing of an 'act to authorize the appointment of commissioners for erecting an harbour for ships to the eastward of Dunleary, within the port and harbour of Dublin' [55 Geo. III Cap. 191]

Construction of Harbour begins
On May 31st, the Earl of Whitworth, Lord Lieutenant of Ireland, lays the first stone of the East Pier. 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.

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Irish Parliament votes to give £21,000 for construction of a harbour at the small fishing village of Dunleary 1767

Completion of first pier ("Dry Pier" now the Coal Pier/Old Quay) On November 18th, a serious storm results in the loss of 400 lives and instigates the campaign for the construction of an asylum harbour. Passing of an act approving construction of a new harbour at Howth. [45 Geo. III]

1807

20 June: Passing of an 'act for erecting an harbour for ships to the eastward of Dunleary, within the Port of Dublin'
[56 G.III Cap. 62]

1816

1815



Construction of the Harbour Master's Lodge by George Smith (a stone contractor for the harbour works)

1820



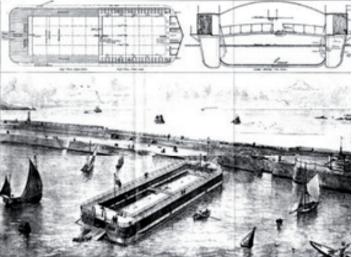




Figure 02.02 - The Pavilion

Figure 02.03 - Floating baths project

Figure 02.04 - View up Marine Road

Origins of the Nineteenth Century Harbour

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 400 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, that 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 Dúnleary 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 Dúnleary, within the port and harbour of Dublin". 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 pier had been built in 1767, but had quickly dried up and was sometimes known as the Dry Pier (now the Coal Harbour). However during the course of construction it was decided that a second pier to the west should be built and this was constructed according to 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 death in 1821 of his father, believed that the original design, with an opening of 450 ft, should be adhered to. Others, such as 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 1840s, 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. At the time 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.

resulting in improvements to Dublin Port which negate the need for a shipping canal from Dún Laoghaire

Completion of the North Bull Wall



Opening of Dublin-Kingstown Railway. Kingstown receives Town Commission

1834

Opening of Atmospheric Railway between Kingstown and Dalkey, first of its kind in the world.

1843-4

time

1821

Visit of King George IV to Dunleary (renamed Kingstown in his honour) Death of John Rennie: his son Sir John Rennie takes over the responsibility for the construction of the harbour



1831 Completion of harbour construction handed over to the Commissioners of Public Works

Mail Packet transfers

to Kingstown from

Howth Harbour

1826



Construction of Royal St. George Yacht Club to desian of JS Mulvanev (2nd oldest purpose built in the world)

1840

Construction of Harbour structure completed

1842



Figure 02.06 - First edition OS map of 1843

Figure 02.07- 1907-09 OS map

In 1834 a railway was extended from the city of Dublin out to Dún Laoghaire. 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. However the railway was never used for the transport of heavy goods and no significant docks were ever built in the harbour. The need for a canal became less logical, in fact, after the real improvement to Dublin Port by the building of the North Bull Wall in 1824. The Mail Packet was transferred to Dún Laoghaire in 1826. It was first accommodated by a wharf near the present band stand 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 by Carlisle Pier which accommodated the mailboats 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.

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 century cars could be lifted onto the mailboat using derricks, but the maximum capacity of the ferry boats was about 25 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.



Figure 02.09 - 1816 map showing the proposed single (east) pier of the Asylum Harbour



Figure 02.08 - Extract from John Rocque's "An actual survey of the county of Dublin, 1760"

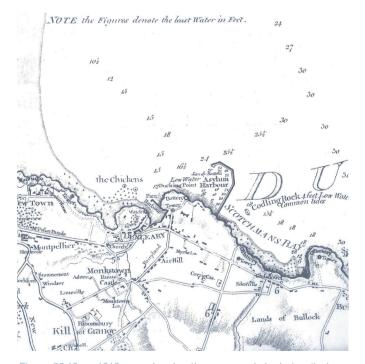


Figure 02.10 - m1816 map showing the proposed single (east) pier of the Asylum Harbour





Construction of Royal Irish Yacht Club to design of JS Mulvaney

Construction of Carlisle Pier begins

1853

Construction of Traders' Wharf

1855

Construction of East Pier Battery

1860



1845
Construction of Coastgue
Station and





Construction of anemometer on East Pier (1st in the world), designed by Prof. Robinson

1852

Closure of Atmospheric Railway (last in Britain and Ireland)

1854



Construction of Carlisle Pier completed



Captain Boyd and his men lost in a rescue attempt during a serious storm—in part leads to establishment of RNLI lifeboat station. Boyd Memorial erected in their honour on East Pier.



Figure 02.11 - Historic character areas

- A. East Pier
- **B.** West Pier
- C. Queen's Road / Crofton Road Esplanade
- D. Carlisle Pier
- E. Old Harbour
- F. Victoria Wharf / Marine Road / Mallin Station.

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 and 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 can be identified by the numerous strollers, walkers, joggers and 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.

The physical character of the harbour can be read in several ways; as a single entity as seen from the distance, or as distinct but interlinking quarters, moved through in sequence. These are considered in the masterplanning section.



Figure 02.12 - East Piel



Figure 02.13 - Aerial view looking west



Figure 02.14 - End of West Pier



Figure 02.15 - Trader's Wharf



Construction of National Yacht Club to design of William Stirling



Marconi makes one of his earliest broadcasts, reporting from the Kingstown regatta

1897

Visit of Queen Victoria to Kingstown

Sinking of the RMS Leinster, Irelands worst maritime disaster

1918

1900



1870

Erection of bandstand and sun shelter on East Pier

Lifeboat wrecked with loss of 15 lives



Erection of Victoria
Fountain to commemorate visit of
Queen Victoria

1920

Kingstown reverts to the name Dún Laoghaire

The socio-economic, cultural and amenity contribution which the harbour makes to Dún Laoghaire and the surrounding region is significant. It forms a central part of the nineteenth-century town of Dún Laoghaire, which developed around the great infrastructure projects of the harbour and the railway and contains some of the finest residential areas and maritime townscape and seascape in the country.

It has been the site of many historic events which have impacted on Irish society and has many associations with significant figures. The significance of the harbour is not only an historic importance, however, it is a living and dynamic place, which continues to play a role in the cultural, economic and recreational life of the town and region.

Historic and Cultural Associations

Most of the uses accommodated in Dún Laoghaire Harbour today have been carried on there for many years and so make a significant contribution to the character and cultural significance of the place. These include boating (of many kinds and scales); trade; marine engineering; walking and running; fishing; training and education; residential; retail; dining. The harbour also has historic associations with a number of important international, national and local institutions: the yacht clubs (of which the Royal St. George is the second oldest of its kind in the world); the Commissioners of Irish Lights; the Sea Scouts; St Michael's Rowing Club; the Royal National Lifeboats Institution; CIE and, the various shipping companies which have operated out of the harbour over the years.

Dún Laoghaire Harbour has been a cultural reference point for artists and writers over the years, most notably featuring in the writings of Beckett (Krapp's Last Tape) and Joyce (Ulysses). It has other associations with prominent historic figures, from Captain Bligh who carried out the survey of Dublin Bay which confirmed the need for an asylum harbour; Marconi, whose broadcasting of the sailing regatta in Dún Laoghaire Harbour was the first sporting broadcast in the world and, the various British monarchs who sailed into Dún Laoghaire Harbour.



Figure 02.16 - Captain Bligh



Figure 02.17 - Marconi



Figure 02.18 - William

Connections

Harbour and the town:

While the origins of Dún Laoghaire extend well back before the construction of the harbour, the great nineteenth century expansion of the town owes much to the presence of Dún Laoghaire Harbour. (Between 1831 and 1861 the population of Dún Laoghaire more than doubled from 5,500 to 11.500). The harbour provided the context for the passenger railway and both facilitated the great middle class settlements in the area. The royal visits and associations with the harbour and town left their marks in place names and the architectural character of Dún Laoghaire, in particular George's Street.

Harbour and the city/region:

Due to its port function, its history and its constant role as a significant public amenity, Dún Laoghaire Harbour reads on a city, regional and national scale.

International:

The international connections extend beyond the immediate ferry route to the UK (Holyhead) and link across many continents through historic sailing routes and global events. Dún Laoghaire Harbour has been a point of departures, and arrivals, for many people over the almost 200 years of its existence.



Figure 02.19 - Carlisle Pier

Commencement of car ferry service

1965

Final sailing of the Mailboat

Department of marine takes over running of Harbour from the OPW and establishment of first (interim) Harbour Board

Harbour Boards in favour of commercial companies to manage harbours

Passing of Harbour Act, abolishing



East Pier resurfaced 2005-2008

1969 Multi-purpose ferry introduced-berthing at the Carlisle Pier

St. Michael's Wharf ferry terminal beaun



1989-90

Completion of new ferry terminal at St. Michael's Wharf



Restoration of Victoria Fountain

2002



03 Planning Context

Introduction

Background

This chapter considers the context for the preparation of the Dún Laoghaire Harbour Masterplan, reviews the relevant environmental and planning policies and considers key planning issues emerging from the review. The chapter considers the following:

- The purpose, status and associated regulatory requirements of the masterplan
- The policy framework for the development of the masterplan area
- A consideration of the masterplan area and development context, having regard to strategic development options and development areas
- Outlines strategic objectives for the masterplan



Figure 03.01 - Dún Laoghaire Harbour aerial view

Purpose of the Masterplan

The masterplan has been commissioned by the Harbour Company in order to:-

- Develop strategies to secure the harbour's future economic stability
- Provide an overall context for future investment decisions
- Reflect and provide for current national and regional policies, guidelines and initiatives
- Ensure there is harmony and synergy between the plans for the harbour and those for the town centre of Dún Laoghaire

The masterplan process seeks to address the following:

- Prepare a detailed masterplan
- Conduct a public consultation on the masterplan
- Complete a Strategic Environmental Assessment of the masterplan

A description and the consultation exercise and its outcomes are detailed in the Consultation Section of the masterplan. The plan covers the period up to the year 2030.

Status of the Plan

The masterplan is a **non-statutory plan** which has been framed within the context of EU, national, regional and local development plan policies. In particular, it has had due regard to the provisions of the Dún Laoghaire Rathdown County Development Plan 2010-2016, where Special Local Objective 13 is:

"To facilitate the continued development of the Harbour in accordance with a harbour masterplan to be prepared by Dún Laoghaire Harbour Board in close conjunction with the Planning Authority. Any approved masterplan must adhere to the overall zonings, policies and objectives of the Development Plan."

A statutory local area plan for Dún Laoghaire Town is to be prepared by the planning authority. The Dún Laoghaire Harbour masterplan will form an input into this local area plan.

Strategic Environmental Assessment and Appropriate Assessment

The Dún Laoghaire Harbour Company, as the competent authority responsible for the preparation of the proposed 'Dún Laoghaire Harbour Masterplan' has determined that a full and comprehensive Strategic Environmental Assessment of the Plan is required in compliance with EU Directive 2001/42/EC as transposed into Irish legislation through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004).

The SEA process for this masterplan includes:

- 1. Screening: To determine which plans and programmes are likely to have a significant impact on the environment
- Scoping: to liaise with statutory consultees to identify key issues of concern that should be addressed in the environmental assessment of the Plan
- 3. Draft Environmental Report: Where the likely significant environmental effects of implementing the masterplan are identified and evaluated
- 4. Consultation: Consulting the public, statutory and public authorities, on the draft environmental report and draft masterplan, giving adequate time for the receipt of submissions
- 5. Final Environmental Report: Taking account of the findings of the draft report and the outcome of consultations in deciding whether to adopt or modify the draft masterplan
- 6. SEA Statement: Make known on adoption of the plan how the SEA process influenced the outcome. Identify how environmental consideration have been integrated into the final plan

The masterplan is accompanied by a standalone Environmental Report that reports on the Strategic Environmental Assessment of the plan itself undertaken in accordance with above regulations. In addition, a Stage 1 and 2 Appropriate Assessment in accordance with the Habitats Directive Assessment Regulations has been carried out. It was concluded that with the mitigation measures proposed, the masterplan will not have any significant adverse effects on the adjoining designated Natura 2000 sites - The South Dublin Bay cSAC and Sandymount Strand / Tolka Estuary SPA.

Environmental and Planning Policy Framework

EU Directives and EU Marine/Port Policy

The Birds Directive (2009/147/EC) and The Habitats Directive (93/43/EEC) are the cornerstones of EU biodiversity policy. Both directives require member states to designate specific terrestrial and marine sites, which together constitute the Natura 2000 network. This network consists of Special Protected Areas (SPAs) -protecting bird species and Special Areas of Conservation (SACs) - protecting habitats and other species of EU conservation concern. Sandymount Strand is an SPA and South Dublin Bay is a Candidate SAC.

The Strategic Environmental Assessment Directive (2001/42/EC) (SEA) relates to the evaluation of the effects of certain plans and programmes on the environment. The purpose of the SEA Directive is to ensure that the environmental consequences of certain plans and programmes are identified, assessed and taken into account during their preparation and before their adoption. The Environmental Impact Assessment Directive (85/337/EEC) (EIA) relates to the assessment of the effects of certain public and private projects on the environment. While the SEA process operates at the level of public plans and programmes, Environmental Impact Assessments (EIA) operate at the level of individual public and private projects.

The Water Framework Directive 2000/60/EC (WFD) covers estuaries and coastal water bodies. The WFD establishes a framework for the protection of all surface waters (rivers, lakes, transitional and coastal) and groundwater at EU level and aims to achieve a good ecological status (or a good ecological potential for heavily modified water bodies) and a good chemical status by 2015.

The Marine Strategy Framework Directive (2008/56/EC) (MSFD) provides a more comprehensive view and deals also with ecosystem services in marine areas. It establishes a framework for the protection and restoration of marine ecosystems. According to this directive, member states must take the necessary measures to achieve or maintain a good environmental status (GES) in the marine environment by the year 2020.

The European Commission Recommendation on Integrated Coastal Zone Management (2002/413/EC) (ICZM) paves the way for better strategic planning of coastal areas which maintains the integrity of this important resource while considering local traditional activities and customs that do not present a threat to sensitive natural areas and to the maintenance status of the wild species of the coastal fauna and flora.

The Ports Policy Communication (2007) aims to increase the carrying capacity of ports in order to allow a further increase of maritime and fluvial transport. The relationship between cities and their ports remains one of interdependency and should be ruled by long term strategic vision and planning.

The Maritime Spatial Planning in the EU (2010) highlights that integrated spatial planning, including maritime spatial planning, offers opportunities for anticipating difficulties and adverse environmental impacts and for avoiding potential conflicts and delays in project development. Such plans should be submitted to strategic environmental assessments, and also to appropriate assessments under the Habitat Directive – to evaluate the potential impacts of plans and projects on Natura 2000 sites.

Integrating Biodiversity and Nature Protection into Port Development (2011) and The Implementation of the Birds and Habitats Directive in Estuaries and Coastal Zones (2011) outline how to effectively integrate biodiversity with the development of ports. The key stakeholders are port authorities, dredging companies, private investors, member states' administrations, environmental groups. There needs to be a better understanding of the context, improved planning of projects, integration of SEA and EIA into plans and projects, in addition to the better management of dredging.

National Policy

The National Spatial Strategy 2002-2020 identifies the sea link between Dublin and Holyhead as a main corridor to and from Ireland. Dún Laoghaire Harbour is identified as a transit Port in the Dublin and East Region along with Drogheda, Dublin, Wicklow and Arklow. The strategy observes that a priority already apparent is the need for upgrading of alternative corridor links through Great Britain and to the European mainland in order to avoid congestion and bottlenecks on the main corridor link from Ireland to the UK and Europe.

The National Development Plan 2007-2013 proposed a major programme of investment in infrastructure with a particular focus on addressing deficits in the various National Spatial Strategy Gateway areas. A particular objective of the plan is the preparation of a comprehensive study of the role of Dublin Port, taking into account locational considerations in the context of overall Ports policy on the Island of Ireland. Transport 21 outlines the investment programme between 2006-2015.

Smarter Travel - A Sustainable Transport Future (2009) is a national policy document which sets out a broad vision for the future and establishes objectives and targets for transport.

The Ports Policy Statement, Department of Transport (2005) seeks to provide a framework for the provision by Port Companies of port services which are efficient, effective and adequate for the needs of our growing economy.

The Ports Policy Review Consultation Document, Department of Transport

(2010) forms part of the initial consultation phase in the review of the Ports Policy Statement. It indicates trends, challenges and opportunities. A number of questions are raised in relation to seaport capacity, energy policy, integrated transport planning. The development of port master planning in other jurisdictions is seen as a transparent method in aiding the engagement of local communities in the long term planning of ports. The review recognises the potential for urban development in ports. Environmental impact and in particular potential impact upon designated Natura 2000 sites is a particularly sensitive issue. Means by which connectivity for passengers and freight can be improved should be explored further.

A series of formal Ministerial Guidelines has been issued under S28 of the Planning and Development Act 2000. The following Guidelines have been taken into account in the preparation of the masterplan:

- Guidelines for Planning Authorities on Sustainable Residential
 Development in Urban Areas, and accompanying document Urban
 Design Manual A Best Practice Guide (2009)
- Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities (2007)
- Retail Planning Guidelines for Planning Authorities (2005)
- The Planning System and Flood Risk Management Guidelines for Planning Authorities (2009)
- Architectural Heritage Protection Guidelines for Planning Authorities (2004)

Regional Policy

The Regional Planning Guidelines for the Greater Dublin Area 2010-2022

provide an overall strategic context for the Development Plans of each local authority in the GDA. The guidelines seek to consolidate development and increase overall densities of development which will lead to a more compact urban form, relative to the size of the population and facilitate the provision and use of a considerably enhanced public transport system. Dún Laoghaire Harbour is recognised as having a role to play in port capacity at a smaller scale and in relation to specialist needs. The strategy also promotes the development of cross boundary Integrated Coastal Zone Management.

The Dublin Transportation Office Strategy, A Platform for Change, outlines an integrated transportation strategy for the Greater Dublin Area for the period 2000 – 2016. This is currently being reviewed by the National Transport Authority's Greater Dublin Area Draft Transportation Strategy, 2011-2030. Dún Laoghaire is a designated town centre. Higher densities should be promoted at designated town centre railway stations and there will be an emphasis on commercial development around such transport nodes. It is the policy of the Draft Strategy to retain a corridor for the provision of the Eastern Bypass, linking Sandyford with the Port Tunnel. Preferred routes for freight transport from the ports will be identified. Maximum parking standards should be set.

Retail Strategy for the Greater Dublin Area, 2008-2016 prepared by the Dublin Regional Authority identifies Dún Laoghaire and Dúndrum as major town centres within the region and therefore should be the location for a full range of shopping extending to higher order comparison shopping, together with the integration of leisure, entertainment and cultural facilities.



Figure 02.02 - Seating at the end of the East Pier

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Local Policy and Projects

The Dún Laoghaire Rathdown County Development Plan 2010-2016 is the statutory development plan for the area. The Harbour area is zoned with Objective "W" is "To provide for waterfront development and harbour related uses". A range of port related uses, marine leisure, commercial, retail services and residential are permitted in principle or open for consideration.

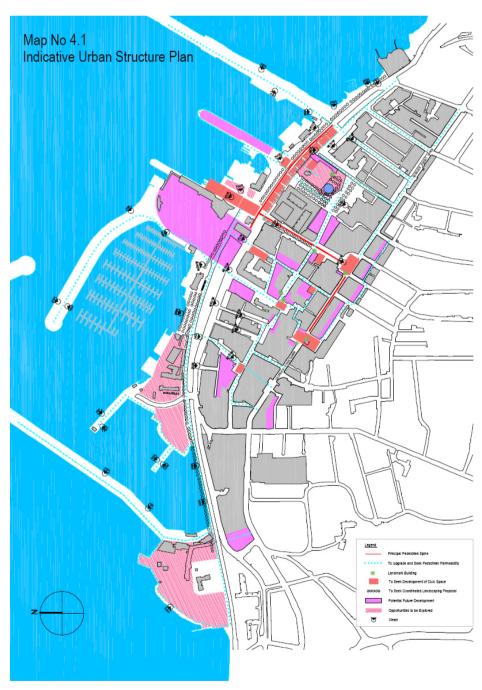


Figure 03.03 - Urban Framework Plan

An Urban Framework Plan (UFP) for Dún Laoghaire Town, which will be converted into a statutory Local Area Plan (LAP) by 2016, applies to the wider area. The objectives for the proposed masterplan for the Dún Laoghaire Harbour area, will have due regard to the following Development Plan objectives for the Urban Framework Plan (UFP):

- To facilitate the continued development of the Harbour in accordance with a Harbour Master Plan to be prepared by Dún Laoghaire Harbour Board in close conjunction with the Planning Authority. Any approved Master Plan must adhere to the overall zonings, policies and objectives of the Development Plan
- To encourage the redevelopment of The Gut adjacent to the West Pier to include improved access to the area
- 15 Coal Quay Bridge. To improve/upgrade access to Dún Laoghaire Harbour and lands adjacent to the West Pier
- To retain the Carlisle Pier structure and to encourage redevelopment on it that will incorporate uses that will bring significant cultural, social, recreational and economic benefits to Dún Laoghaire-Rathdown and must provide for a high degree of public accessibility and permeability, with walkways, viewing areas and public spaces throughout. The redevelopment should integrate with the immediate built environment, should provide improved accessibility between the development and Dún Laoghaire town centre and should commemorate the unique heritage and history of the pier as a gateway for the Irish Diaspora
- To protect and conserve South Dublin Bay and proposed candidate Special Area of Conservation
- 93 To promote the development of the Sutton to Sandycove (S2S)
 Promenade and Cycleway. (It should be noted the alignment shown
 on Maps 2, 3 and 4 is not absolute but indicative only). The necessary
 EIS will commence during the term of the Plan
- To provide a youth and community centre for Dún Laoghaire
- To promote water leisure facilities for public use at the coastal fringe of the Gut and rear of the West Pier, subject to the appropriate environmental assessments including any assessment required under the Habitats Directive in co-operation with the relevant agencies





Figure 03.04 - Terminal Plaza

The masterplan area is partially covered by a proposed Architectural Conservation Area under S81 of the Planning and Development Act 2000 (as amended). Other related candidate ACA'S are "The Metals"; Dún Laoghaire Seafront and, Pavilion Site/Moran Park, Dún Laoghaire. There are 28 protected structures within the masterplan area.

The masterplan area is adjacent to Dublin Bay pSPA, cSAC and pNHA. These areas therefore have a community protected status.

The masterplan area is affected by a number of protected views. In the Development Plan there is a view symbol at the end of the East and West Piers looking inland, indicating the need to protect the views as seen from these locations.

There are a number of views to be preserved from inland locations looking out to the coast across the harbour. One of these views is on Marine Road outside the Pavilion Building looking across the side of the Ferry Terminal. The other notable one in Dún Laoghaire town is located outside De Vesci Terrace looking across the Old Harbour (i.e. the water inside the West Pier).

Consultants have been appointed to prepare a coastal protection strategy and assess vulnerable areas.

Maximum parking standards apply in relation to an extensive list of land uses. There are stricter parking standards along designated public transport corridors. These designated corridors include sites within 1,000m of a DART station. Dún Laoghaire Harbour would fall into this category.

The DLRCC building heights strategy is outlined in Appendix I of the Plan and is derived principally from The Dún Laoghaire Rathdown Building Heights Study (2007). The strategy indicates that the town centre will be protected and intensification will be promoted through compact urban form rather than taller buildings. A key objective is to protect the unique skyline, particularly for views from the ends of the East and West Pier. Building heights within the area are typically 2-3 storeys, with some recent and post war developments of about 4-5 storeys and maximum of 7 storeys. Only the spires of St. Michael's Church and Mariner's Church (the Maritime Museum) and the tower of the County Hall rise above the urban skyline. It is an objective that this be preserved and maintained.

The Building Heights Study (2007) indicates that the Carlisle Pier is a special case and that any new building should be slim, elegant and complement the skyline. A proposed variation to the Development Plan is currently being considered by the Council, which will allow for building heights to be determined during the preparation of the Dún Laoghaire Local Area Plan.

Minimum residential densities of 50 units per hectare should be provided for in areas that are in close proximity to public transport corridors. For apartment schemes over 30 units, there should be a maximum of 20% one bed units and a minimum of 30% of 80sqm+. Parking standards and open space standards are detailed in the plan. There are minimum class 1, 2 and 3 open space standards.

In addition, a further proposed variation to incorporate a Core Strategy, as required by the Planning and Development Act 2010, is also being considered by the Council. One of the central elements of the core strategy is:

"to promote the delivery of sustainable development through positively encouraging higher density quality infill schemes that will consolidate and densify the existing urban/suburban form of the county".

The masterplan will contribute towards achieving this objective. The Core Strategy indicates that there is potential for 35,408 units on serviced and unserviced lands, although only 60% of undeveloped zoned land is serviced. There is a need to provide for an average of 2,715 units per annum up to 2022. The Core Strategy phasing indicates that priority will be given to infill and densification in the period up to 2016 due to the minimal infrastructure requirements.

In addition to the above statutory planning provisions, the masterplan has also had regard to the following plans, strategies and projects:

- County Development Board An Integrated Strategy for Social,
 Economic and Cultural Development 2002-2012
- Traveller Accommodation Programme (2009)
- Dún Laoghaire-Rathdown Arts Strategy 2007-2010
- Dún Laoghaire-Rathdown Heritage Plan (2004)
- The Vision Tourism Master Plan for Dún Laoghaire-Rathdown (2008)
- Dún Laoghaire-Rathdown Biodiversity Plan (2008)
- The Local Coastal Plan Booterstown to Sandycove (2002)
- Dublin Bay Task Force Terms of Reference, DoEHLG (2008)
- Dublin Port Study, Department of Transport (2008)
- The Potential for Growing Marine Leisure, Inter Reg 2005-2007
- Sutton to Sandycove Cycleway, Dublin Regional Authority (2006)
- Dún Laoghaire Baths Proposal, Dún Laoghaire Rathdown County Council (2010)
- Dún Laoghaire DART Station Interchange, Dublin Transportation `Office (2006)



Figure 02.05 - East Pier

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The Area and Context

The Masterplan Area

The area of the masterplan includes the entire harbour area defined by the East and West Piers. In addition, it also contains part of the The Gut which lies outside the West Pier, but which falls under the ownership of the Dún Laoghaire Harbour Company. The remainder of The Gut is in separate ownership. The area of the masterplan is outlined below.



Figure 02.06 - Master Plan Area

The Natural Environment

The Sandymount Strand and Tolka Estuary SPA is located immediately west of the West Pier encompassing the intertidal area between the River Liffey and Dún Laoghaire. An internationally important population of light-bellied brent geese occurs regularly. South Dublin Bay supports important populations of a range of other species. It is also an important site for wintering gulls, especially black-headed gull, the common gull and herring gull. The south bay is an important tern roost in the autumn (mostly late July to September), with over 10,000 terns recorded in recent studies.

South Dublin Bay cSAC is located west of "The Gut" and extends as far as the South Wall encompassing an extensive area of sand and mud flats, habitats listed on Annex I of the E.U. Habitats Directive.

Dalkey Coastal Zone and Killiney Hill pNHA lies to the east of the East Pier and includes the intertidal area from Scotsman's Bay to south of White Rock (Killiney Bay). The amenity area above high water mark in Scotsman's Bay is excluded from the pNHA.

Cultural Heritage

A full appraisal of the heritage context is provided in heritage section of the masterplan as well as the Heritage Management Plan.

Development Options and Potential

A number of scenarios have been considered as part of the overall strategy for the masterplan area. They are:

Do Nothing

Continue with the current economic model for the Harbour without any significant interventions. Possible consequences might include:-

- As a consequence of the current economic model, there would be an inability to fund the continuing maintenance of the Harbour as growth in existing revenue streams reverses and no new alternatives are identified. This in turn could have serious negative implications for tourism in the County, marine leisure investment, direct and indirect employment in the harbour, upkeep of the harbour's infrastructure, and for the future direction of the town of Dún Laoghaire
- Continuation of visual disamenity and lack of public access to the Carlisle Pier and other waterfront areas
- Future growth in marine activity lost to other locations
- Decline in town centre role vis-à-vis Dúndrum, Cherrywood

Intensification of Marine Leisure and Commercial Port Activity

This option presumes that the present marine recreational uses (yachting, boating, fishing, walking and other ancillary activities) be maintained or expanded and new appropriate leisure uses introduced. Growth in ferry operations is possible, but operators have changing requirements in the current economic environment. This may have implications for the Harbour company's ability to fund its public service functions which include developing Dún Laoghaire Harbour as a marine tourism gateway to Ireland, maintaining and enhancing the recreational and amenity value of the harbour and promoting investment and commercial development to support the historic harbour's long-term maintenance.

Urban Development Expansion

Rather than being seen as a separate area, the harbour could allow for a major expansion of the town centre retailing function along with residential and commercial development. However, an excessive emphasis on retailing could serve to actually undermine the role and function of the existing town centre.

Mixed-Use Scenario

The option involves pursuing elements of the two other "do something" scenarios. This alternative is being pursued having regard to the planning and development policies outlined above, environmental impacts, the principles of sustainability and the long term economic viability of future development over the plan period.



Figure 02.07 - East Pier during Red Bull Flugtag

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Strategic Objectives

This section considers strategic objectives that can guide various elements of the Plan. They relate to the main themes developed as part of the masterplan and can be read in conjunction with the policies of the Heritage Management Plan.

Investment and Growth

- 1. Utilise the masterplan as a framework for investment and growth
- 2. Promote a mix of employment opportunities, including those in retailing, enterprise, offices and the community sector

Harbour Functions

- 3. Ensure the safe operation and development of the harbour and its approach waters and provide such facilities, services, accommodation for ships, goods, passengers and marine leisure activities
- 4. Facilitate the ongoing operation of the ferry services over the period of the masterplan
- 5. Accommodate cruise liner facilities, having regard to the needs of other harbour users, potential environmental impacts and the feasibility of providing such facilities

Integrating with the Town Centre

- 6. Promote a sustainable mix of uses including residential and major visitor attractions, which will contribute to an 18-hour day and contribute to the vitality and vibrancy of the town
- 7. Promote development within the masterplan area to integrate effectively with Dún Laoghaire Town Centre
- 8. Facilitate the appropriate expansion of specialist retailing to complement Dún Laoghaire's role as a major town centre within the region
- 9. Ensure an appropriate arrangement of uses to promote pedestrian footfall between the Harbour area and the town centre

Movement, Connections and Accessibility

- 10. Promote a high density of development close to the DART station in order to maximise the use of public transport
- 11. To promote sustainable modes of transport, including public transport, cycling and walking
- 12. Develop a parking strategy to serve the Harbour area and complement existing strategies within the town centre
- 13. Ensure a high standard of pedestrian permeability throughout the area and provide for appropriate pedestrian connectivity to the town
- 14. Facilitate the Sutton to Sandycove (S2S) cycleway through the harbour area

Heritage

- 15. Seek to protect the heritage status of Dún Laoghaire Harbour and ensure the implementation of the Architectural Heritage Management
- 16. Secure the preservation of all Protected Structures within the Harbour area
- 17. Have regard to the designation of part of the Harbour Area as a proposed Architectural Conservation Area
- 18. Seek to preserve archaeological heritage through investigation, preservation in-situ and recording as appropriate

Recreation and Amenity

- 19. Promote Dún Laoghaire Harbour as a major marine leisure facility and a destination for tourism and recreation, while minimising the impact upon designated habitats
- 20. Develop landmark attractions, including a world-class Irish international Diaspora Centre, restaurants, destination retailing and waterfront buildings and uses
- 21. Facilitate sailing, boating and other forms of marine leisure activities.
- 22. Promote the use of the harbour by sports and sailing clubs, community organisations and other stakeholders
- 23. Maximise public access to the waterfront and enhance the public realm wherever possible

Environment

- 24. The masterplan will ensure a development framework which positively enhances the adjoining areas designated under the Habitats Directive in Dublin Bay
- 25. Integrate the new development with the built and natural landscapes of the surrounding area
- 26. Promote sustainable design in the natural and built environment.
- 27. Phased development in line with the availability of supporting infrastructure, including foul sewerage treatment
- 28. Promote the appropriate development on The Gut having regard to the adjoining environmental designations
- Ensure that all new proposed development is adequately assessed in line with the Flood Risk Management – Guidelines for Planning Authorities
- 30. Keep under review the potential for renewable energy initiatives



04 Masterplan Context

Leisure and Tourism Context

The salient features of Dún Laoghaire's most recent leisure and tourism markets are indicated below (statistics and data are sourced from Fáilte Ireland and it should be noted that virtually all existing data and research undertaken by the public sector stakeholders is Dublin, rather than Dún Laoghaire based. Specific Dún Laoghaire research is negligible). Official 2010 data is not yet available.

 Dublin is a destination in its own right and is hugely influential on tourism to and within Ireland. Visitor numbers grew for much of the past decade but tailed off in 2009, as was to be expected given the global recession which affected all countries

Some Features of Recent Dublin Tourism:

- In 2005, there were 1,054m domestic trips to Dublin. In contrast to
 overseas tourism, domestic trips to the capital increased to 1,431m in
 2009. This demonstrated, as in the UK, that in times of recession and
 austerity many families opted to stay at home or increase day trips in
 preference to going abroad
- The majority of British visitors were coming here for a holiday (42%).
 However, visiting friends and relations (28%) and business visits (27%) were the other main markets
- Almost 50% of all British holidaymakers to Dublin arrived in the off-season from October to March, with 90% on a city break and tended to stay exclusively in Dublin
- By contrast 40% of North American tourists arrived between June and August, and unlike British visitors were likely to travel to other parts of the country. European visitors were more evenly spread throughout the calendar (42% in October – March and 42% in the peak June-August months). Again, they were more likely to travel outside Dublin than their British counterparts

	Tourism Numbers 2005 – 2009 (000s)				
Year	2005	2006	2007	2008	2009
Overseas visitors to Ireland	6,763	7,417	7,739	7,436	6,555
Northern Ireland	613	626	638	636	664
Total out-of-state	7,376	8,043	8,377	8,072	7,219
Domestic trips	7,173	7,310	7,942	8,339	8,340
Overseas visitors to Dublin	3,937	4,306	4,449	4,330	3,882
% Overseas visitors to Ireland who visited Dublin	53%	53%	53%	53%	53%

Figure 04.0 1

Visitor Attractions Recent Performance

Dublin has a variety of museums and visitor attractions which attract large volumes of visitors as shown below (visitor numbers for main fee-charging venues). As can be seen from the four year comparison, visits to museums and attractions have bucked the overall trend of visits to Dublin and the majority of the capital's five major paid attractions have increased visitor numbers by 2009.

	2005	2009
Guinness Storehouse	780,851	1,019,166
Dublin Zoo	746,291	898,469
Book of Kells	529,898	478,304
Kilmainham Gaol	182,448	285,974
Old Jameson Distillery	204,000	248,000
Dublin Castle	N/A	158,322

Figure 04.02

Accommodation

Information on Dublin's hotel market, by region is not available. However in the Dublin Region, hotel premises and rooms have increased from 143 and 13,745 to 160 and 119,111 respectively over the last four years. Overall room and bed occupancy rates for Ireland were 62% and 46% (2005) and 55% and 42% (2009). Fáilte Ireland publishes a "Tourism Barometer" report which reflects attitudes and issues of the leisure and tourism trade.

The most recent such publication covered January – September 2010. There was a downturn in bed-night volumes which was largely attributed to the falling demand from overseas tourists. More than two thirds (69%) of all Ireland's hoteliers reported average room yields to be down on the same period in 2009.

2010 figures across all sectors are not yet available, but the overall downward trend in hotel occupancies, attraction and museum visitors and tourism in general is expected to reflect overall global recession. The consistent strength of the euro in 2010 against sterling will also have contributed to the continuous underperformance of the British market, where domestic holidays have had a renaissance.

Conclusions on Ireland and Dublin's Recent Performance and Implications for Dún Laoghaire

In line with the general global economic downturn, Ireland's tourism economy has suffered in the past two or three years. International tourism had been adversely affected by the strength of the euro against the dollar and pound, but recent exchange rate fluctuations might have redressed that to some small degree.

In common with the UK, despite the serious recent downturn in international tourism, domestic day visits and holidays have had some resurgence as evidenced by the performance of Dublin's key attractions. However, it should be noted that Dublin has lost in excess of 0.6m overseas visitors over the past two years, so this is a major issue to be addressed by Failte Ireland.







Figure 04.04 (above) - Brighton Seafront

Lessons from other Port and Harbour Destinations

Introduction

In attempting to understand which other harbourside developments have been successful, both nationally and internationally, a number of factors have to be borne in mind:

- (a) Any of the supposed 'successful' waterfront developments are now mature and have been developed over several decades. There has been no "instant fix" and a variety of public funding packages have been needed to kick-start the development process
- (b) All examples of good practice have large conurbations adjacent to them or extensive resident and visitor catchments within easy reach.
 Many have high speed trains or airports adjacent to them, obviously facilitating access from national and international visitors
- (c) Leisure and tourism developments by themselves do not make successful harbourside or waterfront locations. A mix of uses has evolved to make such developments thriving year round destinations appealing to locals as well as visitors. Invariably, residential, office or other commercial developments have been needed to underpin the softer or less commercial, leisure or tourism elements of the overall site
- (d) Successful waterfront development or overall coastal regeneration has required leadership in the public planning and development departments of these locations. An overarching vision and strategy harnessing public and private sector stakeholders' objectives and talents for the benefit of all has been needed.

Brighton Seafront

In the mid 1990's this once busy resort had suffered badly from the recession at the early part of the decade with high unemployment particularly hitting those in the financial services and retail sectors. Empty shops and offices were stark examples of a once thriving, but now fading, resort.

The seafront was a particularly unpleasant area, frequented by drunks, beggars and drug users. The Council was determined to arrest the decline in Brighton's 'shop window' and together with tourist boards and other public sector interests, earmarked £1m from a budget that would otherwise have been used to simply maintain the seafront.

Phased development then took place to regenerate the seafront and attract private sector investment, particularly between the main pier and road leading from the station. This stretch of road was fronted by deep arches. New landscaping schemes were implemented and the arches developed by local private investors and entrepreneurs. A number of exciting enterprises resulted:

- The arches were developed as bars and bistros by day and clubs by night, meaning the seafront was just as vibrant at night as during the day
- Resort markets, also an artists' quarter, sports such as basketball and beach volleyball and more family-oriented areas, such as children's play areas. Naturally, the seafront's recovery was not something that happened in isolation, but as part of an overall corporate and city-wide regeneration strategy. People visit Brighton for its historic core, independent shopping areas (The Lanes) and for its vibrant seafront. Tourism, culture and the arts provide a buzzing lifestyle attractive to young entrepreneurs particularly







Figure 04.06 - Bristol Harbourside

Albert Dock - Liverpool

In 1974, Merseyside County Council came into existence and having declared that the redevelopment of Albert Dock was top of its agenda, began lengthy negotiations with the Dock and Harbour Board (who have run the docks since 1858). A Development Corporation was subsequently set up in the early 1980s and an agreement with a developer confirmed for the re-development of Albert Dock. The first phase of development opened up with the Tall Ships' Race and the International Garden Festival. In the mid 1980s work began on several dock warehouses; ground floor shops were created with office space on the mezzanine level and apartments on the remaining floors. Other leisure attractions followed including Tate Liverpool and The Beatles Story.

Throughout the last two decades, development has continued including hotels, offices and leisure uses including a major convention centre at the adjacent King's Dock. In the 1990s there had been a policy to attract select retail into the newly created warehouses. In the past three years there has been a shift to attract more bars and restaurants to complement the city centre offer, and cater for convention centre and museum visitors in particular during the day and event/ concert visitors at night.

Bristol Harbourside

Over the last thirty years, hundreds of millions of pounds have been spent regenerating the harbour. The harbourside occupies a 26 hectare site in the heart of the city, concentrated on the historic harbour, former dockyard and industrial land. Old warehouses and goods sheds have been refurbished to provide leisure or business uses (around 25,000m²), particularly waterside clubs, pubs and restaurants. A new pedestrian bridge has been built to better link the waterfront and city retail areas, and extensive public space has been created.

There are many fairly recent visitor attractions including a 21st Century Science Centre that complement the industrial museums and S.S. Great Britain historic vessel, commercial buildings, including the new Lloyds TSB and contemporary waterfront apartment blocks. New housing has been developed on both north and south banks of the harbour. Chairs and tables from bars and cafes line public walkways, and potted plants and tables and chairs on balconies mark boundaries between the public and private areas. Tall ships and other major festivals provide Bristol with a vibrant and attractive leisure and residential destination.



Figure 04.07 - Leith Docks

In all cases there was an active partnership between a committed public sector stakeholder group and private sector entity. The planning and development authorities created a long-term vision and strategy and remained committed to it.

Leith Docks – Edinburgh

The development opportunity for Leith Docks in Edinburgh arose from the decision of the Port Authority to move away from freight handling and associated industrial activities towards a new focus on increasing cruise liner traffic and mixed use development.

The Docks contain an extensive range of buildings, dry and wet docks, many of which are listed and are located some three miles away from the capital, Edinburgh. It was anticipated that residential development would be the dominant use throughout the majority of the development areas, with the exception of industrial use at the eastern areas. In addition, office and other smaller commercial use will be actively encouraged.

However, a wide range of events, leisure, cultural and artistic activity is actively being promoted. Some of it is locally significant and intended to sustain permanent interest in harbour heritage amongst local residents (e.g. major plays, antique fairs, book fairs and farmers' markets).

Other activities have included those of national and international significance including the Festival of the Sea event and start of the Tall Ships Race. With significant government assistance, Leith secured the Royal Yacht Britannia as a permanent visitor attraction at its Ocean Terminal. Over 250,000 people visit the vessel each year and has helped to cement the capital's attraction to international visitors in particular.

Lessons from other Harbour and Port Developments

The four examples of waterfront developments are not intended as immediate comparables to Dún Laoghaire as the scale and funding required, in some cases over several decades, is testimony to planning and funding climates that enabled and facilitated such developments to take place. Nevertheless, they have been described in brief to indicate how Dún Laoghaire can possibly benefit from some of the approaches that made them successful. For example:

- In all cases there was an active partnership between a committed public sector stakeholder group and private sector entity. The planning and development authorities created a long-term vision and strategy and remained committed to it
- Leisure and tourism in itself has not been sufficient to provide a longterm viable solution for these waterfront schemes. In some cases, planning strictures have been relaxed for social or economic benefit and final development solutions have incorporated a mix of commercial and cultural/heritage elements
- All these destinations recognised the importance of the indigenous population and residents' needs as well as the requirements of tourists and visitors. The schemes at Bristol and Brighton particularly emphasised the harbour and town centre physical integration as a vital element in ensuring that all groups' needs were satisfied
- The Albert Dock development at Liverpool has promoted speciality retail so that it does not compete with the major shopping complexes in the city centre. These smaller outlets also complement the range of museums and visitor attractions in the Dock area and the objective is 'Liverpool inspiring gifts and memorabilia' – artwork, historical photography, household fabrics, furniture and maritime retail shops predominate
- Leith Docks has a range of events and festivals all year round which cater as much for the local community as visitors. It has also secured an iconic attraction that is a magnet for international visitors in particular and that has generated major interest in the Docks. Brighton has regenerated its seafront over the past 20 years and this area now caters for family and older residents during the day and its thriving youth market at night



Figure 04.08 - Harbour Square

D Paul Crawley

Property Market Context

Dún Laoghaire Harbour is recognised nationally and internationally as a major leisure destination with a particular focus on water sports. It provides a very valuable asset for the population of the Greater Dublin Area. In addition to water based users, the public benefit from visiting for various events and functions as well as leisure, walking and other uses.

The property market is currently experiencing a deep recession in line with the Irish economy in general. This has resulted in significantly reduced demand for all types of property and a resultant fall in property values. There is a lack of consumer and business confidence which has reduced the appetite to invest and develop property. This has been worsened due to the shortage of bank funding available in the market to purchase or develop property.

As the economy recovers from the current recession, demand for property will increase. The Dún Laoghaire Harbour area will benefit due to the quality of the environment and its excellent accessibility. This will assist in generating demand for both residential and commercial property.

The development of Dún Laoghaire Harbour offers the opportunity to include a wide range of uses and the ability to be redeveloped in phases in line with anticipated market demand. This will ensure that the viability of development is enhanced and will maximise the potential to raise funding for the proposed development. The waterfront location together with the proximity of public transport, and the existing facilities provided in the harbour area and in Dún Laoghaire generally, will result in demand being generated for well designed and attractive commercial and residential development in the harbour area. The location of the property, coupled with a well designed scheme, will ensure the success of a development here in the medium term when market demand stabilises.

Potential Uses and Scale of Development

In devising the masterplan, consideration was given to the scale of development proposed and the types of uses to be contained within future developments in the harbour. Decisions were guided by the opportunities that the property market will present as it recovers in future years, together with the constraints for developing in the Harbour due to both physical issues and Development Plan policies. Building heights and densities permitted were reviewed and the infrastructure that will be required for the new development was reflected in considering the overall cost and the likely end values for a range of uses. This resulted in the development of a hierarchy of values and development returns. Consideration was also given to developing the waterfront in different zones which will allow for delivery to be phased in line with the availability of funding and likely end user demand.

A wide range of uses were considered and tested to assess their viability and potential returns as well as their compatibility with existing uses within the Harbour area. The potential uses assessed fell under a number of categories, as follows:

- Leisure & marine
- Community & cultural
- Offices & enterprise
- Retail
- Food & beverage
- Residential
- Education & research
- Medical

The intention is to provide a diverse mix of uses across the harbour lands while ensuring that the development returns are optimised. The greatest returns are available from retail, food & beverage and residential developments. A wide range of other uses are also viable including offices & enterprise, leisure/marine, medical and educational use. The potential cost of development, due to the proximity to the waterfront, is significant and therefore the masterplan needs to incorporate high value uses in order to support the diversity of a mixed use scheme which is appropriate for such a location. Taking account of the planning and physical constraints together with the cost of developing in this location, the masterplan provides for a balance of leisure, community and cultural uses supported by higher value residential and commercial use.

The proposed scale and layout of the development allows for a number of different character areas and for the development to be progressed in phases over the medium/long term.



05 The Masterplan



Figure 05.01 - View of proposals from East Pier

Vision for the Harbour

Dún Laoghaire Harbour Company is the statutory commercial body charged with developing Dún Laoghaire Harbour as a marine tourism gateway to Ireland, maintaining and enhancing the recreational and amenity value of the harbour and promoting investment and commercial development to support the historic harbour's long-term maintenance. The Harbour Company's current economic model is heavily reliant on income from ferry operations. While there has been a long history of vibrant activity in the harbour recent times have seen a vast reduction in passenger ferry operations to and from Dún Laoghaire. The existing economic model needs to be replaced such that the medium to long term sustainability of Dún Laoghaire harbour is assured. Its future must be considered and planned on a periodic basis.

Dún Laoghaire Harbour is widely recognised as one of the finest man-made harbours in the world. As custodians of this valuable national asset, the Harbour Company has a duty to proactively plan and manage the function and heritage of the harbour estate.

In order to ensure the long term future of the harbour, we must develop strategies to encourage economic development, secure the harbour's heritage and enable people to enjoy its many amenities. To this end, the harbour company has set out their vision future vision for the harbour.

"Dún Laoghaire Harbour will be recognised as an exciting marine, leisure and tourism destination of international calibre; one which elegantly integrates the local town with an historic 200 year old harbour, and which offers a striking blend of modern amenities mixed with a traditional marine ambience in a Dublin Bay setting, making it one of the most beautiful man-made harbours in the world."

Informing the Masterplan

The following chapter illustrates and explains the masterplan for Dún Laoghaire Harbour. It includes a comprehensive site analysis for the receiving environment which has informed the proposals for each area. In addition to this, Arup undertook a comprehensive engineering and infrastructure analysis and a topographical survey was commissioned.

Included the analysis was the following:

- Engineering history of the harbour
- Previous infill of harbour areas
- Geotechnical characteristics
- Structural review of Carlisle Pier
- Utility load assessment and infrastructure capacity
 Key structural considerations for construction in marine environment
- Design considerations relating to flood risk, wave and overtopping and wave progression

The masterplan has recognised and interpreted all of the known constraints. The key design issues have, and will continue, to be taken into account.

Key Themes

The opening chapter described how six key themes emerged through the briefing process. These themes became the starting point for the design process and have continually informed the masterplanning strategy. They have also provided the basis for the sustainability chapter.

The six themes are highlighted on the following page.







Figure 05.03 - Cruise ships © Lyn Gateley



Figure 05.04 - Town and harbour © Paul Crawley



Figure 05.05 - Investment and growth © Paul Crawley



Figure 05.06 - Leisure and tourism © Paul Crawley



Figure 05.07 - Recreational amenity © Paul Crawley

A Harbour for.....

Revealing the Past and Securing its Future

Heritage and conservation are the basis of the harbour plan so proposals must:

- Reinforce the unique sense of place
- Encourage local and global interest
- Attract heritage vessels
- Support candidature for an Architectural Conservation Area

Welcoming Visitors by Sea

- Cruise liners and ferry customers' needs
- Modern berthing facilities
- World class attractions The Diaspora Project
- Calendar of events to lengthen the season with indoor venues and a public art programme
- Convenient transport connections
- Attractive harbour trails and shops to explore

Promoting Investment and Economic Growth

- Celebrate the heritage assets
- Modernise the working harbour
- Support marine enterprises
- Complement the economy of the town
- Strike the right commercial balance between uses

Encouraging Leisure and Tourism

Attractions must include:

- Family fun and choice for all weather
- Sailing facilities and international events
- All year round events programme
- Heritage trails with sheltered stops
- Proposed cultural destinations

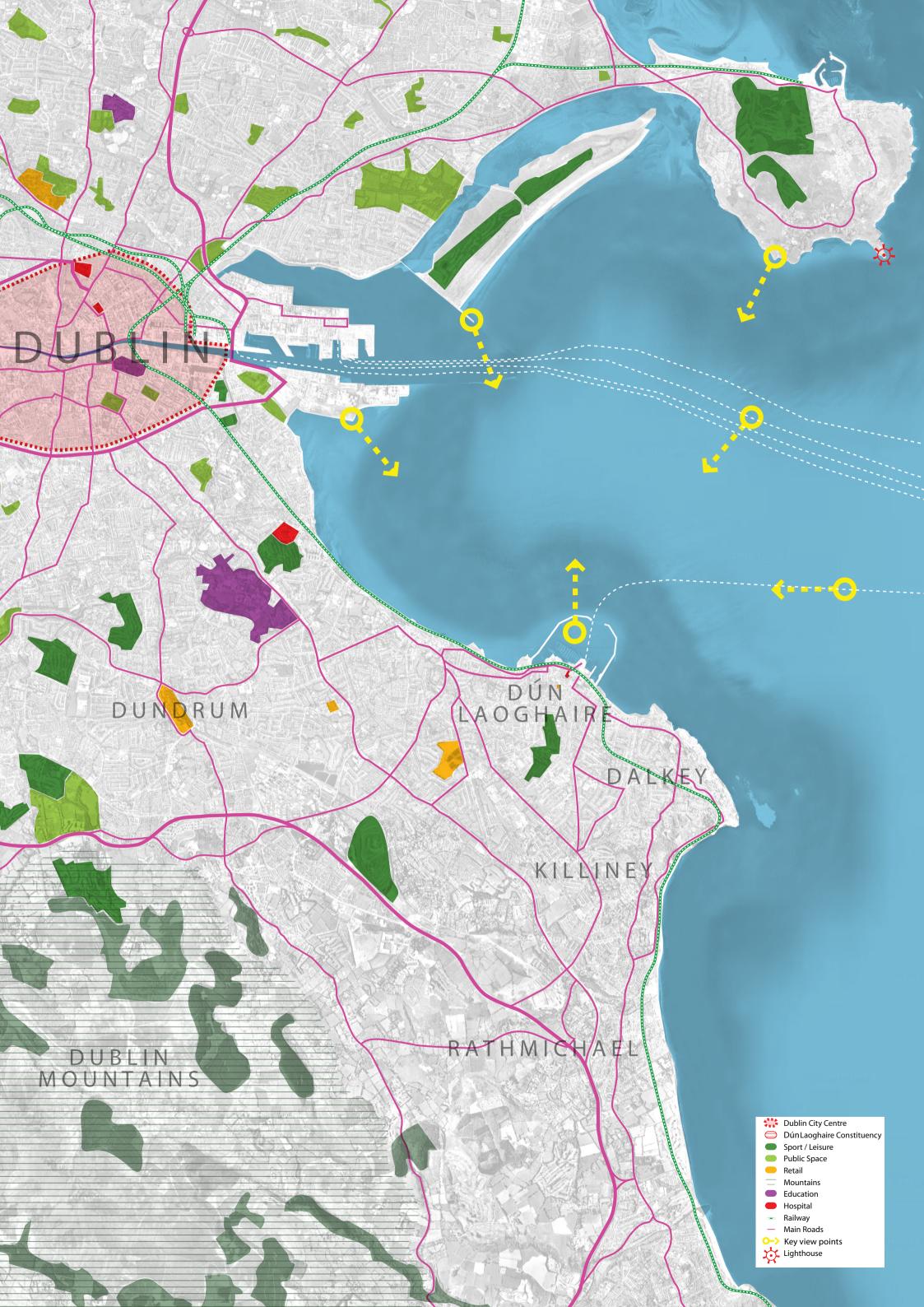
Strengthening Links with the Town for the Benefit of Both

- Economic links through complimentary attractions with employment

 Expand marine activities sailing / rowing / diving / boating opportunities
- Social links through expanded leisure and cultural facilities
- Physical links through attractive plazas and new quayside trails
- Cultural links by coordinated event programmes and visitor trails

Maintaining and Enhancing **Recreational Amenity**

- Improve connections
 - walking trails along opened-up quays
 - cycling routes through and around the harbour
- Create training opportunities for youth
- Achieve universal accessibility







Site Description and Analysis

This section provides a broad introduction to the masterplan area including its constituent and surrounding uses.

Location

Dún Laoghaire is a major Harbour town situated on the east coast of Ireland, 10 kilometres south of Dublin City on the outer edge of Dublin Bay. It is in the province of Leinster and is governed by the by Dún Laoghaire Rathdown County Council. The area of Dún Laoghaire Rathdown has a population of approximately 190,000 with approximately 25,000 within Dún Laoghaire Town itself. Its focal point is an active harbour and the town is framed by its coastal and upland landscapes.

The coast and the Dublin Mountains are both significant to the identity of the area. The coastline where Dún Laoghaire is situated is diverse, varying from rocky headlands with a variety of inlets, long established harbours and high quality beaches. The Dublin Mountains form a distinct south-western edge to the Dublin city area rising in excess of 500m in some places.

Historic Development of the Harbour.

A full appraisal of the history and heritage of the area was completed as part of the Heritage Management Plan, a summary of which is contained in the heritage section of this report. This section summarises the parallel growth of town and harbour from the 1770's to the present day.

Gradual building out of the harbour lands into the water due to infrastructural and marine needs has resulted in a disconnect between the town and the harbour. By examining this process we can draw conclusions which will inform the future planning of the harbour.

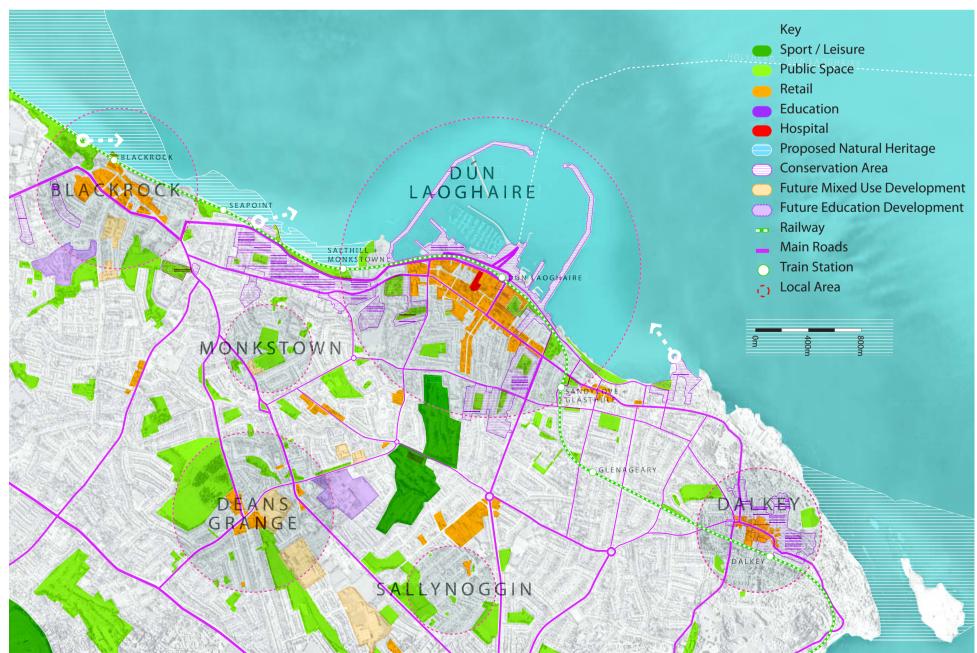


Figure 05.11 - Local land uses and town centres within wider Dún Laoghaire area

Gradual building out of the harbour lands into the water due to infrastructural and marine needs has resulted in a disconnect between the town and the harbour. Conclusions can be drawn which will inform the future development of the harbour.



Figure 05.12 - 1770

In 1770 we see the completion of first pier in the area now known as Old Harbour. The village of Dúnleary consists of little more than a crossroads. The street pattern begins to link up the two Martelo towers in the area. This route will become George's Street.

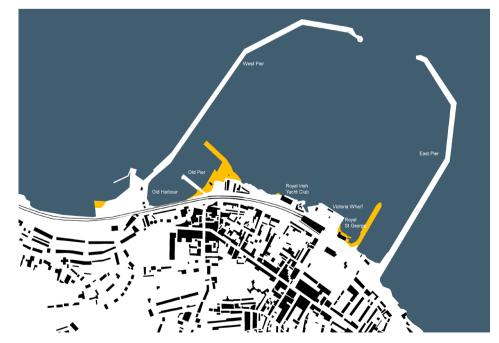


Figure 05.13 - 1907 (orange represents in-filled land)

Traders Wharf and the Carlisle Pier have now been built out. The railway line has now been open for half a century separating the town from the harbour however the town has grown exponentially in this time. The focus of the town has shifted eastwards due to the location of the train station and Marine Road has become the main connection between the town and the harbour.



Figure 05.14 - 1830 (orange represents in-filled land)

In 1830 the construction of the East and West Piers are now complete. The line of the metals which was used during the construction of the harbour can be seen to the south of the waterline. The orange areas represent infill which was carried out during this time to accommodate berthing facilities and working yards. A bridge is built across the Old Harbour to accommodate the new Dublin-Kingstown railway line.



Figure 05.15 - 2009 (orange represents in-filled land)

Various slipways, hard standage areas, shipping, car ferry facilities and breakwaters have been built in response to the growing town's interest in marine water sports and yachting as well as the increased numbers of ferry sailings between Dún Laoghaire and Holyhead. The continued building out of the water's edge has not always been in the interest of providing improved waterside access. The masterplan represents an opportunity to redress this.

Today, 40% of the waterline between the piers is inaccessible to the general public. The creation of an east-west route with waterside access is one of the key aims the Masterplan seeks to achieve.



Figure 05.16 - 2011 (Red highlights lands which are currently inaccessible)

The diagram above highlights in orange the degree to which the waterline has changed in the harbour over the last 200 years. As a result of this outfill, much of the waterline has become inaccessible. Today, 40% of the water's edge between the piers (the areas shown in red) has restricted public access. The remedying of this situation has been a key driver for the masterplanning team. Improved waterfront access is a key ingredient of a successful marine - leisure destination.







Figure 05.17 - Level Changes at terminal building

Figure 05.18 - Level changes at coastguard cottages

Figure 05.19 - Level changes due to Dart line

The Situation Today

In addition to the restrictive access to the waterfront, the physical connections between the town and the harbour have suffered as a result of the train line. Great steps are being made by DLRCC to reduce this severance through the Metals project as well as the improved public realm on Marine Road. The masterplan will seek to facilitate any new links proposed in DLRCC's Urban Structure Plan as well as improving the visual connection between the town and the water, especially the view down Marine Road.

Barriers and Level Changes

Pedestrian access to the East and West Piers is generally considered to be good however the route between them on the harbour side of the train line is marred by a series of level changes, barriers and fences, as illustrated in the series of photographs above and below.

There is a great opportunity for the masterplan to address some of these issues. The Harbour area should have a more equal balance between pedestrian and vehicular traffic and restrictions to waterfront access along this route should be mitigated where possible.

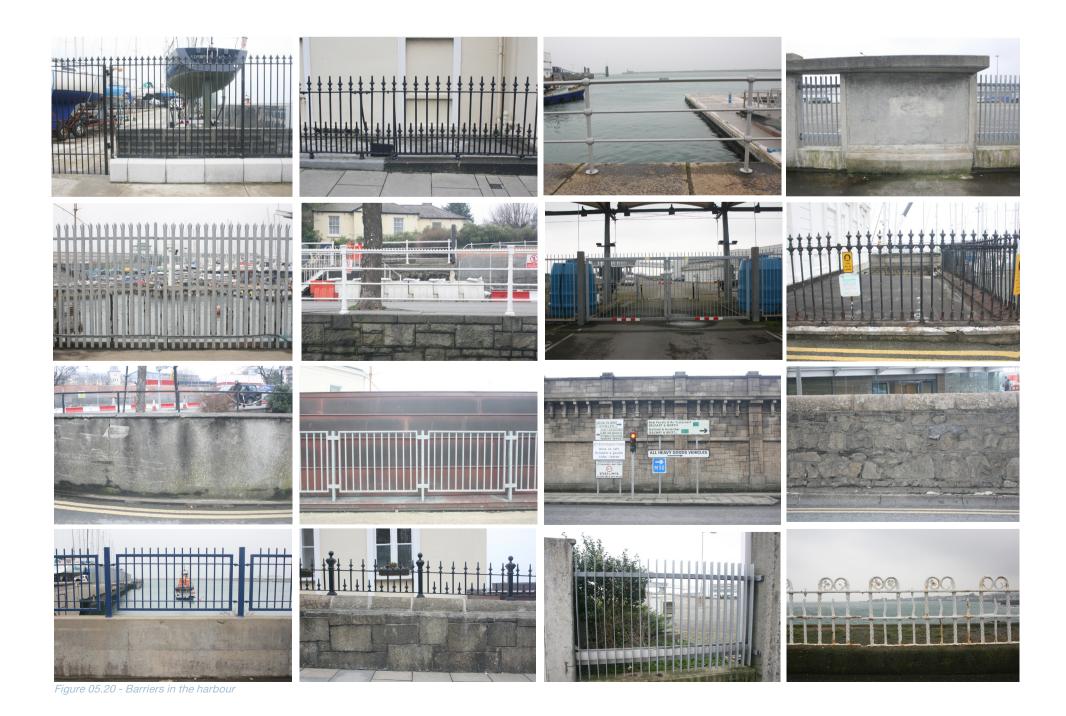


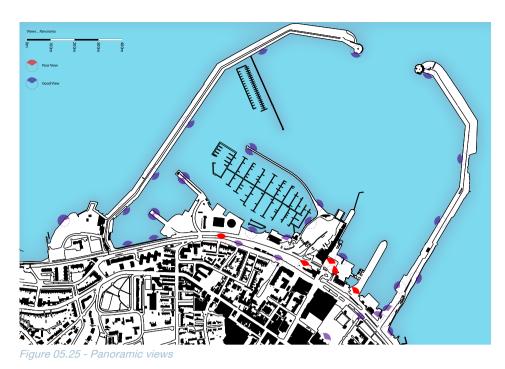


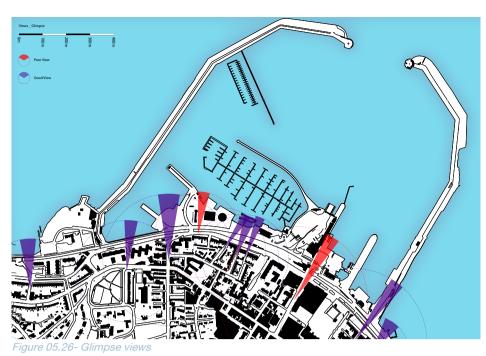
Figure 05.21 - East Pier 1950s



Figure 05.22 - 1880s O.S. Park Structure

Dún Laoghaire has a rich legacy of planned Victorian parks and squares which are highlighted in the map above which dates from 1860. These green spaces are part of the town's historic character however there has been a degradation of this landscape over the last 150 years. Nonetheless, the idea of a network of coastal gardens linking the seafront from east to west as well as back to the town remain a strong precedent for the masterplan.





Views

Views and Prospects

Dún Laoghaire Harbour and waterfront presents one of the most important and attractive visual images in the Dublin Region. While this section deals with local views to and from the Harbour, long range views are considered in the SEA.

Views are typically composed of a number of elements ranging from:-

- the attractive seafront of terraces rising back to the skyline of the town which is dominated by vertical spires
- the broad expanse of the Harbour and its attractive marine architecture
- the background of the Dublin Mountains and Killiney Hill

Within the harbour itself, the appraisals of the Dún Laoghaire Urban Structure Plan contained in the Development Plan makes a detailed visual analysis which grades views and prospects into those which are considered high, medium or poor. These views could be further subdivided into panoramic views, long range views and glimpses

A high proportion of panoramic views, particularly from the water's edge, reflect both the topography and openness of Dublin Bay.

There are important long range views from the end points of the east and west Piers back to the town which have a very sensitive character and require protection or enhancement.

Glimpse views are more intimate, characterised particularly by the series of snapshots along the lanes and openings to the south of Crofton Road, and are very characteristic of the enclosed nature of the town.

Notwithstanding the above, there are also a number of lower quality views which require improvement. Poor views include that of:-

- Carlisle Pier from its entrance
- The ferry terminal plaza across the boatyard of the Royal St George Yacht Club.
- Across the Dart line and station from the bus stops on Crofton Road

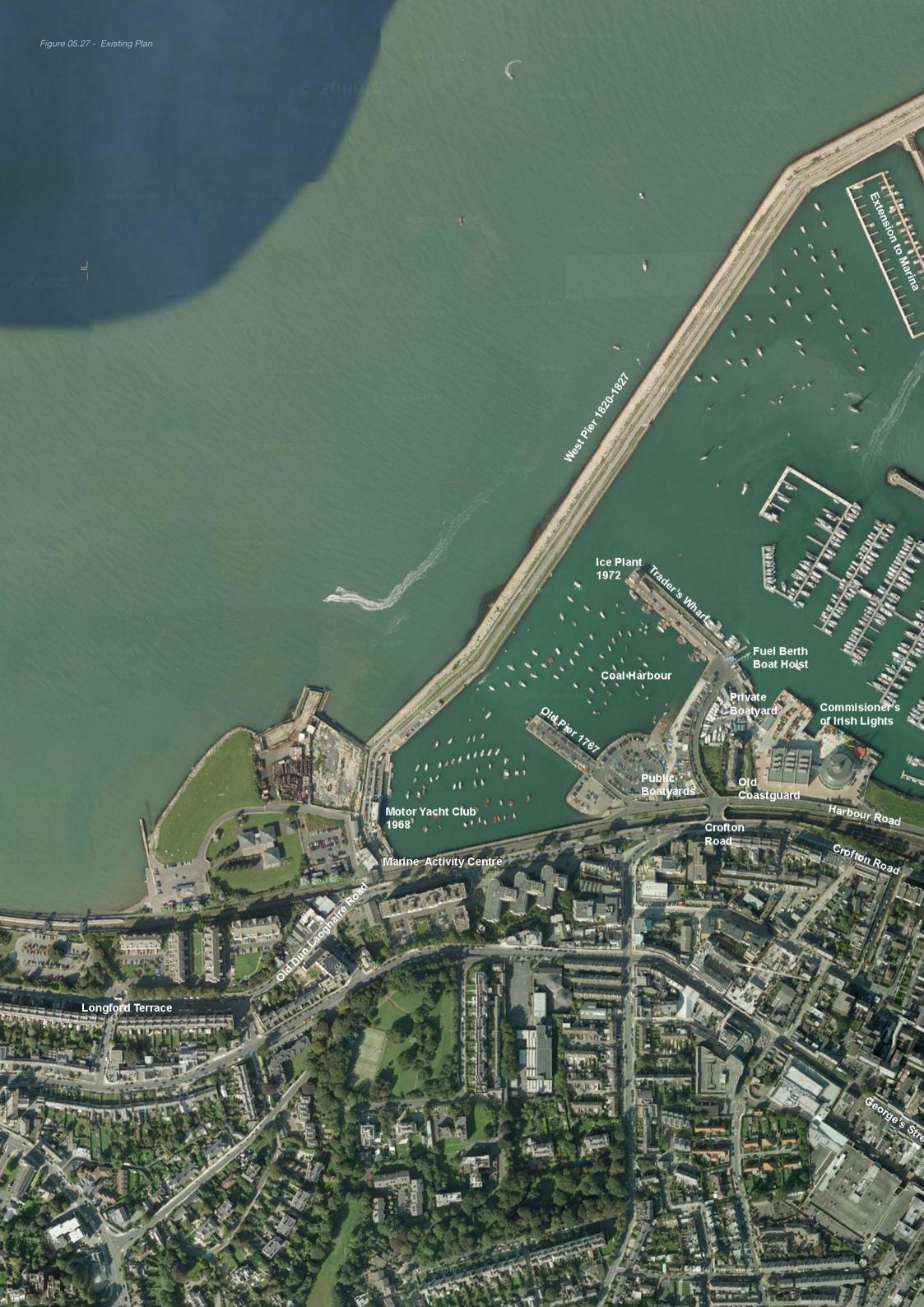
The masterplan has the potential not to adversely affect the high quality views while enhancing the poor quality views. The impact on views will require assessment during planning application stage.



Figure 05.23 - View looking east towards Dún Laoghaire Harbour



Figure 05.24 below: View looking west towards Dún Laoghaire Harbour









© Paul Crawley



Figure 05.29 - View from Royal Marine Hotel

© Paul Crawley

Town and Harbour

Dún Laoghaire is characterised by the separation between the town and the harbour, which is the primary amenity of the area and which gives the town its unique sense of place. Even the most casual observer is likely to note that there is a clear difference in "feel" between the town and the harbour, defined primarily by current use and landscape characteristics. For the purposes of this text, the "town" will refer to the area south of the Dart line and the "harbour" will refer to the area north of the train line and between the harbour walls (The Gut is also assumed to be part of the harbour).

The Town

The structure of the town is largely defined by George's Street running east-west and Marine Road running north south providing the key link between the town and the harbour. Crofton Road runs parallel to George's Street defining the edge of the town and the beginning of the harbour. A number of north-south routes link George's Street and Crofton Road however connections between the town and the harbour are considered to be poor. In addition to this, there are a number of green spaces, the largest of which is the People's Park located at the south-eastern end of George's Street. The topography generally falls gently towards the harbour from the Dublin Mountains which form a backdrop to the town when viewed from the ends of the piers.

The Harbour

Connected along its southern edge by Harbour Road, development in the area consists mainly of marine infrastructure such as piers, transport buildings, sailing clubs and boat standage. Structures consist primarily of buildings sitting in open space surrounded by parking, outbuildings and associated landscaping. As one would expect in a working harbour, there is little urban structure in terms of streets or squares. However several of the buildings are noteworthy due to their historic status or architectural quality.

The main areas of public open space are along the piers and harbourside, notably the East and West Pier, Trader's Wharf and Old Pier, The Gut and the associated Accommodation Road. The open nature of these spaces contrasts markedly with the more enclosed nature of many of the streets within the town. Some of these areas (particularly around the Old Harbour) are also used for car parking which tends to present a barrier to easy access to the waterside.

Further restrictions occur at a number of locations due to the marine operations of institutions such as the sailing clubs and The Commissioner of Irish Lights. Green Space is largely restricted to the area west of the Royal Irish Yacht Club. There are large areas of underused/negative space, principally around St. Michael's Pier due to the reduction in passenger ferry activity.

Connections and Linkages

The diagram below describes the existing links and connections between the waterfront, the harbour and the town.

This separation between the town and the harbour is created by the DART, and by Crofton and Queen's Road, where limited crossing points primarily serve traffic.

There are three bridging points over the DART, located at:

- The junction of Crofton Road/Clarence Street/Dúnleary Road/Coal Quay Harbour Access, which provides access to the western and central areas of the Harbour lands
- Marine Road/Crofton Road/Harbour Access/Queen's Road, which provides access to the central area of the lands; and
- Queen's Road/Harbour Access, providing access only to the eastern end of the Harbour lands

The recent Metals Scheme by DLRCC has decked over part of the Dart railway between Marine Road and the entrance to the Pavilion carpark. This will create a new pedestrian area, café terrace, small play space and landscaped public space for Dún Laoghaire.

The DLRCC Urban Structure Plan proposes a series of improved connections between the town centre and the harbour through a high quality network of streets and public spaces. The creation of these links and routes will be a guiding principle for new development.

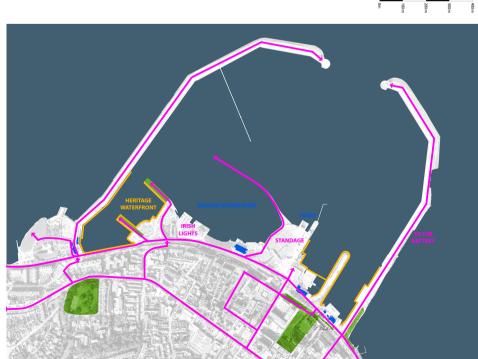


Figure 05.30 - Existing Waterfront Links





Figure 05.31 - Dart Station © Paul Crawley Figure 05.32 - Events at Dún Laoghaire

© Paul Crawley

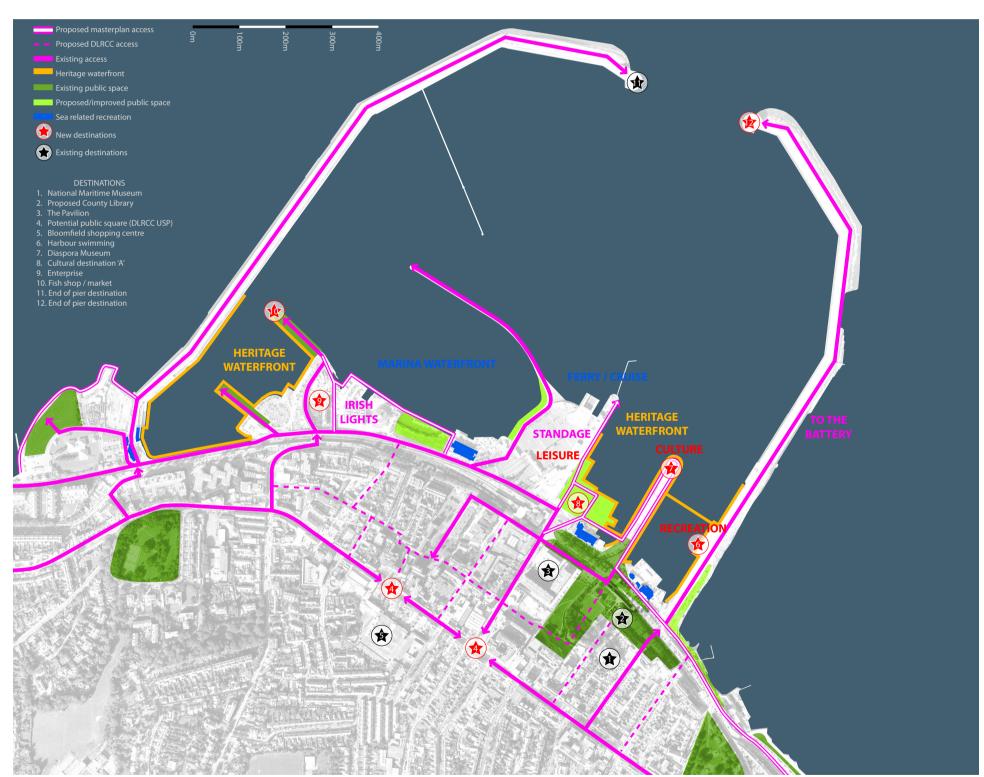


Figure 05.33 - Linking up the waterfront

Linking up the Waterfront

Historically, Marine Road terminated at the water's edge off the Victoria Wharf. This simple and direct relationship between the town centre and the sea was diluted with the redevelopment of the ferry terminal. While the civic space as developed is undoubtedly attractive, it is isolated from both the town centre and the water's edge. It is also underused and it is desirable that this space be redeveloped to its full potential. As a space it would benefit from surrounding uses that would animate it both by day and by night. This area needs to connect more strongly with Marine Road, with the primary aim of encouraging pedestrian/cyclist movements down from the town centre.

East-west movement through the harbour is to be improved by opening up some previously restricted waterfront areas such as Carlisle Pier, Irish Lights, the HSS standage area, and parts of The Gut. It is also hoped that new pedestrian links between St. Michael's Pier and Carlisle Pier as well as between Carlisle Pier and the East Pier can be achieved.

The development of a coastal walk/cycle path from Sutton to Sandycove through this area is an objective of the DLRCC and the masterplan seeks to provide for this.



Figure 05.34 - Harbour Square © Paul Crawley



Figure 05.35 - View up Marine Road @ Paul Crawley

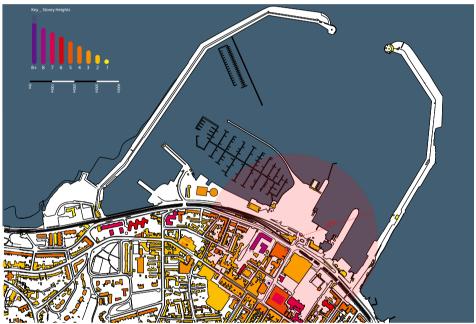


Figure 05.36 - Building heights (existing)

Existing Heights

Dún Laoghaire, on the coast, is designated as a major town centre. Building heights within the harbour area are typically 2-3 storeys. This height pattern is continued throughout the wider surrounding townscape. However there are some post-war and recent developments of about 4-5 storeys, with a maximum of seven storeys. This increase in height occurs mainly along the coast road (Croften Road) which borders the harbour to the south. There is a significant cluster of such buildings in the area to the immediate south of the Dart station where one would expect to see higher density development round public transport hubs. Only the spires of St. Michael's Church and the Mariner's Church and the tower of the County Hall rise above this urban skyline.

The reinstatement of the tower of the Royal Marine Hotel has added to the contrast between the horizontal plane of the town and harbour and the vertical elements. The manner in which the outline of the town descends gradually down to the harbour whose walls then extend in a horizontal plane out to sea and which is then punctuated by the spires of the town is a distinctive feature of Dublin Bay. This profile amplifies the urban character of Dún Laoghaire and has been protected in decisions by the Planning Authority and An Bord Pleanala who have required that the pattern of roof lines descending down to the seashore be maintained.

Land Use Relationships

The DART is the major transport hub for the area providing rail connections into Dublin city as well as bus services to the surrounding areas. It also represents the hinge point between the town and the harbour which have developed separate use patterns over time.

The Town

Primarily zoned for town centre activity and residential uses, Dún Laoghaire has one main shopping street, George's Street, as well as two shopping centres: the Dún Laoghaire Shopping Centre and Bloomfields. Recent years have seen some commercial development of the land around the George's Street area, including, notably, the old Pavilion Cinema and Theatre site opposite the town hall and the lands to the west of Harbour Lodge. St. Michael's Hospital occupies a large site to the immediate south of the study area.

The Harbour

Dún Laoghaire Harbour historically was an important freight port, but this function has changed in recent times. The port is now primarily used as a passenger ferry port and for recreational sailing. The primary marine users are:

- The Ferry Service Stena operate a service to Holyhead however the number of crossings has reduced in recent years.
- The Commissioners of Irish Lights
- The Naval Service
- The Royal National Lifeboat Institution
- Marine Activity Centre Roinn na Mara operate a Centre on the West Pier to provide a facility for training and sailing and other water sports. Three organisations – the Dún Laoghaire Vocational Educational Committee, the Irish National Sailing School and the Irish Youth Sailing Club operate from the Centre
- Dún Laoghaire Harbour Sea Scouts The Scouts have a Clubhouse in the corner of the West Pier next to the Irish Youth Sailing Club.
- Rowing St Michael's Rowing Club operate from their base in the Coal Harbour
- Sailing Clubs The harbour is home to four Sailing Clubs the National, Royal St. George, Royal Irish and Dún Laoghaire Motor Yacht Club
- Marina The Dún Laoghaire Harbour Marina Company operates a 740-berth Marina and onshore administration office
- Fishing Trawler berths are provided for at Trader's Wharf and the Ice Plant is used as an occasional fish shop
- Marine Sales A private boatyard and marine sales is provided at Traders Wharf
- Parking The Harbour Company provides for surface and underground commercial car parks at various locations around the harbour





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Figure 05.38 - Marina © Paul Crawley

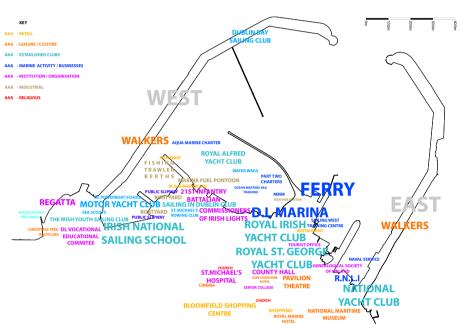


Figure 05.39 - Existing harbour users

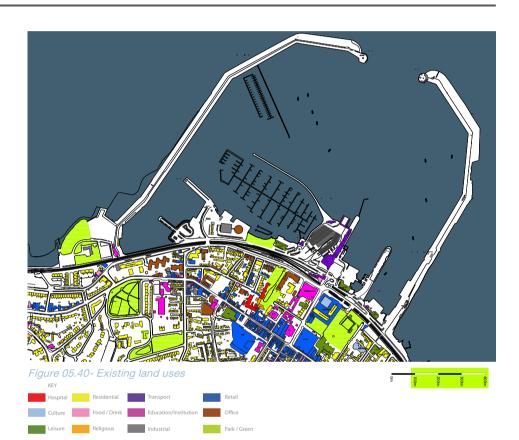
In addition to these users and land owners in the harbour, there are the myriad public users including:

- The walkers on the East and West Piers and breakwater
- The fishermen on the East and West Piers
- Cyclists and roller-bladers on the East Pier
- Public entertainment on the "plaza" and the East Pier

A land use plan illustrates the type of activities which take place in certain buildings and spaces. The land use plan to the right highlights a number of key points regarding the existing structure of Dún Laoghaire.

- The main retail area is focused on George's Street, especially around the junction with Marine Road
- The area north of George's Street and South of Crofton Road has a considerable number of work places.
- A number of cultural facilities are located to the south of Queen's Road such as The Pavilion Theatre, the Maritime Museum and the proposed County Library
- The Dart station serves a large population and range of users to the south but very little in the harbour area. In this regard, it is not operating as effectively as it could be
- A number of marine uses such as yacht clubs, water sports clubs, ferry infrastructure and the Commissioner of Irish Lights are dotted along the waterfront

The main areas of public open space are along the piers and harbourside, notably the East and West Pier, Trader's Wharf and Old Pier, The Gut and the associated Accommodation Road. The open nature of these spaces contrasts markedly with the more enclosed nature of many of the streets within the town. Some of these areas (particularly around Old Harbour) are also used for car parking which tends to present a barrier to easy access to the waterside.





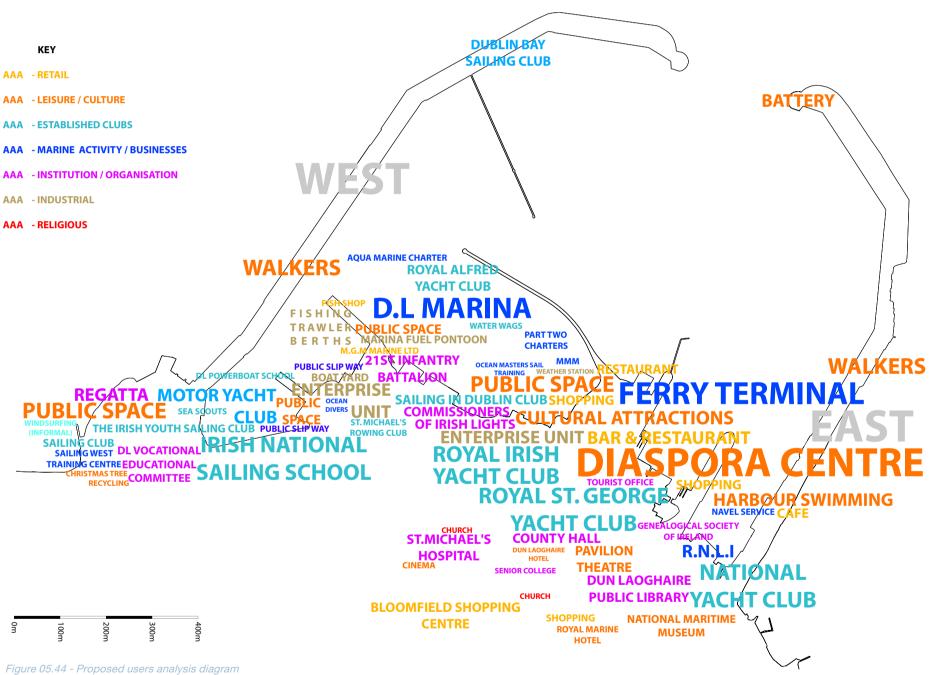
KEY
Cultural Facility
Retail
Work / civic
Sea related recreation
Public parks
Transport bub





Figure 05.42 - Commissioners of Irish Lights

Figure 05.43 © Paul Crawley



Future Land Use Relationships

The masterplan seeks, in broad terms, to build on and consolidate the existing land uses in the harbour. This is represented in the diagram above and to the right.

- It is proposed to build upon the burgeoning cultural quarter located along Queen's road by providing a major cultural facility on the Carlisle Pier
- The area with the strongest potential connection between the town and the harbour lies at the base of Marine Road at the Terminal plaza. This area has strong public transport connections and is thus proposed to be the focal point of the leisure and tourism based waterfront
- Ferry operations and its associated marine infrastructure are to be consolidated at berth 5 located at the northern end of St. Michael's Pier

- The existing ferry standage area is to be reduced by 50% and wrapped in an envelope of buildings. This will help balance the aesthetic issues posed by locating such a large area of tarmac in the harbour area
- A community of homes is planned for the western side of St. Michael's Pier overlooking the marina
- Traditional harbour activities and clubs are to be enhanced in the Old Harbour
- A marine enterprise zone is proposed in the Old Harbour around the coastguard cottages
- Watersports are to be encouraged in The Gut area





Figure 05.45 - Old Coastguard Station

© Paul Crawley

Figure 05.46 - Red Bull Flugtag

© Paul Crawley



Figure 05.47 - Proposed land use relationships

The masterplan proposes a mixed-use community with a carefully considered balance of residential, employment, hospitality, marine, leisure, retail, and civic uses in a genuine, sensible and sustainable mix. It aims to create a busy and active urban realm in which habitation, use, and association will attract visitors, feel comfortable for residents, and be safe and secure for all.

A key consideration in the land use strategy for Dún Laoghaire Harbour is the goal to deliver a critical mass of activity and intensity within specific "character areas". Rather than dispersing uses across the site, they are arranged logically to create areas of focus and identity. Functions are clustered in different districts in order to provide a strong character and to foster a sense of community within each area.









Figure 05.48 - The Gut

Figure 05.49 - Old Harbour

Figure 05.50 - St. Michael's Pier

Figure 05.51 - Carlisle Pier

Character Areas and Proposals

Masterplan Area

The area of the masterplan includes the entire harbour area defined by the East and West Piers. In addition, it also contains part of the The Gut which lies outside the West Pier. The remainder of The Gut is in separate ownership. The area of the masterplan is outlined in the drawing opposite.

Masterplan Character Areas

Four character areas are highlighted, each capable of developing their own identity. The East and West Piers are of equal importance. However they will be dealt with separately as little is proposed for them other than an enhancement of their current usage. A full urban analysis for each area is provided in the next section. The four character areas are:

The Gut

The Gut lies outside the West Pier and is accessed via a single lane carriageway road through the main harbour area. The development potential is capped owing to the restricted vehicular access and the potential visual and other environmental impacts upon the coastline.

It is proposed that this area will cater for a modest mix of residential, marine, leisure and amenity uses. The development area only includes those lands under the direct control of the Harbour Company, but other similar developments outside the masterplan area within The Gut could complement our proposals and are illustrated as part of the masterplan. There is scope for improved pedestrian access along the water's edge.

The Old Harbour and Irish Lights

This area consists of the Irish Lights headquarters building and adjoining open space area, the adjacent protected cottages and the Old Harbour Area. The Old Harbour includes some of the historical part of Old Dúnleary and was the location of the original pier constructed in 1767. It has a robust and utilitarian character, lacking the rarified architecture of the yacht clubs.

The boating activities that take place here are generally of a more modest scale than elsewhere, and the area encompasses the boatyard which has traditionally been a specially designated place where those who are not members of a yacht club can access the harbour via the boat slipway.

It manages to accommodate a diversity of uses and users - and its history of varied uses is evident in the names of its parts; Trader's Wharf, Coal Harbour etc. Current and past uses include the rowing club, fish-selling, boat trading, sea-scouts, sail training, public boatyard, residential, FCA, the Coastguard, and this proliferation of users has resulted in a more chaotic and disorganised character than elsewhere.

There is an atmosphere of neglect - deriving in part from the somewhat isolated location which lacks passive surveillance, and also due to the lack of use of the Coastguard Station and Cottages, which comprise a significant portion of this area.

The character of the area in terms of materials is defined by some fine stonework - found in the snecked stone boundary walls and also in the fabric of the Coastguard buildings. The area is also the location of some of the best surviving port/ marine fabric—boat slip, tracks, turntable, crane etc.

This area is to be developed primarily for marine and boating activities, small scale enterprise and enhanced amenity and public access to the water's edge. There is extensive car parking, which has the potential to be rationalised in the area.

St. Michael's Pier

This constitutes both the main development area and the principal zone for the provision of ferry and potentially cruise liner facilities. It is presently dominated by the terminal building and standage areas which have been built out and developed over the last 200 years, most recently in 1996 through the infill for the HSS Terminal.

Presently, the character of this space is derived from a busy vehicular traffic junction at the intersection of Marine Road, Queen's Road and Crofton Road. This is a function of its role as the most significant link to the town centre. The open space of the plaza adjacent to the terminal building is underused, perhaps suffering from a sense of separation due to the location of the nearby roundabout.

The massive wall of fine masonry that separates the railway station from the harbour helps define the historic character of this area well; that of grand edifices (the railway station, Town Hall, the Pavilion and the ferry terminal). It is where the harbour as an entity meets the town, engaging with its urban setpieces.

The significance of the railway station structures should be noted. These are an element of the important collection of the architecture of J.S. Mulvaney in the harbour (also included are the Royal St. George Yacht Club and the Royal Irish Yacht Club), a collection of national significance.

The County Development Plan stipulates that the area should be developed for mixed use, including terminal facilities and associated infrastructure, residential, hotel, office, retail, restaurants, leisure and recreational uses. It will both serve to complement the existing town centre, and allow for the effective interface with other harbour related activities. There will be a significant enhancement of the public realm between St. Michael's Pier and the Carlisle Pier with the objective of improving public access to the waterfront.

Carlisle Pier

In its current guise, Carlisle Pier represents a significantly underused part of the harbour. Recent lack of access, along with the removal of the shed structures combine to lessen the character of this part of the harbour, despite its rich historical associations.

This is the location for a major visitor attraction, the Irish International Diaspora Centre.



Figure 05.52 - Character areas



The Piers

The harbour is defined and encircled by its two large granite piers making it one of the largest man made harbours to be found in the world.

West Pier

The character of the West Pier is quite different from that of the East Pier, indeed it has very much its own distinct character within the harbour. It has a softer landscape, with grass, gravel and compacted soil combining to lessen the effect of the stonework.

This part of the harbour is quiet; there are fewer strollers than elsewhere. This is due to it being more distant from the town centre and from most yacht clubs (the Motor Yacht Club is located at the beginning of the pier), and it is cut off from the town by the railway tracks.

The lack of historic views of or from the West Pier indicates an historic basis for this isolated status. It is in keeping with the sense that it has gone largely unchanged with time.

The West Pier is the location of some of the best examples of the high quality stonework that can be found in the harbour—particularly at the pier end where concentric circles of cut granite radiate from the base of the lighthouse, and the lighthouse keeper's cottage with its classical detailing.

The Masterplan seeks to maintain the character of the West Pier. No development, other than the upkeep of the existing structures, is proposed. The aim is to maintain the prevailing "rural" and naturalistic character of the pier, in a manner which accommodates wildlife without endangering the fabric of the historic pier structure or the welfare of its users.

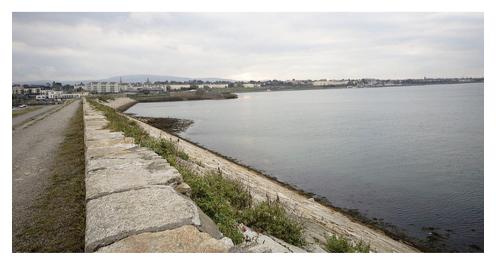


Figure 05.54 © William Murphy Figure 05.55 - West Pier lighthouse © William Murphy





© William Murphy



Figure 05.57 - Band playing on the pier

© William Murphy

East Pier

The East Pier has a character that mainly derives from its hard landscape, which is made primarily of stone and concrete. There is little relief provided by grass or planting. This lends it an urbane feeling; a promenade, almost a version of a Victorian pleasure pier. Much of the non-maritime activity that takes place in the harbour happens here, and indeed it is often referred to locally as "The Pier", which signifies its role as a significant amenity for the town. The protection of the great wall provides a sense of enclosure, as do the views back towards the town.

One must step beyond the wall on the upper level to experience the openness of the seascape. Its orientation means that in the summer the enclosing walls do not cast a shadow onto its main surface later in the day, creating a pleasant environment well into evening-time.

The East Pier has a significant amount of ironwork, both decorative and functional—including the bandstand, shelter, railings, mooring posts and rings. This forms part of an important collection of national significance in harbour.

The masterplanning aim is to maintain and enhance the urban personality of this pier which derives from its physical qualities, its attractiveness for walking and the range of temporary cultural activities which it supports.

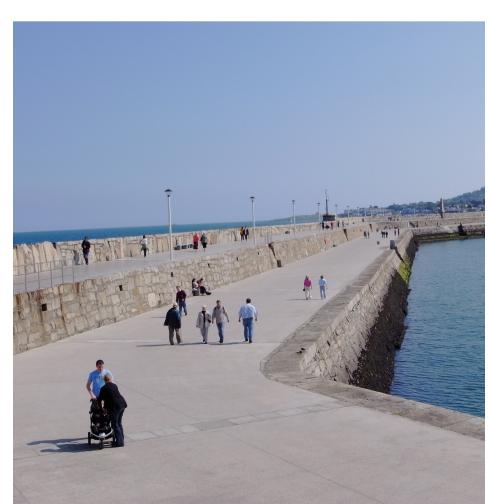


Figure 05.58 - East Pier looking south







Figure 05.59 - Battery scenarios

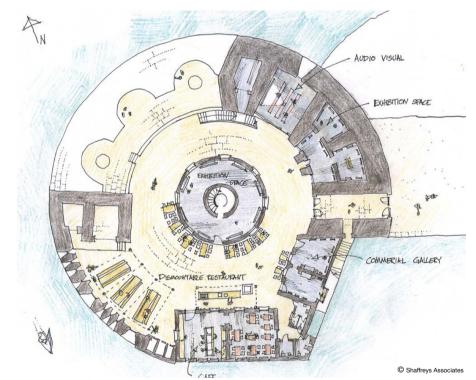


Figure 05.60 - Battery plan

The East Pier Battery

© Paul Crawley

The East Pier Battery has been re-opened to the public since 2009. It is proposed to restore the Battery complex to facilitate greater public access to the buildings and upper areas. A number of design scenarios have been prepared which have explored the Battery's re-use for a temporary exhibition on the Harbour, its history and development, and also for restaurant/cafe use. This plan is being implemented on a phased basis.

Phase 1: Conservation works to the former Soldiers' and Officers' Quarters involving roof repairs and external render was completed in May 2011.







Figure 05.62 above - View north west from The Gut

The Gut

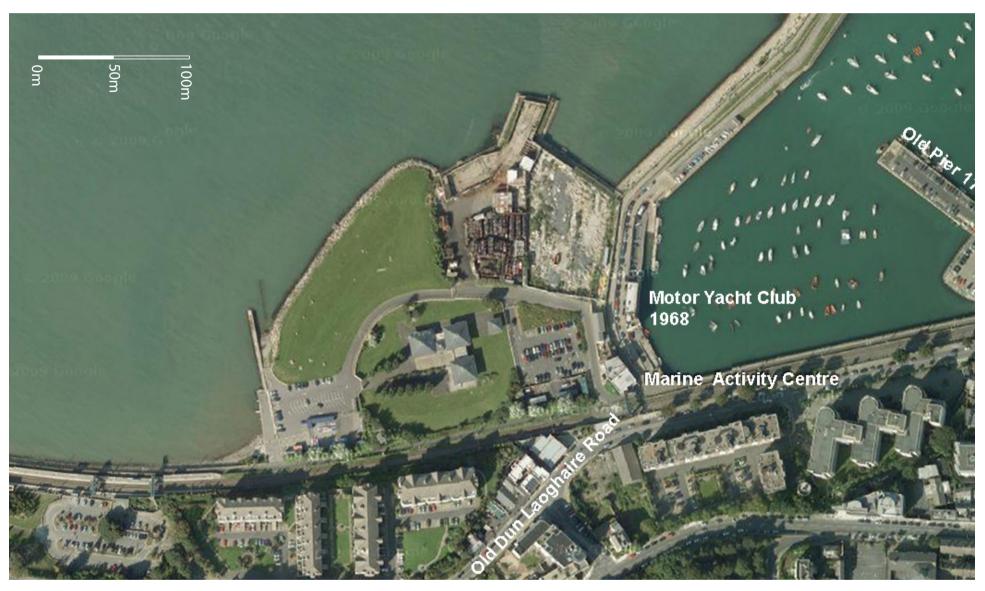


Figure 05.63 - The Gut; existing aerial photo

Site Description

The maps and descriptions in the Heritage chapter explain the history of the site and how development on it has evolved. However The Gut is mostly reclaimed land built out over the last 200 years. In the past, most of the area consisted of underground sludge storage tanks, a soap factory and the junior element of the Dublin Bay Sailing Club. Today it has a mix of industrial uses (pumping station, scrap yards) as well as recreational uses such as sail training. Located on the outside of the harbour walls, the area has a character defined by openness and exposure.



Figure 05.64 - Open sea at The Gut

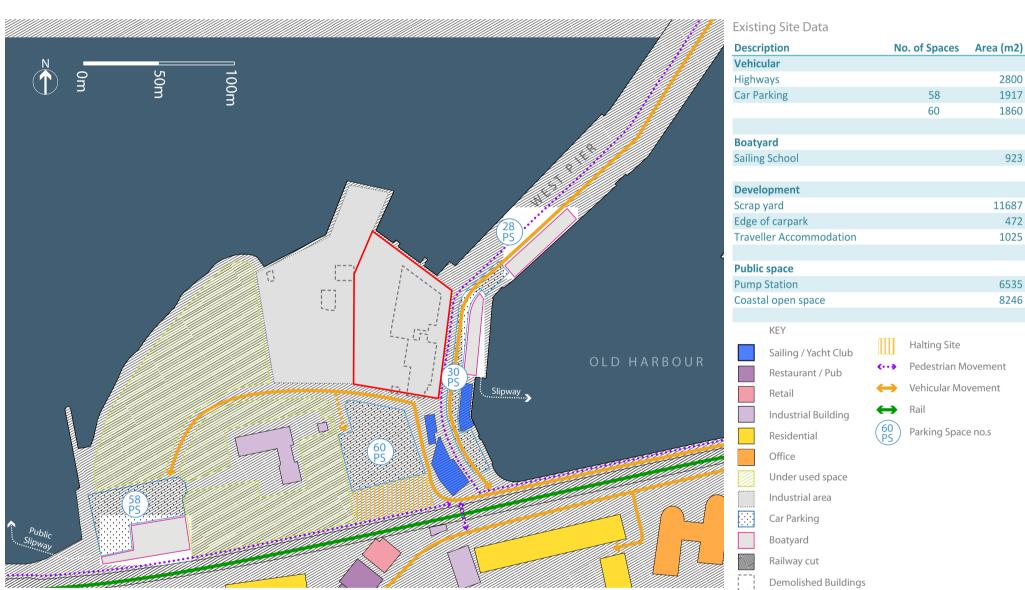


Figure 05.65 - Site analysis

Site Analysis

The area is raised above sea level and relatively flat. From the sea shore there are uninterrupted views across Dublin Bay to the North and West; hence the site has a very exposed aspect to wind and weather. The West Pier can be approached via this site and is a popular resort offering a different experience to the more frequently visited East Pier. The site's eastward aspect is to Old Harbour which is enclosed and sheltered. The southern boundary is defined by the Dart line, which prevents any access to Crofton Road, and cuts off this area from the town.

The existing uses on the seaward side include:

- The Irish National Sailing School
- Club regattas
- The sewage pumping station
- Low grade industrial uses.
- Halting site
- Public park

On the land and Old Harbour sides there are:

- The Sea Scout facilities
- The Dún Laoghaire Motor Yacht Club
- Boatyards
- Open car parking.

There are public slipways to the sea and to the Old Harbour.



Figure 05.66 - View towards Dublin from The Gut

© Paul Crawley

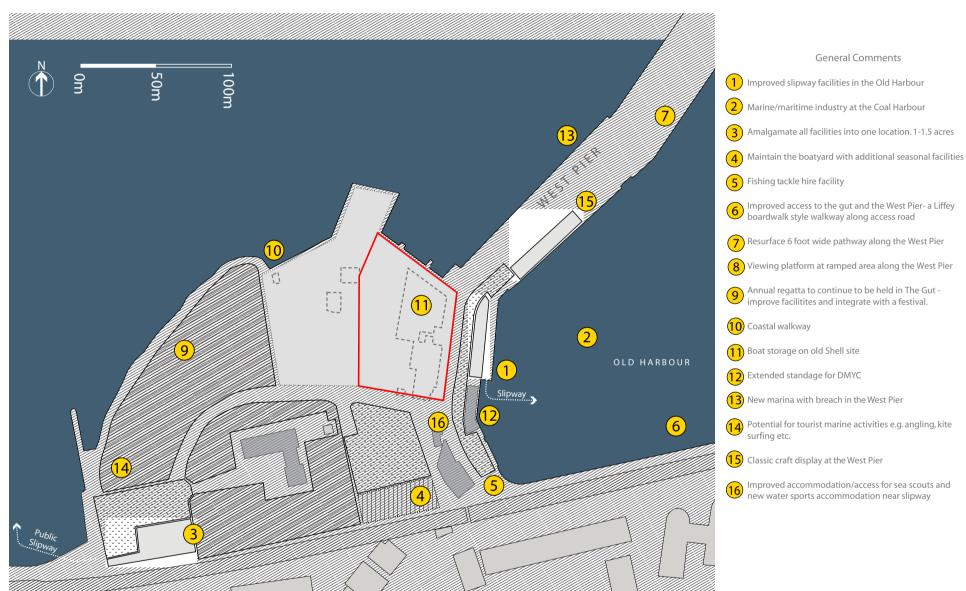


Figure 05.67 - Consultation diagram

Stakeholder Consultation

An extensive consultation process has taken place (see chapter 3) and we received a number of submissions from stakeholders who frequently use this area. They were asked to put forward proposals which could help inform the developing masterplan. These submissions were analysed and mapped against each of the character areas to produce the map shown above.

In general, the comments received for The Gut area related to the following:

- improvements to slipway access
- support for marine enterprise
- amalgamation of scattered facilities
- desire for a coastal walkway
- more boat storage
- Improved facilities for Sea Scouts and fishermen.

Where possible, these comments have been fed into the masterplan proposals for the area and are illustrated in the next few pages.



Figure 05.68 -View towards base of West Pier

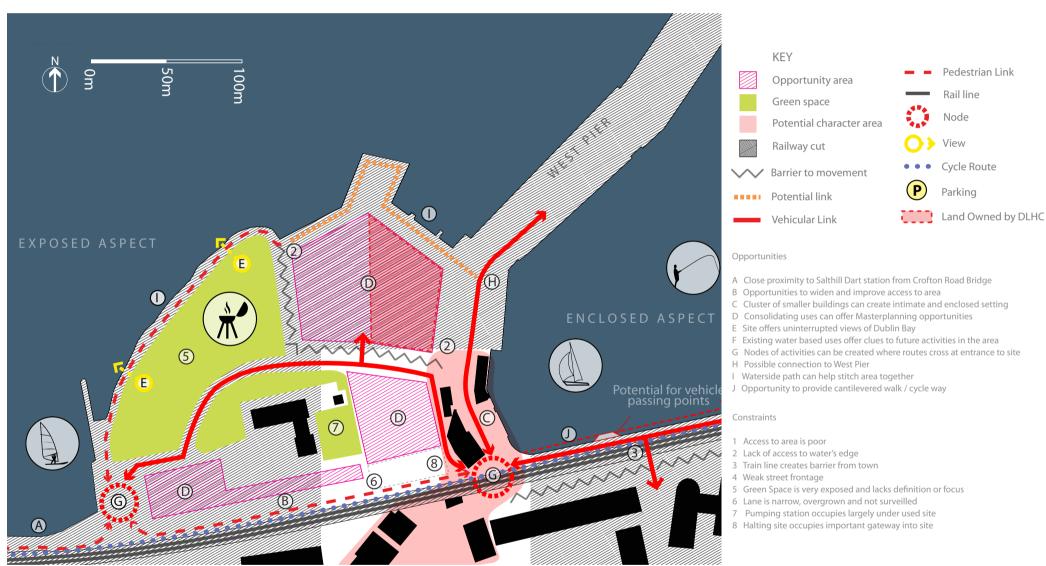


Figure 05.69 - Opportunities and constraints

Constraints

The site analysis and stakeholder comments have influenced the opportunities and constraints plan shown above.

The only vehicular access is along the single lane roadway between the Dart and Old Harbour. This is a bottleneck when the Dún Laoghaire Motor Yacht Club and Sea Scouts are busy and visitors drive to walk the West Pier. The existing industrial activities prevent access to the water's edge and deny a continuous waterfront promenade linking to the West Pier. The Dart line forms a barrier to access to the town.

The footpath alongside the rail line is narrow, not overlooked, and so underused although it does offer direct access to Salthill Dart Station. The Halting site is at the entrance to the area and reduces development values for many land uses.

The Pumping Station has utility corridors that may constrain building close to it. The Old Harbour is shallow and the slipway faces in shore so is often mud bound which restricts launching.

Opportunities

The road access could be widened or passing bays built: these ideas have been investigated and are costly so would invoke need for cross subsidy from a larger development than is proposed or thought appropriate. A road bridge over the railway has been suggested but the space for ramps and construction cost are prohibitive.

The rail side footpath could be widened to include the coastal cycle path and be made safer with overlooking uses; such proposals would take advantage of the site's close proximity to the Dart Station.

The site can accommodate low rise buildings for sea and harbour-side activities such as maritime enterprise, water sport clubs, café and residential uses.

A major civic gain would be the continuous sea front walkway shown on the



The Gut - masterplan proposals







Figure 05.71 - Sketch of development at The Gut

Figure 05.72 - Sketch of development at The Gut

The Gut - Site strategy

Movement Layouts, Linkages and Waterfront Access

The masterplan illustrates the proposed coastal walkway across the existing industrial site and a water sports centre on the Harbour Company land. Access to the sea is improved and there is potential for a sea facing slipway. In the Old Harbour the public slipway direction could be reversed to face into deeper water thus overcoming tidal restrictions. The existing road access is retained and an improved traffic management system is needed at peak times.

Type of Development Proposed

The masterplan promotes a cluster of small new buildings in a courtyard layout that creates shelter and sense of place. The "C" shape is one half of that courtyard and is on Harbour Company Land. If the adjoining lands cannot reciprocate this building form, then an alternative footprint shapes should be explored.

Demolition, Reuse, Reclamation, Refurbishment, New Build

Clearance of unsightly structures on the industrial site is proposed. Subject to detailed investigations, the new buildings in the form shown are appropriate and viable. The existing buildings facing the Old Harbour are retained.

Land Uses and Flexibilities

The range of land uses at ground level could be marine enterprises, water sports clubs, parking and a café, the floors above would be residential apartments with balconies, not ground level gardens. Residential use brings a 24/7 presence to add vibrancy and help passive security.

Height, Scale and Massing

The illustrations shows 2-3 storey buildings of shallow plan depth suitable for the land uses described. The character of the enclosed space is like that of a working quayside where bold but simple industrial forms reflect the maritime uses and exposure to weather; balconies to the residential would be recessed and roof forms, if pitched, could be metal clad. Building lines create the edge to public space and yard areas should be walled rather than open fenced.



Figure 05.73 - Ground floor land use



Figure 05.74 - Upper floor land use

Quantum:

Residential 4100-4300 m2 GIA
Boat storage 400 - 700 m2 GIA
Watersports Centre 1000-1200 m2 GIA



Figure 05.75 - Sketch view of proposals

Outline Design Code

The aim of the Outline Design Code is to help create a coherent pattern of development throughout this area of the harbour and is a key part in delivering high quality design. The design codes outlined here are intended to guide the design process, help create better designs and help set design parameters for planning applications. These design codes should be read in conjunction with the policies of the heritage management plan.

This document should provide strategic guidance on key aspects of the development of the harbour. However, it is not an exhaustive code and further, more detailed, work will need to be carried out. It should be sufficiently flexible to allow the creative abilities of architects to be coordinated, but not limited.

The guidelines will be implemented through a series of design workshops and discussions through RIAI workstages 1-4. In order that the document remains current and useful, periodic updates will be required.

Public Realm and Open Space Strategy

It would be appropriate to encourage intensification and clustering of existing water-sport and sail training activity in enhanced facilities in the area, potentially enjoying access to both the protected water of the harbour and the exposed bay with close proximity to slipway facilities. The potential to develop a watersports centre should be examined for this location. This concept should be reviewed in association with the proposals of the DLMYC for the slipway in the Inner West Pier zone.

There are several public spaces throughout The Gut area. However, only a small section of these are under the ownership of the harbour company. One of the largest public spaces in the harbour is the Green Space to the west of The Gut. Although under the ownership and management of DLRCC this space has potential to be more widely used due to the proposed watersports centre on the lands owned by DLHC.

The primary public realm within The Gut area is the proposed walkway along the waterside. This will be an all weather paved and timber surface with a variety of edge conditions (slipways, steps, rock armour etc) arranged along it to create a varied and interesting public realm.

Streetscape and Active Frontages

All elements of the streetscape should be coordinated to provide a highly legible environment.

The masterplan takes a pragmatic approach to street level frontages based on the understanding that it is impossible to provide active frontages everywhere, and that it is more realistic therefore to concentrate active uses along key areas within the development. In the case of The Gut, the facade of the watersports centre at ground level will create a self-monitoring and self-policing development and minimises blank or inactive street frontages.

The strategy also relies on private uses, such as entrances to residential units, as a way of activating the public realm by establishing strong 'front door to street' relationships across part of the entire site.

Residential Buildings

To maintain a sense of enclosure to the spaces, facades should have a continuous and consistent scale, treatment and character. Consistency can be achieved through common or similar use of materials. Elements such as non-residential buildings can be of contrasting character

The relationship of residential units above ground floor in The Gut will be vital to the security and vitality of the place. Residential accesses should be celebrated in the street scene and made clearly locatable and identifiable through the use of materials, colour and lighting. Residential accesses should be located in all streets (particularly pedestrianised ones) in order to maintain 24 hour usage.



Figure 05.76 - Landscape precedents

Landscape Strategy and Streetscape

The public realm should enforce the "Village Character" of The Gut. A network of shared surface spaces should be developed.

Materials utilised should reflect the scale and character of the proposed spaces, and be largely of small modular unit type. Materials utilised should be sympathetic and in character with the existing granite quay walls and remnant paving elements. Materials such as Castlestone, Tegula or Natural or Reconstituted Grantite Sett paving would be appropriate. All kerbing and path edgings should be of natural granite to match the existing. Materials utilised should have a "gritty" harbourside character to reflect the areas cultural heritage and context. Materials chosen should be carefully considered to cater for the demands of universal accessibility, and allow for the colour contrasts and delineation required in shared surface spaces.

Street furniture and signage should be carefully considered and used in a restrained and minimal manner. The palette of materials used should reflect the harbourside character of the spaces, and not be suburban in character. The use of bollards should be minimised, with more subtle means of delineation utilised wherever possible. A way-finding strategy should be developed to ensure legibility of the spaces.

Planting should be minimal and be focused in sheltered courtyard, amenity and semi-private spaces. Planting to exposed areas, quaysides and piers should be avoided. Planted spaces should be carefully designed and located to maximise shelter and minimise coastal exposure. The use of level change should be considered to maximise micro-climate and thus usability and viability of spaces.

Landscape Management Issues

The character of the West Pier is wilder and softer than the East Pier and that difference should be retained. Materials should be selected based upon a considered life-cycle costing analysis, materials should be functional and robust and easily replaceable.

Planting should be carefully selected to survive coastal exposure and to require a minimum of maintenance. A stock of 5% of hardworks materials should be held in stock to allow for swift replacement and repair of damaged areas.

Amenity Strategy

The principal gain that the Harbour Company can deliver is the link in the coastal walkway across the industrial site. The proposed developments are modest in scale but will increase activity and make the area attractive and safe to visit.

It would be appropriate to encourage intensification and clustering of existing water-sport and sail training activity in enhanced facilities in the area of the Gut and potentially enjoying access to both still-water of the harbour and the open bay with close proximity to slipway facilities. The potential to develop an international standard training school should be examined for this location. This concept should be reviewed in association with the proposals of the DLMYC for the slipway in the Inner West Pier zone.

Water Space Strategy

A new slipway is illustrated for sea launching and the reversal of the ramp into Old Harbour is shown. Both will considerably increase access to the water for the public, clubs and other marine activities.



Figure 05.77 - Waterside precedent

Materials

The Gut is unlike the other character areas in that it is outside of the harbour walls and therefore largely exposed to the elements. It is envisioned that The Gut will have a contemporary feel to its architecture and public realm. Materials and construction detailing for new buildings and structures within the Harbour should be of high quality, durability and robustness of material and execution. Consideration is to be given to the particularly exposed marine environment in the detailed specification and grade selection of materials. Blank or service frontages will be limited to secondary frontages. Access to car park and service yards will have solid closures that complement the overall building designs.

The context suggests that the materials should contrast those of the town and should be of the harbour rather than town aesthetic. The design commissions need to be carefully managed by the Harbour Company to secure the very best contemporary outcomes.



Figure 05.78 - watersports centre precedent







Figure 05.80 -Irish Lights and coastguard cottages

Old Harbour

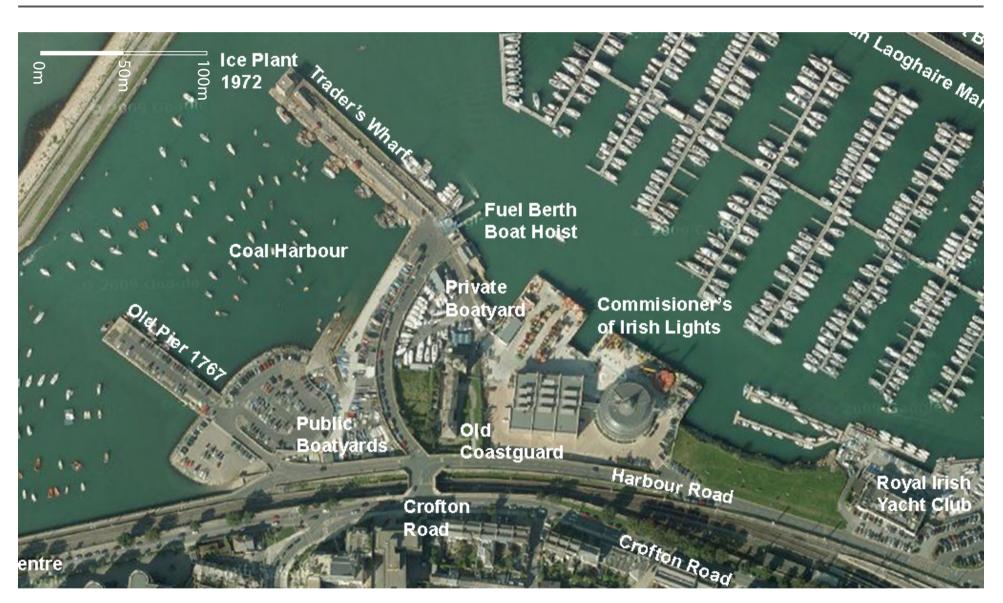


Figure 05.81 - Existing aerial photo

Site Description

The maps and descriptions in the Heritage chapter explain the history of the site and how development on it has evolved.

The Harbour Company owns the lands north of the railway line. The Old Pier defines the east side of Old Harbour, and Trader's Wharf defines the east side of Coal Harbour. These are the oldest harbours and have a very distinctive scale and charm in contrast to the main harbour and marinas. The Green Space is an open grassed area and a popular venue for summer events; it is the gap between the Irish Lights buildings and the marina and terminal activities to the east. A public boatyard is provided in the Coal Harbour for members of the public who do not have access to yacht clubs or storage facilities. The two public slipways provide popular access to the water and are a hive of activity in the summer months.

Site Analysis

The quay sides are at similar levels above 3.3m the water line with the distinctive feature being the ramped roadway ascending to cross the railway. The bridge offers a panorama point over the western part of the harbour and is the primary link to the town. The Coastguard Cottages and the tower of the Coastguard Station are the original buildings on the site; some of the cottages are occupied and are the only residential use in the harbour. MGM Boats lease part of the quayside for marine enterprise use.

From the quaysides there are views across the harbours to the West Pier and to the Marina to the north and east.







Figure 05.83 - Boatyard

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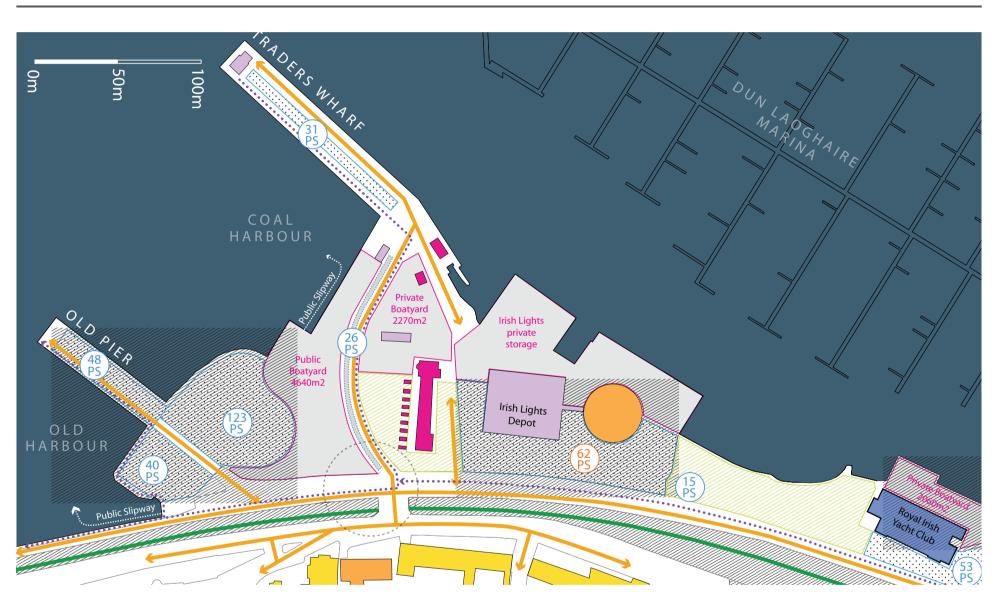


Figure 05.84 - Site analysis diagram

The quaysides are used for boat storage and parking which when looked down upon from the ramp does convey a disorganised impression. There is no public access in front of Irish Lights. The Old and Coal Harbour quaysides are walkable but without linkages to other quaysides so the area is a cul de sac. The southern boundary is defined by the stone walls to the Dart line which has always disconnected the harbour from the town.

There are two public slipways, one into Old and Coal Harbours. The current land uses can be summarized as marine activities, minor residential, and surface car parking.

Existing Site Data

Description	No. of Spaces	Area (m2)
Vehicular		
Highways		7551
Car Parking	189	6462
	26	361
	25	791
	62	4176
Boatyard		
Public Boatyard		4640
Private Boatyard		2270
Irish Lights Private Storage		5040
Development		
Public space		
Irish Lights Public Space		3855
Coastguard Cottages Public space	2	2227

	KEY
	Significant Building
	Industrial Building
	Office
	Sailing / Yacht Club
	Residential
	Under used green space
	Car Parking
	Boatyard
	Railway cut
(···)	Pedestrian Movement
\leftrightarrow	Vehicular Movement
\leftrightarrow	Rail
	Site of ancient ring fort (Dun) from which the town derives its name
60 PS	Parking Spaces





Figure 05.85 -View from Green Space towards marina

© Paul Crawley

Figure 05.86 - Public boatyard

© Paul Crawley

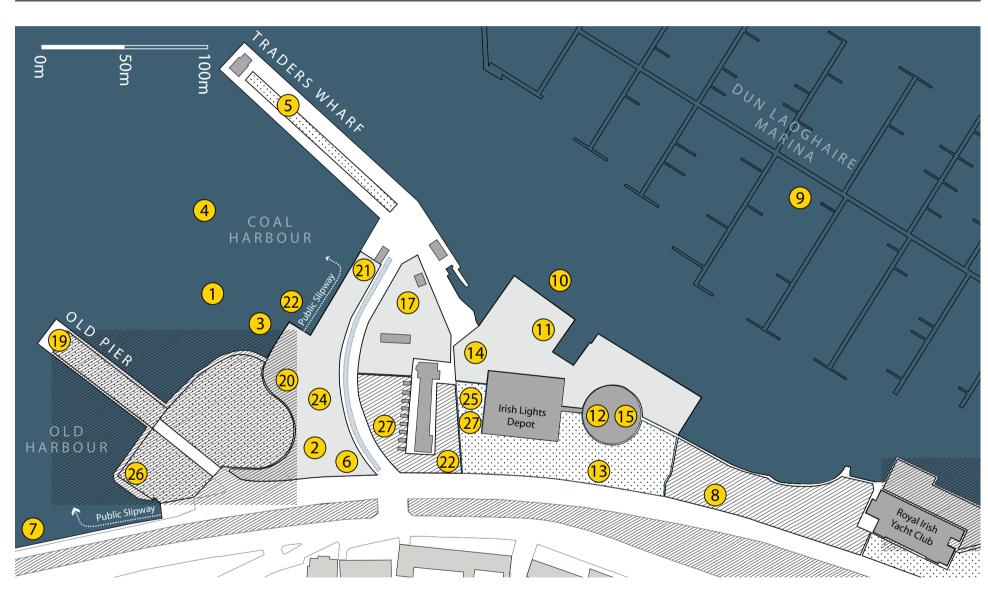


Figure 05.87 - Consultation plan

Stakeholder Consultation

An extensive consultation process has taken place (see chapter 3) and we received a number of submissions from stakeholders who frequently use this area. They were asked to put forward proposals which could help inform the developing masterplan. These submissions were analysed and mapped against each of the character areas to produce the map shown above.

The main recurring comments are to improve facilities for small boats, encourage maritime industries and associated services, improve berthing for visiting vessels, create pontoon moorings in Coal Harbour, more boat storage, a second slipway and associated marine facilities.

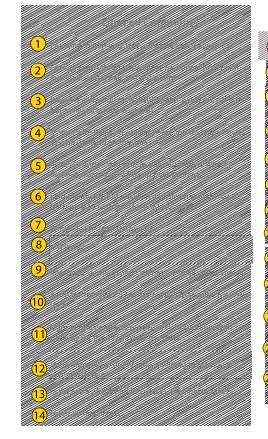






Figure 05.88 - View over coastguard cottages

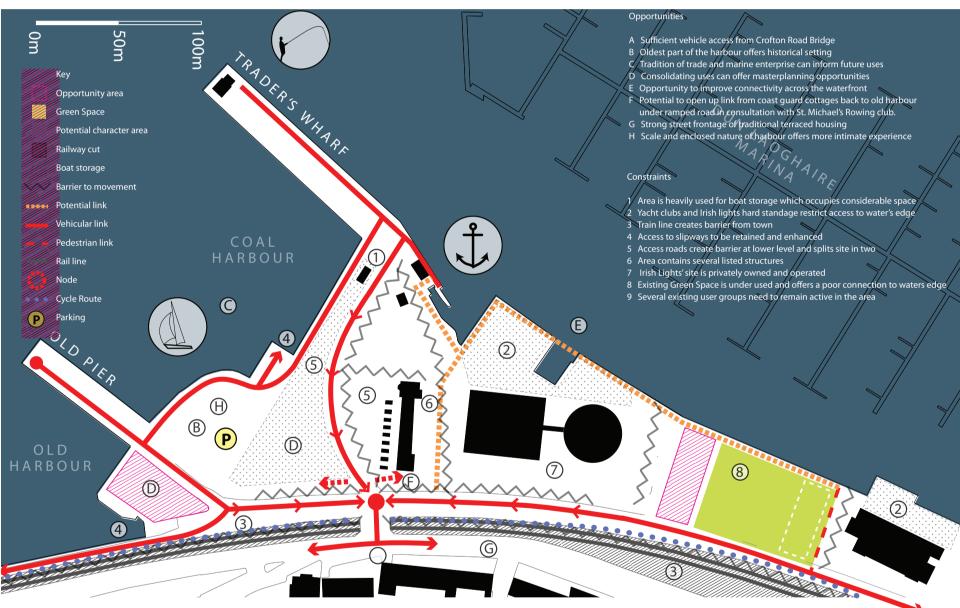


Figure 05.89 - Opportunities and constraints

Constraints

The site analysis and stakeholder comments have influenced the opportunities and constraints plan shown above.

The only vehicular access is down the ramp off Crofton Road bridge.

The existing depot and marine uses prevent public access to the water's edge and deny a continuous waterfront promenade linking this area to St Michael's Pier to the east.

The area contains several listed structures that must be respected and the coastguard cottages and Irish Lights buildings define the scale and bulk of development in this vicinity.

Some properties on the town side of Crofton Road enjoy views over this area and so height is an issue if proposals exceed the existing buildings. The slipways are well used and there is an extensive area of boat storage. The Green Space is a summer event place and apart from West Pier is the only sizable grass area in the harbour.

Opportunities

The Old Harbour and the Coal Harbours are the original Harbours and their listed structures establish the scale and character that any new proposals must protect and enhance.

The vehicular access from Crofton Road Bridge is good. A pedestrian link along the quay beside Irish Lights is possible but will require negotiation.

The existing maritime uses establish the working quayside character of this area and should be encouraged to consolidate here creating employment and training opportunities.

The area between the ramp and the cottages can accommodate low rise buildings for maritime uses, chandlery sales, boat hire, fishing and diving facilities and a café and some residential use.

A major civic gain would be the continuous quayside walkway shown on the plan and any proposals for the Green Space should try to incorporate outdoor summer functions until similar venues are provided elsewhere on the Harbour lands.



Old Harbour - masterplan proposals





Old Harbour - Site Strategy

Figure 05.91 - proposals for a marine enterprise cluster

Movement Layouts, Linkages and Waterfront Access

The masterplan illustrates the proposed quayside walkway that would achieve the desired linkage to the east which would need safety management measures as it is a working quay.

Type of Development Proposed

The masterplan promotes this area as a marine enterprise cluster. The plan shows a single new building beside the coastguard cottages as well as two potential new buildings on the expanded Green Space.

The westerly building line should follow the road curve, whereas the easterly one should be parallel with the cottages. The industrial/business uses suggests a cluster of small new buildings in a courtyard layout that creates shelter and sense of place.

Demolition, Reuse, Reclamation, Refurbishment, New Build

The new buildings in the form shown are appropriate and viable. There are several listed structures which will be preserved and which inform the character of any new works.

It is proposed to extend the Green Space into the sea to achieve a more successful waterside connection.



Figure 05.92 - Land use plan

Quantum

Marine centre: 750-1000 m2 GIA
Enterprise 3500 - 4200 m2 GIA
Residential 1000- 1200 m2 GIA
Marine recreation building 400-600 m2 GIA

Land Uses and Flexibilities

Land uses beside the coastguard cottages would be marine enterprises including boat building and repairs, chandlery, commercially related office businesses and such like with parking and a café. Residential use in the cottages could be retained and possibly expanded as it offers 24/7 activity which adds interest and assists security. The non-residential use of the cottages could be enterprise offices and the tower could be a café with a management suite above. Surface parking and short term boat parking will be needed for these operations.

Land uses in the Green Space would be enterprise use and marine related leisure. These uses provide activity and passive surveillance to the Green Space.

A Marine Utilities Centre is shown at the corner of the Old Harbour, it being one of the few places where a small building is appropriate and one that could provide the absent facilities sought after by the multiple users of this area. It will provide toilets, locker and changing rooms for divers, sailors, and others. Lock-up stores are proposed and there would be a first floor meeting space and management office.

Height, Scale and Massing

The illustrations shows a workshop-like building beside the coastguard cottages, approximately 6m high for boat building with potential for a mezzanine office. The form will need to be sub-divisible for separate businesses to have frontage and eight units are illustrated. The character of the building should capture the marine/quayside aesthetic with preference for a simple roof profile clad in dulled metal or for a "green" or "brown" roof construction since the roofscape is looked down upon from Crofton Road neighbours. The walls could be stone for robustness at ground level with upper level clad in timber or metal. The shutters and workshop doors should be in metal or natural timber; fittings need to be appropriately scaled and weather durable.

The building on the west side of the Green Space is three-storeys and flat-roofed. It is perpendicular to Crofton Road so as to minimise intrusion into the prospect of adjacent residents. This scale and plan are appropriate to frame views to the east side of the Irish Lights circular office building. The building to the east of the Green Space should be single storey. Materials need to be robust for the exposure of the site - not render as it weathers poorly and not brickwork as that would mimic the cottages - hence pale coloured inert panels. Balconies should be recessed rather than cantilevered. The materials palette should be respectful to The Commissioners of Irish Lights building.

The Marine Utilities Centre would be two storeys high and the materials palette would be the same as the workshops described above.

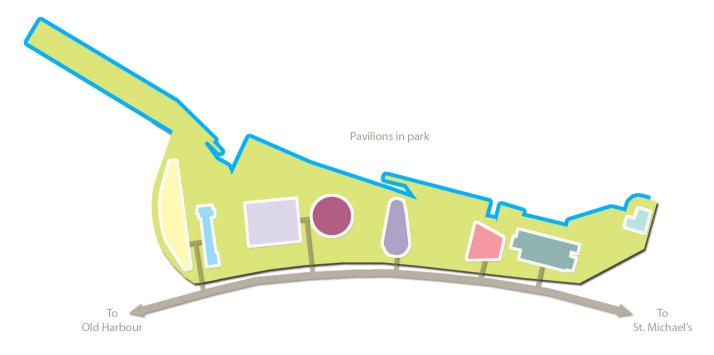


Figure 05.93 - Setting up of pavilion buildings along the coastal park

Outline Design Code

The aim of the Outline Design Code is to help create a coherent pattern of development throughout this area of the harbour and is a key part in delivering high quality design. The design codes outlined here are intended to guide the design process, help create better designs and help set design parameters for planning applications. These Design Codes should be read in conjunction with the policies of the heritage management plan.

This document should provide strategic guidance on key aspects of the development of the harbour. However it is not an exhaustive code and further, more detailed, work will need to be carried out. It should be sufficiently flexible to allow the creative abilities of architects to be coordinated, but not limited.

The guidelines will be implemented through a series of design workshops and discussions through RIAI workstages 1-4. In order that the document remains current and useful, periodic updates will be required.

Public Realm and Open Space Strategy

The public boatyard area including the Coastguard Buildings, its gardens and adjacent areas should remain generally in boatyard use. Consideration should be given to a reorganisation of the boatyard to improve its utility and capacity and to improving the standard of its facilities. Boat stacking options should be reviewed. Layouts and management arrangements should ensure continuity of a substantial level of public access to the waterside. Some migration of boat-storage uses away from required public realm routes will be necessary. The harbour masterplan should propose a public access plan across the harbour and that will need particular consideration in the Boatyard area.

Consideration should also be given to the development of a cluster of marine services activities in a refurbishment of the Coastguard Buildings to include new accommodation in some of the gardens and adjacent areas. This concept should be further assessed as a priority.

The car-parking areas serve a purpose and should generally be retained. However, the centre car-park adjacent to the boatyard should be considered for occasional use as a major rally point and dry-standing for race and other marine festival events.

The interface between the boatyard and the Commissioners of Irish Lights building should be enhanced and opportunities explored with Commissioners of Irish Lights for future levels of integration of public boatyard activities and the workshop and yardage of Commissioners of Irish Lights.

While managing the demands of existing and potential new users, for improved facilities etc., it will be necessary to balance this demand with an awareness of the limited capacity of this area to accommodate substantially greater intensification of physical infrastructure without damaging its cultural heritage character. This will be carried out in consultation with the recognised traditional user groups of this area. A Public Boatyard Users Forum is established to ensure a robust consultative process with users.

Other areas of public realm improvement include:

- eliminate car parking from the Old Pier and Trader's Wharf. Maintain these piers as functioning berthing piers for a diversity of boat types and events
- ensure the inscribed Roman numeral depth markings in the quay wall between Trader's Wharf and Old Pier are not damaged or obstructed
- explore opportunities to establish any surviving archaeology relating to the former Martello Tower and Battery or, the original Dún of King Laoghaire
- To maintain, preserve and present the surviving elements of marine engineering heritage which are located in this part of the Harbour, including the former crane tracks, turntable and bogey, as well as the areas of historic granite paving, bollards, etc., which survive here and which are a distinctive part of this area's character

The Green Space is designed to connect with and service the marine enterprise units by offering an inviting public space for the whole community. The park should contain areas of open grass, colourful planted beds and benches.

The paths of the park will be laid from a combination of natural stone, and high-quality concrete pavers. While the park generally should feel open, it should also have eye-catching elements such as feature trees offering the experience of spring blossom or autumn colour. The botanical richness of this park should also look to exploit any ecological potential.

Streetscape and Active Frontages

The character of the Old Harbour consists mainly of heritage buildings sitting in space rather than defining it. As such, it is impossible and inappropriate to provide active frontages everywhere. However, the main spaces in the area will be addressed by the buildings sitting in them so that the intimate character associated with this part of the harbour can be retained. Consequently, the active accessible ground level uses are located along the waterfront and in the major public areas such as the Green Space and marine service's cluster.

Materials

It is envisioned that The Old Harbour will have an architecture and public realm which is respectful to its heritage environment. Many cues can be taken from the receiving environment such as materials, scale and massing and building design should be of the harbour rather than the town aesthetic. The design commissions will be carefully managed by the Harbour Company to secure the very best contemporary outcomes.



Figure 05.94 - landscape precedents

Landscape Strategy and Streetscape

The ground plane around buildings and thoroughfares should be large panels of utilitarian surfaces with emphasis on granite channels and edgings, with heavy drain covers and fittings; all in sympathy with the existing surfaces around Crofton Road bridge. Street furniture must be of a scale and materials reflecting the harbour context, and not suburban in character.

Planting might be minimal and in large containers since the ground is hard surfaced with little top soil and the site is exposed. The exception is the Green Space which should remain dominantly grass as the soft-surfaced space on the necklace of places along the waterfront. The new edge to the marina opposite the grass could be stone steps to provide a safe edge, access and informal seating for water side events.

The public realm should maintain and enhance the functional working harbour character of this area. Materials utilised should reflect this character of the proposed spaces, and be largely of poured surfacing type. Materials utilised should also have a "gritty" harbour side character to reflect the areas cultural heritage and context. Materials such as asphalt, poured concrete, exposed aggregate concrete and in more amenity areas resin bound gravel would be appropriate. Materials utilised should be sympathetic and in character with the existing granite quay walls and remnant paving elements. Careful consideration should be given to the design and detailing of paving junctions, expansion joints and edgings. Materials chosen should be carefully considered to cater for the demands of Universal Accessibility, and allow for the colour contrasts and delineation required.

Historic paving elements and edgings should be preserved in-situ. In areas adjacent to historic paving elements, care and consideration should be given to the restoration of the legibility of these elements. Materials utilised should be sympathetic and in character but maintain a clear visibility between the old and new materials.

The use of bollards should be minimised, with more subtle means of delineation utilised wherever possible. A Way-Marking Strategy should be developed to ensure legibility of the spaces.

Planting is not appropriate in this area and should be limited to seasonal planting boxes to highlight key building entrances and nodes of activity.

Landscape Management Issues

The Green Space would be managed by the adjacent development and maintained as a public amenity. The quayside facing Coal Harbour needs a management regime to which all users contribute so once re-organised it will be well kept.

Materials should be selected based upon a considered life-cycle costing analysis. Materials should be functional and robust and easily replaceable. All areas should cater for vehicular overrun and also the turning movements and weights of large vehicles and trailers.

Planting should be carefully selected to survive coastal exposure and to require a minimum of maintenance.

A stock of 5% of hardworks materials should be held to allow for swift replacement and repair of damaged areas.

Amenity Strategy

The Harbour Company will need to negotiate the link in the coastal walkway across the north side of the Commissioners of Irish Lights buildings. The Green Space proposal will offer a stronger waterside connection by stepping the land down towards the sea. The proposed developments are modest in scale but will increase activity and make the area more attractive and safer to visit than is presently the case.

Water Space Strategy

Coal Pier Zone - This area should be used for a more intensified mooring arrangement. Consideration should be given to the development of a c.150 berth public pontoon mooring arrangement for motor boats and other smaller boats. A feasibility study should be undertaken to examine the potential. The public slipway should be kept clear for continued use.

Trader's Zone - The existing dominant use of this zone for commercial fishing boats should be encouraged. Opportunities for fishing charter trips and day boat hire should be encouraged. Consideration should however, be given to relocation of the fishing boat use to the north face of the wharf and to increasing the available area in the Coal Pier Zone for public marina purposes. In either case, a route alongside the moored boats should be kept clear for access to and egress from the public slipway.

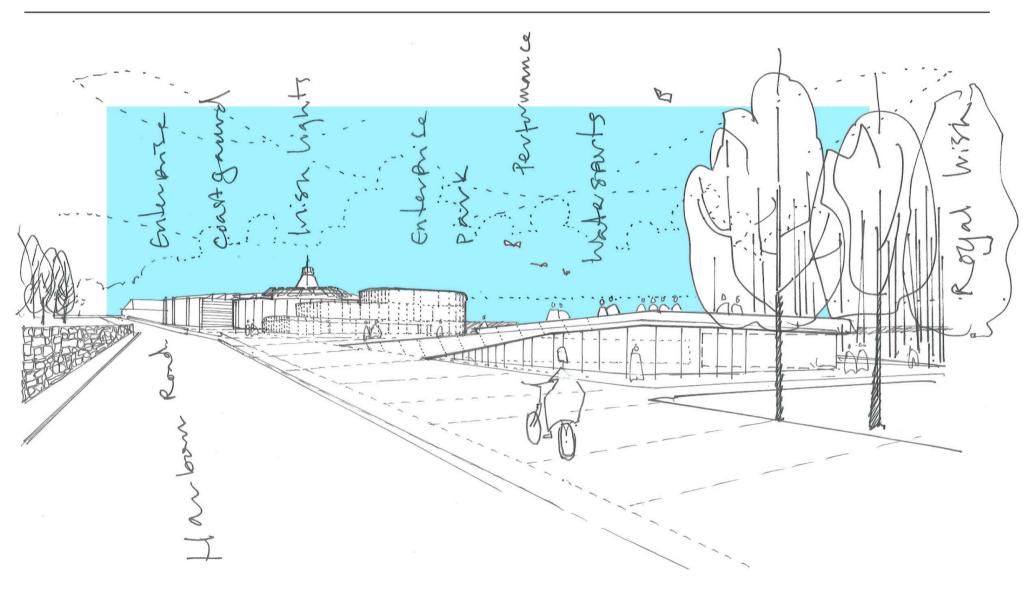


Figure 05.95 - View along Harbour Road looking towards Irish Lights





Figure 05.96 - Dart Station

Figure 05.97- Terminal building

© Paul Crawley

St. Michael's Pier

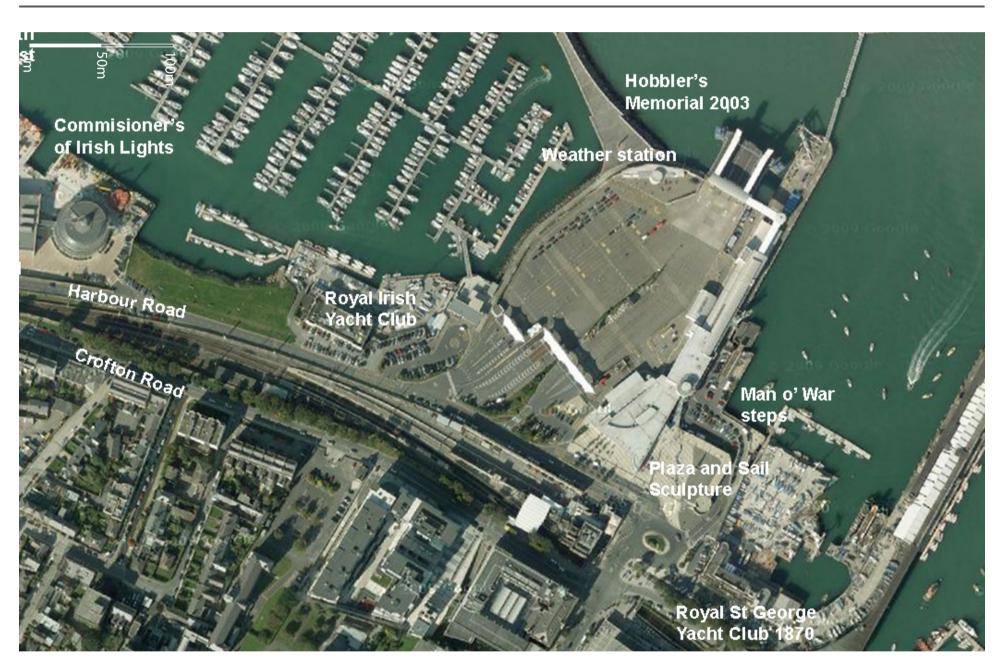


Figure 05.98 - Existing aerial view

Site Description

The maps and descriptions in the Heritage Chapter explain in detail the history of the site and how development on it has evolved. The existing terminal facilities were built in 1996 and a lot of land for it was reclaimed from the harbour to create the car ferry open parking, known as standage, and the related docking facilities.

The Harbour Company owns most of the lands north of the railway line on which the Terminal and standage are located. The existing terminal building and standage cover the majority of St Michael's Pier.





Figure 05.99 © Paul Crawley Figure 05.100 © Paul Crawley

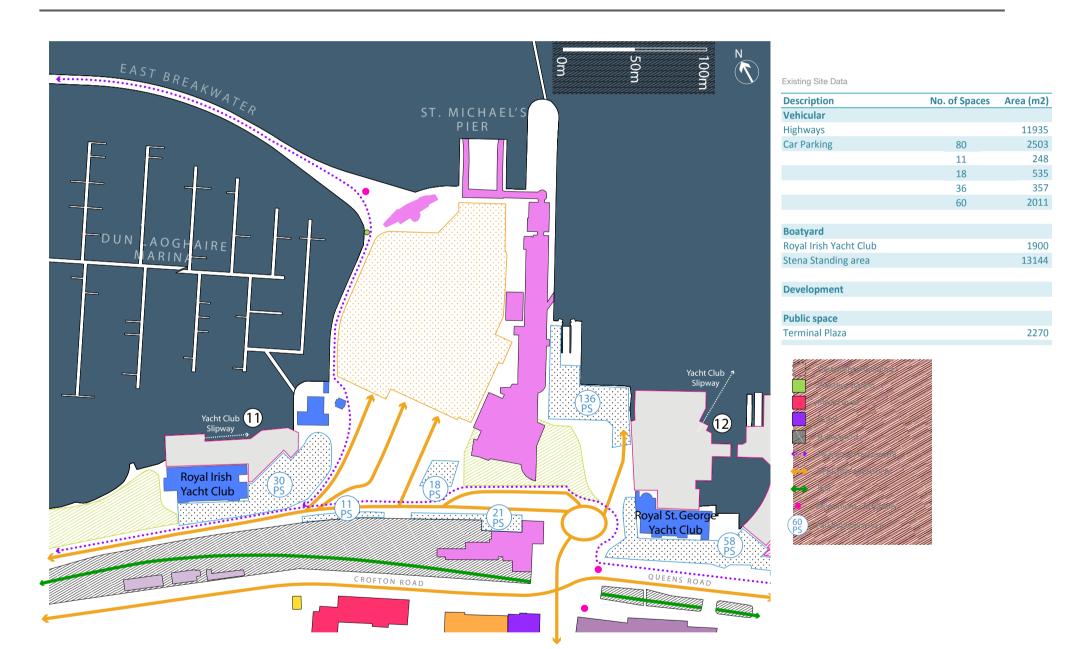


Figure 05.101 - Site analysis

Site Analysis

To the west, the Royal Irish Yacht Club (RIYC) has a private slipway and car parking. To the east, Royal St George Yacht Club (RStGYC) has a large private boat storage apron and facilities for boat lifting and slipway launching and private parking. To the south is the main vehicle and pedestrian entry to the Harbour estate from the junction with Crofton Road, Queen's Road and on axis with Marine Road which leads to the town's main shopping street. The Dart Station and bridge head buildings signify entry to the harbour estate.

Presently, public access on St Michael's Pier to the waterfront is available only at the Terminal Plaza and along the little used narrow footpath to the west side of the standage which leads out onto the East Breakwater. The terminal and standage need secure areas for customs and passport control reasons, hence public access is very limited.

From Terminal Plaza there are views north over the harbour and east to Carlisle Pier. From the west side footpath there are views over the Marina to Dublin Bay. The Terminal has a restaurant at first floor level offering views to the east. There is a carpark under the Plaza.

Importantly the pier standage area is approximately 4.5m lower than the pavement level in front of the town hall.





Figure 05.102 © Paul Crawley Figure 05.103 © Paul Crawley

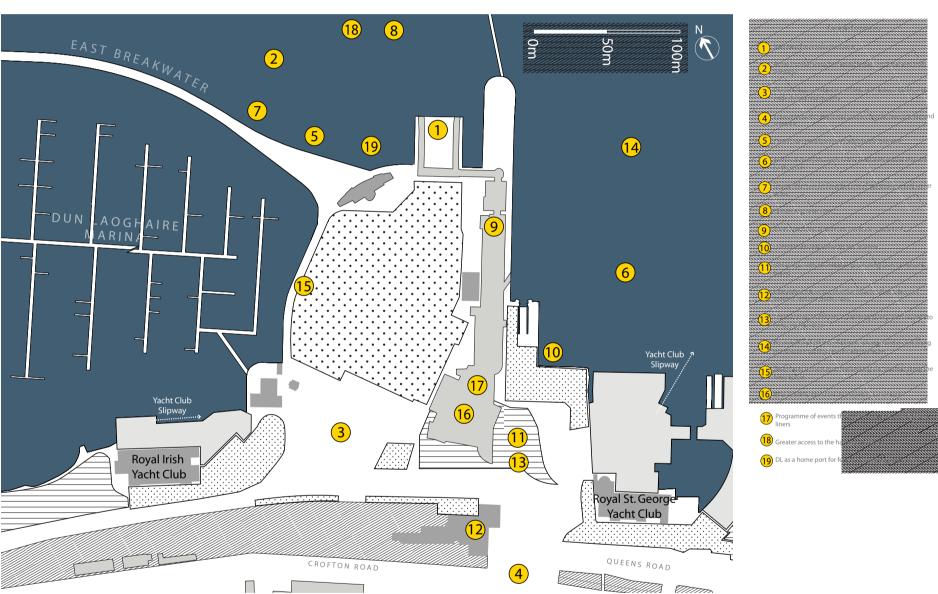


Figure 05.104 - Consultation plan

Stakeholder Consultation

An extensive consultation process has received taken place (see chapter 3) and a number of submissions were received from stakeholders who frequently use this area. They were asked to put forward proposals which could help inform the developing masterplan. These submissions were analysed and mapped against each of the character areas to produce the map shown above.

The main recurring comments relating to this area were the desire to retain ferry facilities and attract cruise ships but avoid adverse impacts, improve public realm and connections to town, reduce standage surface parking to provide more pedestrian access, integrate transport access with the town and other tourist attractions, attract other ships for tourism interest.

Opportunities

The Dart Station and related bus interchange provide exceptionally good city-wide accessibility for the public. Marine Road is the direct connection to the town's retail focus on George's Street and recent pavement widening enhances the pedestrian experience but the separation between the town and harbour is a strategic issue.

The recent covering of the Metals successfully reduces the severance of the railway and provides an attractive promenade and prospect from the town side of Queen's Road. This, and close proximity to the Maritime Museum and the proposed new library suggest strong potential for cultural linkages and a tourist trail to and from the harbour.

Recent developments such as the Pavilions and Marina Square offices set the context for the scale and height of potential future developments in the harbour.



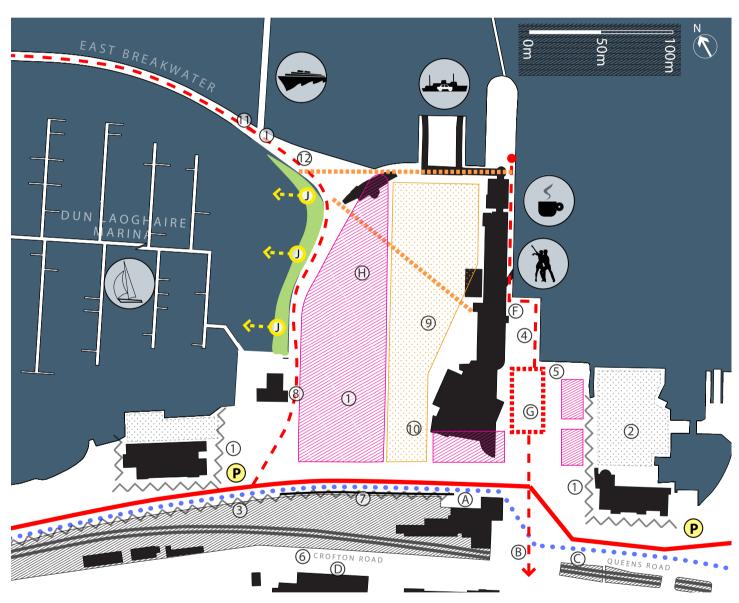


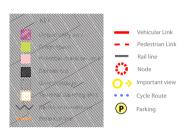
Figure 05.1035 - Existing ferry standage

© Paul Crawley

Figure 05.106 - Existing ferry terminal

© Paul Crawley





- Close proximity to Dún Laoghaire Dart station Good connection back to George's Street. The Metals project creates a better connection back to town
- Recent buildings to south of site offer scale preced Terminal building frontage can accommodate uses offering greater
- Enclosure of plaza can offer protection from elements while framing Large sites available due to reduction of ferry standage
- Views over Marina to Dublin Bay can be harnessed

- Yacht club hard standage restricts access to water's edge Train Line creates barrier from Town
- Wall restricts view to water from town (wall around plaza) Bus standing obstructs visual link to harbour
- Access to breakwater is hidden 50% of ferry standage to be retained
- Large surges of ferry traffic will need to be accommodated in the
- Cruise is on opposite side of pier to ferry terminal

Figure 05.107 - Opportunities and constraints

There was an historical link across the waterfront side of the Royal St George Yacht Club. Over the lifetime of the plan opportunities may arise to investigate the reinstatement of this link to facilitate easier public accessibility between Carlisle and St Michael's Piers.

A major civic gain could be the continuous quayside walkway shown on the plan. The Plaza is an exposed space and if more enclosed by new buildings with active frontages, it could become the sheltered focus for tourists in the Harbour. The Plaza could become the venue for outdoor functions all year round protected on its east side by a new plaza building.

Constraints

The site analysis and stakeholder comments have influenced the opportunities and constraints plan shown opposite.

The primary vehicular approach is on the axis of Marine Road to the roundabout at the junction with Harbour Road. This junction is unpleasant for pedestrians to negotiate and accentuates separation from the town, which has existed since the railway was built.

The Dart station has a fine listed stone wall on the harbour side of the tracks but its height obstructs visual connections to the pier and makes an inactive frontage on a key approach.

The two yacht clubs' privatisation of their waterfronts means there is no continuous public waterfront walk. The absence of a safe attractive promenade along this part of the estate is a major drawback that the masterplan has to address. The pedestrian experience and linkage to the west is equally poor which means the East Breakwater is an unappreciated

Even with reduced ferry traffic there will be accumulations of cars queuing to embark and surges disembarking; these will need traffic management measures.

Building height is a key consideration in this area, and the dominance of the Town Hall tower and church steeples are the town's silhouette signature which must be respected.



St. Michael's - masterplan proposals



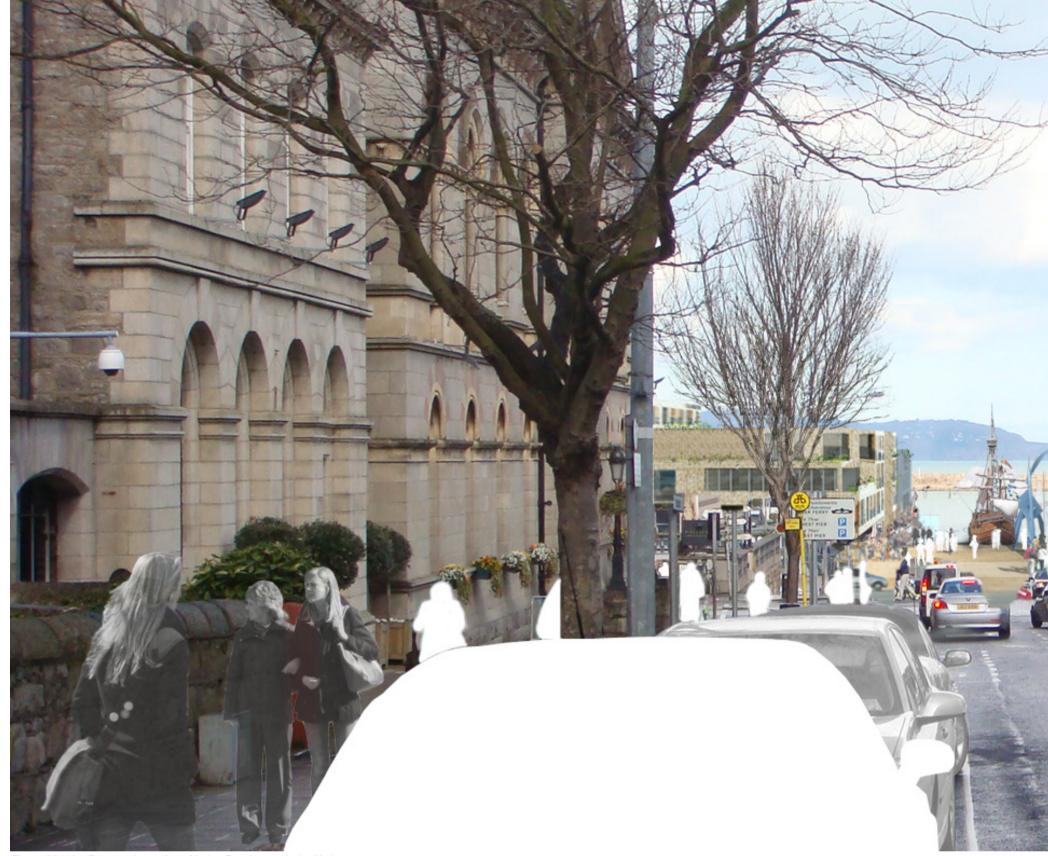


Figure 05.111 - Proposed view from Marine Road towards the Harbour

St Michael's Pier - Site Strategy

This site is the only significant development opportunity on the harbour estate resulting from under used ferry facilities and therefore readily available, relatively unencumbered land. Potential fortuitously coincides with its ideal location in a prime position for the transformation of the harbour to a tourism and leisure destination.

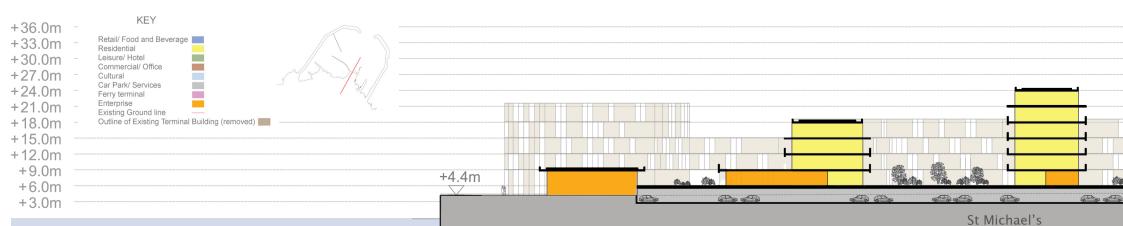
The residual ferry functions are compacted into the centre and north of the site thus liberating the conspicuous public facades to east, south and west for high value leisure and tourism functions. Residential development is proposed for the upper levels. In response to the public consultation concerns at the potential privatisation of the quayside, all homes will have balconies or access to podium level communal gardens and no private waterfront gardens are proposed.

The potential forms of the superstructure buildings are explored and evaluated in the massing studies illustrated.

Movement Layouts, Linkages and Waterfront Access

The masterplan illustrates the consequences of compacting the terminal functions and liberation of the west side of St Michael's for early development. Ultimately, terminal facilities are concentrated at the end of the pier and the ferries would use Berth 5; potential cruise ships invoke the need for a new mooring pontoon shown as Berth 6. Operations will necessitate coach and service vehicle use of the new wide west promenade but in cruise mode only. St Michael's Pier is equivalent in size to a large city block and would benefit from an east west pedestrian route. This is an aspiration and difficult to achieve because of level changes and the need to bridge over the ferry operation's secure zone.

The establishment of a pedestrian access between St Michael's Pier and Carlisle Pier should be considered over the lifetime of the plan. This would deliver an explorable tourist loop and improve pedestrian access to the proposed Carlisle Pier destination attraction. The plan for such a pedestrian link would take full cognisance of the operational requirements of the Royal St George Yacht Club and other harbour users.





Type of Development Proposed

The masterplan proposes the four frontages of the site have different characters responding to their context and functions.

- The east facing facade to the plaza and harbour to be leisure and tourism;
- The west facing to the marina to be marina related activities;
- The north facing the harbour to remain the ferry/cruise operations using Berth 5 and possibly a new Berth 6 for cruise ships along with the compacted ferry operations;
- The south frontage to the station to be tourism attractions, local retail, and vehicular access to the reduced ferry standage, and other functions.

Demolition, Reuse, Reclamation, Refurbishment, New Build

Clearance of the western side of the standage will permit development there in the early phases, once the ferry operations have been compacted to the north of the site. Redevelopment of the existing ferry terminal will depend upon market strength; and interim uses for the vacant areas within it are being considered.

The masterplan envisages that St Michael's Pier will be completely redeveloped in phases. All new development will be within existing dry-land areas.

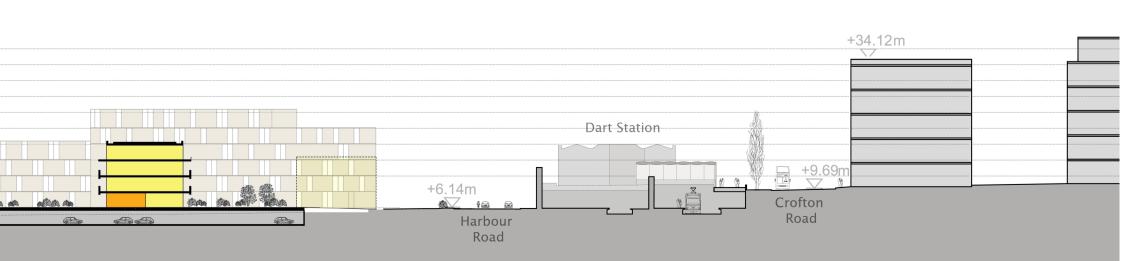




Figure 05.113 - View towards east side of St. Michael's Pier from Carlisle Pier

Land Uses and Flexibilities

The Harbour Centre is the heart of the future leisure and tourism harbour-front and is the water-space area most visible from Marine Road and to the town centre generally. The quayside will be made more easily accessible to the public. A lively mix of uses are proposed at ground level along the east frontage including tourism-related attractions and access points to upper levels. This unique waterfront setting will accommodate stylish restaurants, cafes and bars as well as a host of attractions, entertainment, and retail opportunities such as gift and souvenir shops.

On Levels 1-5 the proposed land uses are - hotel, residential, and related offices and communal amenity space.

The west frontage would be marina functions comprising at ground level facing the water: marine enterprise offices and workshops with associated marine retail, and café/bars. On levels 1-5 the proposed land use is residential.

The north frontage to the harbour would be mooring piers and ferry gantries which will involve new and reconfigured facilities. Cruise operations would invoke need for a new Berth 6 and periodic service vehicle access along the new west facing promenade.

The south frontage uses will provide active frontages at ground level comprising a destination attraction to the east, vehicle access points in the centre, and local retail to the west. Upper levels would be residential, hotel, and related offices. The centre of St Michael's Pier is the reconfigured standage with parking for the residential and other uses at a sunken ground level, and the standage car parking is above and would be uncovered.

The marine tourism uses will provide the desired waterfront vitality, and the residential and hotel uses on upper floors will bring a 24/7 presence, add variety, and help security.

Height, Scale and Massing

The illustrations below show 4, 5, and 6 storey buildings of shallow depth plans suitable for the land uses described.

Several different layouts are possible and the timing and phasing of the residential development will influence the final version so those illustrated are indicative only. All apartments will have balconies and some may share podium terraces but there will be no private garden frontages onto the quayside.

Quantum

Retail / Cafe/ Restaurant/ Bar /

 Food & Beverage:
 6000-7000 m2 GIA

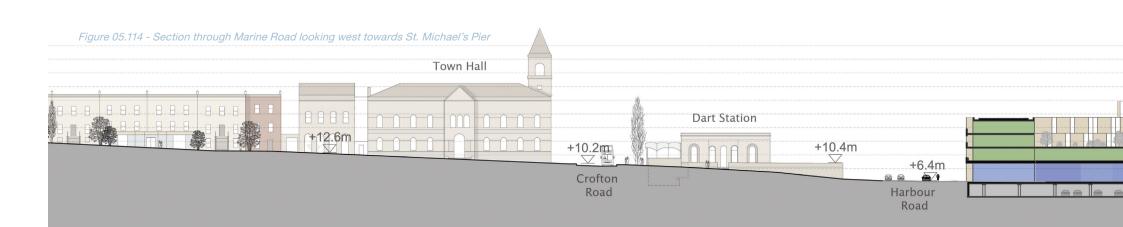
 Residential:
 28000 - 30500 m2 GIA

 Enterprise:
 800 - 1200 m2 GIA

 Ferry terminal:
 2000 m2 GIA

 Hotel:
 5000 -6000 m2 GIA

 Commercial Leisure:
 2000 - 2500 m2 GIA



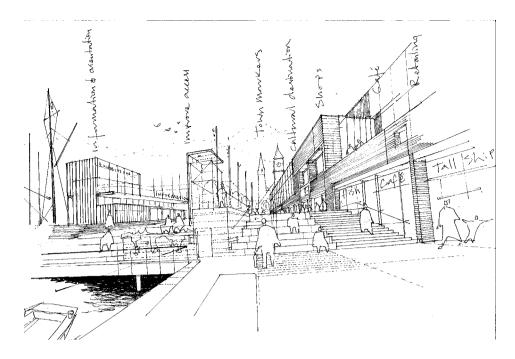


Figure 05.115 - Sketch from St. Michael's Pier looking north towards Marine Road



Figure 05.116 -Sketch looking over Harbour Plaza



Figure 05.117 - podium level plan



Figure 05.118 - Alternative layout option

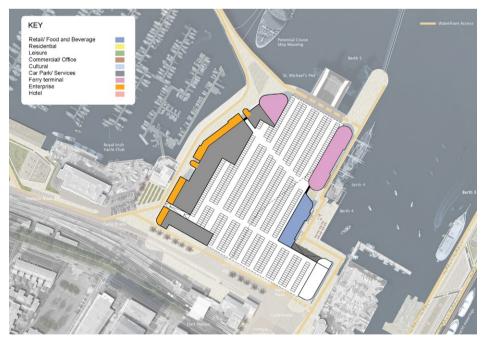


Figure 05.119 - Lower ground plan



Figure 05.120 - Alternative layout option



The ultimate goal is to deliver a strong urban environment, which creates a self-monitoring and self-policing development and minimises blank or inactive street frontages

Outline Design Code

The aim of this Outline Design Code is to help create a coherent pattern of development in this area of the harbour and is a key part in delivering high quality design. The design codes outlined here are intended to guide the design process, help create better designs and help set design parameters for planning applications. These codes should be read in conjunction with the policies of the heritage management plan.

This document should provide strategic guidance on key aspects of the development of the harbour however it is not an exhaustive code and further, more detailed, work will need to be carried out. It should be sufficiently flexible to allow the creative abilities of architects to be coordinated, but not limited.

The guidelines will be implemented through a series of design workshops and discussions through RIAI workstages 1-4. In order that the document remains current and useful, periodic updates may be required.

Public Realm and Open Space Strategy

There are several public spaces throughout St. Michael's Pier. The largest of these is the Harbour Plaza. This is a focal point where the key streets (Marine Road and Harbour Road) are collected. This civic square is an important social "collector" and the first place of arrival when arriving at the harbour from the town or by train or bus. The aim is to recover the urban character of the earlier Marine Road/Victoria Wharf relationship which provided a strong visual and physical connection between the town centre and what was then the centre of the Harbour (as evidenced in some of the historic photographs). In doing so, improve the presentation and integration of the surviving section of Victoria Wharf as part of a new Harbour Plaza.

This space contains a flexible area of approximately 60x30 metres for exhibitions, markets and gatherings and also the major pedestrian entrance and exit to the podium car park.

Two further squares are defined at the western side of St. Michael's Pier, as Marina Place and Breakwater Place. These are smaller, more intimate and sheltered than Harbour Plaza.

Marina Place is west facing and collects minor, pedestrian routes from the south as well as from the western quayside. This is a suitable location for a retail/ food and beverage kiosk and entrance/exit to the podium car park. Breakwater Place is also west facing and addresses the breakwater pedestrian route. This is also a suitable location for a kiosk and minor pedestrian entrance/exit to the podium car park.

The primary public realm within the St. Michael's Pier area is the esplanade along the east and west watersides. These will be all-weather paved and timber surfaces with smaller spaces arranged along it to create a varied and interesting public realm.

These spaces could be flanked by catering outlets, restaurants and retail units, particularly on the east facing side to provide activity and life onto this

key waterfront, throughout the day and into the evening. The western edge would be an ideal location for marine enterprise and marine-based business units

Other uses these waterfront edges could encourage might be:

- promenade
- location for art installations
- outdoor exhibitions
- outdoor dining
- meeting / seating spaces

Streetscape and Active Frontages

All elements of the streetscape should be coordinated to provide a highly legible, navigable environment.

The masterplan takes a pragmatic approach to street level frontages based on the understanding that it is impossible and inappropriate to provide active frontages everywhere. It is more effective, therefore, to concentrate active uses along key areas within the development. Consequently the active, accessible ground level uses are located primarily along the waterfront and the major public thoroughfares.

These street-level frontages will be carefully designed to provide public uses such as shops, cafes, restaurants, business spaces, and leisure and community uses. This will help to ensure that the edge of the public realmand the extremely important interface between the buildings and the spaces they define - are activated.

The strategy also relies up on private uses, such as entrances to residential units and office lobbies, as a way of activating the public realm by establishing strong "front door to street" relationships across the entire site.

Transport mode interfaces, most notably the Dart Station, Ferry Terminal and potential Cruise Terminal will also serve to activate the public realm.

The ultimate goal is to deliver a strong urban environment, which creates a self monitoring and self policing development and minimises inactive street frontages

Shopfront Heights and Retail Fenestration

Retail unit fenestration should generally be single storey i.e. (4.5-4.8m). A signage zone should be included within this dimension and be consistent across all units. In some places, particularly along the eastern side of St. Michael's Pier, double height fenestration will be permissible. Other non-residential uses may also be located at first floor level.



Figure 05.121 - Landscape precedents

Landscape Strategy

The public realm design should establish the maritime square character and civic status of this important marine environment.

Materials utilised should be largely of "civic" quality. Materials such as natural stone flags and setts, resin-bound gravel, and high quality precast concrete and reconstituted stone paving would be appropriate. Materials utilised should be sympathetic and in character with the existing granite quay walls and remnant paving elements. Careful consideration should be given to the design and detailing of paving junctions, expansion joints and edgings. Materials chosen should be carefully considered to cater for the demands of Universal Accessibility, and allow for the colour contrasts and delineation required. The palette of materials selected should allow for the maximum flexibility and use of the spaces, materials and build ups should be capable of allowing vehicle over run and allow for gatherings such as events, shows, markets, out door cinema and concerts etc. A network of pop-up power, water and drainage points should be provided.

Historic paving elements and edgings should be preserved in-situ. In areas adjacent to historic paving elements, care and consideration should be given to the restoration of the legibility of these elements. Materials utilised should be sympathetic and in character but maintain a clear visibility between the old and new materials.

Street furniture and signage should be used in a restrained and consistent manner. The palette of materials used should reflect the harbour-side character of the spaces, and not be suburban in character. The use of bollards should be minimised, with more subtle means of delineation utilised wherever possible. Consideration should be given to relocation and reuse of the existing mosaic bench art piece the Harbour Plaza

Planting should be of civic character, and mainly consist of trees with a minimum 30-40cm trunk girth size. Selection of species should complement the surrounding mature street trees.

Landscape Management Issues

Materials will be selected that are functional, robust and easily replaceable and the selection will be based on life cycle costing analysis. All public realm areas should allow for regular vehicular over run to minimise the risk of paving failure and to thus maximise the life, durability and flexibility of the spaces.

Planting should be carefully selected to survive coastal exposure and to require minimum maintenance.

A rational palette of hard and softworks materials should be developed, that is easily understood, maintainable and replaceable. A stock of 5% of hardworks materials should be held by the Harbour Company to allow for swift replacement and repairs.

Car Parking Solutions

The car parking strategy at the Harbour (see Access and Transport section, page 109) is centred on a multi functional provision. A single deck of spaces sits directly below the ferry standage areas. Special consideration needs to be given to this deck to ensure that it is a clean safe, pleasant and enduring

Standard car parking solutions will not be appropriate. Where possible the car park areas should be naturally lit and ventilated. Also, soft landscaping should be introduced to enhance the internal environment and provide means of navigation. Above and below ground levels should be 'blurred' to enable a seamless transition of users from the car park to public spaces above. Particular consideration should be given to column spacing, artificial lighting and materials/finishes to ensure good visibility

Amenity Strategy

The significant gains that the Harbour Company can deliver on St Michael's Pier are the improved public access, and view to the waterfront from the Plaza, and on the west facing side, the proposed promenade will be much wider than at present, and with safer forward visibility, the enjoyment of the breakwater walk around the marina will be dramatically improved.

The proposed developments are viable and not exaggerated in scale and are essential to transform the harbour to a tourist and leisure destination for a wider audience than at present. The proposed mix of land uses will bring 24/7 activity and make the pier attractive to both local and international audiences.





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Water Space Strategy

A new cruise ships pontoon berth is illustrated. The feasibility of the cruise ship initiative is undergoing separate assessment. Berth 4 will be decommissioned as a ferry berth so this conspicuous mooring will be available for visiting and /or historic ships thus emphasising the leisure and tourism dynamic of the harbour.

Composition

The architecture of the district will be delivered by a number of architectural practices. Variety will be encouraged but controlled. Architectural treatments should be read together as a coherent whole, whilst providing the opportunity for well coordinated variety. Materiality, massing, fenestration and roof profiles must be coordinated across development plots.

The challenge for architects for the harbour is to deliver variety that is highly coordinated yet not contrived. Overall, the harbour must deliver a distinctive architecture.

Materials

It is envisioned that Dún Laoghaire Harbour will have a contemporary feel to its architecture and public realm. They will provide active frontages and will need to provide larger openings to allow shops, restaurants and other publicly accessible uses to function. Blank or service frontages will be limited to secondary frontages or and the standage areas. Access to car park and service yards will have solid closures that complement the overall building designs.

St Michael's Pier is unlike the other character areas in that it is a much larger scale, comprises different land uses, and does not have the strong heritage cues that prevail on The Gut and the Old Harbour. The context suggests that the materials should contrast with those of the town as the site sits in front of the esplanade and so should be of the harbour rather than town aesthetic. The design commissions need to be carefully managed by the Harbour Company to secure the very best contemporary outcomes.

Materials and construction detailing for new buildings and structures within the Harbour should be of high quality, durability and robustness of material

and execution. Consideration is to be given to the particularly exposed marine environment in the detailed specification and grade selection of materials.

Along key public frontages, notably the east and west side of St. Michael's, the bases of buildings will need to provide shelter to pedestrians through the use of projecting canopies or columned walkways. Materials should be robust to handle the saline environment.

Each building will respond to the skyline with a different expression either on its upper floors or in its roof form. Setbacks or other means of defining the tops of the buildings should be used.

It is further envisioned that each of the character areas within Dún laoghaire Harbour will have a slightly different architectural style in order to emphasise and respond to their unique setting.

Harbour Plaza, the central space of St. Michael's will use metal and glass as its major materials and the expression of the buildings will be based on transparency and layering. The buildings will sit lightly above a very permeable base with a large percentage of large openings and fully glazed frontages in order to cater for retail and food and beverage offers.

The west side of the development will portray a more 'grounded' architecture which will aim to establish a strong relationship to the street level.

Residential Buildings

To maintain a sense of enclosure to the spaces, facades should have a continuous and consistent scale, treatment and character. Consistency can be achieved through common or similar use of materials. Elements such as non-residential buildings can be of contrasting character

The relationship of residential units above ground floor in the harbour will be vital to the security and vitality of the place. Residential accesses should be celebrated in the street scene and made clearly locatable and identifiable through the use of materials, colour and lighting. Residential accesses should be located in all streets (particularly pedestrianised ones) in order to maintain 24 hour usage.









Figure 05.124 - Illustrative image showing the opening up of views from harbour plaza to the water and active frontage along the eastern edge of St. Michael's Pier.

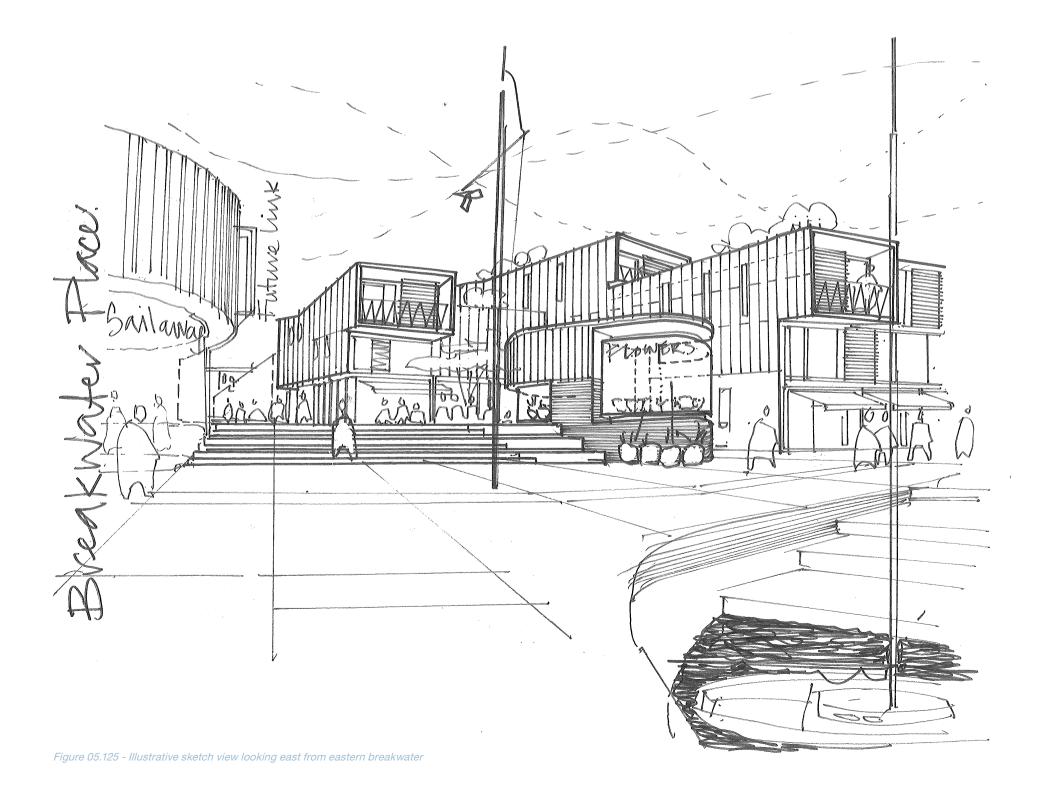




Figure 05.126 -Illustrative sketch view looking west along Harbour Road

This area of Harbour Road will need to accommodate general harbour through-traffic, pedestrian movement and vehicular ferry traffic. There is also an opportunity for DLRCC and CIE to review an enhanced southerly space for bus to train interchange.

This southerly facade will need to incorporate a new condensed access to the standage area and ground floor active frontages.

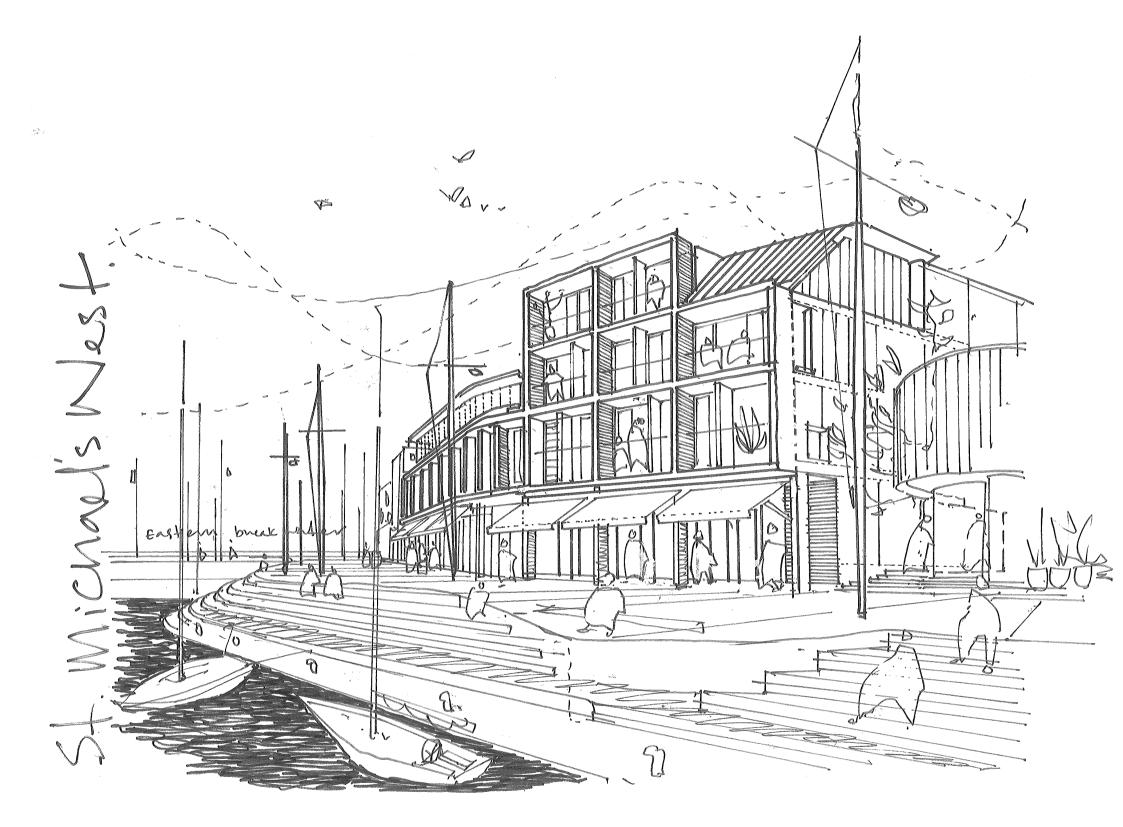


Figure 05.127 -Illustrative sketch looking north along west facade

This west-facing boardwalk could provide a high quality public realm with terraced decking to the water line and active ground floor frontages. Two public places would provide protected environments and access for residents.







Figure 05.129 above -View north along Carlisle Pier

Carlisle Pier



Figure 05.130 - Existing aerial view of Carlisle Pier

Site Description

The maps and descriptions in the Heritage chapter explain the history of the pier and how its structure and uses have evolved.

Carlisle Pier is orientated north/south and raised above sea level to a datum of circa 4.4 m AOD. It extends to approximately 240m, is relatively flat and currently cleared of all built structures. The pier is approached between the Royal St. George and the National Yacht Clubs and is adjoined by the Bank Seat and is linked to the Royal St. George winter boat standage by lock gates.





Figure 05.131 -National Yacht Club

© Paul Crawley

Figure 05.132 -View towards Carlisle Pier from East Pier

© Paul Crawley

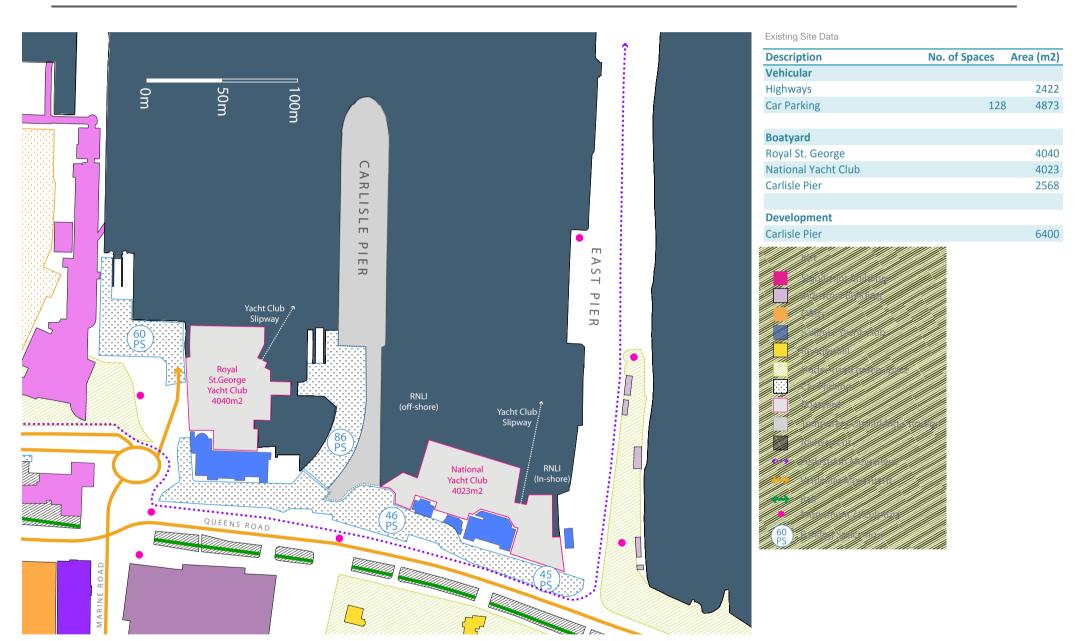


Figure 05.133 -Site analysis

Historically the pier provided moorings for steamers and ships at berths 2 and 3 but larger ships and ferries are now accommodated by berths 4 and 5. The pier has a prominent location and its former use for mail boat mooring and émigré ships gives it a profound place in the history of the Irish Diaspora.

The existing uses on the cleared pier include some car parking, boat storage and other incidental or temporary storage, and occasional use as summertime event space. Other adjacent users are the Genealogical Society, RNLI and Yacht Clubs.



Figure 05.134 - View looking north towards Carlisle Pier

© Paul Crawley

Figure 05.135 - View towards yacht club

© Paul Crawley

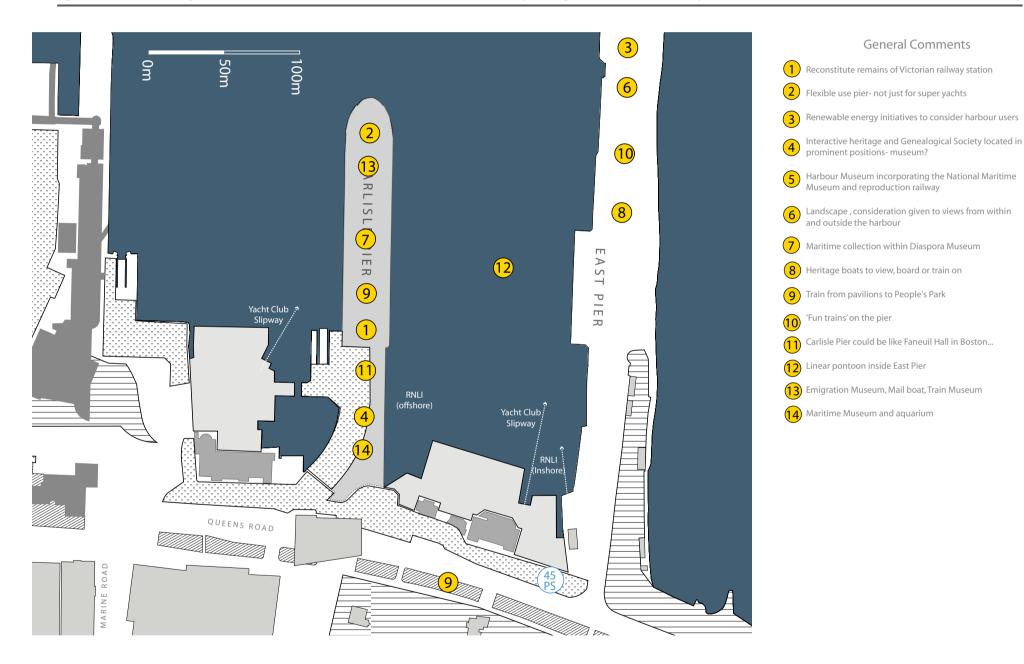


Figure 05.136 - Consultation plan

Stakeholder consultation

An extensive consultation process has taken place (see chapter 3) and a number of submissions were received from stakeholders who frequently use this area. They were asked to put forward proposals which could help inform the developing masterplan. These submissions were analysed and mapped against each of the character areas to produce the map shown above.

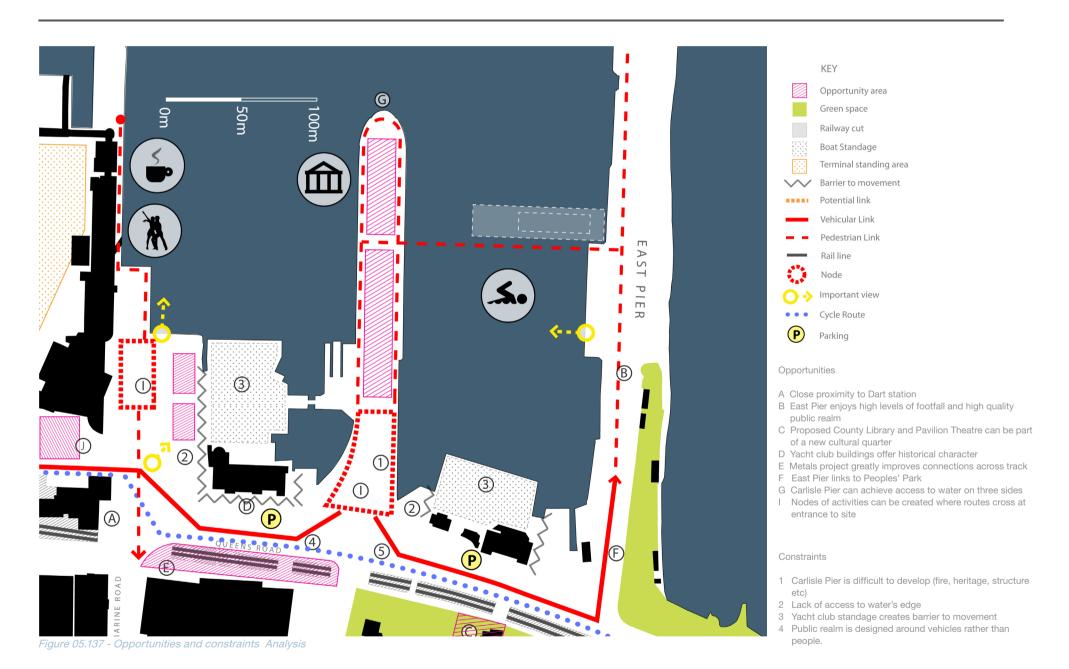
Constraints

The site analysis and stakeholder comments have influenced the opportunities and constraints plan shown overleaf.

There are structural constraints relating to the pier which are described in diagram 7 and it is suggested that any new pier buildings are limited to using the old Carlisle Pier stone structure for its substructure.

Whilst the pier is visually prominent from the East Pier, access to it through the car parking areas of the flanking yacht clubs and pedestrian navigation to it from Marine Road and the town centre is not currently intuitive.

The pier, by its nature, is a cul-de-sac. This lack of accessibility should be improved.



Opportunities

The location, historic use and shape of the Carlisle Pier make it a very appropriate site for a major cultural attraction of international renown and profile (Irish International Diaspora Centre). A new cultural attraction placed on the pier would serve to activate the surrounding public spaces and waterfront areas and provide a landmark within the harbour for water space and land based users.

The vehicular and pedestrian access to it should be improved and this can be done in a variety of ways. The pier proper and any future structures to be built on it could provide very good opportunities for spectator viewing to the water space on either side of it.

The position of the pier within the harbour and adjacent to the yacht clubs means that it could also provide a high quality event space for festivals, expositions, markets and other occasions in the summer months. This new event space could be well linked and used in conjunction with the town centre public spaces such as People's Park and The Metals.

New pedestrian links from the East Pier and across to St Michael's are suggested in order to improve accessibility to the pier and increase pedestrian footfall and navigation to it. The links would become places to view activity over the water space and harbour and improve overall waterfront accessibility. The practicality of these pedestrian routes requires further detailed assessment over the lifetime of the plan to ensure that required marine activities are not adversely affected.

The proposed new baths structure off the East Pier can be formed either against Berth 1 or perpendicular to it and thus provide an effective breakwater for an inner moorings area. The Carlisle Pier site can accommodate low rise buildings for cultural destinations, visitor attractions and associated uses and activities. In addition to these dominant uses, restaurant, bar and café uses would also be appropriate.



Carlisle Pier - masterplan proposals





Figure 05.139 - Precedent waterside at Copenhagen

Site Strategy

Movement Layouts, Linkages and Waterfront Access

The masterplan illustrates and proposes links and walkways to the existing pier site and a major cultural destination building. Access to and views into the immediately adjacent harbour waterspace is improved and a new major public space is proposed at the base of the pier for festival and events. Major new public viewing terraces and decks should also provided at high level as an integral part of the design of any new build structure.

There is potential for additional pontoon structures to be placed on berths 2 and 3 for visiting large yachts and boats.

The vehicular access is retained and an improved way finding method is required. In order to improve the access to and the setting of the pier, parking to the south of the Royal St. George and the National Yacht Clubs may need to be reviewed and/or consolidated.

Appropriate Built Form

The masterplan promotes a long, low and light building form that creates strong presence and landmark character.

Demolitions, Reuse and New Build

The pier structure is currently clear of all structures and future buildings or structures must ensure appropriate re-use of elements of the dismantled former train shed (see outline design code).

KEY Retail/ Food and Beverage Residential Leisure/ Hotel Commercial/ Office Cultural Car Park/ Services Stena Enterprise Existing Ground line Outline of Existing Terminal Building (removed)

Land Uses and Flexibilities

The range of land uses at ground level could include restaurant, café, bar lobbies, ticketing and retail associated with the cultural attraction. The floor(s) above would be utilised for the cultural attraction space with multiple balconies and terraces for viewing. Due consideration needs to be given to flood and wave impact issues.

Height, Scale and Massing

The illustrations indicates that the pier can accommodate buildings of shallow plan depth suitable for the land uses described in the order of 12-14 m tall.

Quantum

Retail / Cafe/ Restaurant/ Bar / F+B: 800 - 1000 m2 GIA Cultural: 6000 - 8000 m2 GIA

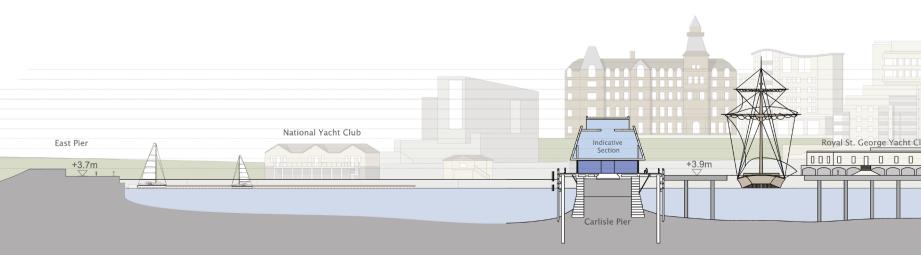
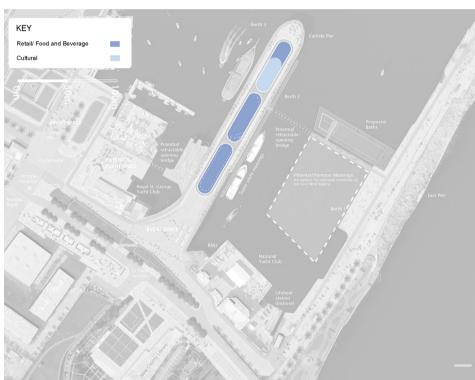




Figure 05.141 - Proposed view towards Carlisle Pier from East Pier





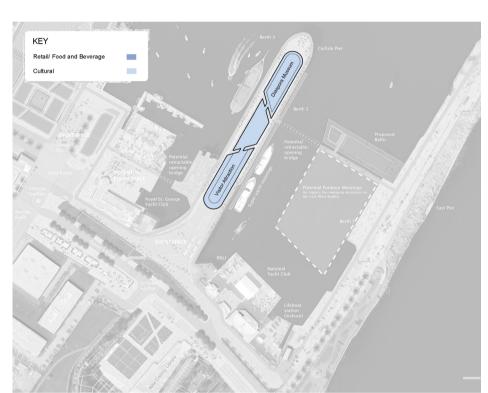


Figure 05.143 - Upper floor uses

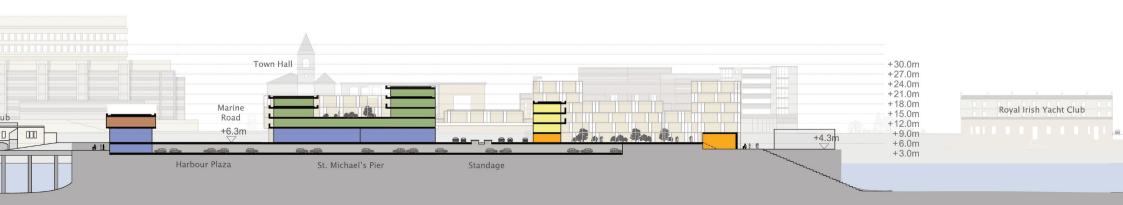












Figure 05.144 - Landscape precedents

Carlisle Pier Outline Design Code

The aim of the Outline Design Code is to help create a coherent pattern of development in this area of the harbour and is a key part in delivering high quality design. The outline Design Codes summarised here are intended to guide the design process, help create better designs and help set design parameters for planning applications. These codes should be read in conjunction with the policies of the Heritage Management Plan.

This document should provide strategic guidance on key aspects of the development of the harbour however it is not an exhaustive code and further, more detailed, work will need to be carried out. It should be sufficiently flexible to allow the creative abilities of architects to be coordinated, but not limited.

The guidelines will be implemented through a series of design workshops and discussions through RIAI Workstages 1-4. In order that the document remains current and useful, periodic updates will be required.

Public Realm and Open Space Strategy

The primary public space in this area is the "Event Space" located at the base of the pier. Measuring approximately 2500m2 it will integrate with The Metals project currently being undertaken on Crofton Road. This strategy will link together the elements of the new cultural quarter.

The intention is that this space would be used to attract international marine and sailing events to the area, being well located between two of the harbour's yacht clubs. The space will be flanked by the Irish International Diaspora Centre to the north and possible market facilities to the south. The existing substation will be integrated into the design or moved during the development of the Irish International Diaspora Centre.

Other uses for this space might be:

- Sailing events
- As a promenade
- Outdoor markets
- Temporary events and installations
- Meeting / seating spaces

The pier structure will be repaired and retained with public access on all sides. The ground floor will comprise mainly of retail and restaurants/ cafes as well as the entrances to the cultural facilities above. Breaks will be accommodated in the ground floor of the building at two locations to allow east-west permeability across the pier.

It is an intention of the Harbour Company to integrate in an architecturally and culturally meaningful way the retained columns from the 1894 railway terminal structure which was dismantled in 2009. This may be as part of the International Diaspora Centre project or as part of the public realm which surrounds it.

Streetscape and Active Frontages

These pier frontages will be carefully designed to provide publicly accessible uses such as shops, cafes, restaurants, and lobbies. This is to ensure that the minimal street frontage is blank, and that the edge of the public realm - the extremely important interface between the buildings and the spaces they define - are activated.

The roadway between St. Michael's and the Carlisle Pier will be activated by temporary uses which could take place in the upgraded shelters currently flanking the route. The ultimate goal is to deliver a strong urban environment, which creates a self monitoring and self policing development and minimises blank or inactive street frontages

Shopfront Heights and Retail Fenestration

Retail unit fenestration should generally be single storey i.e. (4.0-4.8m). A signage zone should be included within this dimension in a consistent manner across all units.

Along key public frontages, notably the east and west side of Carlisle Pier, the bases of buildings will need to provide shelter to pedestrians through the use of projecting canopies or columned walkways.

Materials

It is an objective to ensure that any new structures on the Carlisle Pier, in addition to complying with the special objectives in the Dún Laoghaire Rathdown Development Plan 2010-2016, are designed to be expressive of their unique pier context and are designed, detailed and constructed to ensure durability and building performance over time.

Materials and construction detailing for new buildings and structures within the harbour should be of high quality, durability and robustness of material and execution. Consideration is to be given to the particularly exposed marine environment in the detailed specification and grade selection of materials.

Residential Buildings

There are no residential buildings proposed on Carlisle Pier





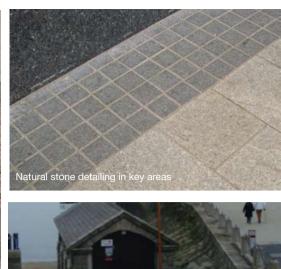




Figure 05.144 - Landscape precedents

Landscape

The public realm should be respectful of the strong heritage and reflect the proposed cultural character of the pier area.

Materials utilised should reflect the use and character of the proposed spaces, and be largely of small modular unit type. Materials utilised should be sympathetic and in character with the existing granite quay walls and remnant paving elements. Materials such as Castlestone, Tegula or Natural or Reconstituted Grantite Sett paving would be appropriate. Consideration should be given to all kerbing and path edgings should be of natural Granite to match the existing. Materials utilised should have a 'gritty' harbour side character to reflect the areas cultural heritage and context. Materials chosen should be carefully considered to cater for the demands of Universal Accessibility, and allow for the colour contrasts and delineation required in Shared Surface Spaces.

Historic paving elements and edgings should be preserved in situ. In areas adjacent to historic paving elements, care and consideration should be given to the restoration of the legibility of these elements. Materials utilised should be sympathetic and in character but maintain a clear visibility between the old and new materials..

The new gateway entrance space to Carlisle Pier should be contemporary in character and utilise high quality modular flag precast concrete and Stone materials. The palette of materials selected should allow for the maximum flexibility and use of the spaces, materials and build-ups should be capable of allowing vehicle over run and allow for gatherings such as events, shows, markets, out door cinema and concerts etc. A network of pop-up power and water points should be provided in all necessary locations.

Street Furniture and Signage should be carefully considered and used in a restrained and consistent manner. The palette of materials used should reflect the harbourside character of the spaces, and not be suburban in character. The use of bollards should be minimised, with more subtle means of delineation utilised wherever possible. A Way-Marking Strategy should be developed to ensure legibility of the spaces.

Planting to the public realm should be of civic character, and should mainly consist of tree planting. Selection of species should be in character with the surrounding mature street tree planting.

Landscape Management Issues:

Materials should be selected based upon a considered life-cycle costing analysis; materials should be functional and robust and easily replaceable. All public realm areas should be designed to allow for regular vehicular overrun to minimise the risk of paving failure and to maximise the life, durability and flexibility of the spaces.

Planting should be carefully selected to survive coastal exposure and to require a minimum of maintenance.

A rational palette of hard and softworks materials should be developed that is easily understood, maintainable and replaceable. A stock of 5% of hardworks materials should be held in stock to allow for swift replacement and repair of damaged areas.

Waterspace Strategy

Smaller visiting cruise ships and super yachts should be encouraged to moor in this zone where there is immediate access to the shore-side attractions and consideration will be given to the formation of appropriate heavy pontoon moorings running off Carlisle Pier for this purpose. Such pontoons should also include provision for general yacht mooring purposes with a view to reducing the swing moorings in the East Bight. Pontoon yacht moorings linking with the existing club facilities should also be considered.

The zone should also host historic vessels and visiting tall ships and other boats which are off themselves an attraction and a public spectacle.

The zone would be suitable as a departure point for boat trips into the bay and around the harbour.

The feasibility of mooring feature vessels off the East Pier should be examined. Uses could include visitor attractions, marine related club-houses and other public or semi-public amenity uses.

Amenity Strategy

The principle gain that the Harbour Company can deliver is the opening of ground level and upper areas of the pier to public access. The proposals are modest in scale but will increase activity and provide the town and harbour with a world-class destination.









Figure 05.145 - © Museum of London

Figure 05.146 - Max Goldman

Figure 05.147 - © Kristina Hoeppner

Figure 05.148 - © Allie Caufield

"'Diaspora" refers to dispersed populations that like seeds scattered away from the parental body, replicate in new locations a culture, a social entity and an identity connected to the homeland."

Why a Diaspora Centre?

- For a country with the largest global diaspora there is no national diaspora centre, no landmark to celebrate and commemorate Irish diaspora in Ireland
- Diaspora tourism is a significant area for growth
- A diaspora centre could act as a catalyst for the integration of the diaspora in the economic, cultural and tourism development of Ireland

Historical Context

The estimates of the Irish diaspora vary from 70 to 80 million.

- 3.1 million Irish citizens currently living outside of the country (2nd
- 800,000 Irish born people are living overseas (first generation)
- The Irish diaspora is highly significant and much larger than other diasporas. The Jewish diaspora is 17m and Indian diaspora is 20m
- The Irish diaspora is visible through politics, business, culture, music and education around the world

Why Carlisle Pier?

- There is a historic and emotive connection between the Carlisle Pier and the Irish diaspora
- As a point of departure, the Carlisle Pier is intrinsically entwined with the history of the Irish diaspora from the mid-19th century
- To mark the role played by the Carlisle Pier, Dún Laoghaire as one of the most significant point of departure for the Irish Diaspora.





Figure 05.154 - Carlisle Pier today

© DLHC/Peter Barrow Photography









Figure 05.149 -

Figure 05.150 -@ Andy Hay

Figure 05.151 - @ Danijel Zivkovic

Figure 05.152 -© Jula Julz

"As a site of memory, the Carlisle Pier is one of the most important in the history of Irish migration. As a potential symbol of the interconnection of Irish and British lives, it is unrivalled" Dr. Brian Lambkin

The Vision

- To be the first international centre of commemoration and celebration of the Irish Diaspora around the world
- To be an architecturally iconic building, a major world-class tourism cultural attraction, drawing over 1 million visitors per year
- To be a centre of excellence for scientific research and genealogy utilising the most modern technology
- A discovery centre to educate and entertain with multimedia and online exhibitions always facilitating interaction and engagement
- Ultimately, to connect over 70 million of the Irish diaspora
- To link technologically with other international diaspora museums



Figure 05.155 - Public building on the waterfront Museum of Liverpool

© 3XN Architects



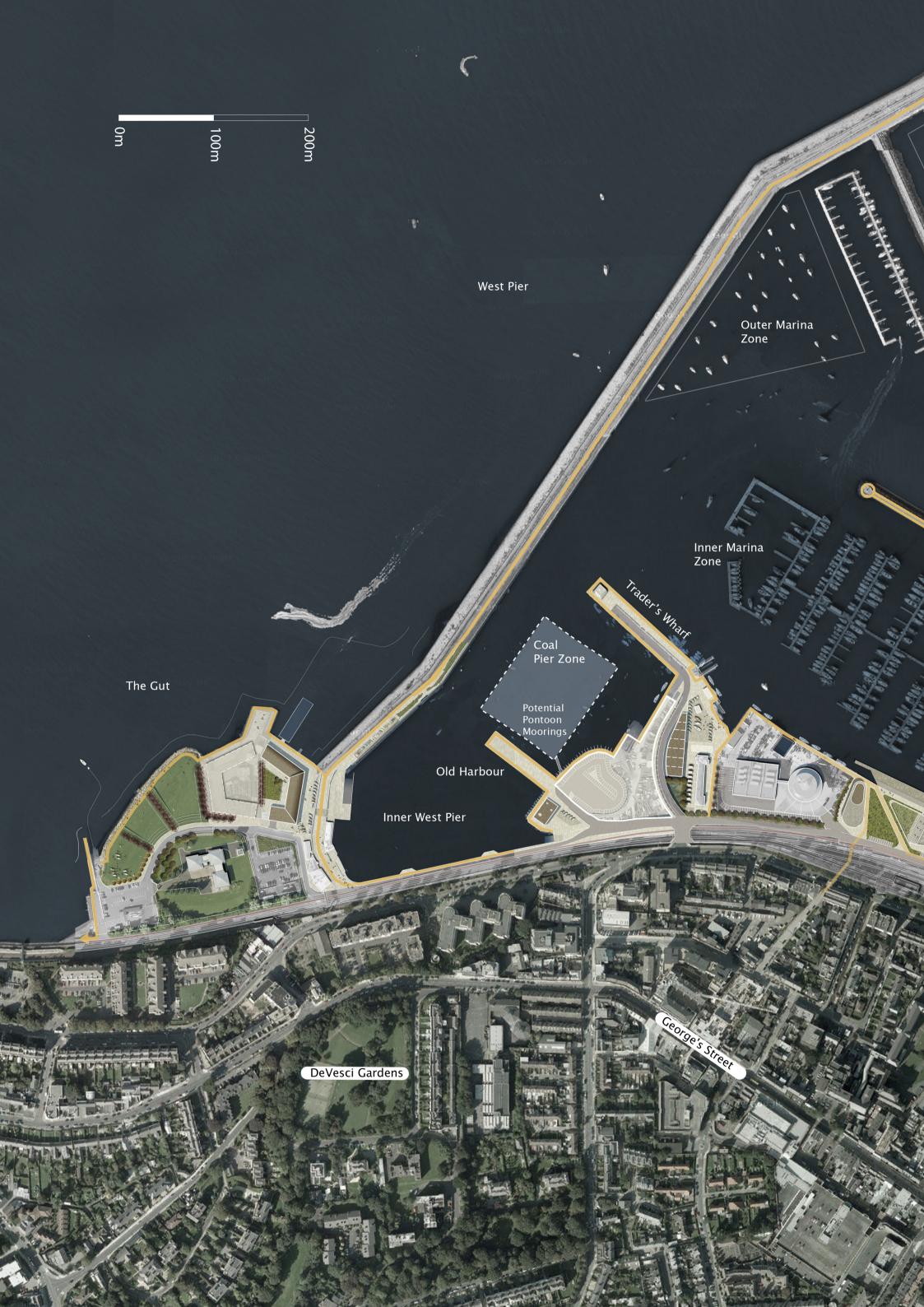
Figure 05.156 - Public quaysides

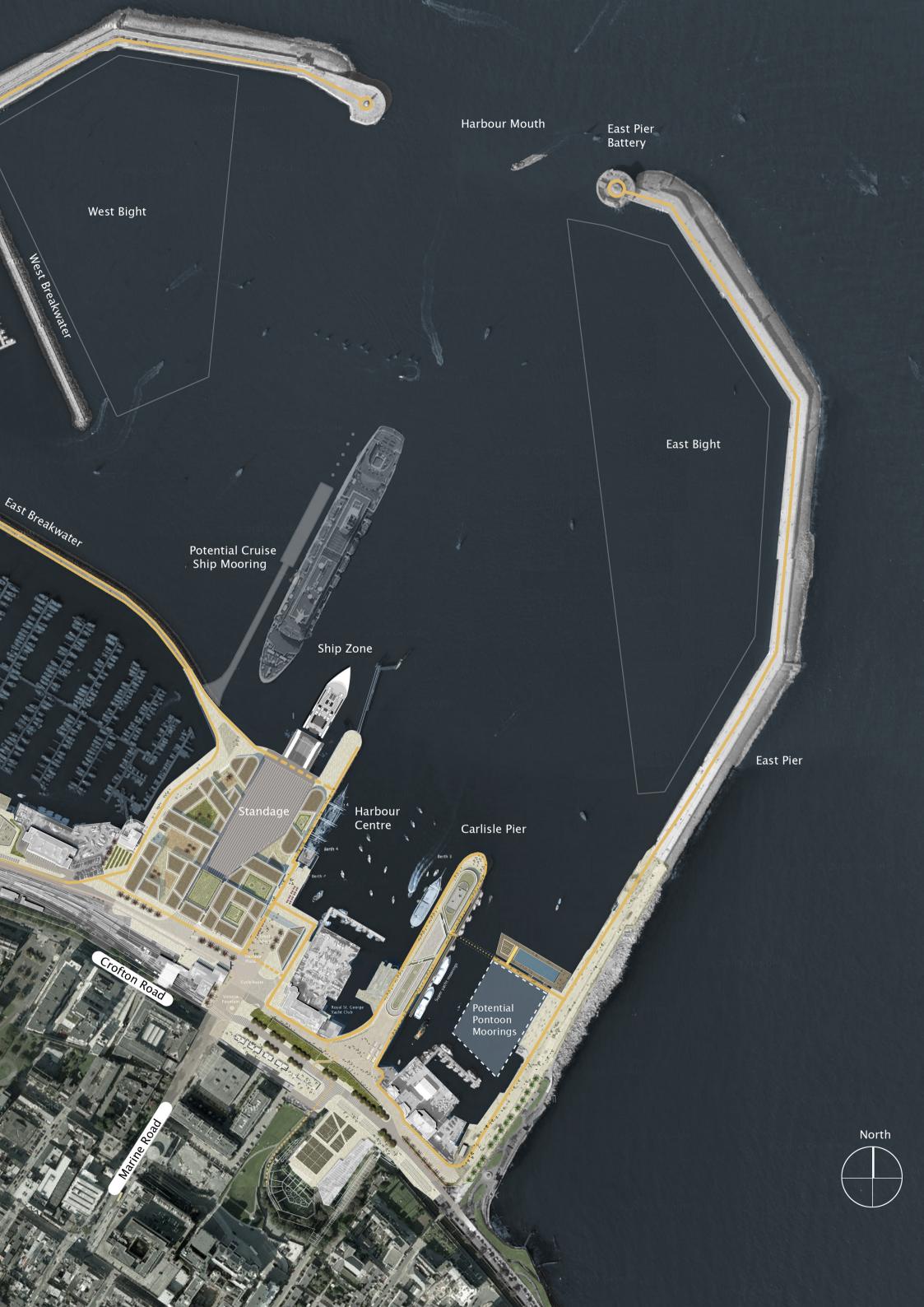
© David Chipperfield Architects



Figure 05.157 - Heritage ships

© William Murphy







06 Economics and Impact

Study Outline

DKM Economic Consultants have prepared an economic impact study of the proposed development to examine the economic potential of this substantial scheme.

This report is laid out as follows:

- Section 1 provides a socio-economic profile of the receiving and wider areas, with particular emphasis on Dún Laoghaire town.
- Section 2 lists the tourism impacts of the proposed masterplan.
- Section 3 analyses the economic impact from the proposed masterplan developments.

The information presented below is the conclusions of this report.

Employment Impact

Employment during construction

On average, every €10 million spent on a construction project generates employment for 100 persons for one year. Typically, 71% of that employment would be direct employment related directly to the construction firms involved, with the remaining 29% indirectly employed by Irish companies supplying the construction firms. A further 40% of induced jobs are generated, as employees spend their incomes on goods and services.

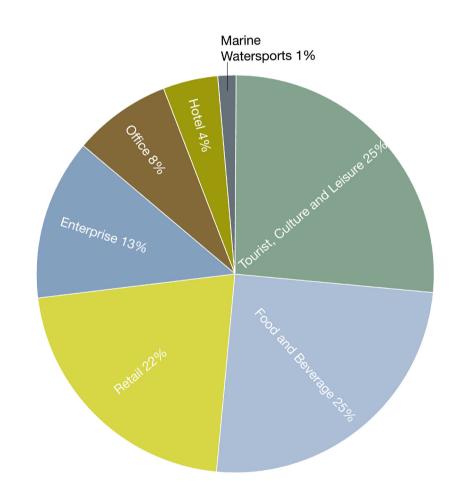
The following bullet points summarise the employment impacts for the total time period covered by the Dún Laoghaire Harbour Masterplan.

- Over a 10 year construction period, opportunities for a total of 2,800 FTE (Full Time Equivalent) jobs will be created.
- Given that the construction sector is continuing to haemorrhage jobs, it can be assumed that there will be no constraints in filling these positions and that most of those employed on site and in indirect and induced jobs arising from the proposed development will currently be unemployed. Therefore no displacement of jobs is envisaged at this stage.
- 200 direct and indirect FTE jobs are expected to be created during each year of the construction phase.
- It is expected that that number will be higher during the peak period of construction, rising to 300 (1.5 times 200).
- An annual average of 80 induced jobs will be created as workers spend their earnings, mainly on retail and services.

Gain = 280 jobs x 10 years of construction employment

Employment Upon Completion

The fully finished development will comprise a mix of uses that is in keeping with the masterplan's vision to develop the Harbour into an international marine, leisure and tourist amenity and destination. It is important to note that some uses are not yet definitively designated. The pie chart below gives the break down as envisaged at this stage.



In addition there will be a local "multiplier" effect, as the workers who are employed in the new development spend some of their earnings in the locale, and this spending generates more jobs locally, mostly in retail and other services. These areas and uses may well change following consultation and need to be seen as indicative only.

Gain = 1000 direct jobs and 400 indirect jobs

Gain= 2800 jobs over 10 years

Net Job Gains

In order to assess the economic impact of the DHLH Masterplan, the issue of displacement and replacement has to be considered. While it is not possible to be precise about the labour market conditions and movements of firms and employees over the full time horizon of the masterplan, it is expected that most of the employment outlined above will constitute net gains to Dún Laoghaire.

Employment Impact of Irish International Diaspora Centre Project

The number of persons to be employed at the Diaspora Project and the other cultural and tourist facilities envisaged for the masterplan are outlined above. However, an attraction that aims to draw 1 million visitors to the town will have an economic impact over and above the number of persons employed within its walls. Making certain assumptions, it is possible to calculate the employment impact of the additional visitor spend to the Diaspora Project. This so-called AVS (Additional Visitor Spend) denotes money spent in the locality after the entry price to the project has been paid. In the absence of survey data specific to the proposed venue, we assume that:

- 21% of the expected 1 million visitors will be residents, and their expenditure in town will not be counted, as it is not strictly additional
- For overseas tourists, the average daily spend is generally used in studies. In 2009, this was €58 per day in Ireland. We assume that spending equivalent to a half day visit might be appropriate for visitors to Dún Laoghaire (€29)
- Domestic visitors from the rest of Ireland would typically spend less: domestic trips made up 26% of all visits to Dublin and only 14% of revenue. Assigning half of the AVS of overseas visitors to those coming from Ireland (€14.50) seems reasonable. By comparison, a study undertaken of museums in the South-West of England suggested expenditure per museum visitor as a result of each museum trip (beyond any entrance payment) was the equivalent of €8.60 for larger museums

Taking out the proposed local visitor share leaves 790,000 "tourists", who are split into domestic and overseas visitors as per Fáilte Ireland research on the Dublin tourist market.

Applying the assumed AVS to these visitors, gives an estimated total spend of €19.9m per year.

It is estimated that up to 200 direct FTE jobs will be created as a result of the additional spend by visitors to the Diaspora Project, based on a projected visitor number of 1 million.

This is clearly a tentative estimate, and it is not clear that all these jobs will be located in Dún Laoghaire itself. We have taken a very conservative route to arriving at the jobs estimate, but it must be born in mind that many assumptions had to be made.

Gain = 200 indirect jobs

Other Economic Impacts

There are clearly many other economic impacts of the proposed masterplan. Unfortunately, not all of these are quantifiable, but that does not make them less important. Community gain will be an impact where numerical values are not attainable.

Community Gain

- At present, 40% of the waterfront between the piers in Dún Laoghaire Harbour is not publicly accessible. The masterplan is aiming to improve waterfront access considerably.
- The mix of uses envisaged for the harbour area encompasses residential, commercial and leisure /tourist uses. This will ensure all areas will be frequented after night fall and the harbour will be safer for visitors and walkers as passive surveillance will be provided through increased foot-fall.

Benefit to Local Authority and Exchequer

Rates Income Generated

It is estimated that the rates liability from the completed masterplan (assuming the development if fully completed and fully occupied) would be in the region of €850,000 - €1,100,000. This is equivalent to 1.4% of the rates collected in 2009, as per the Council's Annual report.

Exchequer Savings Arising from Construction Workers

Given the high unemployment rates among construction workers, it can be assumed that most of the 2,000 workers employed on the site and the employees of the firms supplying the materials and services to the construction effort, are either unemployed or just coming off a completed project, facing unemployment. By not signing on, there is a direct benefit to the Exchequer, which is calculated as (the unemployment benefits that would accrue to the worker) plus (the taxes and levies the employed worker pays to the Exchequer).

The CIC Report (2009) mentioned above found that

- The average annual Exchequer saving in social welfare payments per construction worker was €18,254, and
- Tax receipts from the average worker would be of a similar magnitude (€18,458) per year.

Applying this to the estimated 200 workers directly and indirectly employed as a result of the Dún Laoghaire Harbour Masterplan construction each year, gives an Exchequer gain of €7.3 million, per year of construction.

Accessibility and Sustainability

The proposed harbour masterplan is well served by public transport. It is adjacent to DART and intercity rail services and a number of bus routes.

The availability of this choice of transport modes for residents and workers on the site will facilitate a reduction of car dependency for travel to work and leisure pursuits. The masterplan incorporates the planned S2S Cycle Way and provides a number of new connections to this route from newly developed Harbour water side walks and loops.

Conclusions

There will be significant employment opportunities: over the 10 year construction phase, it is estimated that 2,800 FTE jobs will be created. The proposed mix of uses, as it stands, will provide direct and indirect employment for 1,400 FTE employees.

In addition to the employment generated by the businesses on site, an estimated 200 jobs will arise from the visitors to the Diaspora Project. Local and national government will benefit from rates and savings in Social Welfare.

Total employment gain

= permanent employment 1600 jobs



07 Access and Transport

Existing Conditions

Background

AECOM have assessed the transportation aspects of the masterplan for the development of Dún Laoghaire Harbour. This assessment has commented on the likely impacts of the plan on the receiving environment, and provides recommendations for appropriate mitigation measures, as required.

AECOM has made reference to the following documents as part of this study:

- Dún Laoghaire-Rathdown County Development Plan 2010 2016
- Dún Laoghaire-Rathdown Cycle Policy June 2010
- Transportation Strategy 2011-2030 2030 Vision; and
- Smarter Travel A Transport Policy for Ireland

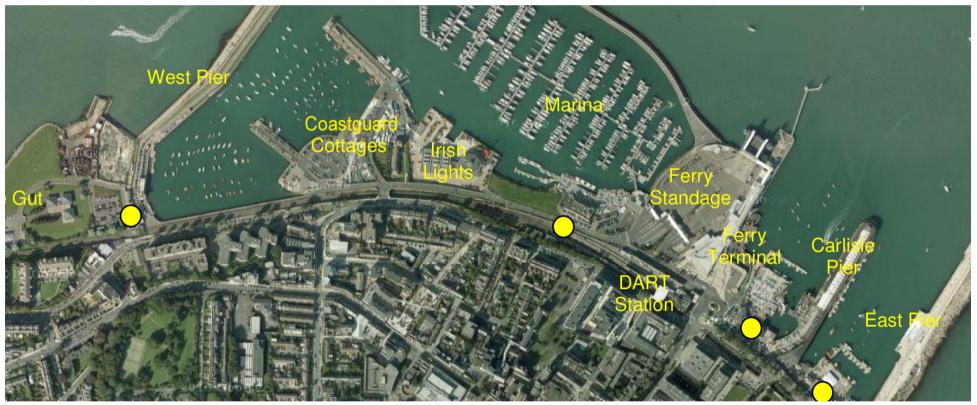


Figure 07.01 - Overview of Key Harbour Land Uses

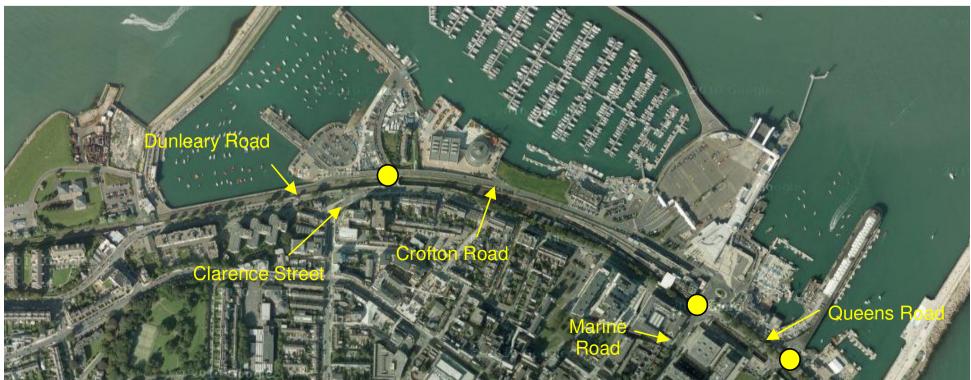


Figure 07.02 - Overview of Local Road Network





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Figure 07.04 - Bus stop at Dún Laoghaire

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The purpose of this report is to:

- Describe the existing environment in terms of traffic and transportation, and any future schemes or initiatives which will impact on general traffic and transport patterns
- Quantify a Preliminary development demand in the opening/design year in terms of traffic movements
- Identify and quantify the likely traffic and transportation impacts resulting from the development
- Identify suitable measures, if any, to mitigate relevant traffic and transportation impacts, and to address any existing issues which may be exacerbated by additional traffic associated with the proposed development

The Transport Assessment was supported by junction modelling to assess the capability of critical junctions within the study area to accommodate the expected levels of traffic, and, where necessary, allow the identification of mitigation measures which, if required, would alleviate any adverse effects the proposed development traffic may have.

Summary & Conclusions

The Preliminary Traffic Assessment was compiled in support of the masterplan for Dún Laoghaire Harbour which includes a scenario for proposed mixed use development on the Harbour Lands, Dún Laoghaire, Co Dublin. The main findings of the report can be summarised as follows:

The masterplan will comprise of approximately 75,000 m2 of development including residential, retail, museum/cultural, leisure facilities and cafes. An element of this development will replace existing uses located on the lands.

Trip rates for the proposed development have been derived from the TRICS (Trip rate calculations) Database, having regard to public transport and soft mode access to this area. As noted above, there will be an element of replacement of existing development within the proposals. However for the Preliminary Traffic Assessment, it has been assumed that all development is new, while no allowance for bypass trips or diverted trips has been applied to the trips generated. This allows for a robust assessment of traffic impacts.

A preliminary estimation of the number of vehicle trips attracted to the development indicated that an additional 106 inbound trips in the AM peak will be generated, with 97 outbound trips, while in the PM peak 115 inbound trips will be attracted to the development, with 142 outbound trips.



Figure 07.05 - Dún Laoghaire connections

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The amount of office/enterprise development is limited, therefore minimising peak hour commuter trips to and from the development. An element of retail, as well as food and beverage, cafes etc will effectively operate as ancillary to the cultural and leisure elements, therefore reducing the number of primary trips attracted by these elements. As noted the assessment does not allow for bypass or diverted trips. The trips will be split between the existing three access points located at the signalised junctions of Crofton Road/Clarence Street/Dúnleary Road and Marine Road/Crofton Road/Queen's Road and the priority junction of Queen's Road.

A review of the Census data shows that a large number of people travelling to and from Dún Laoghaire use public transport, and it is expected as previously agreed on other development projects in Dún Laoghaire that the modal split for cars will reduce down to the order of 50%. This would allow the traffic flows to reduce. However for robustness, no modal split factor has been applied to the traffic flows.

Junction models of the two signalised access junctions were analysed for the 2011 and 2026 Do Minimum and Do Something scenarios, which showed that while the queuing increases slightly, the junctions remained within capacity. The maximum Degree of Saturation on the Dúnleary Road/Clarence Street Crofton Road/Harbour Access junction is 81.2% with a queue of 19 pcu, while on the junction of Marine Road/Crofton Road/Harbour Access/Queen's Road the maximum Degree of Saturation is 82.4% with a maximum queue of 21 pcu.

The priority controlled junction of Queen's Road/Harbour Access was also assessed, and the analysis shows little impact on the operation of this junction. The limited access from this area to the rest of the Harbour Lands has been maintained.

While some works are currently taking place to improve the kerb lines of the Marine Road junction, there is limited space to expand the junction due to the built up nature of the area. Similarly, the Dúnleary Road junction is limited due to developments on the south and the railway line to the north.

The analysis indicated that, with the robust estimation of trips generated by the development, the junctions in the area will function within capacity.

It is noted that this assessment is a preliminary estimation of the number of trips generated by the development and the distribution of trips onto the existing network. The provision of additional information on existing building to be replaced as well as the locations of car parks may change the results of the analysis.



08 Sustainability

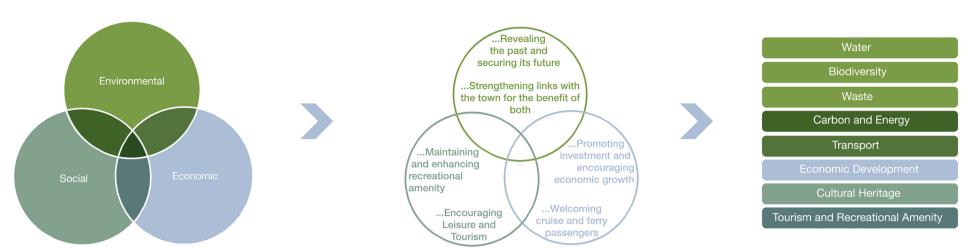


Figure 08.01

Introduction

Dún Laoghaire Harbour's vision to be, "recognised as an exciting marine, leisure and tourism destination of international calibre" and the development of the masterplan for the area provides an ideal opportunity for the promotion of sustainability in its widest sense.

The Dún Laoghaire Harbour Masterplan encapsulates an array of strategies and measures promoting sustainable outcomes through the optimisation of the triple bottom line – social, environmental and economic value.

Context and Approach

Definition of Sustainability

Due to the breadth, depth and complexity of the concept of sustainability, it is inherently difficult to define. The Bruntland Commission's definition of sustainability has become the most widely accepted:

"development that meets the needs of the present without compromising the ability of future generations to meet their own needs" Gro Harlem Bruntland

Sustainable development is centred on the effective use of resources in a holistic manner, combining social, environmental and economic resources.

The holistic approach to sustainable development adopted within the Dún Laoghaire Harbour Master Plan seeks to optimise this social, environmental and economic value to all stakeholders involved in the scheme.

Value of Sustainability

Evaluating options and making decisions which optimise the use of these three categories of resources, environmental, social and economic, creates value in the following ways:

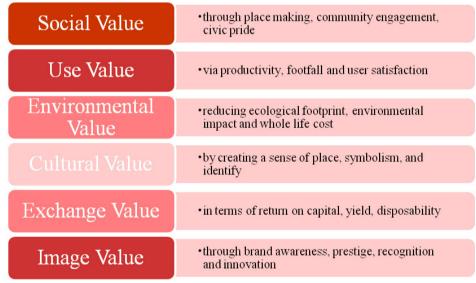


Figure 08.02

Approach to Sustainability within the Dún Laoghaire Harbour Masterplan

Sustainability embodies the triple bottom line approach that characterises sustainable development today. The focus areas and strategies identified reflect the three pillars of environmental protection and enhancement, social welfare and quality of life and economic viability and prosperity.

The purpose of the Sustainability chapter is to present the long term vision for sustainability at Dún Laoghaire Harbour, and identify the framework and strategies for Dún Laoghaire Harbour Company and other stakeholders to implement the sustainability goals of the redevelopment.

The sustainability framework encompasses a number of priority themes influenced by the over-arching vision for the Dún Laoghaire Harbour Master Plan, as shown above.

Details of the opportunities integrated within the masterplan for each of these themes are presented in the following sections.

Water Sustainable Water Usage Buildings Water Usage Monitoring Rainwater harvesting Systems Foul Water Storage Tanks Peak Drainage Control Improved Water Quality



Water

Opportunities for sustainable water management are shown in the diagram above.

The buildings proposed within the masterplan will reduce water demand on the public network and minimise domestic foul and wastewater discharges.

The potential to incorporate storage tanks alongside the foul water evacuation pumping stations would attenuate the peak effluent generation periods, and thus allow the effluent discharge to be distributed over an extended period minimising the intensity of the outflow to the public network.

Drainage

Surface water disposal will be achieved through the provision of an outfall to the bay from each sub-division of the overall area. Therefore there will be no impact on the existing piped sewerage receiving system.

Opportunities for sustainable waste management are shown in the diagram above

Effective planning and design is a fundamental requirement to achieving sustainable resource and waste management. An integrated approach to waste management will be enabled through the masterplan, encompassing a range of measures.

Collection

Waste

All waste containers provided within the development must be accessible to a waste contractor. Therefore the development plans will ensure that sufficient space is provided for the collection of these wastes. This includes turning spaces for waste collection vehicles and sufficient head height for tipping movements. Further, the ground will be level, smooth, hard surfaced and without any kerbs.

Native Planting and Species Drought Tolerant Planting Green Roof Technology Increased Biodiversity Educational Resources

Carbon and Energy On site Renewables Public Lighting with Centralised PV Support Facade Design and Orientation Passive Low Energy Building Design and Low Energy Building Services Monitoring and Controls

Biodiversity

The coastal zone is an area of high biodiversity and supports a range of protected habitats and species, which require certain environmental conditions to be maintained. Loss of habitat, alteration to the hydrological regime, contamination events or disturbance would limit the extent of suitable habitat available to support the habitats and species for which these sites are designated. It is also likely that these events would alter the natural food chain, resulting in likely alterations to the distribution of species. These changes could negatively affect the structure and function of the site, and impact on the long-term distribution of species for which the site is designated.

New development at Dún Laoghaire Harbour necessitates the careful consideration of a wide range of biodiversity issues. The Appropriate Assessment of the Draft Dún Laoghaire Harbour Masterplan Planning Report, Natura, July 2011 looks at the potential effects of a proposed plan on one or more Natura 2000 sites.

The Appropriate Assessment suggests the following mitigation measures which seek to maintain, protect and preserve designated and non-designated sites of ecological value, in line with those proposed in the Environmental Report of the Dún Laoghaire-Rathdown County Development Plan 2010-2016:

• Integrate the new development with the built and natural landscapes of the surrounding area, such that no projects giving rise to significant direct, indirect or secondary impacts on Natura 2000 sites shall be permitted on the basis of the Dún Laoghaire Harbour Masterplan (either individually or in combination with other plans or projects)

Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

- (a) no alternative solution available,
- (b) imperative reasons of overriding public interest for the plan to proceed; and
- (c) adequate compensatory measures in place
- All subsequent projects, and or plans, arising from the Dún Laoghaire Harbour Masterplan will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive
- Dún Laoghaire Harbour Company shall set up procedures to ensure compliance with the requirements of Article 6 of the Habitats Directive for all subsequent projects and or plans, arising from the Dún Laoghaire Harbour Masterplan
- No ecological networks, or parts thereof which provide significant connectivity between areas of local biodiversity, are to be lost without remediation as a result of implementation of the Dún Laoghaire Harbour Masterplan

Carbon and Energy

Opportunities for sustainable carbon and energy management, shown in the diagram above.

Passive Low Energy Building Design

The buildings proposed within the masterplan will aim to optimise the use of passive design techniques. The buildings will make use of the harbour location to maximise the use of natural ventilation and will use passive systems including exposed thermal mass, night-time purging of the building and shallow plan forms to minimise the energy use of the building. Any buildings constructed will be "long life - loose fit"

Facade Design and Orientation

Facade design for the buildings will focus on:

- Maximising daylight availability to working spaces
- Minimising solar gain to all parts of the building
- Minimising fabric heat losses in winter
- Minimising uncontrolled infiltration of the building;
- Integrating opening sections to allow natural ventilation to work in a controlled and effective way; and
- To optimise the embodied energy and lifecycle benefits for this critical element of the building

Facade design for each building will balance these criteria with a strong focus on ensuring the long term lifecycle energy footprint for the buildings are minimised.

Low Energy Building Services

The combination of passive design approach with high quality facade solution will form the foundation for the environmental control systems within the building. The careful design of these elements in harmony with the local micro-climate will facilitate the deployment of low energy building services systems.

Transport Traffic calming Pedestrian Access **Integrated Transport Information** Electric Vehicle Charging Points Links to Public Transport Cycle Routes

Economic Development Transport Hub / Gateway Marine and Harbour Business Opportunities Local Economic Regeneration **Employment Creation** Optimised Sustainable Land Use

Transport

Effective planning and design is a fundamental requirement to achieving sustainable transport management for Dún Laoghaire Harbour. An integrated approach to transport management will be enabled through the masterplan.

In summary, the access points are largely unchanged. Pedestrian and cycle access points will be provided into the development and will tie into an external works carried out by DLR CC.

Public Transport

Dún Laoghaire is already well served by public transport with both the railway line and a number of Dublin Bus services. The Aircoach also travels to Dún Laoghaire.

Dún Laoghaire Harbour is directly served by the DART, as well as commuter train services, with the station located on Crofton Road, adjacent to the ferry terminal. The western extent of the lands, including the West Pier area and The Gut are further served by a second DART station, Salthill & Monkstown, which is closer for walking to the west end of the harbour.

The DART underground line will connect the Northern Rail lines with the DART stations as well as locations such as Spencer Dock, St Stephen's Green, Christchurch and Heuston Station. These plans could treble the rail journeys in the greater Dublin Area upon completion but plans to advance the construction have been put on hold. Rail improvements are then considered to be minimal for now.

In total, over 500 buses stop at Dún Laoghaire adjacent to the ferry terminal each day. There is also a good level of service on Saturdays, and a more reduced service on Sundays. The Aircoach, a private bus service to Dublin Airport, also serves Dún Laoghaire, with 29 services per day in each direction, operating 24 hours a day.

Walking and Cycling

Pedestrian movements are already high in the vicinity of the harbour lands and in the region of the access points to the lands, due in part to the high volume of public transport stops/terminating services in Dún Laoghaire as well as the leisure element of the harbour. The West and East Piers are frequently used for leisure walks with almost 1 million people recorded in 2010.

With improved waterfront access facilitating easier east to west connectivity across the site as well as improved and upgraded public realm we would expect to see pedestrian numbers increase. This will be given extra impetus due to the stronger visual connection proposed between the town and the water.

The plan proposes to provide for the S2S cycleway as it moves through the harbour lands in and east west direction. The Metals provides access for cyclists, as well as pedestrians across the railway line cutting and works have recently taken place to provide more connections for pedestrians and cyclists from Dún Laoghaire to the Pavilion. Cycling is permitted on the lower level of the East Pier.

Economic Development

The DLH Masterplan will provide employment opportunities during both construction and upon completion. The Irish International Diaspora Centre Project is included in the economic analysis of Dún Laoghaire Harbour Masterplan and was carried out by DKM Consultants.

- The construction costs of all the elements of the proposed Masterplan are estimated at €200m. When the multiplier effects are added, it stands to benefit the Irish economy to the tune of €245 million
- There will be significant employment opportunities: over the 10 year construction phase, it is estimated that 2,800 FTE jobs will be created
- While the final mix of uses has not yet been established, the proposed mix of uses, as it stands, will provide direct and indirect employment for 1,400 FTE employees
- In addition to the employment generated by the businesses on site, an estimated 200 jobs will arise from the visitors to the Irish International Diaspora Centre Project

Other Economic Impacts

Community Gain

- Additional access to the waterfront
- A safer and more inviting place at night

Benefit to local authority and exchequer

- Rates income guaranteed
- Exchequer savings arising from construction workers

Accessibility and Sustainability

Incorporated into public transport to reduce car dependency

Local and national government will benefit from rates and savings in social welfare.



Cultural Heritage Historical Context Historical buildings Heritage Trail Public art installations Cleaning, Care and Maintenance

Leisure & Tourism

The value of marine leisure activities is closely correlated with the quality of the environment. Factors such as depleted marine life and water quality have a direct impact on leisure activities. For example, in the Chesapeake Bay water quality improved significantly between 1996 and 2001, with a resulting sixfold increase in leisure related revenue.

The Dún Laoghaire, Leisure and Tourism report, LTO February 2011 outlines the specific tourism situation in Dún Laoghaire and presents the opportunities that the masterplan should avail of.

Opportunities for a sustainable leisure and tourism industry can be promoted through learning from other examples. A leisure and tourism strategy was developed as part of this masterplan which looked at similar proposals at Bristol, Brighton, Albert Dock and Leith.

- In all cases there was an active partnership between a committed public sector stakeholder group and private sector entity. The planning and development authorities created a long-term vision and strategy and remained committed to it
- Leisure and tourism in itself has not been sufficient to provide a longterm viable solution for these waterfront schemes. In some cases, planning structures have been relaxed for social or economic benefit and final development solutions have incorporated a mix of commercial and cultural/heritage elements
- The examples all recognised the importance of the indigenous population and residents' needs as well as the requirements of tourists and visitors. The schemes at Bristol and Brighton particularly emphasised the harbour and town centre physical integration as a vital element in ensuring that all groups' needs were satisfied
- The Albert Dock development at Liverpool has promoted speciality retail so that it does not compete with the major shopping complexes in the city centre. These smaller outlets also complement the range of museums and visitor attractions in the Dock area and the objective is 'Liverpool inspiring gifts and memorabilia' – artwork, historical photography, household fabrics, furniture and maritime retail shops predominate
- Leith Docks has a range of events and festivals all year round which
 cater as much for the local community as visitors. It has also secured
 an icon attraction that is a magnet for international visitors in
 particular and that has generated major interest in the Docks. Brighton
 has regenerated its seafront over the past 20 years and this area now
 caters for family and older residents during the day and its thriving
 youth market at night

Cultural Heritage

A Heritage Management Plan for Dún Laoghaire Harbour has been prepared in tandem with this masterplan. The Heritage Management Plan is focused on the cultural heritage aspects of Dún Laoghaire Harbour and has informed the masterplan. The decision to prepare a Heritage Management Plan at this early stage acknowledges the heritage significance of Dún Laoghaire Harbour to the nation.

While it is a stand alone plan, it informs the masterplan proposals and its principal purpose is to guide management of the significant cultural heritage of the harbour in the context of current and future challenges and changes. The Heritage Management Plan is a non-statutory plan and exclusively addresses cultural heritage aspects of Dún Laoghaire Harbour. However, as the contemporary character of the harbour owes so much to its cultural heritage and this cultural heritage is a key asset to the future sustainability of Dún Laoghaire Harbour, these aspects also resonate within the masterplan proposals.

A series of heritage management policies have been developed which are aimed at enhancing and protecting the cultural heritage while acknowledging that Dún Laoghaire Harbour is a living, dynamic, place which has and will continue to change over time.

Conclusion

The masterplan for the Dún Laoghaire Harbour area will have a positive environmental impact bringing significant cultural, social, recreational and economic benefits to Dún-Laoghaire Rathdown and the region.

Key environmental aspects of the masterplan for the Dún Laoghaire Harbour area include biodiversity, water and landscape. In the future, efforts should be undertaken to minimise negative impacts on key habitats or species during the construction or operation phases of the plan. Appropriate Assessment screening will be undertaken where required. Construction works should take due cognisance of the adjacent coastal waters so as to minimise impacts on them. The masterplan will have due regard to historic landscape and key local views whilst providing an opportunity to enhance local amenity.

A Strategic Environmental Assessment (SEA) has been undertaken for the masterplan for the Dún Laoghaire Harbour area. The SEA process will ensure that environmental considerations are fully integrated into the harbour masterplan. The objectives of the SEA process will provide for a high level of protection of the environment and promote sustainable development by contributing to the integration of environmental considerations into the preparation and adoption of the masterplan. The process includes consultation with the public and environmental authorities.