



Fig. 0.02 Haulbowline Island 1829-1841.



Fig. 0.03 Haulbowline Island 1897-1913.



Fig. 0.04 Haulbowline Island 2015.



Masterplan Structure

The document structure reflects the terms of reference of the Masterplanning brief deliverables. The document is organised into eight sections which outline the various considerations of the final plan.

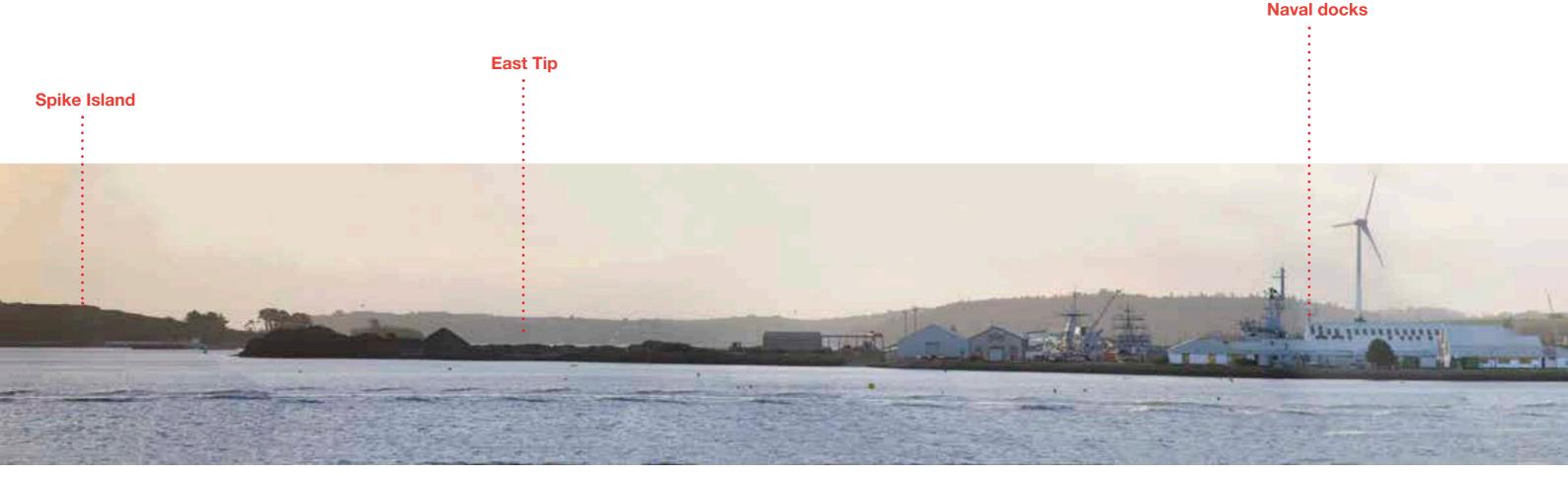


Fig. 0.06 View looking towards Haulbowline Island from Cobh at sea level.

Part One - Introduction & Executive Summary

This section sets out the overall background to the Masterplan study, highlighting its unique challenges and opportunities. It also includes an executive summary of the Haulbowline Masterplan Vision.

Part Two - Masterplan Context

This section outlines the background to the Haulbowline Masterplan study. It describes the design team's composition, approach and sets out clearly the Masterplan's terms of reference. It also describes the surrounding contiguous communities and their physical relationship with the island.

Part Three - Analysis

The section describes the existing site conditions for the island through a series of land use analysis sections. It includes an access and movement section relating to the modal arrival to the island. The section utilises other waterfront case studies to highlight similar maritime "island" or shared port developments. It also includes a brief analysis of the Portsmouth historic dockyard, which the Masterplanning team visited during the course of the study.

Part Four - Vision

The section describes the proposals for the future land use of the island. It sets out the concept for the Masterplan. A Vision Masterplan sets out the key character zones and options. The section also illustrates the potential uses for the proposed central grand passageway which defines the central pedestrian promenade through the island.

Vision Statement - To be the smartest, most innovative and responsive Naval Service provider in the world

Irish Naval Service - Vision, Mission, End-state



Part Five - Drivers

The section sets out 10 key thematic drivers for the development of the Masterplan proposals. The themes interrelate and assist the final Masterplanning strategy and decisions.

Part Six - Recommendations

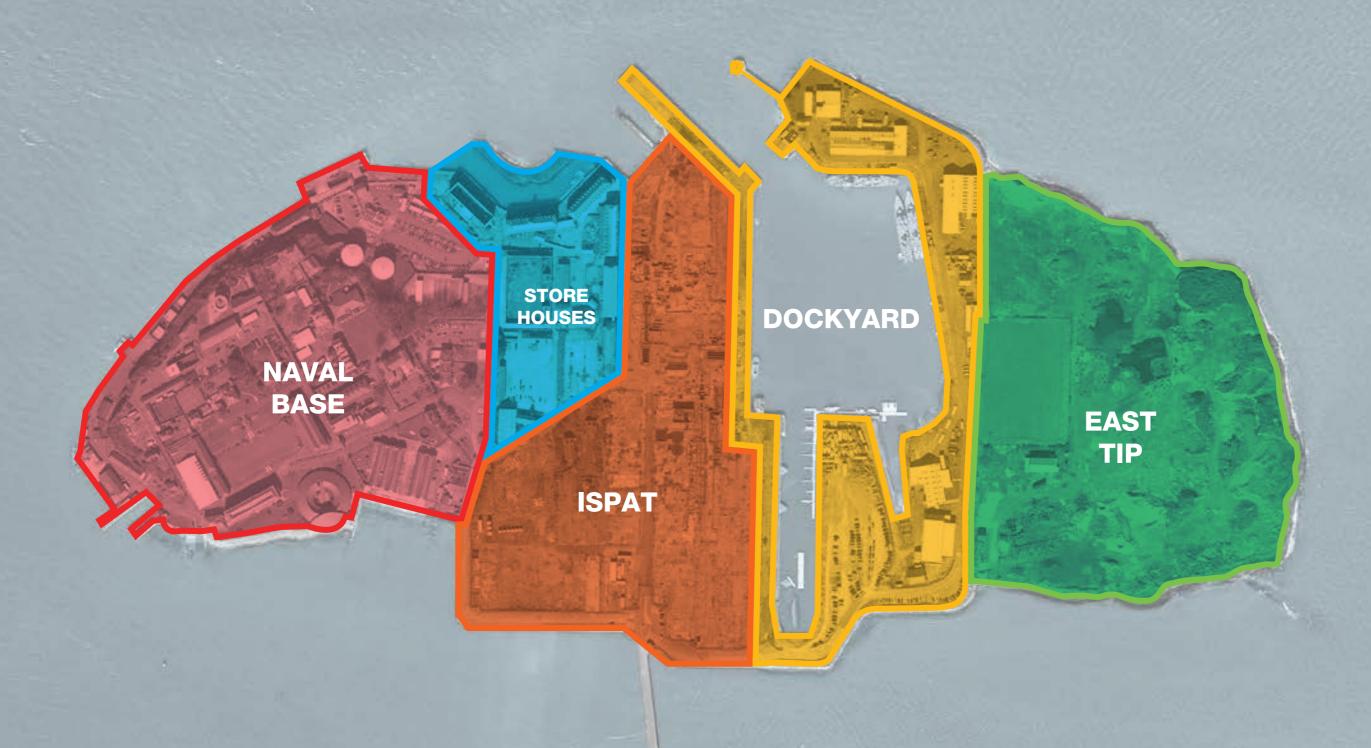
The recommendations set out short, medium and long term goals for the island's land use planning. This is intended to outline the Masterplan's intentions in a coordinated fashion with the East Tip and ISPAT (Irish Steelworks) remediation works. It also highlights "early wins" for the Masterplan along with planning and movement strategies.

Part Seven - Next Steps

The section identifies the challenges for the island's sustainable future development by defining the next steps. It sets out 10 key study areas as the proposed "to do" list for the Masterplan. These additional studies are required in order to create a holistic one-island plan and are outside the remit of this document.

Part Eight - Supporting Documentation

The supporting documentation sets out in more detail various sub studies and assessments pertinent to the Masterplan. The section also includes stakeholder commentaries made during the Masterplanning process and highlights key issues along with the team's mitigation responses whenever appropriate.

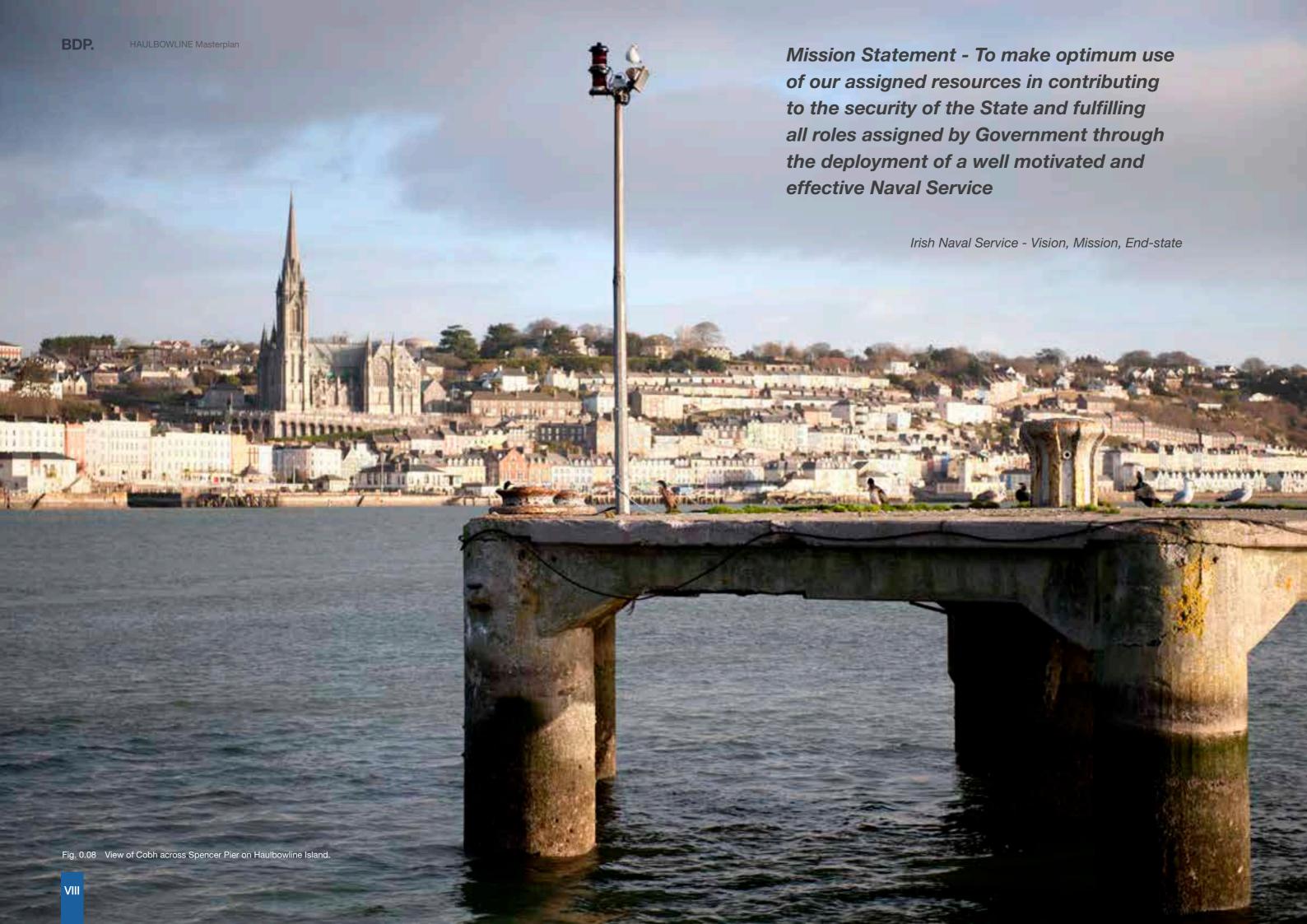


ROCKY ISLAND

Fig. 0.07 Character zones diagram.

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The introduction to the Masterplan summarises the key issues surrounding the study. It includes an Executive Summary which highlights the main conclusions of the report. The introduction also includes a narrative on the wider issues surrounding Haulbowline Island and it is intended to give a broader narrative to the Masterplan challenges.



1.1 Our Team

The Masterplan team is led by BDP. The BDP team consists of Architects and Urban Designers, Conservation Architects, Environmental Engineers, Civil and Structural Engineers.

BDP

BDP Ireland Blackhall Green, Dublin 7

The BDP team is supported by Transportation and Maritime Engineers, Mott McDonald.

Mott McDonald

Royal Liver Building, 4th Floor, Pier Head, Liverpool, United Kingdom, L3 1JH

The Planning context and statutory assessments are led by John Spain and Associates.

John Spain Associates

50 Upper Mount Street, Dublin 2



Fig. 1.01 Aerial view of Haulbowline from the southeast, with the National Maritime College in the foreground.

1.2 Stakeholder Community

Many stakeholders for the project have contributed valuable guidance in the development of the Masterplan proposals. Stakeholder consultations have taken place both formally and informally in large and small groupings as required.

Key stakeholders for the project are as follows:

- Irish Naval Service
- Department of Defence
- Department of the Environment
- EPA
- Cork County Council
- Department of Agriculture, Food and the Marine
- IMERC partners including UCC and CIT/NMCI
- Fáilte Ireland
- Spike Island Development Committee
- Enterprise Ireland
- IDA Ireland
- Residents of Ringaskiddy and Cobh

There have been a number of Stakeholder Review workshops that have helped refine the Masterplan vision to ensure interpretation of the supporting information is fully aligned with stakeholder requirements. The stakeholder comments have been recorded and integrated as part of the developing Masterplan Vision. These comments are paraphrased in the Supporting Documentation in Section 8.0.

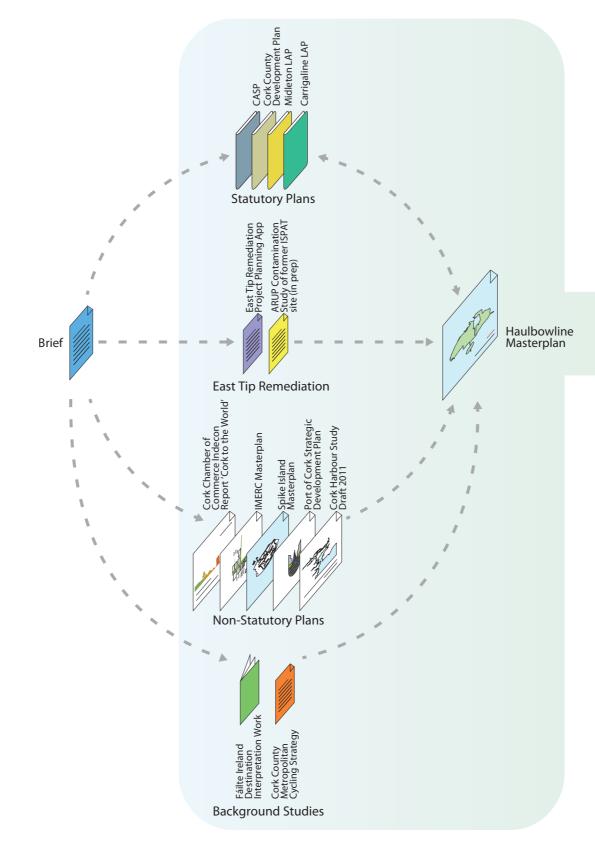






Fig. 1.03 Masterplan for Spike Island by Scott Tallon Walker Architects Consortium.



1.3 Ireland's Ocean Wealth

Remarkably 94% of Ireland's land mass is under the sea. Haulbowline Island is a strategic deep water Irish naval base that patrols the entire maritime area.

"Sea-based transport accounted for 99% of the total volume (45 million tonnes) and 95% of the total value (€128 billion) of the goods traded (imports/exports) in Ireland 2010. One of the primary roles of the Naval Service is the protection of these sea lines of communication, our trade routes. These routes are the arteries or life-blood conduits of Ireland's economy."

Extract from: Óglaigh na hÉireann-Naval Service; Who are the Naval Service and Harnessing our Ocean Wealth, An Integrated Marine Plan for Ireland, July 2012.

It follows that the Masterplan's central stakeholder is the Irish Naval Service. The Naval Service have importantly developed an interim operational Masterplan for Haulbowline in 2014 (see extract in section 8.0 supporting documentation). The document sets out fully their service and logistics requirements. The appropriate integration of the naval requirements into a broader shared framework for the island has also been considered as part of this study.

The role of the Naval Service is evolving continuously and the Masterplan highlights the potential for a much improved social dividend, through the sharing of the maritime story and tradition of the island. The inherent value of the island's heritage is also a central consideration. The recent Government Policy on Architecture 2009-15 also highlights that our architectural heritage, should be treated in a holistically planned manner.

Any re-opening of the island's traditional naval boundaries will be always set within a secure operational context. This is a constant reference point for all decisions within the Masterplan.

The creation of real linkages and "new" stories between these places is of the utmost importance for the success of Haulbowline Island.

The wider tourism potential of the Cork Harbour environs is regarded by Fáilte Ireland as an important national asset. The story of the Haulbowline Masterplan is clearly an opportunity for the overall tourism and recreational potential of Cork Harbour and its environs. A number of individual standalone studies have been prepared that have created an initial momentum already. It is hoped that the Haulbowline Masterplan completes the tapestry of studies. The adjacent Masterplan studies for Cobh Waterfront 2012 and Spike Island Masterplan 2013 are both integral parts of the broader linked Haulbowline vision.

The integration of the IMERC cluster is an important factor in the creation of a single cohesive "maritime" community. The Masterplan for IMERC is adjacent to the National Maritime College of Ireland (NMCI), designed by BDP in 2002. The Beaufort Lab, which will house one of Europe's largest wave tanks, will increase the NMCI local campus population in 2016 by 150 researchers, staff and students from the University of Cork and Cork Institute of Technology.

The Masterplan will also facilitate links with new initiatives for tourism within the Cork Harbour area. Initiatives such as the Wild Atlantic Way by Fáilte Ireland have demonstrated the commercial value of having a single joined up approach for tourism destinations.

Proposals for a major visitor building for the Lusitania disaster comparable in scale to the Titanic Centre in Belfast are also viewed as a possible catalyst for the island's regeneration. This would be subject to a detailed cost benefit analysis by others.

The creation of a "connected island" is central to the plan's thinking. The island has a unique strategic connectivity value. It will act as a future landing point for the Spike Island visitor circuit. The island may also become a major tourist destination for the region so its connectivity via air, sea and road are all part of the Haulbowline experience. Connectivity locally is also part of a chain of interconnected steps and links that will start well beyond the island's boundaries. The journey to Haulbowline from Cork should also become an integral part of the island experience.

The Midleton Electoral Area Local Area Plan (2011) has designated the western area of the island as an Architectural Conservation Area. Other naval ports such as Portsmouth's historic dockyard have generated significant additional employment, start-up innovation companies and tourism through sensitive refurbishment and a strategic fiscal partnership with the Royal Navy and local government.

The Irish Naval Service and the Heritage Council of Ireland have also identified the potential for a naval Maritime Museum on the island in its scoping study of February 2007. The island has a number of exceptional examples of built maritime heritage including six 19th century four story Store Houses that originally serviced the British Naval ships, directly from the sea. The properties are currently within a "holding maintenance" cycle. The Store Houses' proposed amenity, cultural and visitor value have not been exploited for any other use. A central challenge for the Masterplan is the realisation of their asset value through the re-adaptation of these buildings for potential tourism and social innovation uses.

The island has had the unfortunate label in the recent past of the "Toxic Island". The remediation of the Irish Steel Factory (ISPAT) site and East tip will also create a "fresh" new identity for Haulbowline.



Fig. 1.04 Bo01 and Western Harbour in Malmö, Finland.

The East Tip site currently holds an EPA Waste Licence (W0289-01), issued on the 23rd July 2014 for the remediation of the site. Any development undertaken pursuant to this Masterplan will be required to ensure that the conditions/requirements of the licence are complied with.

The island should now become an international exemplar in sustainable development. Exemplar dockland regeneration projects such as Bo01 and Western Harbour in Malmö, Finland have provide a successful example of where local codes and special area regulations have created "world class" sustainable highly "livable" neighbourhoods. The creation of a new community park which opens the island to surrounding communities is of central importance to the plan.

The approach to a sustainable development has already been started by the Irish Naval Service through their energy planning and operational initiatives. The creation of a single "green" island sustainable energy grid is also part of the future infrastructure considerations for the Masterplan. The adoption of a sustainable water management plan, structured planting zones, wildlife lawns, and diverse parkland zones will also help with the "re-greening" of the island.

The Masterplan is designed as flexible land use framework. The neighbourhoods are intended to adapt locally as changing priorities emerge.

The Masterplan should also become the baseline for a future cost benefit analysis that can quantify the vision as part of an integrated, transdisciplinary and multi-sectoral shared vision. This in turn should help guide fiscal incentives for the island's future development.

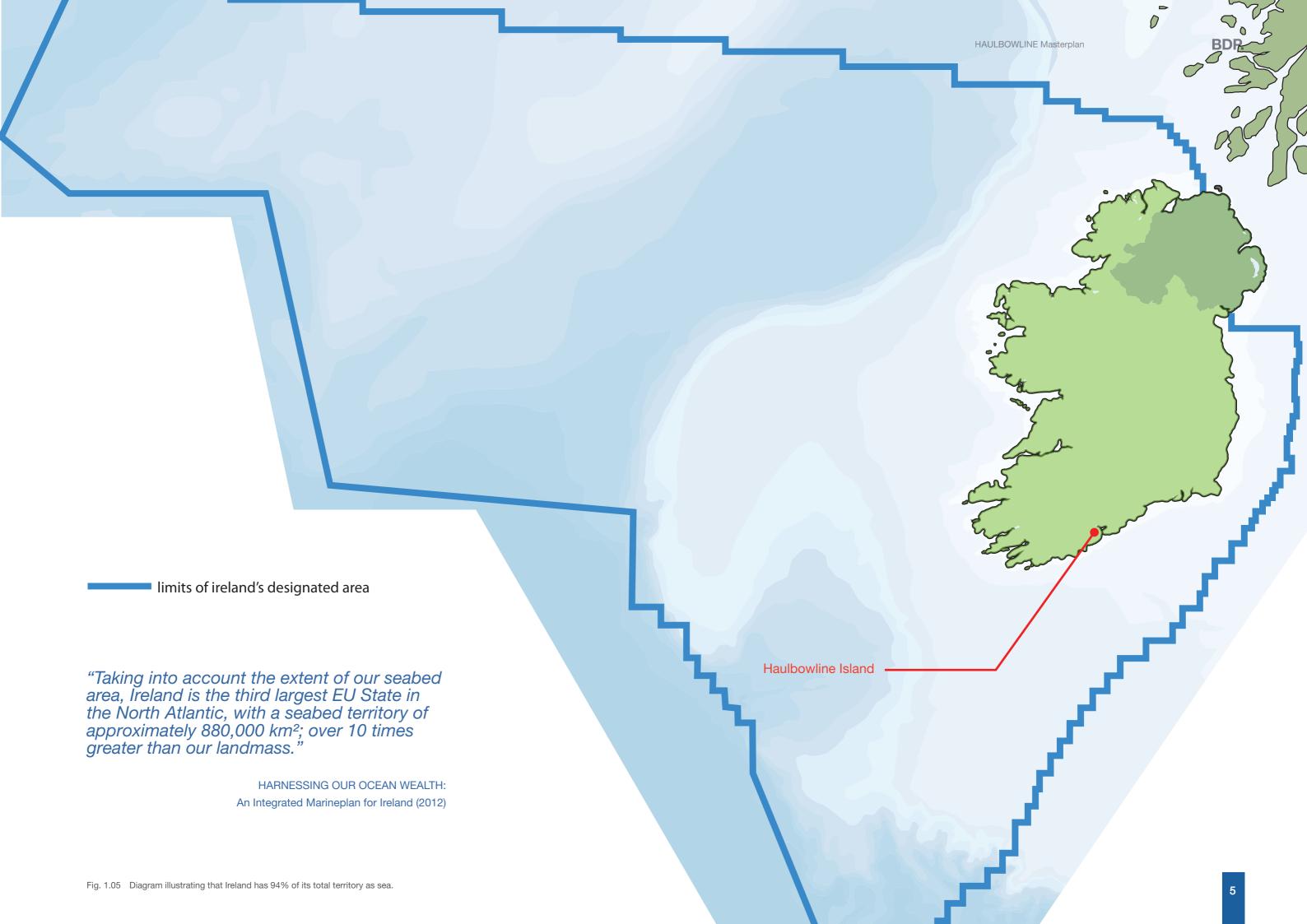


Fig. 1.08 Cork Harbour is the second largest harbour in the world by navigational area. The maritime map illustrates the deep water Cobh Road, which allows access to the harbour for larger vessels. Haulbowline acts as key gateway for the harbour.

1.3 Background to the Study

The Haulbowline Masterplan study was commissioned by Cork County Council and the Department of Agriculture, Food and the Marine in November 2014.

A Haulbowline Masterplan for the entire island was considered necessary in order to coordinate properly the future interfaces with the remediated areas of the island. This was particularly important around the interface zones in the central zone of the island – the former ISPAT factory. It clearly identifies opportunities for the creation of a social dividend for the surrounding communities.

The East Tip remediation was granted Planning Permission on the 1st May 2014. The East Tip plan proposes the creation of a 9 hectare park. The remediation works importantly includes the stabilisation of the waste deposits from the former Irish Steel Works factory (ISPAT) in order to protect the longer term amenities, ecology, community and environment of Cork Harbour. The remediation project also extends well beyond the East Tip itself to include

EAST TIP

the central 8.5 hectare portion of the island, which was formerly the ISPAT factory site. The opening of this area for future naval use is important in that it allows contiguous access to the western quay wall. It follows that the naval dock yard is utilised fully for its intended

The Masterplan sets out the nature of all future development on the island by defining an agreed future land use plan. Importantly the secure future operational boundaries for the Naval Service will be set out by the Masterplan.

The land use plan will also help to inform the future civil engineering requirements within the remediated areas. This is a critical consideration in ensuring that the complex remediation works are not undone by future phases. Also it may provide for future economies by defining key routeways, shared carparking, landscaping and public realm works.

The Masterplan is intended only as starting point for individual studies relating to the island's development. Throughout the process it has become clear that there are a number of additional detailed scoping, survey and engineering exercises required to refine the proposals.

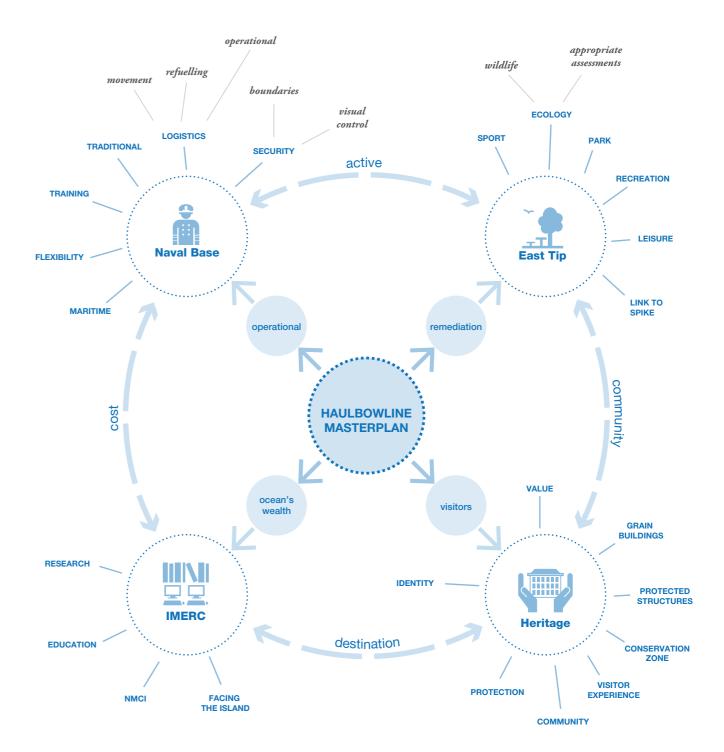
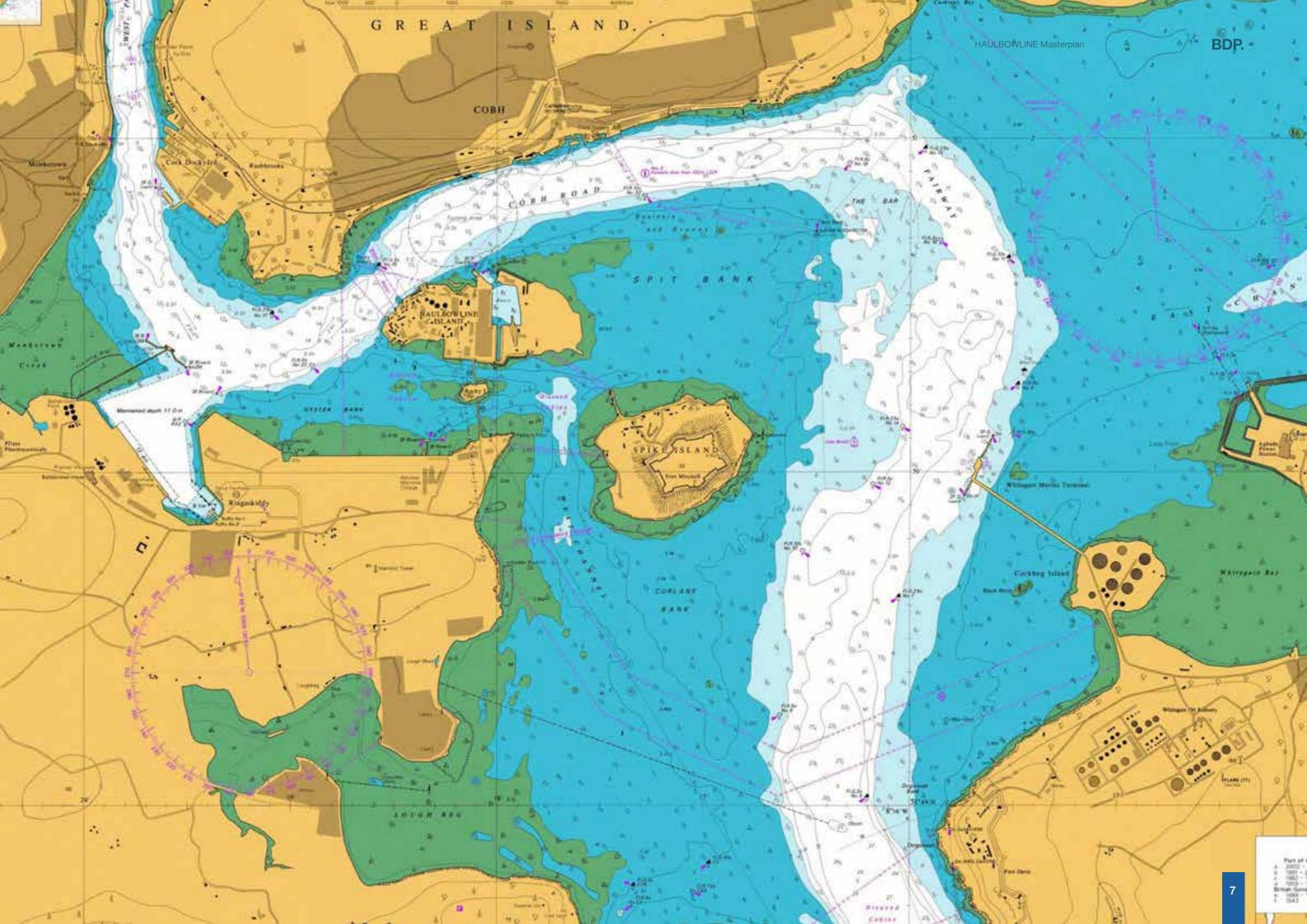


Fig. 1.06 East Tip and ISPAT remediation zone.

Fig. 1.07 Mindmap of Masterplan Challenges and Opportunities.



1.4 Terms of reference for the Masterplan

The client for the Consultancy team is Cork County Council.

The consultancy team reports directly to Cork County Council which reports directly to the Project Steering Group.

The Steering Group includes:

- Cork County Council
- IMERC partners including UCC and CIT/NMCI
- Department of Defence
- Department of Agriculture, Food and the Marine
- Irish Naval Service

The Masterplan brief to the team is set out in the Brief for the appointment of a consultant to prepare a Masterplan for Haulbowline Island-June 2014.

The Masterplan brief is intended to:

- Set out a clear context for future land use options and zonings for the Masterplan area, including naval service, public amenity, training, IMERC campus, sustainable energy innovations, marine related amenity, accommodation and other requirements.
- Provide a transportation vision for the Masterplan area to include:
- An access strategy based on existing and proposed road infrastructure (N28 upgrade);
- Options for potential access to Spike Island Bridge, Pedestrian Walkway, Ferry;
- Options for shore based access to/from Cobh and the greater Cork Harbour Environment;
- Pedestrian and cycling movement corridors on Haulbowline;
- Address the public access arrangements by road and water in order to achieve an integrated transport solution;
- Options for slipway access Cork County Council have commissioned an engineering report on the most suitable location for a slipway.

- Show provision for an attractive environment with an unique sense of place, public realm and amenity that captures the maritime heritage of Cork Harbour and helps to differentiate Cork Harbour as a growing maritime hub
- Provide good orientation and easy access between Haulbowline and surrounding developments including the IMERC campus at Ringaskiddy
- An assessment of the Tourism Potential to tie in with Cobh, Spike Island, Camden Fort and Cork City and Harbour, including unique tourism offerings that can help develop a destination. This assessment should include the potential of "Cruise Tourism" for cruise ships berthed at Cobh
- An assessment of the existing condition and proposed future use of the 3 cut limestone buildings on the ISPAT site, Martello Tower and the drydock facility
- Demonstrate how development on Haulbowline will physically address the lands at Ringaskiddy (IMERC Campus)
- Investigate underground infrastructure (tanks, caverns etc.) – this may be an issue to potential users of the site
- Facilitate appropriate employment opportunities within the Masterplan site area

- Assessment of natural heritage in the area
- Assessment of architectural merit of existing buildings
- Visualisation of proposals (3D) including ideas for architectural interventions for new and existing buildings and landscape design solutions
- Set out options for a landmark development to signal the renaissance of Cork Harbour demonstrating a visionary approach
- Outline short, medium and long term priorities for the future development of the island and costs of developing the Masterplan in a phased approach
- Ensure that the provision of additional public access does not compromise the necessary security at the Naval Base

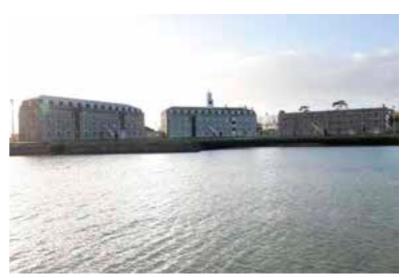


Fig. 1.09 Haulbowline Store Houses viewed from the northern sea approach.



Fig. 1.10 National Maritime College of Ireland, NMCI, opened in 2004. The NMCI is Ireland's primary provider of training and education for the Merchant Marine and the non-military needs of the Irish Naval Service (INS).



Fig. 1.11 View from the NMCI's large foyer looking across Haulbowline Island to Cobh in the distance. Haulbowline Island forms a strong visual backdrop to all of the activities of the NMCI.

1.5 Unique challenges and opportunities of the Masterplan

The Government Policy on Architecture (GPA) objectives 2009-15 emphasises the need for a strategic approach to Masterplanning and placemaking which is very apt for Haulbowline, given its many stakeholders (See section 8.0 stakeholder commentaries).

The overarching themes of the GPA are particularly relevant when considering the island.

Quality of life and place-making

Strategic urban design approach to the Built Environment based on architectural and qualitative urban design place-making principles.

Haulbowline has both carefully crafted, unique existing heritage spaces and the potential for new exciting public places.

Knowledge and Culture-Genius loci

Education and awareness of our existing Built Environment and the role of the architecture.

Haulbowline has many built layers of an active naval history in a single place.

Well made

Delivery of an integrated approach to the built environment with quality as the core criteria.

Haulbowline has the opportunity to mend the place through a land use framework for future generations.

Innovation and process

Joint collaborative approach-measurable tangible outcomes in the Built Environment-**Trans disciplinary** and **Multi-Sectoral**.

Haulbowline will involve many agencies and interests. It requires an overarching holistic planning approach.

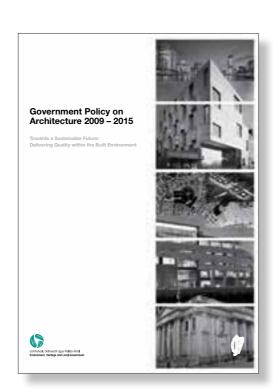


Fig. 1.12 Government Policy on Architecture 2009-2015

Haulbowline Island is an active operational Naval Base. It is the headquarters of the Irish Naval Service.

The island has been heretofore an enclosed and secure military environment and access has been strictly controlled.

The Masterplan is considered essential due to the remediation works to the island's East Tip. The remediation works in effect will involve 70 percent of the island's land cover. The Masterplan's central challenge is to ensure that there is a structured plan in place to enable the remediation enabling works to be integrated into an overall "One-Island Plan".

The Masterplan must also ensure that the island continues as an operational naval base. The Naval Service has set out their requirements for the future of the island in their Naval Masterplan (see supporting documentation 8.8) which has been integrated into the broader thinking of the Masterplanning process.

The creation of a secure naval base that operates adjacent to an openly accessible public environment is a central challenge. Security within the Masterplan is of paramount importance. Balancing security whilst ensuring the island is not perceived as a "fortress" is an important consideration. 'Being within touching distance at times'.

Tourism also forms part of the Masterplanning principles. The creation of a "grand pedestrian passage" through the base is part of a wider movement circuit of cruise liner day trippers arriving at Cobh. The promenade whilst being public will also be utilised solely for the Naval Service. It will have time-tabled access and logistical use, solely under the discretion of the Irish Naval Service.



Fig. 1.13 View across the ISPAT remediation location to the derelict Store Houses, which forms the central opportunity area for the Masterplan. The brownfield site has a number of subterranean "hot spots" that may inhibit future development, unless closely coordinated with the land use plan.



1.5 Unique challenges and opportunities of the Masterplan

The Masterplan also has the unique challenge of dealing with three very different physical environments which are all contiguous to one another:

- The original island which has been designated as an Architectural Conservation Area by Cork County Council.
- The central reclaimed 11.3 hectare Irish Steel brownfield site which divides the island.
- The East Tip "dump" brownfield peninsula, which is being planned as a future park.

To complicate the Masterplan further the current naval dockyard is located in the centre of the two areas requiring remediation. It is separated physically from its spiritual and historic headquarters by the central ISPAT wasteland.

The aforementioned issues are all related to land use planning. The creation of improved linkages throughout the island involves opening direct pathways across the island. These pathways should be developed in tandem with the security requirements of the Irish Naval Service.

The central part of the island is dominated visually by six 19th century store houses. These structures are synonymous with Haulbowline's public identity. They are highly visible from Cobh, and should be considered the "urban hinge" of the Masterplan. Their refurbishment and future adaptation for sustainable uses is a central challenge for all of the stakeholders. Currently the store houses are falling into disrepair and their immediate curtilage has been destroyed. A number of potential new shared future uses for these buildings have been identified through the Masterplan process.

Haulbowline will also directly link with its closest neighbour Spike Island; which operated as an isolated Gaol until 1990. A major regeneration of Spike Island is proposed as part of an unique cultural tourism experience.

The adjacent National Maritime College for Ireland and the proposed IMERC cluster will in time create a new educational, research and enterprise quarter overlooking the island's southern approach.



Fig. 1.14 Plaque on the Northern storehouses on Haulbowline celebrating the arrival of their majesties King Harald and Queen Sonja of Norway to the Naval Base on 20th September 2006.

The island has been somewhat a place apart from the local communities throughout its history.

Whilst a neighbour, the island has operated as its own "secure ecosystem". The European ruling that has resulted in the remediation plans for the island's East Tip and ISPAT central area has placed the focus on the "re-greening" of the "toxic" island. New ways of doing things on the island include an integrated holistic approach to planning.

The remediation of the island is also a Cork Harbour gateway project that will be transformative for the entire local community. As a place to visit, it will create a new public destination for viewing the passing ships

along the Cobh Road channel. It will also become a parkland space, a meeting point, a jogging trail and a family place to visit.

The creation of a new park in the East Tip has required a new approach to the island's land use planning due to the increased presence of the public adjacent to secure areas. The re-adaptation of the central Store Houses for other uses more suitable to a contemporary society will also bring a new vitality to the island community. The re-adaptation of these structures for naval, maritime, tourism, cultural, educational and residential use will also help create opportunities to "spark" future development possibilities.

The utilisation of the western dock wall for dedicated Naval operations also responds to the increasing pressures on the existing dock to cater for larger naval vessels. The western wall will allow a large flexible logistics space immediately adjacent to docked ships. The future-proofing of the island for numerous naval uses and potential expansion is a key consideration. The integration of supporting utilities within the remediation plan will also provide a potential "smart grid" for future naval growth. This will in time require considerable civil engineering integration with any remediation plans for the ISPAT area.

Arrival to the island traditionally was an important event. Originally arrival was solely by sea. The northern

store houses created a fitting place to embark. The predominant arrival to the island is now by road. The creation of a southern urban plaza which responds to this modal shift and announces the island is an important part of the transformation of the island's image. The gateway also overlooks the emerging IMERC innovation campus which is planned around the NMCI.

The Masterplan also provides a framework for future alternative developments to happen. It provides a suite of possible options based on a secure naval plan. Short term community initiatives are also proposed as catalysts for increasing public participation in the medium to long term.



1.6 Executive Summary

The Masterplan sets out alternative proposals for the various future land uses of Haulbowline Island. It is solely a framework plan which articulates a series of physical development choices for the future of the island.

For the purposes of the document the island's neighbourhoods are considered as a single linked place. Detailed issues such as the logistical security of the Irish Naval Service, ownership and ongoing remediation will require individual studies dealing with specific topics. The next steps in the Masterplan (see section 7), articulates further studies that will be required to implement the plan, in full or in part.

The implementation of the Masterplan will require the established attitudes to Haulbowline to change. Differing fundamental stakeholder views have emerged throughout the study and they are summarised and also discussed (see section 8.0 supporting information). Above all a trans-disciplinary and multisectoral approach to Haulbowline Island is required going forward. An Island Trust has been suggested as an initial mechanism.

A Strategic Environmental Assessment Screening and Natura Impact Statement has also been completed and is available separately to this document, due to its size. Its recommendations have been included throughout the Masterplan documentation.





Fig. 1.17 The use of temporary furniture in the Museums Quartier Vienna as part of the reuse of poorly performing external spaces, using low cost initiatives to public realm planning.



Fig. 1.18 The use of well designed dockyard structures as part of an improved public realm approach in Rotterdam.

Overview - Island neighbourhoods

The Masterplan is intended to be a holistic single island vision. Nevertheless it is based around a number of unique neighbourhoods, each with dramatically different physical development challenges.

Naval Base - Western island - Architectural Conservation Area

This area will require careful conservation planning. As a defence forces training base the restoration of the existing buildings for continued "active" uses is a central consideration. Importantly the landscape character of the area, the heritage curtilage of the buildings and the creation of an improved public realm and landscape also form part of the Masterplanning proposals.

Heritage Village - centre west

The central heritage village has been designated for the re-adaptation of the Store Houses. These buildings are intended as flexible warehouse and loft spaces for future innovative uses. They may eventually operate as an inner secure cordon within the naval base. The uses are similar to the Historic Portsmouth Docks. It is well regarded internationally as a success. It is both an active secure Royal naval base, major tourism destination and a third level education and innovation campus.

The central area of the island has both the most remarkable built heritage, with the existence of the six exceptional 19th century storehouses and the hidden industrial heritage of the central water reservoir. The ISPAT remediation area also provides the challenge of utilising a gigantic space which is logistically in the centre of any future pedestrian movement patterns. The reuse and adaptation of these environments will require a flexible multi-agency response.

Naval Docks and logistics – centre east

The Naval Docks is a magnificent facility. The Masterplan proposes simply the re-use of this facility and its quay edges for its original use. The reinstatement of the graving docks for a possible private sector use also is proposed. The creation of a safe and flexible logistical space to the west wall will create opportunities surrounding the dockyard for naval rationalisation and efficiencies. The proposed lifting bridge (see legend 08) is proposed as an important pedestrian link improving dockyard daily circulation and operational efficiencies.

1.6 Executive Summary

Unique Visitor Experience

The southern arrival area of the island faces the traffic bridge. It creates the first impression of the island and sets the qualitative tone for all visitors. Currently this space is a screened brownfield site which reinforces the idea of Haulbowline as a contaminated place. The development of the public realm, roadways and landscape in this area are critical for changing perceptions. There exists an opportunity for a future major iconic building to be located close by, given its prominence from the Oyster Bank. The space should be landscaped and should form part of the island's green routes with the East Tip Park in the medium term. Ideally a new Haulbowline lawn (see legend 15) around a new urban quarter should be planned for as the island develops.

East Tip Park

The development of the East Tip Park is the catalyst for the project. It is a community place which requires multiple uses and importantly a sense of landscape identity. The park should ultimately link with a single island pedestrian promenade. It also should form a stepping stone for linkages to Spike Island. The structure of the park is one which sets out the major tree stands in orthogonal groups, framing views towards the surrounding coastal landscape.

The proposed landscaping structure has also been extended throughout the island. A series of tree-lined avenues are aligned with security zones to ensure that the island's secure areas are integrated with the island's green framework. Townscape views across the island to Cobh Cathedral are also enhanced. If nothing further happens, the creation of a green infrastructure which helps enclose spaces for future uses is a priority in the plan.

Landscape art

The park provides the opportunity for a major piece of landscape art to be installed in the future. Other places such as the Forth and Clyde Canal have commissioned 30 metres tall steel horse sculptures, the Kelpies; or the 20 metres tall Angel of the North in Newcastle to help attract and redefine places for a wider international community. In doing so they have increased tourism and altered local public perceptions of places previously regarded as being on the edge.



Fig. 1.19 Angel of the North, Newcastle.



Fig. 1.20 The Kelpies, Falkirk, the Forth and Clyde Canal.



Fig. 1.21 Formal parkland tree-lined avenue, Barcelona.



Fig. 1.23 Formal tree-lined avenue, Carlsberg industrial complex Copenhagen.



Fig. 1.22 Regenerated waterfront storehouse, Barcelona.



Fig. 1.23 Formal tree-lined avenue, Carlsberg industrial complex, Fig. 1.24 Quayside restaurants, Nyhaven, Copenhagen.

Grand Passageway

The Masterplan is organised around a pedestrian north-south axis that acts as a "grand passage way" to the northern refurbished Spencer quay. This was traditionally the arrival point from Cobh to the island by sea. The development of this location in the plan will require the collaboration of all stakeholders. The linkage is important in that it will provide the opportunity for tourists to arrive from the newly refurbished northern pier by boat and access bridge links directly to Spike Island. The central zone will also be a place that can be utilised for additional ceremonial activities for the Defence Forces. It will also provide a central sustainable water reservoir in the same location as the original east camber dock: restoring and remembering the original heritage curtilage to the storehouses 3-6, which was lost during the ISPAT development.

Store Houses

The re-adaptation of the storehouse for potential future uses is a central consideration for the island. The six buildings are largely in a perilous state of repair with only a single one in active use by the Irish Naval Service.

The refurbishment of these buildings along with their curtilage is a central consideration as it involves multiple stakeholders. The creation of alternative uses is the central tourism opportunity for Haulbowline as a destination. The creation of a vibrant "peopled" edge along the central axis of the island will also act to animate the island's core, with the naval activities as a dramatic operational backdrop.

There are many competing "asks" for these buildings which are all welcome. The challenge will be securing appropriate funding for these buildings to be rescued. Any active uses should be welcomed.

East Camber

The east camber was originally an important working edge to the storehouses. The proposed raised water garden will be utilised as part of a sustainable urban drainage approach whilst integrating heritage and leisure activities. Secure operational lines will always be integrated with landscape and public realm designs.

Fig. 1.25 View of Cobh Island from the northern side of Haulbowline Island; Rat Island and the Store Houses visible to the right of the image.

1.0 INTRODUCTION

1.6 Executive Summary

Irish Naval Service

The Masterplan is of paramount importance for the Irish Naval Service. It will help secure their future operational needs by providing additional lands to the western wall of the dockyard for logistical requirements, whilst vastly improving pedestrian connectivity throughout the base.

The Masterplan ensures that there is a cohesive secure naval base by reinstating clear boundaries. Connectivity and pedestrian linkages are restored through and around the heritage village to the western wall of the operational dockyard.

The Naval dockyard now has a dedicated logistical space to the western wall to allow the berthing of longer naval ships. Secure access around the basin is provided through the inclusion of a new lifting pedestrian bridge at the dockyard's throat. Boundaries are now sensitively defined through the use of tree-lined fence lines, in keeping with the formal character and the heritage of the island.

The graving dock has been reclaimed on the western side for active uses. This area has been designed to allow external private operators to utilise the dock in the future whilst ensuring the dockyard integrity is retained.

Linkages

The Masterplan whilst being focused on the island also takes into account the importance of the island within Cork Harbour. It will also be important to provide improved linkages, better connectivity by sea, road, and rail to Haulbowline and its neighbour Spike Island from the surrounding access points.

Arrival

The Masterplan has proposed a major new pedestrian plaza, Haulbowline lawn and central car parking area. This area has a number of potential futures but the Masterplan vision illustrates alternative options for a major national landmark visitor building or educational

cluster facing the IMERC campus to the south. The site also has been highlighted as a potential location for a major logistics building that could also be linked with naval operations and in particular the increased docking capacity along the dockyard west wall.

Logistics

The space is designed to provide dedicated rationalised car parking for the island. The southern pier can also act as a drop off area for arrival to the island by road. This space frames views to all parts of the island for the visitor and improves security by the demarcation of clear zones for public access.



The island will be remediated throughout in the near future. An infrastructural "smart grid" is proposed. This is organised to ensure future disturbance of the remediated lands is avoided. Buildings will "plug and play" into the utilities framework in the future phases. It is important that the civil engineering requirements of future requirements are accommodated at early stages of the planning process. At this stage the capacities for future developments have not been fully identified and will require substantial additional studies. These may in turn alter the Masterplan's detail.

Fiscal incentives

The Masterplan does not purport to be a cost benefit analysis for the island's development. There are too many unknowns for an accurate financial analysis to be undertaken at this time. However there does exist

Catalysts

Low cost Initiatives on a small scale can have large impacts and it is the intention that a number of reuse public realm projects could be initially developed in areas to encourage a greater sense of public participation.

Genius loci

The island is above all a unique place. It is both natural and solely man-made. The island has now the opportunity to become a pilot project for best practice.



Fig. 1.26 HMS Victory visiting navy at Portsmouth Historic Dockyard. Fig. 1.27 HMS Victory, Portsmouth Historic Dockyard.





1.6 Executive Summary

LEGEND

06.

01.	West Camber - Naval Logistics Dock	21.	Boat Technology Museum
02.	Helipad	22.	Future Oil Storage / Firing Range
03.	Car Parking	23.	Parade Ring
04.	Dock Basin	24.	Martello Tower
05.	Graving Dock	25.	Grand Visitor Staircase

29. Boat / Ship Maintenance

31. Naval Education Building

30. Grand Passage

32. Crematorium

34. Beaufort Lab

36. Road Bridge37. Paddy's Point

38. Spike Island

39. Cobh Riverside Walk

33. NMCI

35. IMERC

Naval Yacht Club 26. Marina

07. Naval Operational Area27. Water Ferry Quayside08. Lifting Bridge28. Ocean Racing Facility

08. Lifting Bridge09. Naval Park

10. Naval Sports Pitch

11. Spike Island Pedestrian Bridge

12. Park Access & Future Jetty

13. Orientation Centre14. Naval Security

15. Visitor's Lawn16. Visitor Centre

17. Energy Centre

18. Heritage / Innovation Village

19. Rat Island20. Naval Court

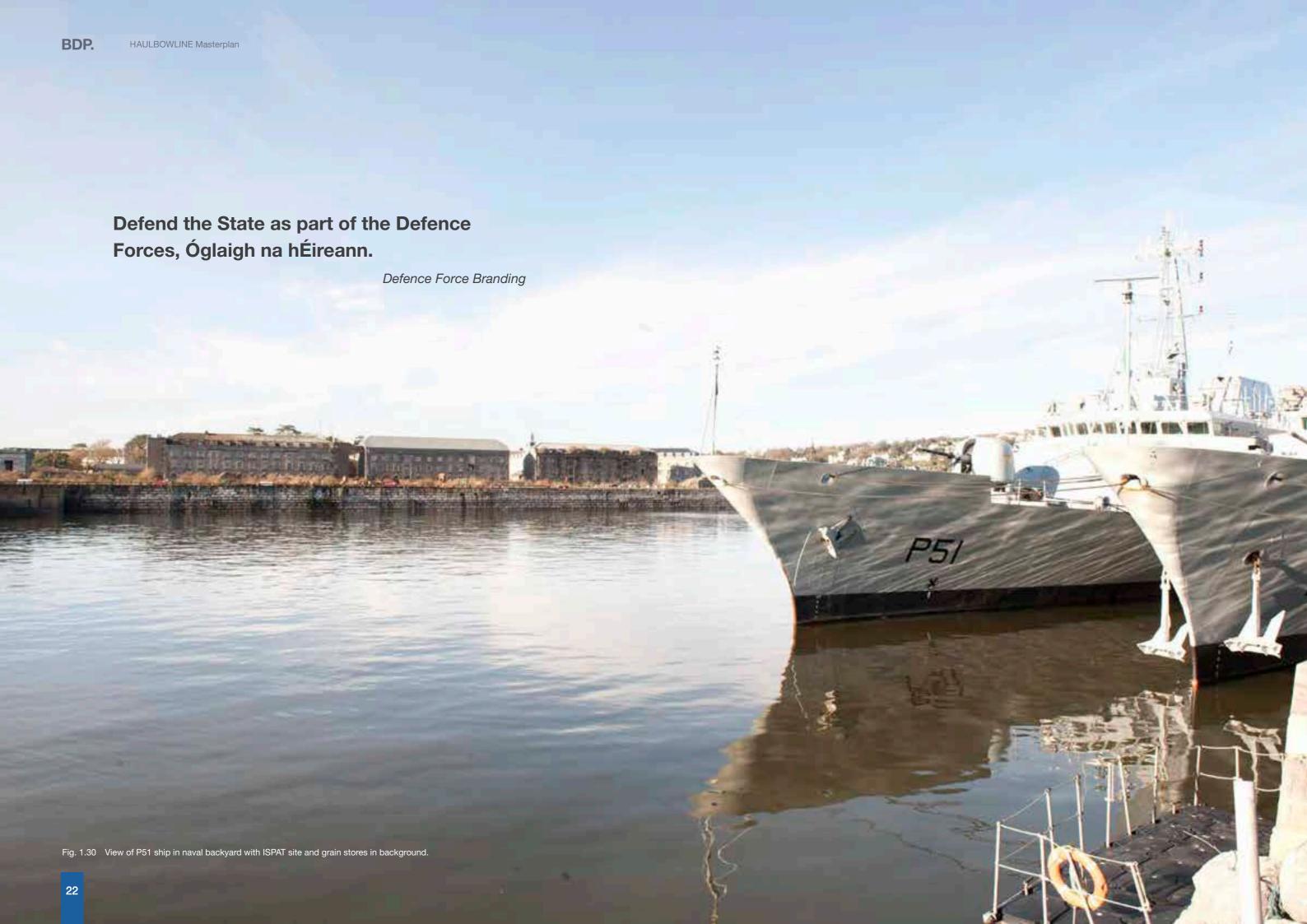
New

Re-adaptation of Existing Structures



Fig. 1.28 Artist's view of the central Grand Passageway for the island, illustrating the refurbished storehouses, water gardens and public realm spaces. (See legend no. 30)





BDP.

The context sets out the physical context of the island. Along with a description of the surrounding communities its also describes the island in detail through Lynchian analysis drawings, photographs and scale comparisons. A time line gives a brief overview on the island's evolution and along with a neighbourhood analysis the section describes the various parts of the island today.



MASTERPLAN CONTEXT



Fig. 2.01 Haulbowline Island viewed from Cobh.



Fig. 2.02 Aerial view of Haulbowline Island from the north east in 1933, showing the dockyard in intensive use. Also note the existence of the East Camber adjacent to the Store Houses, enabling quayside access into the centre of the island.





Fig. 2.04 View of Haulbowline and Spike Islands from Cobh.



Fig. 2.05 The views from St. Mark's Square in Venice, across to San Giorgio Maggiore have the same visual power as looking across from the ramparts in Cobh.

2.0 MASTERPLAN CONTEXT

2.1 Genus Loci

The Masterplanning process quickly identified the "genius loci" (the spirit of the place), as important consideration for all stakeholders.

The island forms part of a cluster of "plated" islands that populate the harbour.

The "spiritual" qualities of the island are important to define. The island's buildings sit on the harbour edge. Powerful photographs of the store houses with the working east camber water way, illustrate a series of buildings that are wholly dependent on the surrounding water ways. This in turn produces a powerful architecture. Haulbowline was originally a powerful architectural statement in the 1930s. The views from St. Mark's Square in Venice, across to San Giorgio Maggiore have a similar visual power as views from the ramparts in Cobh to Haulbowline.

Haulbowline Island sits at the entrance to Cork Harbour. It has been in continuous operation as a naval base for over 200 years. The island is half natural, half man-made. Its physical growth is one of substantial civil and maritime engineering ambition.

The island's original "front door" is only visible from Cobh. There is an "urban conversation" between Cobh, its terraced streets and the formality of the island's six store houses. Both are visually connected across the Cobh Road sea channel.

Arrival by boat was traditionally alongside the store houses. Haulbowline has played host to kings and dignitaries from the northern pier. The store houses were a place of civic "grand arrival" and embarkation.

The island is now accessed by road from the south. The activity around the IMERC cluster and the National Maritime College has meant that the island has now a single front door. A utilitarian bridge facilitates arrival by road. It is distinctly underwhelming.

The elevation of the western original island footprint is contrasted by the man-made dockyard which sits close to the sea.

The storehouses are also reminiscent of the giant Mills of Saltaire in Bradford and northern England.



Fig. 2.06 Saltaire Mills in Bradford.

They have an iconic functional architecture which is deeply connected to the surrounding maritime context. They "sit on the sea"

Ensuring that the Masterplan utilises the existing heritage and helps reveal the "elements" of the island are key considerations.

Opportunities also exist within the Masterplan proposals to transform parts of the island for their original use. The reclamation of the west wall for naval use will bring this industrial architecture back into active daily use.

There now exists an opportunity to carefully reveal the island once more, respecting its rich tradition whilst protecting its future.

Fig. 2.09 Haulbowline Island - Aerial view with Cobh in the background. (Courtesy of the Irish Defence Forces)

2.0 MASTERPLAN CONTEXT

2.2 Overview

Haulbowline Island is located in Cork Outer Harbour, some 550m from the heritage town of Cobh. The island incorporates a harbour built by the British Admiralty in the 1790s. The Irish Marine Service, established in 1939, which subsequently became the Irish Naval Service in 1946, has its headquarters on the island and is the main base for the Navy's operations. The harbour has some 190m of quay wall on the east side and 70m of quay wall on the northern side. This is the main area of activity of the Irish Navy and all maintenance work that does not require drydocking is undertaken here.

The entrance to the harbour is from the North East through a 29m wide opening. The harbour itself is well protected from ocean generated waves and in the direction of the entrance the reach is only some 650m so wave generation in the harbour from NW winds is minimal.

Haulbowline's strategic location has created a rich Naval history that is reflected in the character and authenticity of its buildings. It is an unique gateway to the harbour. The island has two distinct characters. The close knit elevated western edge whose urban structure is akin to that of a traditional Irish village; the eastern reclaimed landscape whose space is that of the shipping vessels it was intended to service.

The island is highly visible from the surrounding edges of the harbour and forms a backdrop for Cobh. The island's landscape is currently one of stark contrast. Scotch pines punctuate the skyline of the original island. The central and eastern areas of the island are abstract lifeless brownfield areas, which are visually incongruous with the surrounding bay.

The island's history is deeply connected with the sea. The disasters of the Lusitania and the Titanic both have touched Haulbowline's past.

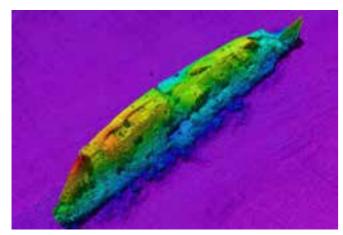


Fig. 2.07 New sonar imagery of the wreck of the RMS Lusitania one hundred years after it loss. A 3D image of the wreck of the Lusitania with the bow of the vessel towards the NE. The wreck lies on a flat sea floor in a general depth of 93m. INFOMAR Integrated mapping for the Sustainable Development of Ireland's Marine resource.

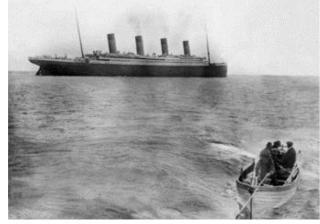


Fig. 2.08 The last image of the Titanic leaving Cobh.





Fig. 2.11 Haulbowline Island, 1902.

2.0 MASTERPLAN CONTEXT

2.3 Haulbowline Historic Timeline

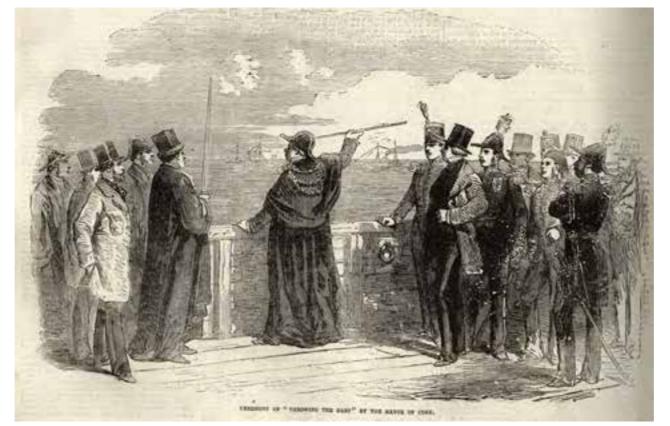
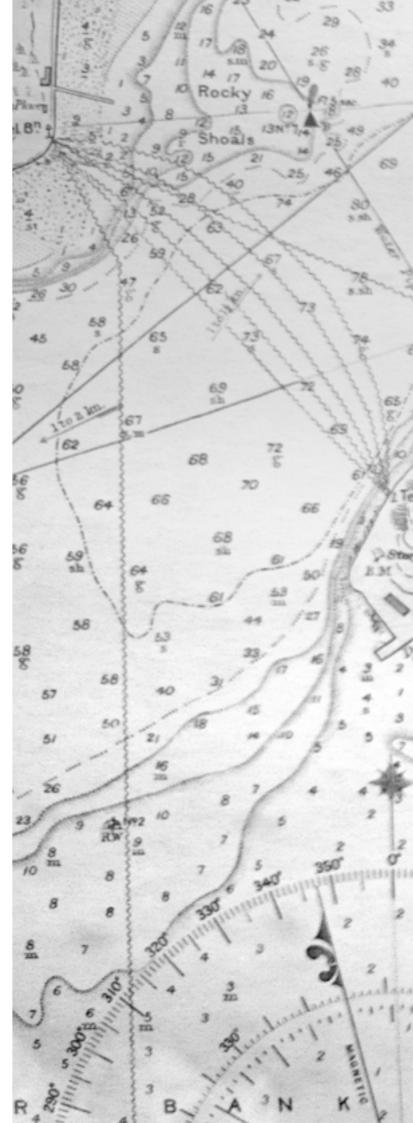
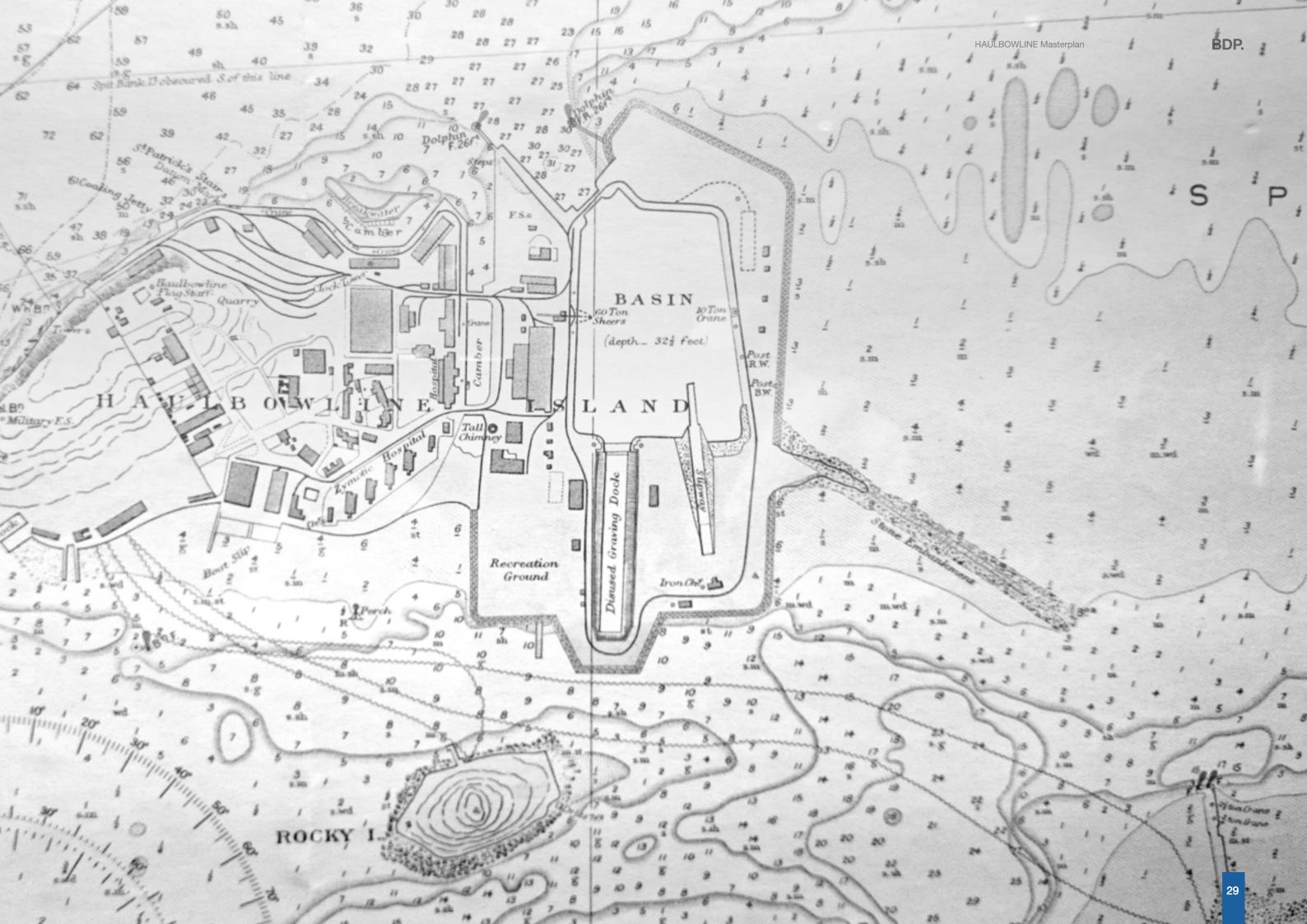


Fig. 2.10 Throwing the Dart, 1855.

His Excellency and the Viceregal cortege in the Admiralty barge, rejoined the steamer, at Haulbowline, shortly before two o'clock, when the steamer proceeded to sea, and having arrived at a point commencing the outline of the Poor-head on the left, and the Old head of Kinsale on the right, the Mayor and civic authorities proceeded to assert the corporate jurisdiction over the harbour by the customary formality of throwing the dart

Illustrated London News, Vol.XXVI, 1855, p.531 2 June 1855





2.3 Haulbowline Historic Timeline



Fig. 2.12 Map of Cork Harbour by Rev J Lindsay (1750).

800 - 900: Norse sailors establish longphorts in locations throughout Ireland, including Cork, and make frequent use of Cork Harbour. "Haulbowline" is derived from the Norse "Aalebolig" meaning "eel location" or "den".



Fig. 2.14 King William besieging Cork.

1620 - 1690s: After vacation in 1620, the fort falls into disrepair. The island is occupied discontinuously during the mid 1600s, and in 1690 the unoccupied island is taken by Williamite Forces, who go on to seize Cork City and Kinsale. By the late 1690s the island is once again unoccupied and falls into further disrepair.



Fig. 2.13 Fort on Haulbowline Island (1603).



1707 - 1795: In 1707 Lord Inchiquin of Rostellan leases the island, setting up a sailing club called "The Water Club" in 1720, the first of its kind in the world. During this time the island did not have much military significance as Kinsale was the primary Naval Establishment on the South Coast. Based on a survey in 1795 Haulbowline is selected as the location for a Naval Re-Supply Base and hospital.

Fig. 2.15 "Cork Harbour 1738" by William van der Hagen.



1806: Lord Inchiquin's lease terminates, and Haulbowline is occupied by the Navy to the East and Ordnance to the West. A large stone North-South wall is built to divide the island, with an archway for access. The wall and archway still stand today.



1815: The Martello Tower
- one of a number on the
Lower Harbour area - is built
on Haulbowline. A large
cannon sits atop providing
360° cover. The Martello
Tower remains in use today
as a store for Naval artefacts.

Fig. 2.17 Archway on Haulbowline Island.

Fig. 2.19 Martello Tower on Haulbowline.



Fig. 2.16 Rat Island.

1804: In order to protect small craft from adverse water and weather conditions, and allow for their repair and general maintenance the west camber and breakwater - known locally as Rat Island - is built.



1807 - 1818: The area known as Royal Alexandra Yard is built to the North of the island. Comprising of quays and six large Store Houses all constructed from limestone quarried on the island, the Store Houses are used for re-supplying the fleet, with one used as a Naval Hospital. A Zymotic Hospital for the treatment of tropical diseases is also accommodated in a number of red brick buildings. The Zymotic Hospital is no longer standing, while Royal Alexandra Yard remains well preserved.

2.3 Haulbowline Historic Timeline



Fig. 2.21 Graving Dock on Haulbowline.

1894: A dockyard is completed on Haulbowline, greatly exceeding both expected cost and duration. A causeway is built to transport prisoners from the neighbouring Spike Island to act as labourers in its construction. The dockyard has a paved bottom and dock gates that allow it to be pumped out for use as a dry-dock. A smaller dry-dock is later built inside the bigger dock in 1910.



Fig. 2.23 Dainty - early Irish Free State ship.

1921 - 1938: After The Anglo-Irish Treaty, Haulbowline is transferred to the Irish Free State in 1923. As Ireland has no Navy, the Naval Base is closed down, but kept on a "care and maintenance" basis by the OPW throughout the 1930s. Great Britain keeps possession of the three Treaty Ports of Berehaven, Cork Harbour and Lough Swilly throughout the 1920s and up until 1938.



Fig. 2.20 USS Jamestown arriving in Cobh carrying relief (Rodney Charman).

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1845 - 1847: During the Great Famine Haulbowline Island operates as a Relief Depot, storing grain shipped in from America for distribution around the country. In 1847 distribution ceases, and despite 3,000 tonnes of grain remaining on the island, locals starve on the mainland. Irish rebel John Mitchell recalled - "Perhaps there are thousands of tons of food rotting within the stores at Haulbowline at Cork Harbour, - and tens of thousands rotting without".

1917 - 1918: During World War One Haulbowline serves as a re-supply base for the Allies. In 1917 with America entering the War and after the sinking of the Lusitania the strength of the Naval Fleet in Cork Harbour was greatly increased. From 1917 to 1918 a total of 92 US Navy ships are stationed in Cork Harbour, as well as American Seaplanes. In total approximately 2,000 marines and 3,000 dockyard workers were based at Haulbowline during the War. After the War ends in 1918, Haulbowline operates with a reduced workforce and with less re-supply demands.



Fig. 2.22 Sub chasers in Cork Harbour.



Fig. 2.24 British garrison leaving Spike Island after handover.

1939 - 1970s: In 1939, Great Britain hands over the three Treaty ports (Berehaven, Cobh and Lough Swilly) to the Irish Free State. "The Marine and Coast-watching Service" is established in order to protect Irish coasts and offshore waters, and 6 Motor Torpedo Boats are purchased. Haulbowline is reactivated to act as the Naval Base. In 1946 the decision is taken to make the Marine and Coast-Watching Service a permanent part of the Defence Forces, and so is born the Irish Naval Service, which has been based in Haulbowline since.

Through the 1950s and 60s fishery protection is the main day-to-day task of the Naval Service.

1939 also sees the opening of the Steel plant on the island. In 1946 the privately-owned firm goes into receivership, and a year later the Government purchases and nationalises the company to secure some 240 jobs.



Fig. 2.26 ISPAT factory during its dismantling.

2001: Days after the terms of its five-year deal with the Government expired, Irish ISPAT announces it was closing the plant.

400 jobs are lost, while Irish ISPAT also leaves debts of £45 million - including £23.7 million it claims it owed to its parent company ISPAT International, as well as £4.2 million owed to workers.



Fig. 2.25 LÉ Deirdre.

1972 - 1989: The Naval Service commissions many of the ships it still operates with today. In total seven new ships and two auxiliary ships are commissioned.

1995: The island's steel plant, plagued by difficulties throughout the 1980s and 90s, is eventually sold to ISPAT International Group for $\mathfrak{L}1$, with the understanding that money would be invested in the plant and its 330 jobs secured under a five-year plan.



Fig. 2.27 ISPAT factory during dismantling stage.

2011 -: It is estimated that up to 500,000 tonnes of slag remain on the former Irish ISPAT site on Haulbowline Island. An interagency taskforce, is set up to draft a remediation plan for the island.

It results in a €40m rolling package to fund the clean-up and in October 2013, a planning application seeking permission for the project is lodged with Cork County Council.

Fig. 2.30 Haulbowline Island sits within Cork Harbour, as a "gateway" island. It is surrounded by a variety of neighbours, in a visually rich environment. The port of Cork in the foreground is undergoing major redevelopment and will further intensify maritime activities around Haulbowline.

2.4 Surrounding Communities

Haulbowline is part of a wider maritime community that contributes to the life of Cork Harbour.

Cobh is the traditional partner of Haulbowline. Its ramparts face the island directly. The island is also part of Cobh's daily psyche. The "real" connectivity has been largely broken and the island, whilst visible is disconnected apart from the occasional naval ferry.

Ringaskiddy is the closest residential community, although it is further away than Cobh.

The town forms the first part of the gateway to the emergent IMERC cluster. The approach by road is visually fragmented.

The €100 million redevelopment of Ringaskiddy Port has been recently granted planning permission by An Bord Pleanála. The redeveloped port which is due to be operational by early 2018 will facilitate larger shipping vessels; ensuring that the Port of Cork remains competitive.

Spike Island is the closest island. A visually fortified prison, the island is a frozen artefact from the past history of the bay, which is now proposed as major visitor attraction.

The closest island to Haulbowline is Rocky Island. It operates a small private crematorium which is hidden from the passer by.

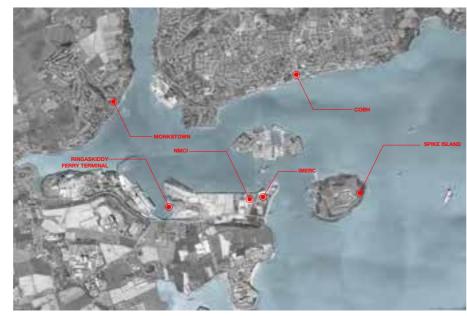


Fig. 2.28 Haulbowline surrounding communities.

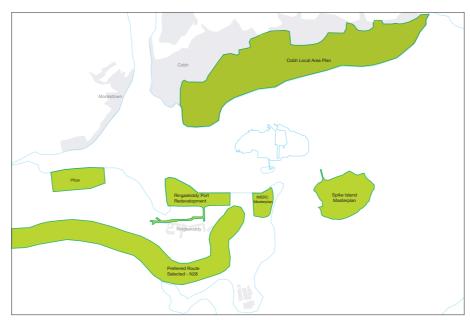


Fig. 2.29 Masterplan and Proposed schemes within close proximity of the site and likely to have a considerable effect on the site.





2.4 Surrounding Communities

IMERC Cluster

The IMERC South campus is the closest neighbour to Haulbowline. The emerging maritime and research campus is closely linked with Haulbowline through the shared resources of the National Maritime College of Ireland.

IMERC is currently completing the construction of the Beaufort laboratory as the first part of their IMERC South Masterplan. This will become the largest marine renewable energy research centre in the world.

IMERC is also involved the wider regeneration of Haulbowline. Proposals for a number of related initiatives exist at early planning stages, including:

- Scaled floating wind turbine to demonstrate MaREI process for ocean renewable energy conversion to green biogas – potential for worldwide application of Irish technology;
- Additional research and start up innovation hub building;
- International Ocean yacht racing team.

IMERC faces Haulbowline Island and the visual integration of their campus with the island as an important organising principal. The southern entrance to the island addresses the new developments and the original NMCI's design is organised on a visual ley line which extends across the island's ISPAT site (See figure 2.32).

The interconnectivity and sharing of facilities is an important consideration in the development of the wider educational campus with the Irish Naval Service.



Fig. 2.31 Artist's aerial visualisation of the IMERC proposed cluster, with Haulbowline in the foreground (courtesy of Laura Mellett).

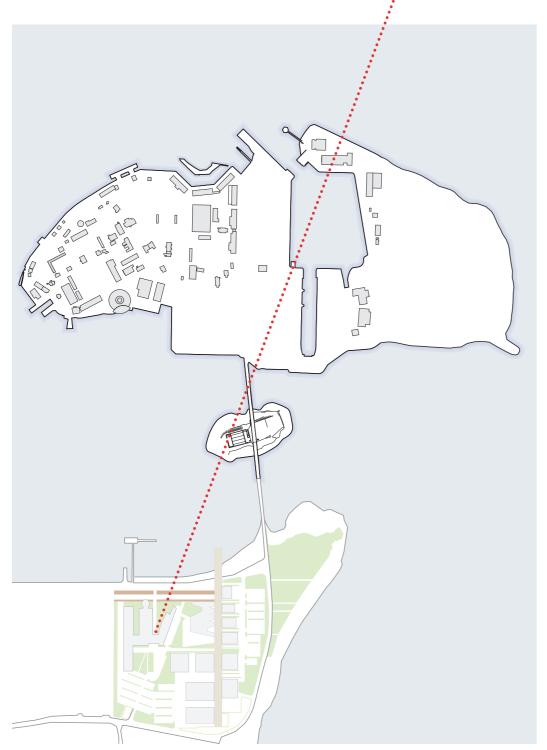


Fig. 2.32 The IMERC campus with Haulbowline Island, is shown on the southern part of the diagram. A Lynchian analysis identifies the key view corridor across the island to the Cathedral Spire in Cobh.



Fig. 2.33 The artist's visualisation of the IMERC campus from the south looking across Haulbowline Island at the top of page. (courtesy of ABK Architects)

2.4 Surrounding Communities

Spike Island

Spike Island is on the south east edge of Haulbowline and is intrinsically linked with its past and future. As a penitentiary island it has a Vauban citadel styled raised fort which is highly prominent on the skyline.

The island provided the convict labour for the construction of the dockyard in Haulbowline over a period of 17 years with the remnants of the connecting prisoner causeway still being visible at low tide.

A major visitor and tourism initiative has been developed for the development of the island as a tourism destination in recent years. The creation of linkages and the use of Haulbowline as a "stepping" stone to the island are all important parts of the Masterplan movement strategy.

Spike Island may become connected to Haulbowline through the development of a "lifting" pedestrian bridge. As such the connection of these unique places will form a compelling tourist destination in the harbour.



Fig. 2.35 Historical map of Spike Island (approximately 1900) illustrating the island penitentiary layout. The northern pier is a remnant of the caissons used to access Haulbowline Island for the construction of the eastern dockyard.



Fig. 2.36 Artist's impression of Spike as a major visitor's centre in the future. (Courtesy of Scott Tallon Walker Architects).



Fig. 2.34 View of Spike Island from the South with Haulbowline Island and Cobh in the background.

HAULBOWLINE Masterplan BDP.

23. Parade Ring

26. Marina

24. Martello Tower

25. Grand Visitor Staircase

27. Water Ferry Quayside

28. Ocean Racing Facility

30. Grand Passage

32. Crematorium

36. Road Bridge

38. Spike Island39. Cobh Riverside Walk

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NAVAL PARK

12

- 10. Naval Sports Pitch
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- 13. Orientation Centre
- Naval Security
- 15. Visitor's Lawn
- 16. Visitor Centre
- 17. Energy Centre
- 18. Heritage / Innovation Village
- 19. Rat Island
- 20. Naval Court
- New
- Re-adaptation of Existing Structures



Fig. 2.37 The Masterplan final Vision Plan illustrating Haulbowline in context with the Spike Island Masterplan and the proposed IMERC campus in the south.

39

F Fort Mitchel

2.4 Surrounding Communities

Cobh

Cobh was traditionally the front door for Haulbowline. The town originally served as home for the British Navy Commanders, with access to the island being only by boat via the store houses. Its urban development overlooks the island and it forms a constant colourful visual reference point.

The Pugin designed Cathedral spire is a dominant visual landmark when viewed across the island's central zone.

Cobh has plans for the regeneration of its waterside edge. An increasing number of particularly large Cruise Ships dock in the harbour during the summer months. As a destination it also provides a gateway by rail or bus from Cork, but not to Haulbowline. Intermittent Naval boats operate a limited ferry across the Cobh Road channel for the naval personnel and visitors.

Haulbowline is the back drop for all that happens in the Cobh waterfront. The proposed remediation works and regeneration of the island will substantially visually improve and help animate the town's waterfront.

Cobh currently has the Lusitania Museum and recently the town remembered formally the 100 year anniversary of the disaster.



Fig. 2.38 Lusitania ceremony on Cobh waterfront.



Fig. 2.39 Lusitania ceremony on Cobh waterfront.

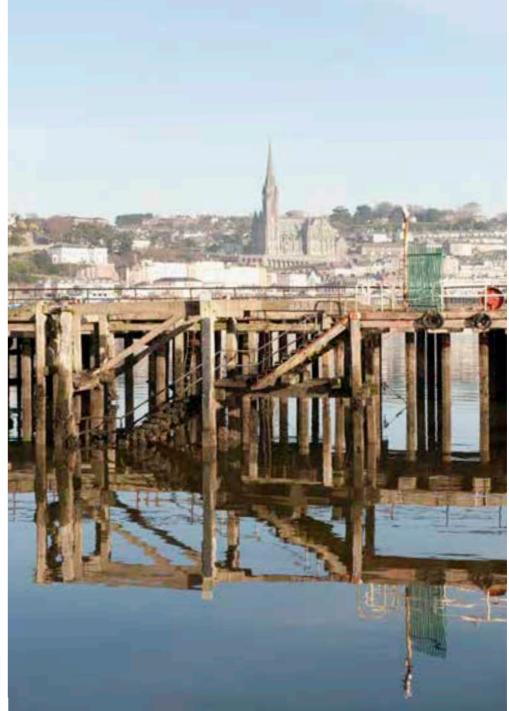


Fig. 2.40 View of St. Patrick's Cathedral, Cobh from Cobh Road channel.



Fig. 2.41 View of cruiser docking in Cobh.



Fig. 2.42 Aerial view of Novartis pharmaceutical plan with Haulbowline Island and port of Cork in top left.



Fig. 2.43 View of Camden Fort. Cork Harbour is punctuated by a number of historic defensive forts around the peninsula.

Cork Harbour and the adjacent Pharmaceutical Industries

Cork Harbour also has a number of major Pharmaceutical campuses around its periphery. These campuses are close by and are important in the creation of sustainable local employment in the area.

Camden Fort

Cork Harbour has a number of forts that are visible from Haulbowline, accessible directly by sea from the base. These forts form part of a tapestry of heritage fortification for the wider harbour area.

2.5 Physical Development of the Island

Haulbowline has a long history as a naval base at the gateway to Cork Harbour. Its location was originally recognised by the Admiralty and the creation of a naval base dates back to the 1790s. The strategic importance of the base also prompted the ambitious development of the dockyard.

"Large amounts of Limestone blocks had been prepared, and laid out in long rows, but there was not much progress in the construction of the basin and dock walls; only 600ft of the 2,800ft of quay-wall had been completed. This quay wall was 42ft high from its foundation, being 18ft thick at that level and decreasing to 12ft thick at the top."

Haulbowline-the Naval Base and Ships of Cork Harbour, Daire Brunicardi, 2012.

The Naval Base island doubled its size starting in the late nineteenth century and created one of the largest sheltered docks in Ireland at that time. Stone was extracted from the island's northern quarry facing Cobh (now the location of the oil tanks and firing range), to create dock basin, measuring 41,099m². This equates roughly to nine times the size of the University College Cork Queens College Quadrangles or one Merrion Square in Dublin.

The creation of the new island and dock was initially supported with convict labour from the nearby Spike Island prison. Additional skilled workers were added, and the construction of the basin took over 17 years.

2.6 Island Population

The Central Statistics office indicates resident population of 148 in its 2011 Survey.

CD120: Population of Inhabited Islands off the Coast by Sex, Islands by Electoral Division and Census Year.

It should be noted that there is a much higher transient population on the island based on naval training cycles.

Fig. 2.45 Aerial view of Haulbowline Island from the east in 1933, showing the dockyard in intensive use. Also note the existence of the East Camber water way adjacent to the Store Houses, enabling quayside access into the centre of the island.

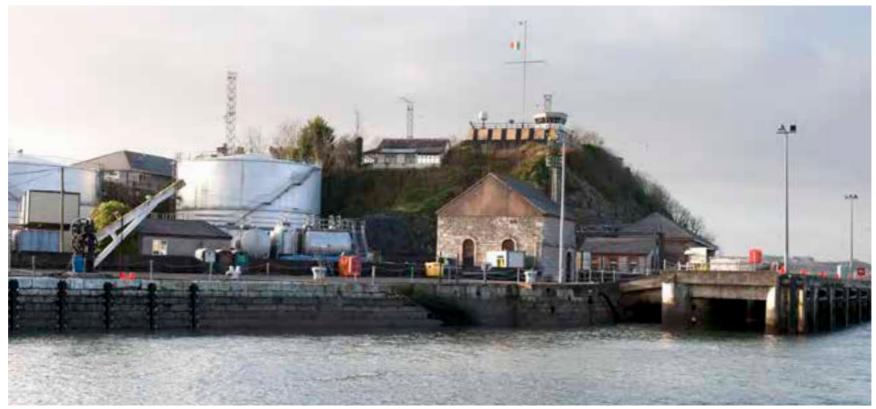


Fig. 2.44 View of the northern quarry, the location for the stone used to make the island's dock basin.



2.7 Land Zones

The island is divided into five character landscape zones. The zones relate largely to the incremental growth of the island.

The historic base

This is the original part of the island and is characterised as a self contained naval village centred on two squares:

- The parade ring
- The officers quadrangle

The spaces are fine grained, tree-lined and frame views towards the surrounding harbour and stepped landscape.

The materials of the buildings are very much of the island, with a combination of limestone, render and timber in areas. The overall feeling of the island is of a maritime environment.

The island is defined by a very high wall dividing the ordinance and naval parts of the island. The wall



Fig. 2.46 View across historic Naval core, showing dividing wall and archway.

makes a pronounced change in direction when it enters the sea on the southern side with a dramatic three storey Doric limestone gateway.

Central Store Houses

This area is arguably the most important part of the island for the Masterplan. The Store Houses designed by Cork Architect Thomas Deane in 1815 are exceptional four storey buildings that are laid out formally around an original quay edge (now concealed along Store Houses 4-6 and known as the east camber).

The centre of this area is dominated by the island's central rain water reservoir, which is a major civil engineering structure in itself.

The area is surrounded by a number of smaller structures in varying states of disrepair.

Naval Dockyard

The naval dockyard is a magnificent man-made facility that is accessed from the northern edge. The dockyard was not completed and hence there is a slipway in its south eastern corner. The dockyard also has a southern graving dock. Currently the Naval Service operates along the eastern wall in a relatively restricted footprint of approximately 2,800m². The central ISPAT brownfield site is vacant apart from a derelict single storey building.

Southern Arrival

The southern arrival zone is largely a brownfield site. It has a limited perimeter access road for the base and a few ad hoc buildings.

East Tip

The East Tip is as its names suggest a man-made hazardous waste tip from the former ISPAT factory. The East Tip site currently holds an EPA Waste Licence (W0289-01), issued on the 23rd July 2014 for the remediation of the site. Any development undertaken pursuant to this Masterplan will be required to ensure that the conditions/requirements of the licence are complied with. It has a single unused Naval playing pitch at the western boundary.



Fig. 2.47 View from watchtower to Cobh.



Fig. 2.48 View across historic Naval core.



Fig. 2.49 View of drill training in the parade ground.



Fig. 2.50 Arrival of personnel from Cobh by sea to the northern naval pier.

Character Zones

Active, Historic naval base

Central Store Houses and reservoir

Naval dockyard

Southern arrival zone

East Tip dumping ground



Fig. 2.51 View of the historic Store Houses from Rat Island.

Fig. 2.60 Aerial view of Haulbowline Island illustrating character zones.



Fig. 2.52 View to the Store Houses from Cobh Road.



Fig. 2.53 View across the ISPAT remediation site.





Fig. 2.55 View of the working naval docks.



Fig. 2.59 View of the historic boat houses from the south.



Fig. 2.58 View of the existing ESB utility line on the island's south west tip.



Fig. 2.57 View across the naval playing field to the East Tip.



Fig. 2.56 View of East Tip.

2.8 Planning Context

Overview of Haulbowline Planning Context

Haulbowline Island occupies a strategic and central location within Cork Harbour, approximately 14 kilometres southeast of Cork City and adjacent to Ringaskiddy.

The statutory local planning policy context for Haulbowline is provided by the Midleton Electoral Area Local Area Plan 2011.

Notwithstanding that the island is located within the Midleton Electoral Area, access is from a single bridge on the southern part of the island, connecting with Ringaskiddy in the Carrigaline Electoral Area 2011. The Carrigaline Electoral Area Plan is therefore also of some relevance to the island. At a more regional level, the Cork County Development Plan 2014 – 2020 and the Cork Area Strategic Plan (CASP) 2008 are relevant.

There are a series of non-statutory land-use plans relating to the Cork Harbour area, such as the Spike Island Masterplan (2012), IMERC Masterplan (2013), the Draft Cork Harbour Study (2011) and the Port of Cork Strategic Development Plan 2012.

The Haulbowline East Tip Remediation Project was approved by An Bord Pleanála in May 2014. Permission had been sought by Cork County Council for the remediation of the East Tip, comprising of the following:

- Demolition of 3 no. existing buildings on the site and site clearance;
- Re-profiling of the site;

- Construction of a perimeter engineered structure (PES) and an engineered capping system with surface water drainage system - the PES would include a rock armour on the sea side;
- Provision of a public park;
- Provision of a playing pitch to replace the existing naval facility;
- 2 no. 2-lane access roadways to provide segregated access from Haulbowline Bridge to the proposed public park and to the naval dockyard, with associated revised security arrangements;
- Provision of new footpaths.

An application for the remediation of the East Tip was required on foot of a European Court of Justice Judgement (ECJ494/-1) (April 2005).

The East Tip Remediation Project is a key factor in the formulation of the Haulbowline Masterplan.

National and Regional Planning Policy

The National Spatial Strategy promotes revitalisation in the south-west region and recognises development of economic potential based on tourism, marine and natural resources and certain types of enterprise development.

The Regional Planning Guidelines (RPG's) for the South West 2010 – 2022 recognise that the maritime environment offers a new range of exciting possibilities for sustainable economic activity and growth in the region.

Section 1.3.20 of the RPG's notes that the region has significant capacity for research and innovation.

Statutory Local Planning Policy Context

Cork Area Strategic Plan (CASP)
The CASP recognises the potential of Haulbowline for major medium to high density mixed-use redevelopment, including high quality workplaces, apartments and cultural projects. The CASP is supportive of the concept of clusters, specialisation and growth.

Cork County Development Plan 2014 - 2020
The County Development Plan acknowledges the development of the East Tip at Haulbowline as a recreational area. (Section 6.6.1). The County Development Plan states that the remainder of the island is suitable for naval/marine related developments (Section 6.6.1).

The County Development Plan also recognises that the full potential of the Cork Harbour area could be better realised through a more integrated approach to its planning and development. Reference is made in this context to the Draft Cork Harbour Study (Section 6.6.9).

Midleton Electoral Area Local Area Plan (August 2011)
This is the statutory land use plan for Haulbowline.
There are no zoning objectives set out for the island.
The island is recognised in the LAP as a "brownfield" site. It is stated that redevelopment on the island will most likely be based around the historic uses on the site, predominantly the Naval Base.

The LAP recognises the potential and heritage and cultural development, including through linkages with Spike Island and Fort Camden. Potential synergies with the National Maritime College and IMERC are also acknowledged.

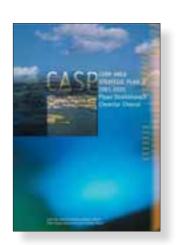








Fig. 2.61 Masterplanning statutory documents for the Haulbowline study.

The LAP states that the continued existence of hazardous waste material at the former Steel Factory site is a significant restriction to new development.

The LAP sets out a number of constraints associated with development at Haulbowline, comprising of the following:

- Lack of adequate mains water supply and wastewater infrastructure;
- Reliance on a single road access point;
- Absence of public transport;
- · Lack of existing community facilities or services.

The LAP states that there is a need to achieve greater direct access on foot across the mouth of the dock basin between the Naval Base compound and the dock to the east of the island.

The following protected structures on the island are identified:

- Martello Tower;
- Group of limestone warehouse buildings.

In addition to the above, it should be noted that the National Inventory of Architectural Heritage (NIAH) lists a number of other buildings of importance, including the tank building, church, boathouse, a number of houses, and naval office.

The LAP identifies that the western part of the island is an Architectural Conservation Area (ACA). It is an objective of the LAP to conserve and enhance the special character of this area. The Masterplan proposals will need to take cognisance of this Conservation Area designation. Any proposals in the Masterplan for development within or adjoining the Conservation Area will need to ensure that any such development does not have a negative impact upon the character and appearance of the Conservation Area. It is noted that the Conservation Area designation largely relates to the existing Naval operations on the west side of the island. Having regard to the requirement for security at this location, the Masterplan does not propose any significant additional development within the Conservation Area.

The LAP also acknowledges that the Lee Catchment Flood Risk Assessment and Management Study has not identified any flood risk on the island.

It is noted that there is some local evidence of overtopping of the sea levels in the vicinity of the harbour to the north of the island. Any specific development proposals on the site should be subject to flood risk assessment, and if necessary, incorporate project specific flood risk mitigation measures.

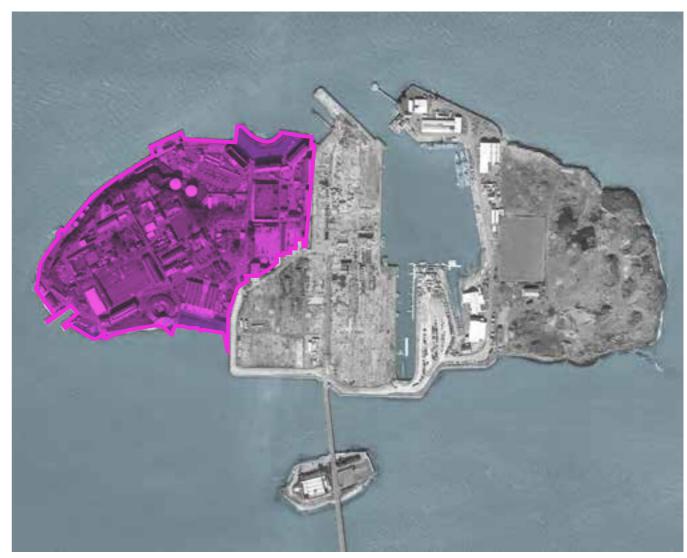


Fig. 2.62 Haulbowline Island with the conservation zone highlighted.

2.8 Planning Context

Non-Statutory Local Planning Policy Context

Cork Harbour Study (Draft – 2011)

The introduction to the Draft Cork Harbour Study states that "Cork County Council has been aware for some time of the need for a more integrated approach to the planning of Cork Harbour".

The Cork Harbour Study of 2011 identifies that the main potential for new uses on the island is at the site of the former Steel Factory.

It is also noted in the Draft Study that the circa early 19th Century single storey building that remains following site clearance at the former Steel Factory site was recommended for retention by the Department of the Environment.

Spike Island Masterplan (2012)

The Strategy set out in the Spike Island Masterplan favours clustering a set of attractors to create a rich visitor experience and strong destination profile.

A key element of the achievement of the strategy for the island is the creation of linkages to the island. A number of options are considered in the Masterplan, including the following:

- The bascule bridge rock armoured causeway with central part comprising initially of a floating pontoon and eventually a bascule bridge. This would comprise of a link between Haulbowline and Spike Island;
- A roll on/roll off option with link either to Haulbowline or Ringaskiddy;
- Passenger vessel between Cobh
 Haulbowline/ Ringaskiddy – Spike Island.

The Masterplan states that it is unlikely that the potential of Spike Island can be realised without the bascule bridge option.

IMERC Masterplan (2013)

This Masterplan sets out the framework for the development of a campus at IMERC, which would benefit from the facilities of The National Maritime College of Ireland, the Irish Naval Service Headquarters on Haulbowline Island and the Beaufort Laboratory (UCC).

The Masterplan states that "The former ISPAT Office Buildings on Haulbowline Island will become a focus for IMERC related business incubation, SME support and soft landings for FDI".

The Masterplan highlights that there is a requirement to address the physical separation between IMERC and Haulbowline by creating a single point of arrival to IMERC and by encouraging connectivity.

The Masterplan proposes to locate the entrance point to the IMERC Campus at the head of the bridge that leads to Haulbowline Island to create a "gateway" for those visitors to IMERC, continuing on to Haulbowline Island as well as marking the entry to the new Campus to the west.

Port of Cork Strategic Development Plan (2010)
This Development Plan by the Port of Cork was undertaken in the light of changing planning and transportation policies at national, regional and local level and followed the refusal by An Bord Pleanála in 2008 of a port facility development at Ringaskiddy. The Development Plan identifies that port lands adjacent to Ringaskiddy Ferry Terminal will be the

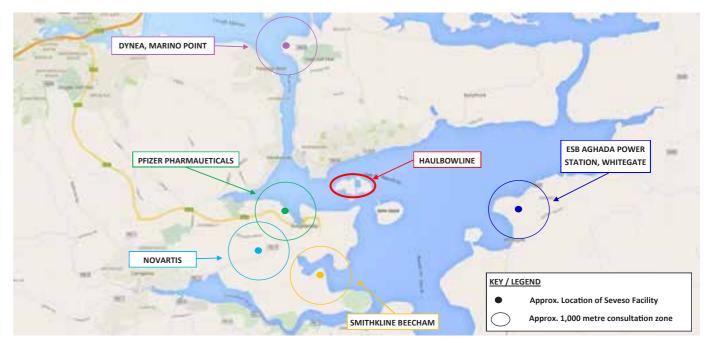


Fig. 2.63 Haulbowline Island in context with surrounding SEVESO zones highlighted.

most suitable location for the development of a container terminal in the Port of Cork.

At the time of writing, there is a current application to An Bord Pleanála for redevelopment of existing port facilities (Ref: PA0035). Oral hearing has been concluded and a decision from An Bord Pleanála is awaited.

Seveso Sites

Section 14.5 of the Cork County Development Plan 2015 – 2021 relates to control of major accidents hazards and the Seveso II Directive 96/082/EC as amended by Directive 105/2003/EC, which seeks to reduce the risk and to limit the consequences of accidents at manufacturing and storage facilities involving dangerous substances that present a major accident hazard.

Objective ZU 5-1 of the County Development Plan seeks to "Reduce the risk and limit the consequences of major industrial accidents by, where appropriate, taking into account the advice of the Health and Safety Authority when proposals for new development are considered".

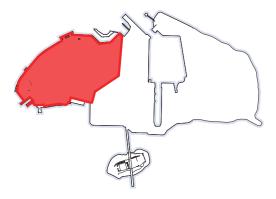
It is noted that there are two Seveso sites located in Ringaskiddy, namely the Novartis Ringaskiddy site and the Pfizer Ireland Pharmaceutical site. The Carrigaline Electoral Area Local Area Plan states at Table 2.7 that both of these Seveso sites have a consultation distance of 1,000 metres.

The closest of these is the Pfizer Pharmaceutical site.

This is located approximately 1.2 kilometres from the south-western tip of Haulbowline and as such is located outside the consultation zone.

Therefore, the proximity of the Seveso sites is unlikely to have any material impact on the land use planning options for Haulbowline.





2.9 Four places - One Island

Active Naval Base

"By 1914 the dockyard employed 3000 men and was home to a significant fleet of British and US naval ships during the First World War"

> Naval Service Masterplan for Haulbowline 2014 3: Historical Context (c)

The island has four places that could not be more different in character. The Naval Base has now been designated as an Architectural Conservation Area (ACA). It has numerous fine examples of 18-19th century maritime buildings along with naval heritage artefacts. The spaces between the buildings operate well as parade rings and as training areas for the naval cadets. It is very much alive with tradition and ceremony. The spirit of the place is clearly one that is intrinsically linked with the sea.

The Parade ring is the formal heart of the island and it is the designated formal display area for the navy, displaying the Irish flag and colours.

The island has an elevated topography rising 21m above sea level. The north facing cliff edge overlooks the main maritime routeway. Framed views to the surrounding landscape setting towards Cobh, Spike Island and the harbour in general are stunning, but largely hidden from the public.

The atmosphere in the base is collegiate. The buildings are of a human scale and the resultant spaces and landscaping creates relatively sheltered spaces from the prevailing south westerly winds. The materials of the building vary from locally quarried limestone to render. The lasting impression of the of base's architecture is one of a distinct maritime "feel" and historic community.





Fig. 2.66 View of drill session in active naval base.



Fig. 2.67 View of Logistics Unit.

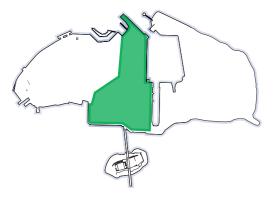




Fig. 2.68 View of drill session on the parade ring. Fig. 2.69 View of the northern naval promontory.







2.9 Four places - One Island

Western Dock Edge

The western dock edge is the site of the former ISPAT steelworks factory. Currently it is a hazardous brownfield wasteland at the heart of the island.

The space is very large, equivalent to O'Connell Street in Dublin (only wider), or to the formally laid out 1635 Palais Royal enclosed garden in Paris. These spaces are surrounded by city neighbourhoods and consequently they provide a city-scale briefing space. The island's central space is single sided, and particularly exposed to coastal weather extremities.



Fig. 2.71 Basin excavation work during the 1870s.



Fig. 2.72 Aerial view of the western dock edge. (Image courtesy of the Irish Defence Forces)



Fig. 2.74 View of the ISPAT site.



Fig. 2.76 View along the western dock edge north towards Cobh.



Fig. 2.70 View of the ISPAT remediation site.

Fig. 2.73 View of the dockyard west wall.



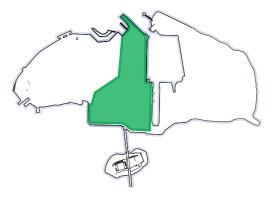
Fig. 2.75 View of the ISPAT site.



Fig. 2.77 View across the Ispat site towards the Store Houses.







2.9 Four places - One Island

The West Quay Wall

The entrance to the harbour is from the North East through a 29m wide opening. The harbour itself is well protected from ocean generated waves and in the direction of the entrance the reach is only some 650m so wave generation in the harbour from northwest winds is minimal.

There is a west quay wall some 185m long. It runs alongside the site of the old ISPAT steelworks. The steelwork area is commencing remediation to remove hazards associated with contamination that occurred when it was a steelworks.

The Navy currently have 8 no ships with a total length of 582m. In 2016 with the decommissioning of two ships which are being replaced the total length of vessels will be 631m. Their available quay length currently is 190m so only two vessels can be alongside the quay at any one time unless they are moored in tandem.

The west quay wall is considered of paramount importance to the Irish Naval Service, as it provides additional capacity. It also reduces pressure on the severely congested Eastern quay wall.

The west quay wall has not been surveyed as part of the Masterplan buts its condition is believed to be robust for continued naval use.

The space does provide logistical opportunities for future naval operations. It provides a multi-use logistics carpet for almost any activity associated with the naval operations. Importantly this can be secured or expanded as required allowing the island to have a major space for other event based activities. Also the space allows the creation of a central car parking location for all of the island's users.

"The West Wall will address the immediate requirement to accommodate and support the P61 class of vessel. This work is a critical requirement for the future berthage and support of P62 and P63 due for arrival over the next two years"

Naval Service Masterplan for Haulbowline 2014 7 (a) Phase 1: West Wall



Fig. 2.78 View of the 180m long west wall from the east wall.

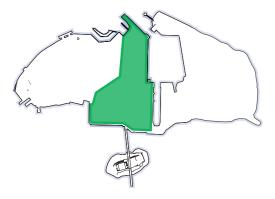
Fig. 2.79 View of the west quay wall.



Fig. 2.80 Detailed view of the west wall still in good working order.







2.9 Four places - One Island

Working Naval Docks

At the south western end of the harbour is a graving dock, built around the same time as the harbour. The dock is some 200m long and has an entrance width of 30m. The dock is out of use at present, the docks caisson gate is sunk in the middle of the dock making access for all but small boats impossible. There are two protrusions from the top of the dock wall which it is presumed were used to lay vessels along to provide additional quay space.

There is a slipway on the south eastern end of the harbour. This area is used by the Naval Yacht Club for boat storage and launching.

The graving docks are currently utilised informally for the Naval yacht club. The docks are largely intact with caissons gates from the main dock basin being abandoned in the middle of the channel.

"To consist of development of the berth around the drydock facility including roofing, site support and workshops"

Naval Service Masterplan for Haulbowline 2014, 7 (e) Phase 5: Redevelopment of the facility around the old Drydock

"The provision of a covered ship's berth in the area of the old drydock facilitates year round routine and specialist maintenance to the naval fleet free from environmental limitations"

Naval Service Masterplan for Haulbowline 2014, 7 (e) Phase 5: Redevelopment of the facility around the old Drydock



Fig. 2.82 View of the west wall and the south east slipway into the docks.

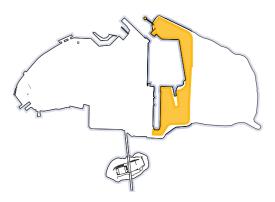


Fig. 2.83 View of the now defunct north quay.



Fig. 2.81 Detailed view of the graving dock accessed from the naval dock; currently in use as a berthing for the naval boat club.





2.9 Four places - One Island

Eastern Dock Edge

The eastern edge of the dockyard is an ad hoc arrangement of buildings with little or no obvious coherent structure. The spaces in between feel congested for naval uses due to the proliferation of competing activities, cross-over's and pressures on vehicular access. This area is the most unsuccessful in terms of the layouts of the buildings and is as a result of the legacy constraints from the ISPAT factory on the western dock edge.

The space is considerably restricted considering the increasing size of the naval fleet and its associated logistical requirements. It offers little flexibility for future growth or robustness for unforeseen operational demands.





Fig. 2.85 View of the eastern dock wall.





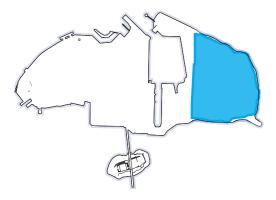




Fig. 2.86 Views of the eastern wall and working naval docks.







2.9 Four places - One Island

East Tip

The East Tip is a contaminated no man's land. It is visually incongruous with the surroundings. A Haulbowline lunar landscape.

"Waste from many years of steel plant operations was bagged and buried in 'cells' on the large East Tip and in two smaller historic tips. Legislative changes in the UK during the plant's operation led to UK landfills no longer accepting the most toxic dust cake from the dust extraction system, which was then also mixed with waste refractory materials and disposed on (sic) in the East Tip."

Industria Contamination at the former site of the Irish Steel Plant at Haulbowline Island, County Cork

A Report by Friends of the Irish Environment

January 2009



Fig. 2.88 View of the East Tip from Cobh.



Fig. 2.89 Aerial view of the East Tip. (Image courtesy of the Irish Defence Forces)



Fig. 2.90 View of the East Tip.



Fig. 2.91 View of the East Tip playing area from eastern dock edge.







The analysis section is a detailed review of the island. All aspects of the island are reviewed from its conservation requirements to movement and access. This section includes a detailed narrative on movement and also specifically concentrates on the approach to the island from the sea. The section uses benchmarking for similar port developments as well as a scale analysis to assist in the understanding of the island's spaces. This is particularly relevant for the central ISPAT remediation site.



"Tradition insists on a Phoenician landing here, but later ownership lay with Ui Liathain or O'Lehane tribe which was succeeded by the Barrys who gave their name to Barry's Great Island or the island of Barrymore. The harbour, as a walk along the rampart-like roads of Cobh will reveal, is plated with islands: Spike, Haulbowline which is now a national naval centre and steel-works, and closer to the city, Fota (which was also Barrymore estate) and little island, now heavily industrialised. And apart from Spike, none are islands any more, all being accessible by road and causeway."

The lie of the land: Journeys through Literary Cork-Mary Leland



Fig. 3.01 Haulbowline in the context of Ringaskiddy, Cobh and Spike Island.



3.1 Landscape

"As a party to the Convention, Ireland has agreed to promote landscape protection, management and planning, and to define landscape quality objectives, while fully involving the people concerned in the decisions that affect their area."

European Landscape Convention-proposals for Ireland's Landscapes 2010, The Heritage Council

This has been further expanded in the National Landscape Strategy for Ireland 2015-25, which sets out landscape values and qualities.

The landscape qualities of the island are of particular importance in the context of the views from Cobh. The landscape around the islands has been moulded by the maritime environment and by man. A continued history of land expansion, and development has created a landscape which is rich in physical symbolism for Ireland's history.

The magnificent scenic setting of the island within the harbour is evident from Cobh. The southern road approach is screened and the island has minimal if any visual presence from the Ringaskiddy approach due to recent developments.

Visual opportunities exist for the opening of vistas across the island to Cobh. In particular the creation of visual ley lines across the island to Pugin's Spire which is a prominent harbour landmark.

The landscape for Haulbowline should be considered as part of a broader pattern of land uses. The setting of the island is an important consideration for the communities that overlook it. Cobh's rampart streets overlook the island. Vistas onto and through the island should be considered part of the town's "front garden".

The IMERC cluster will also overlook the island from the south. The creation of an extended campus that communicates visually across the intervening shared water ways is a central consideration in the placement of future buildings and edges.

An integrated landscape and public realm plan will also help restore the island to the status of the "green pearl" in the harbour.

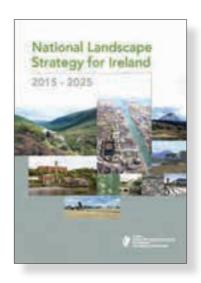


Fig. 3.03 National Landscape Strategy for Ireland 2015-2025.

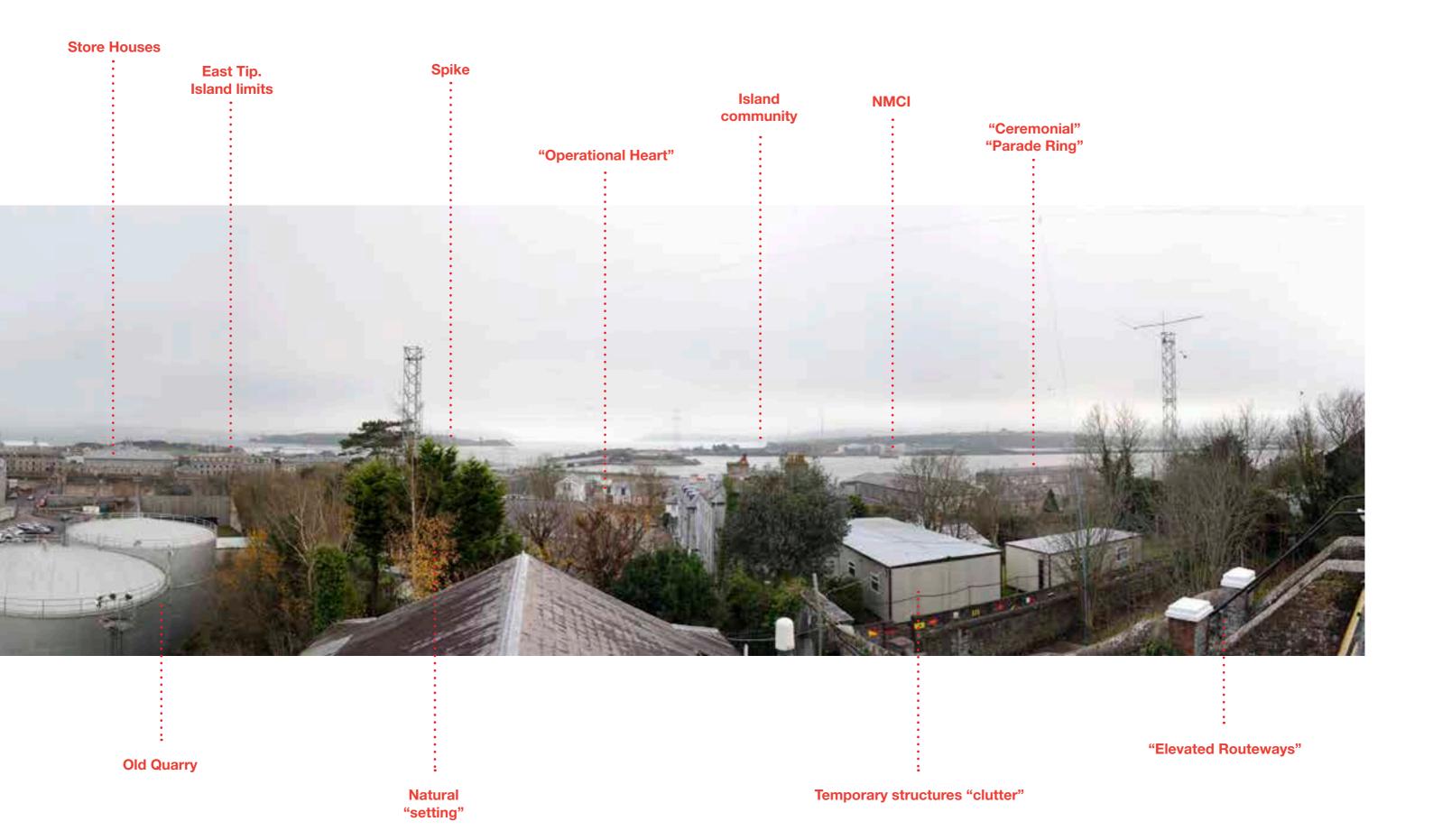


Fig. 3.02 View from Watch Tower showing land marks and key vistas.

Oil storage

Refuelling Service

Temporary structures "clutter"



3.1 Landscape



Fig. 3.04 View of Stores Houses and Naval Base at sea level. Store House number one is currently derelict after a major fire in 2008. The view is dominated by the two four storey oil storage tanks. The historic parts of the island's architecture are apparent on the skyline.



Fig. 3.05 View of island from north north-west showing naval buildings and warehouses at waters edge. This edge of the island also houses ordinance stores and associated offices, which are securely screened from the island due to the "crag and tail" topography of the cliff face.





Fig. 3.06 View of island from west showing naval buildings and warehouses at waters edge. The pier is actively used by the Naval Service for dive training due to its convenient close proximity to the deep water channel.

3.1 Landscape



Fig. 3.07 View of Haulbowline Island from the south approach. The view shows the cadet's living quarters on the left hand side with the central mess, looking towards the NMCI. The boat buildings have been re-adapted, but the existing slipways still remain. The ESB pylons are visible on the east skyline on the former ISPAT factory but are now defunct.



3.2 Utilities

Wastewater disposal on Haulbowline Island
There are two Waste Water Treatment Plants (WWTP)
on the island:

- Base WWTP Design 600 PE commissioned in 2006. Aeration Tank Current population is 150 persons;
- Dockyard WWTP Design 75PE commissioned in 2013. RBC.

Base WWTP 1

There is existing capacity on Haulbowline Island. However if there is intensification of use and an increase in population a connection to the public sewer in Ringaskiddy should be considered. There could be potential surges into the Treatment Plant unlike now where it is an even flow.

This WWTP is tested on a monthly basis. It is expensive to run and maintain. The locations of both plants are not considered ideal.

Dockyard WWTP 2

If toilets are considered on the East Tip there is capacity to connect to the existing WWTP2 in the naval dockyard. The dockyard treatment plant is currently tested twice a year.

The Cork Lower Harbour Wastewater Treatment Plant and the associated infrastructure has capacity to accept flows from Haulbowline, NMCI and Beaufort. The current loading is estimated to be 48,700 population equivalents. The plant is being constructed for 65,000 and has permission to go to 80,000 when necessary.

The Cork Lower Harbour Main Drainage Scheme (Cork LHMDS) includes the population/industrial centres of Cobh, Carrigaline, Crosshaven, Passage West, Monkstown, Glenbrook, Ringaskiddy, Shanbally and Coolmore. The existing sewer network serving the Lower Cork Harbour area comprises mainly combined sewer systems. Wastewater from Cobh, Carrigaline, Passage West/Monkstown and Ringaskiddy is currently discharged following preliminary screening or untreated into the Harbour.

It is proposed to transfer wastewater from the Cork Lower Harbour to a new wastewater treatment plant site. A site for a new central treatment plant has been selected at Shanbally (north west of Carrigaline) utilising the existing IDA outfall discharging to the Harbour at Dognose Bank. The scheme includes the construction of eight main pumping stations and approximately 57km of new/upgraded sewers, rehabilitation of existing sewers and surface water separation where economically viable. An Environmental Impact Statement has been prepared for the scheme and approved by An Bord Pleanála.

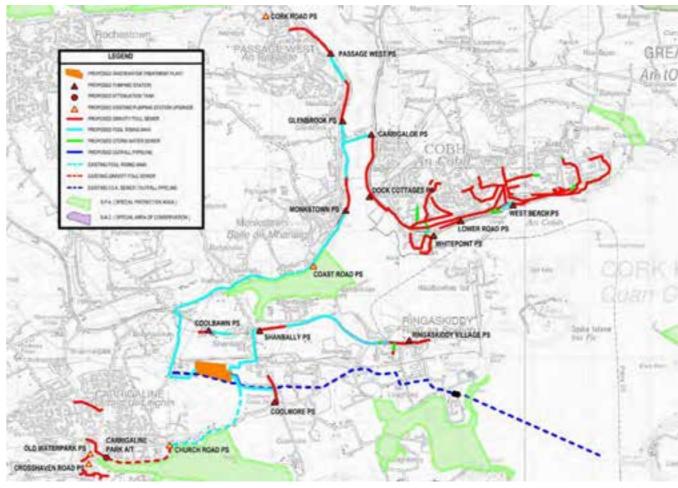


Fig. 3.08 Map showing existing and proposed waste water treatment strategy for Cork Harbour.



Fig. 3.09 The existing rain water reservoir for the island is housed centrally behind the Store Houses. The view illustrates the screen wall to the reservoir facility.



Fig. 3.10 View from the sea, to Rocky Island (now used as a private crematorium) the refurbished road bridge, and the central ESB pylon.

ESB line

The existing overhead Haulbowline-Ringaskiddy double circuit 110kV line crosses in tandem with the bridge. It is a major visual and physical obstacle for the island's development. There is a substantive way leave of 23 metres to either side of the line. The line is currently dormant.



Fig. 3.11 Flooding on the island.

Flood Risk

There is no current Flood Risk data for the island available. The adjacent IMERC campus indicates that a minimum finished floor level of +4.00m to be provided to cater for the 1 in 200 year flood event.

A detailed flood risk analysis for the island is required urgently to inform the levels for future developments.

There is recent anecdotal evidence of overtipping of the west wall of the dockyard, which would give concern for establishing a robust future ground floor level for new habitable structures.

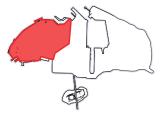


Fig. 3.12 Flooding on the road approaching Haulbowline.



Fig. 3.13 CFRAM - flood risk analysis for South West region.

Any proposed development pursuant to the Masterplan should also take into account the relevant recommendations of the South West CFRAMS, as appropriate. The requirements of the Planning System and Flood Risk Management Guidelines for Planning Authorities (DEHLG/OPW, 2009), should be considered. In particular, the potential for overtopping of sea defences in the vicinity of the harbour to the north of the Plan area should be taken into account, having regard to the potential impacts of climate change.



3.3 Existing Land Use Features

The landform's most prominent feature is the crag and tail appearance of the island's highest point. The buildings are organised around this point and the main formal squares form part of a series of informal pathways to the summit fort.

The raised part of the island is on the western edge. It has a number of significant Scotch Pines trees, and these are visible on the skyline from Cobh.

Spaces in between the buildings are of a human scale generally enclosed with tree-lined walled pathways.



Fig. 3.14 View of tree-lined pedestrian pathway connecting the core of the island to the Store Houses.



Fig. 3.15 View of the archaeologically important "historic" crosswall.



Fig. 3.16 View from the sea to the Store Houses and original island with the naval buildings wrapping up and around the elevated "crag and tail" approach.



Fig. 3.17 Views of the Doric naval gateways and walls.



Fig. 3.18 View of the Doric naval gateway.



Fig. 3.19 View of more recent boundary walls.



Fig. 3.20 The south eastern bastion and tower of the original 1602 fortification on the island.

3.4 Archaeological

There has been no archaeological investigation completed on the island. Any future development within the island will remain potentially susceptible to occurring on an area of archaeological importance.

Walls

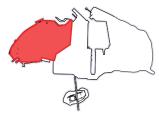
The island has a number of fine walls which are of a significant scale. The Great Wall and dividing gate for the island is still in place.

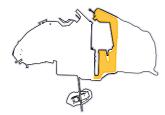


Fig. 3.21 View of Store House central clock tower.



Fig. 3.22 Cobh Cathedral has a strong impact on Haulbowline, and is particularly visible from the northern edges which face the town.





3.5 Naval Use



Fig. 3.23 Current Land Zoning.

Land Zones

The island is 86 acres in total. Approximately 44 acres require remediation due to the contamination of ISPAT factory which equates to 51% of the total.



Fig. 3.24 View of Haulbowline Bridge and Rocky Island. The bridge is approximately 440 meters across, and is approximately a 5 minute walk to the NMCI from the Naval Base. Due to its exposure this is not a welcoming route, and travel is predominantly by vehicle. (Image courtesy of the Irish Defence Forces)

Bridge Access

The island is accessed by a single road bridge.

Access for pedestrians is restricted as footpaths are discontinuous with the wider network. There is no provision for other modes of movement such as cyclists.



Fig. 3.25 Naval Boundaries.

Naval Boundaries

The Naval Service are the key users of the island.

Traditionally they have controlled all access to the island. The boundaries for their uses would traditionally extend to the perimeter of the island.

However due to the contamination issues related to

the East Tip and the East Camber ISPAT former factory site this is disrupted by large tracts of effectively "no go areas". These areas disconnect and disrupt the naval activities and consequently fragment the efficient operation of the base.



Fig. 3.26 Roads on the island and point of restricted access. Access to the island is restricted, controlled at the central arrival point by naval security.

Security

The island is a secure base which is managed by the Naval Service. Access is restricted. The island has occasion for total lockdown when all public access to the island is restricted via a bridge closure.



3.5 Naval Use

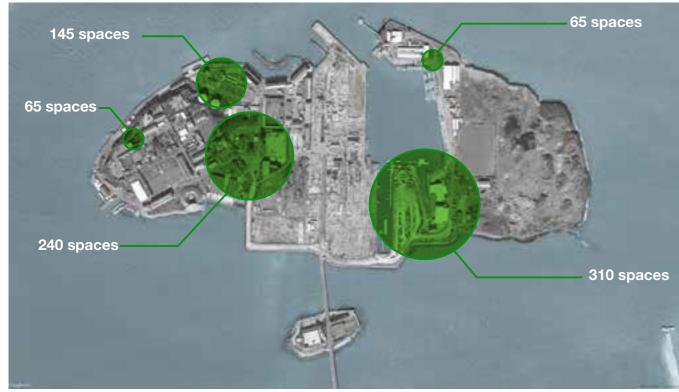


Fig. 3.28 Car parking - approximate current number of spaces: 825.

Car Parking

There are approximately 825 car parking spaces in 6 areas that happen throughout the island. The car parking is highly dispersed and informal. In addition the Naval service have a requirement for 1,000 car spaces on the island for longer term vehicle storage when crews are at sea. This is also forms part of logistical security considerations for the island's naval community.

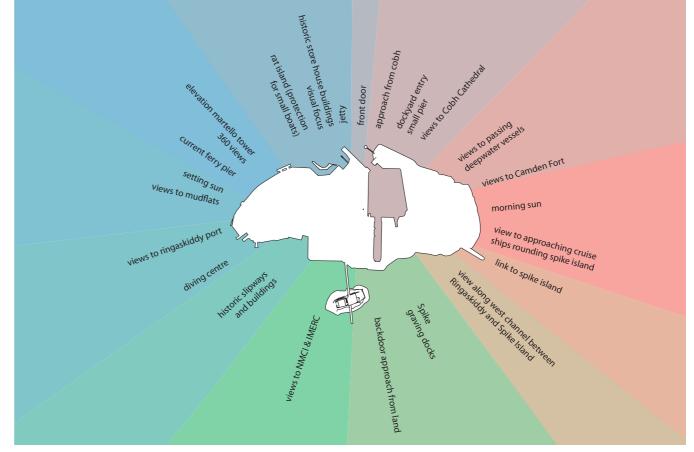


Fig. 3.27 Maritime impacts on island.

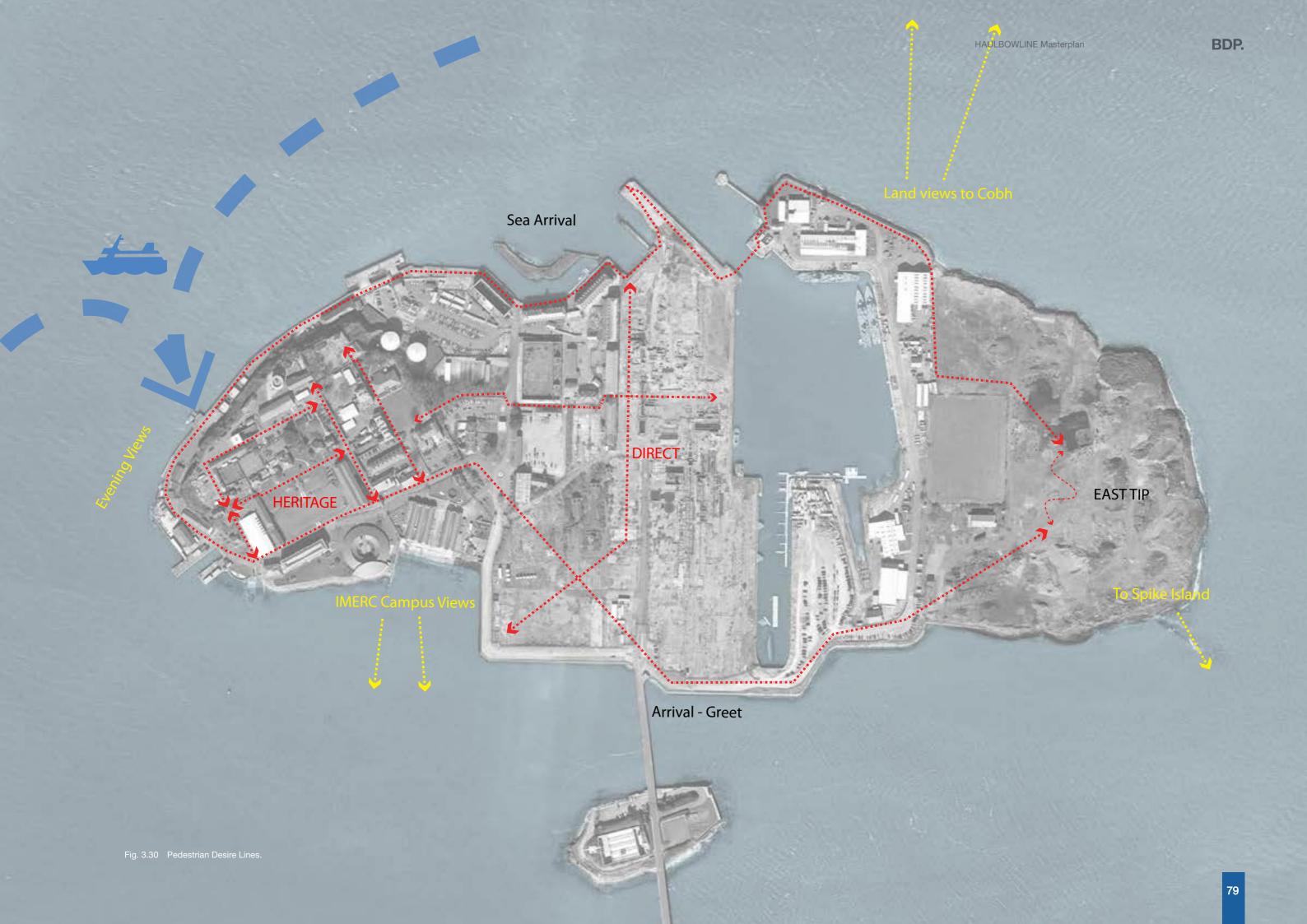


Fig. 3.29 Island edges and usage.

Shoreline Uses

All of the island's coastal edges have a maritime use. The uses are governed by the depth of the water and often adjacent land uses are driven solely by the demands of the sea. For example the logistics surrounding the refuelling of naval vessels is directly connected with the adjacency of the fuel tanks and the northern T jetty.

This has created over time a sophisticated land use pattern. It is important for any Masterplan to respect these relationships and enhance them wherever possible.



3.6 Movement

From the assessment of the needs of the Irish Navy and the other requirements of the Haulbowline Masterplan the following identifies various options and required actions'.

Navy Fuelling

The location of the Navies fuel store is potentially an obstacle to alternative develops on the island. Furthermore due to the procurement of larger vessels the Naval fuel storage capacity needs to increase. As described previously there are a number of options to provide additional storage and also improve the development options for the island without compromising the Navies operational requirements:

- 1. Fuel Facilities.
 - During the development of the Masterplan the location of the Fuel Storage Facilities has placed considerable restrictions on the options for fully developing island. To look at the alternatives discussed above alternative options should be investigated. These would include:
 - a. Floating fuel tenders.This would require consideration of:
 - i. Pollution control:
 - ii. Cost;
 - iii. Location;
 - iv. Suitability in the environs of Cork Harbour.

- b. Using Commercial Storage facilities. This would require consideration of:
- i. Security of supply especially in relation to the long term feasibility of Whitegate Refinery and the storage tanks;
- ii. Cost;
- iii. Location;
- iv. Pollution control.
- c. Fuel Berth Location.

The existing berth is located in an excellent position as far as berthing of vessels is concerned as it is orientated parallel to the tidal current flow. Due to the increase in vessel size it will require extending. As an alternative the feasibility of re-locating the facility to the location as shown in Figure 3.32 and as discussed the Irish Navies Haulbowline Island Masterplan should be investigated. The following would need to be considered:

- Location to ensure sufficient water depth and correct orientation to the tidal current direction;
- ii. Cost
- iii. Environmental factors;
- iv. Location of storage tanks, i.e. land based, water based or a combination of both.
- Harbour. The harbour facilities are described previously. To increase the capacity of the harbour the following options should investigated:

- a. Use of the west quay.This requires the following:
- i. Identify the uses the west quay would be put to;
- ii. Suitability after the remediation of the land the steel works were located on. The level of remediation would need to be understood and what, if any, further remediation may be required;
- iii. Cost of woks including installation of required services, further remediation, security measures.
- b. Use of the graving dock.

The dock is potentially an excellent additional facility. For a number of reasons it only has limited use at the moment. In order to maximise its use the following is recommended:

- i. Options study for its future use by the Navy, repair facility for Ocean Going Yachts, etc;
- ii. The options should consider if and how different operations could co-exist;
- iii. Consider the staged refurbishment:
- 1. Removal of obstructions;
- 2. Clearance of any silt;
- 3. Cost of providing services, carnage and generally operating the facility;
- 4. Feasibility and cost of covered working areas;
- Feasibility and options for sharing with commercial drydocking operations;
- Feasibility of using as drydock, its cost and the potential impact on Cork Dockyard at Rushbrook if the Navy ceased using their drydock facilities.

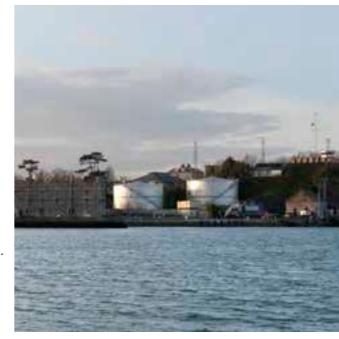


Fig. 3.31 Oil silos on Haulbowline.



Fig. 3.32 Alternative location for the fuel berth.

Other opportunities

Commercial & Leisure Ferry Service

To look at the development of this research is recommended to determine what will be required based on likely footfall from the existing and future developments. It would need to take account of the various local plans for population growth, car parking, etc.

Development of marine turbine testing facilities

The development of IMERC will ultimately determine whether this is an opportunity. It is recommended that close ties are maintained between the development team and IMERC to ensure any opportunities are fully exploited. The production of a prospectus detailing the opportunities would be a positive step in achieving growth in this area.

Marine tours, diving schools, marine activities such as boating, windsurfing, canoeing, etc.

Any increase in tourism will improve the viability of any of these activities. They will in their own right improve the attractiveness of the location as visitors enjoy watching water based activities. Also some of these are not dependent on good weather so suit the local climate. Some market research is required to understand the likely level of interest and if there are existing business that would be willing to invest in such opportunities.

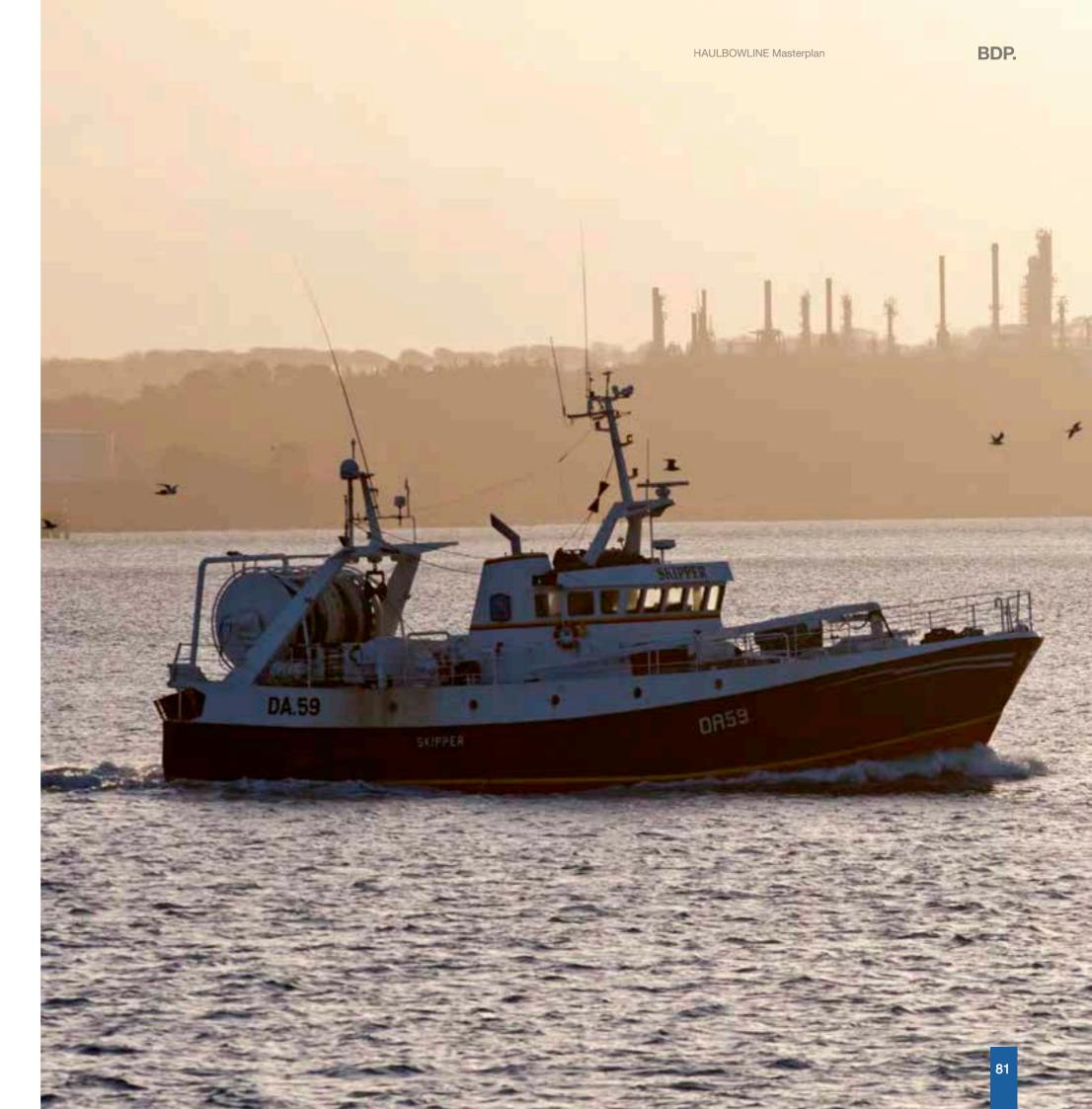


Fig. 3.33 Local fishing trawler crossing Cobh Road channel with Whitegate oil refinery in the background.

3.6 Movement

Ferry Services

A short desktop review of foot ferry services with Europe and further afield shows a wide range of services from regular to seasonally-only services. Vehicle carrying, long distance (1 hour +) and large water based high dense urban areas (for example Hong Kong) have been discounted in the review. The table (Fig 3.34) below shows examples of types of ferry services which could be similar to that which may operate to/from Haulbowline Island.

Many services operate within the local public transport network and fares reflect the local rates for bus and rail services for similar journeys and are combined in multi-model ticketing. In major population centres of Merseyside and Tyneside a regular commuter service is offered in large vessels that are used for leisure services during off-peak times and incur high operating costs.

The following descriptions and photographs show the wide range of services that can be offered from the service on the Clyde, Figure 3.35, to the Lake Lucerne ferry, Figure 3.39. The service that can be offered will clearly depend on the demand but, with suitable planning for the infrastructure is scalable.

In Strathclyde and other locations smaller more flexible vessels are in use (figure 3.35) providing a more flexible service. The Harwich Harbour ferry offers a comparable situation to that at Haulbowline Island with 3 destinations served in a triangular timetable.

Other coastal foot ferry services in Europe are operated on more ad hoc leisure and tidal basis with limited set timetables or advertised services. The Tyne Ferries, (Figure 3.37) is a larger ferry and has been an established service for many years. Although land lakes, the ferry services on Lake Geneva and Lake Lucerne have some similarities to that which could operate in Cork Harbour. Clearly the service on Lake Geneva has a special attraction as the fleet consists of paddle steamers (see Figure 3.38). The ferry service on Lake Lucerne (Figure 3.39), serves both the commuter and leisure market.

There is an existing Irish Navies launch service between Cobh and Haulbowline that provides access primarily for the Navy. It is also used by civilians working on the island and provides evidence for the opportunity for a regular civilian foot ferry service that could include Haulbowline, Paddy's Point, Spike Island and ultimately destinations such as Ringaskiddy. The examples from Europe of vessels and services in this note show the range of opportunities available and the commercial approach needed for a viable and sustainable service.

A private sector owned and operated service which is commercially viable or that could be possible subsidised by the Navy, using a small launch vessel (10-20 passengers), could be a suitable start up option to support the commuter demand and naval requirements. This could form the base of a regular service throughout the day and year and provide a platform to support the creation of a unique leisure attraction in which the ferry service and the vessel used becomes a visitor attraction in its own right and an addition to the local tourist offering.

The type of ferry to start this service would, in the first instance, be at the smaller end of the market, say 10-20 passengers. As the demand increased either additional small ferries would be introduced or larger ferries obtained.

Service	Vessel Capacity	Service Patterns	Journey Time	Cost (Euro)
Clyde Link	12	On Demand/30 mins		Zone Rates
Kilcreggan Ferry	Unknown	Hourly with Train Service	15 mins	8 Return
Harwich Harbour Foot Ferry	12	60 mins overall	Various	8 to 2
Fowey to Mevagissey	50	Every 2 hours	50 mins	19
Passenger Ferry				
Shield Ferry (Tyne)	350	30 mins	7 mins	Zone Rates
Mersey Ferries	Various	20 mins Commuter	10 mins	Zone Rates
Lake Geneva	Various	Hourly	Various - 30 mins	Various
			Lausanne to Evian	
Lake Lucerne	Various	Various -	Various	Various
		Mixture of commuter and		
		tourist service		

Fig. 3.34 Table 1 - Example of types of ferry services.





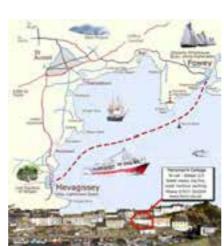


Fig. 3.36 Fowey Ferry and route map.



Fig. 3.37 Tyne Ferry.





Fig. 3.39 Lake Lucerne Ferry.



Fig. 3.40 Karycraft at berth at pier on Haulbowline Island, with Cobh in background.



3.7 ISPAT Factory

The island's strategic nature was also unfortunately exploited by ISPAT with the creation of a steel works plant from 1939 until its closure in 2001.

"Thousands of workers were employed at Irish Steel. Numbers varied, but peaked in the 1970s when approximately 1,200 people were employed there"

Naval Service Masterplan for Haulbowline 2014
3: Historical Context (f)

The ISPAT building was a gigantic structure which dwarfed the island. It subsequently created an enlarged island footprint through the dumping of waste locally into the surrounding harbour. Subsequently the magnificent adjacent Store Houses have fallen into decline. The industrial heritage and curtilage of the basin of the island has also been destroyed, including the East Camber which was filled in with hazardous waste.

ISPAT is being remediated by Cork County Council. The East Tip remediation will now see the island transform into a Community Park which will make part of the island fully accessible for the local community for the first time.

The island has also lost some of its original "wonder" with the bridge linkage to Ringaskiddy. The entrance has flipped to the south side with its main approach now being from the road rather than by sea from Cobh. Currently arrival to the island feels like a back door or service approach.



Fig. 3.41 View of Irish steel factory ISPAT. Store Houses dwarfed in foreground.



Fig. 3.42 Former ISPAT site, with Store Houses visible in background.



Fig. 3.43 Former ISPAT site, satellite view. The footprint of the gigantic ISPAT building (main site is 113,000m²) is visible.



Fig. 3.44 Aerial view of ISPAT factory, showing it in context with the historic western naval base. (Image courtesy of the Irish Defence Forces)



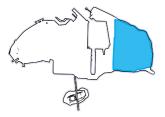
Fig. 3.46 ISPAT factory photographed from Dockyard, along the west quay wall.



Fig. 3.45 ISPAT photographed looking north, after demolition.



Fig. 3.47 ISPAT site during site clearance.



3.8 East Tip Growth

Background

Steel Production took place on Haulbowline Island between 1939 & 2001. Process waste dumped on the sand spit to east of the Naval Dockyard from early 1960s created the East Tip (c. 9ha). In response to European Court of Justice Judgement (ECJ 494/01) the County Manager was requested by Minister Coveney to facilitate remediation of site (July 2011). This Remediation project commenced in August 2011.

Site Investigation Process

All known waste types present at the East Tip have been subject to detailed chemical analysis. Comprehensive testing of underlying soils, waters and gases has also been undertaken. A detailed understanding of geological conditions at the East Tip has been obtained. Details on water movement & interaction with Harbour water have been measured. All work has met quality assurance requirements.

Site Investigation Findings

Testing has confirmed materials at East Tip are similar to those found on other steelworks sites & are consistent with known history. Impacts on the surrounding environment are modest, the waste can be remediated on the island. A range of remedial options are now being evaluated prior to choosing the design solution. Remediation will leave a positive legacy and be future-proofed for permanent protection of people and the environment.

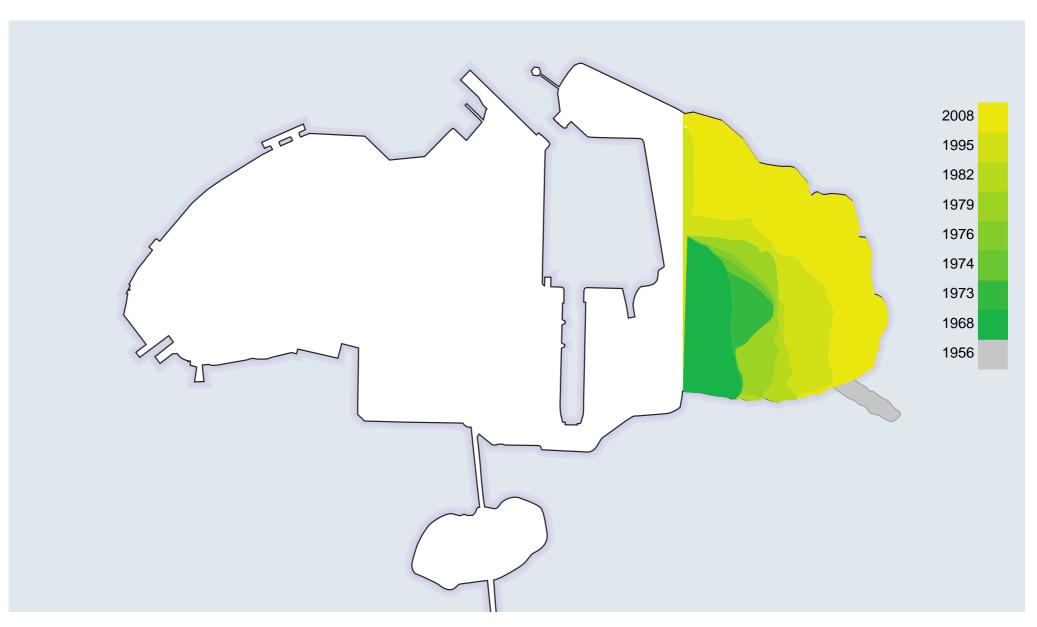


Fig. 3.48 The above diagram illustrates the progressive growth of the East Tip due to dumping over a fifty year period.

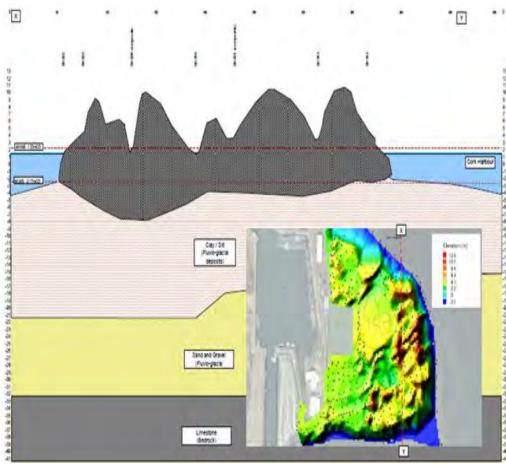


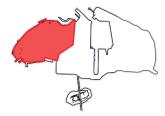
Fig. 3.49 A diagrammatic geological cross-section through the East Tip ground build-up. Beneath the tip is low permeability alluvial clays and silts. Water movement throughout the tip is controlled by the daily tides.



Fig. 3.50 East Tip prior to remediation.



Fig. 3.51 East Tip prior to remediation.



3.9 Existing Building Analysis

The island contains sites and features that are Recorded Archaeological Monuments, Protected Structures, buildings included in the National Inventory of the Architectural Heritage, and the west end of the island is designated an Architectural Conservation Area.

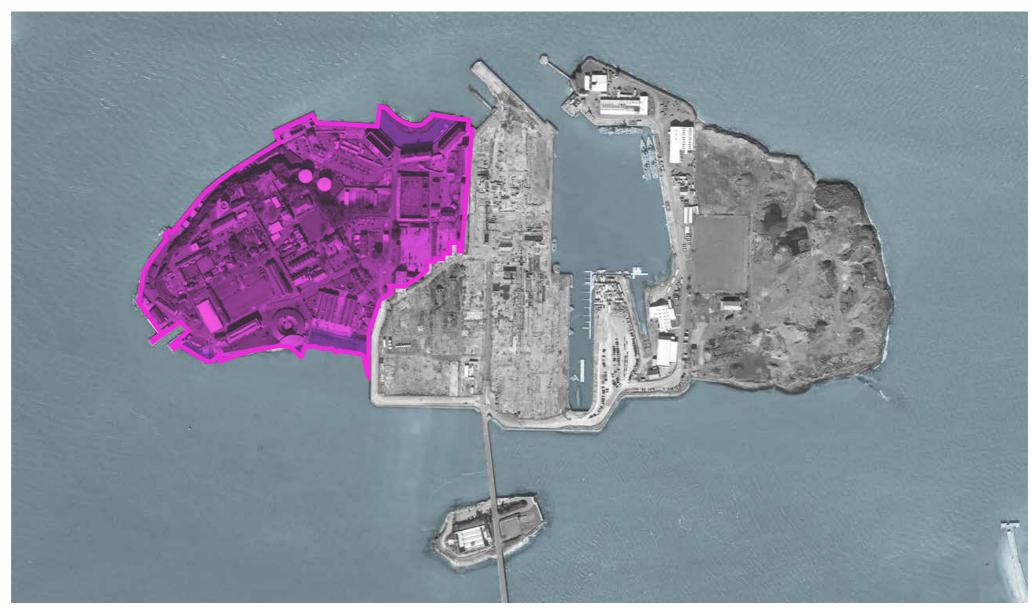


Fig. 3.52 Haulbowline area of conservation highlighted. The Architectural Conservation Area relates largely to the original island's footprint.



Fig. 3.53 The highlighted map illustrates the pattern of physical built development on the island. The physical development of the original island is formally laid out around the original island footprint. The next major organiser for structures is the central basin, which has resulted in restricted development for the Naval Service on the East Wall strip, and southern stripway.

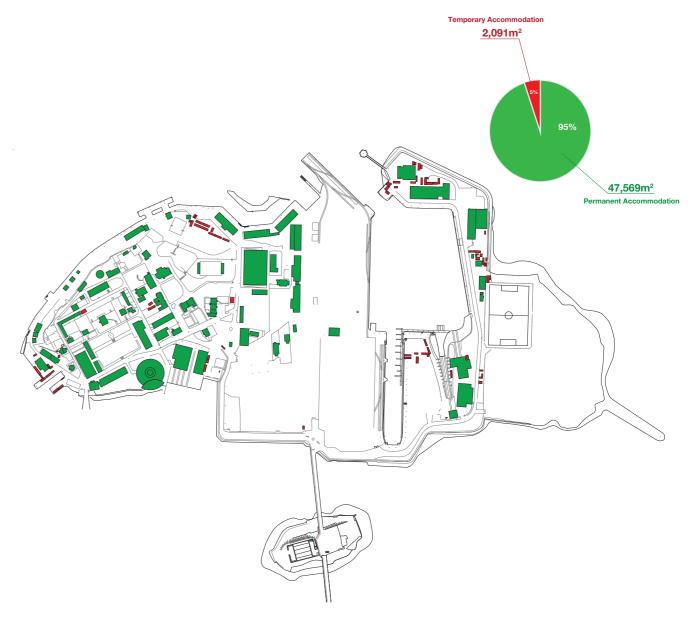
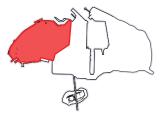


Fig. 3.54 The island has a number of temporary structures that are sporadically placed throughout the island's footprint. Whilst the structures are unsightly, they are largely screened within the western port of the island. Ideally these structures should be removed from the ACA.



3.10 Existing Building Analysis

Heritage Buildings

"It will found expedient to form a naval establishment of greater extent"

Samuel Bentham, Inspector General of Naval Works, 1805

Haulbowline Island's unique position surrounded by defensive forts proved important in its strategic development. The subsequent townscape organisation of the island follows closely the evolution of the island's increasing importance as a naval base for the Admiralty.

Originally the island's sole structure was the elevated central old fort. It was decided in the early 1800s to divide the island with the great wall and gate, into the western ordinance board and eastern victualling board. This was an important decision in the creation of the physical scale of the subsequent buildings.

The western buildings are focused on a number of pathways that lead to the elevated parade ring. A number of original heritage buildings for officers, clerks, labourer's cottages, coopers, workshops and smiths create an authentic working village.

The eastern edge is closely related to the original layout of the manmade wharfs – rat's island being the only remaining physical evidence of these structures surviving. Six great storehouses are formally laid out around the island's original eastern perimeter. The Storehouses are built from "stone of the county". Centrally located within the victualling yard is the great two storey vaulted rainwater reservoir. Storehouse number six was subsequently used as a Naval Hospital with an associated smaller ancillary laundry building and isolation ward.

The most recent historical development was the 19th century dockyard basin. This magnificent structure was never completed fully but was constructed utilising the stone from the adjacent island's quarry facing Cobh. Its industrial heritage should also be considered important parts of the island's heritage.

Naval Headquarters



Fig. 3.55 3 bay office building, built 1822.

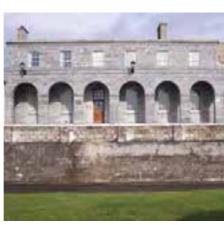


Fig. 3.57 Logistics unit, built 1822.



Fig. 3.59 Base HQ, built 1822.



Fig. 3.56 Naval college, built 1822.



Fig. 3.58 Naval HQ, built c. 1890.

Historic Store Houses



Fig. 3.60 Block 4, built 1822.



Fig. 3.61 Block 6, built 1822.



Fig. 3.62 Block 8, built 1822.



Fig. 3.63 Block 9, built 1822.



Fig. 3.64 Irish ISPAT, built 1822.



Fig. 3.65 Irish ISPAT, built 1822.

Castle / Tower



Fig. 3.66 Martello tower, built 1822.



Fig. 3.67 Freestanding tower, built c. 1720.

Warehouses



Fig. 3.68 Warehouse, built 1822.



Fig. 3.69 Workshop, built 1869-1887.



Fig. 3.70 Boathouse, built 1822.



Fig. 3.71 Brick store, built c. 1890.



Fig. 3.72 Boathouse, built 1822.



Fig. 3.73 Naval boat transport, built 1860.



Fig. 3.74 Former tank building, built 1822.

Residential



Fig. 3.75 Two-storey house, built c. 1890.



Fig. 3.76 Terrace of 4 houses, built 1822.



Fig. 3.77 Two-storey house, built c. 1890.



Fig. 3.78 Albacore Cottages, built 1890.





Fig. 3.79 Roman Catholic church, built c. 1930. Fig. 3.80 Cast-iron letter box, erected c. 1905.

3.10 Existing Building Analysis

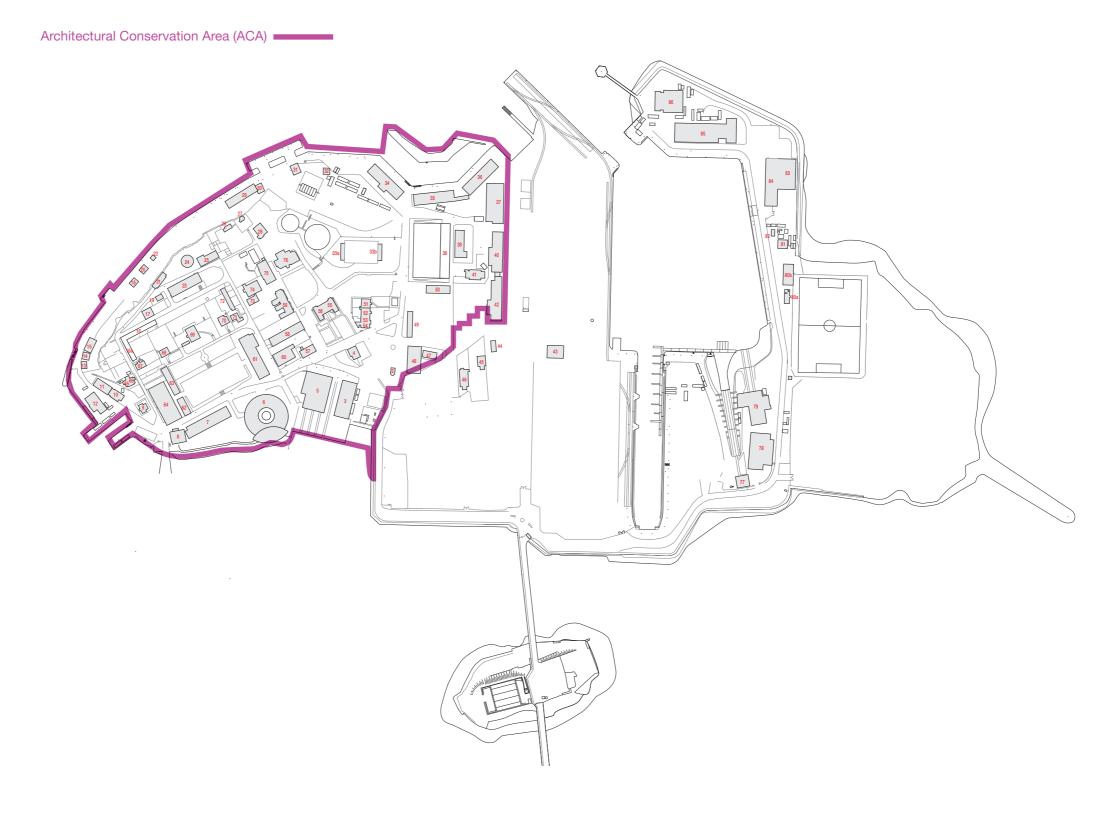


Fig. 3.81 Annotated plan of existing buildings.

Haulbowline Area Schedule

Building	Building Name	No of	Total Area
Number	building Name	Storeys	(m²)

Number		Storeys	(111-)
	Existing Build	dings	
2	Security Hut	1	37
3	Seamanship Bay	1	728
4	-		257
5	Technical Training		1157
6	Canteen		1824
7	Old Billets	2	1343
8	NCO's Mess	2	474
9	Diving Centre	1	73
10	Recompression Chamber	1	141
11	Theatre	1	189
12	B.F.W. Offices & Yard/ Stores	1	303
13	-	1	49
14	-		64
15	Boat Transport		136
	boat Hallsport		
16	-		231
16a	-		123
17	Garage	1	108
18	Compound (b1)	1	58
19	Boiler House	1	42
20	Compound (b2)		58
	Compound (bz)		
21	-	1	
22	Compound (b3)	1	23
23	-	1	429
24	Round Tower	1	157
25	-	1	213
26	_		46
27	Base to Viewing		41
28	Podium	1	147
	-		
29	-		692
30	-		73
31	-		200
32	-	1	52
33a	-		80
33b	-		83
38	Derelict Area		528
	Defelict Alea		
39	-		338
41	Hospital	1	233

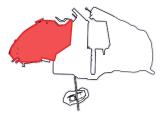
Building	Building Name	No of	Total Area	
Number		Storeys	(m²)	
43	-		261	
44	-		139	
45	-		255	
46	-		443	
47	ISPAT Houses		117	
48	-		460	
49	Living Quarters	2	335	
50	Paint & Oil Stores	2	463	
51	Living Quarters	2	208	
52	Living Quarters	2	209	
53	Living Quarters	2	120	
54	Living Quarters	2	155	
55	Naval HQ	3	526	
56	Living Quarters		527	
57	Fire Station		147	
58	Living Quarters		799	
59	Cadets' Mess		1207	
60	-		829	
61	Guard Room &		1366	
	Stores			
62	-		461	
63	-	3	726	
64	Diving Stores & Gymnasium	1	886	
65	Military Police	2	102	
66	Personnel Support Services	2	99	
67	-	2	144	
68	-		165	
69	-		364	
70	-	2	197	
71	_	2	154	
72	-		135	
73	-		93	
74	_		212	
75	_		1200	
76	-		915	
77	Winch House		185	
78	Tech Stores		962	
79	Mast House		1574	
	IVIASI HUUSE	1		
80a	-		111	

Building Number	Building Name	No of Storeys	Total Area (m²)
80b	Painters'	1	270
81	Riggers	1	106
82	ESB Transformer	1	29
83	Crane Store	1	670
84	Machine Shop	2	747
85	Fitting Shop	1	1494
86	WEU	1	742
TOTAL (m²)			33848

Storehouses			
34 35 36	-	4	2014
35	-	4	2014
36	-	4	2014
37	-	4	2014
40	-	4	2014
42	-	4	2014
TOTAL (m²)		12084	



Fig. 3.83 View of the island's historic officer's quadrangle.



3.10 The Store Houses

The exact chronology of the buildings is not certain. They were completed by 1822 and formerly named the "Royal Alexandra Yard".

The building's fine limestone facades were quarried from the adjacent island, and as such the buildings are very much part of the island. They are made of "county stone".

The buildings are linear in plan, with 11 metre spans and 4 storeys. Their repeat fenestration and rational architectural language gives them a powerful architectural and urban presence.

The Store Houses were accompanied by living quarters for the supply of the medical officers and for the accompanying staff. These included houses for the chief surgeon and the Naval Storekeeper among others.

Over the course of the next century the adjacent lands were leased out and notably Irish Steel Ltd. filled in the East Camber which was immediately adjacent to the Store Houses.

The Store Houses have since fallen into serious disrepair; only Store House number two with its central cupola is being actively used.



Fig. 3.84 The historic Store Houses viewed from the East.



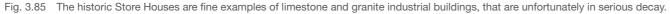




Fig. 3.86 The north facade of the Store Houses.



3.11 Access and Movement Strategy

3.11.1 Introduction

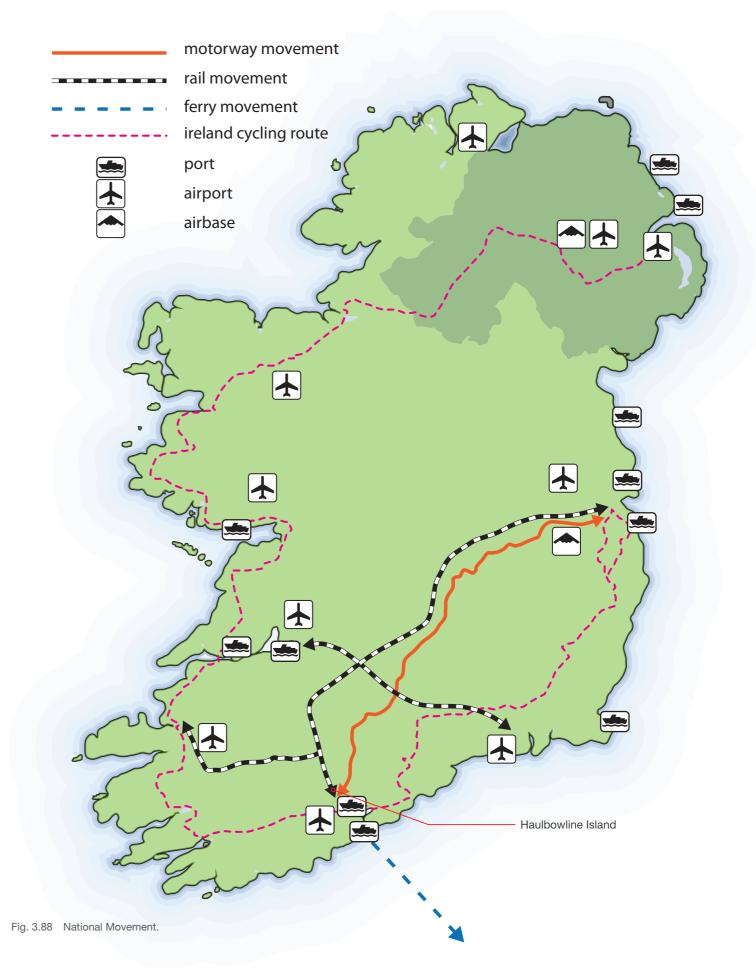
This section of the Masterplan focuses on access and movement, something that is critical to a successful future for Haulbowline. The focus of this section is on three key areas, since they will drive change and development:

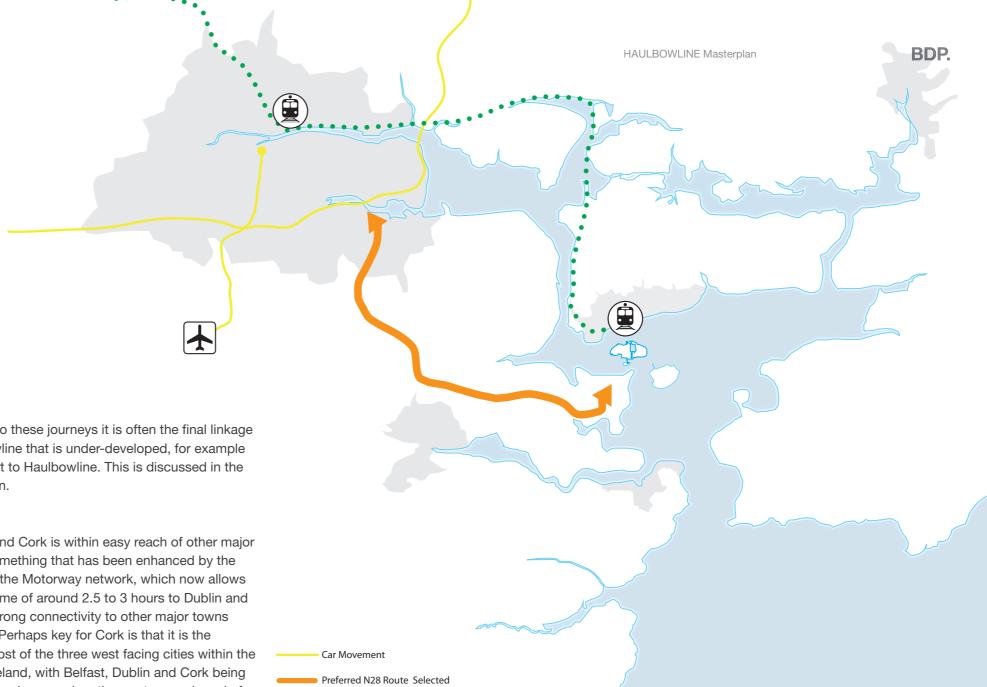
- Gateways The ways in which entry to Haulbowline is gained, across a range of modes, maximising flexibility, while at the same time maintaining critical
 factors such as security;
- Nature of Island Understanding the way in which the island has developed, from sea borne access, to addition of the road, then considering how this needs to develop in future;
- Challenges Understanding how the island can "work smarter" for both the Navy and Cork, taking greater advantage of the emerging maritime cluster that is at the geographical centre of Cork Harbour.

Our analysis has been undertaken with the following core actions:

- Analysis of movement patterns on Haulbowline Island and the approaches to it, for both day-today and occasional use, primarily through two comprehensive site visits and further conversations with Navy personnel and other stakeholders;
- Reviewing key sections of relevant studies and Masterplans. This includes consideration of wider linkages in particular towards Cobh, Ringaskiddy and Spike Island;

- Analysis and understanding of the critical challenges both now and in future across a range of modes and geographies;
- Ensuring that access and movement is a critical part of the developed Masterplan through teamworking, but also correlates with wider considerations such as the need to ensure that any public access does not compromise Navy security;
- Considering wider benchmark examples, such as Portsmouth Harbour, and understanding their parallel opportunities with Haulbowline;
- Analysing technical information available, this being primarily within documents, albeit due to the nature of current use this appears limited in relation to quantified information about movements on the island itself.





3.11.2 Context

Europe/International

The south west of Ireland is, despite not being central to Europe, within easy flight time of under 2 to 3 hours of many parts of Western Europe, particularly the west facing maritime seaboard. Much of Europe's population lives in this area of coverage, with major cities such as Lisbon and Porto to the south and Amsterdam or Antwerp further north capable of being within such a distance. Wider trans-continental linkages are available via Dublin or Shannon, both within 2-3 hours of Cork and allowing closer access to the Americas than from much of Europe.

While nearly all of England and Wales is within 2 hours flying time of Cork, its location slightly further south than Dublin or Belfast, and facing south rather than west like Limerick or Galway means that Cork is perhaps more European facing in nature. This is exemplified by the fact that ferries from Ringaskiddy travel to mainland Europe direct, rather than solely through the United Kingdom.

Cork is also a gateway to Europe from a maritime perspective, reflected in some of the historical connections with Titanic, Lusitania and other vessels sailing to the Americas. This is something also reflected in the prominence of Cobh on the Cruise Liner Circuit – having around double the number of visiting cruise ships to that of a city like Liverpool, more northerly within the Irish Sea Circuit. Haulbowline's ease of access to the Atlantic and strategic location at the Gateway to Europe is after all the key reason why the Navy presence is historically here.

In relation to these journeys it is often the final linkage to Haulbowline that is under-developed, for example from Airport to Haulbowline. This is discussed in the next section.

Ireland

Within Ireland Cork is within easy reach of other major centres, something that has been enhanced by the building of the Motorway network, which now allows a journey time of around 2.5 to 3 hours to Dublin and provides strong connectivity to other major towns and cities. Perhaps key for Cork is that it is the southernmost of the three west facing cities within the island of Ireland, with Belfast, Dublin and Cork being relatively evenly spaced on the western seaboard of Ireland.

For those without access to a car, rail and coach services are reasonable to Cork from many destinations throughout Ireland. Linkages from Cork Kent Station and Cork Bus Station exist (discussed in gateways text following), but are relatively underdeveloped.

Something that should not be underestimated is the "spiritual" presence of Haulbowline throughout Ireland. Being the only Navy base in a maritime focused country means that it has a place in the minds of many people, particularly those with Navy personnel in their families.

Fig. 3.89 Existing regional movement patterns on land.

Regional

Train Station

Cork Airport

• • • • Cork/Cobh/Midleton Train movement

Cork is the gateway to the south west of Ireland and has a comparatively large population in itself. The harbour area, particularly that between Cobh and Ringaskiddy is one of both opportunity and divide. In terms of opportunity it is the focus for a number of maritime related activities and therefore centres of smaller population - such as Cobh, Passagewest or Crosshaven. It is however a place where the water divides populations from one another, something reflected by fact that local political boundaries meet here.

The nature of Haulbowline being primarily for Navy use means that, without a car access to it from within the region is focused to and from Cork, as the larger destination, not smaller towns such as Carrigaline or Crosshaven.

The N28 planned upgrades acknowledge the growing demand for movement to and from the Ringaskiddy area, in particular related to the Port expansion. Ultimately the route is south east of Cork, whereas the majority of users in the wider region need to travel north and west, due to the geography of Cork and wider south Ireland.

3.11 Access and Movement Strategy

3.11.3 Gateways to Haulbowline

There are a series of different gateway routes that are available, each having different characteristics and fitting with the different geographies describe previously. These are reviewed on a mode-by-mode basis below:

Air

It is understood that Helicopter travel is possible to the island for dignitaries although no dedicated or formalised helipad exists. This is understood to be an aspiration of the Naval Service.

Cork International Airport has a range of European and UK flights and is well placed on the south side of the city around 13km due west of Haulbowline Island. The airport has significant capacity for more flights with two runways and a large terminal building and has significant numbers of people within 2 hours flight time (Most of the UK/Ireland and significant maritime cities on the European coast, such as Amsterdam).

Access to and from the Airport is poor without a car. Routes are circuitous and unclear at the western end of the journey since most key roads run north to south, whereas the Airport is an east to west journey. Taxi is possible but relatively expensive. Direct buses to IMERC or Haulbowline do not operate.

Routes to other IMERC style European Centres are relatively weak – while services operate to London and Amsterdam, links to Maritime cities such as Nantes, Hamburg or Lisbon may be able to create wider benefits.

Car/Vehicular

A bridge links Haulbowline's south side to and from the mainland, close to Ringaskiddy. During the course of this Masterplan this bridge has been undergoing structural upgrades, although its vehicular capacity is not changing. This then links via the N28 (which has capacity and geometric constraints at its southern end approaching Ringaskiddy) to and from the south side of Cork and the wider road network. The scale of the Cork Harbour means that even relatively short distances can be lengthy by road – for example from Cobh to Haulbowline, even with use of the ferry across the River Lee is around 12km compared to the 700m "as the crow flies" distance. The bridge is restricted in width with two relatively narrow traffic lanes (circa 3m each) and a narrow footway along its western side. The bridge is around 500m in length.

Roads on the island are relatively informal, being within the control of the Naval Service via controlled entry. There is understood to be typically between 300-400 cars on the island on a typical day (there are no formal counts taken), although the Naval service point out that a requirement for their personnel could be up to 1,000 vehicles. Additionally the nature of the Naval Service means that the bridge can carry lorries and larger vehicles for servicing.

The public road network leading to the island is lightly used, although surrounding developments such as NMCI and IMERC and will change this over time. There are some local "bottlenecks" at peak times on the wider network, for example at signals in the Centre of Carrigaline, however the network is relatively simple and core access is focused around the N28 corridor from

Cork City. Many of the other routes are former country routes that have got busier over time as both car ownership and economic activity has grown.

Rail

The rail connection from Cork Kent to Cobh is a major asset, since it provides a direct and permanent, dedicated link, but is only of any value in connection to Haulbowline for Navy Personnel, since they are the only ones with a means of ferry from Cobh to Haulbowline. The railway service generally runs hourly and is a strong fixed link, since it does not interface with other traffic and therefore suffer delays. It has significant priority.

Bus

A public bus runs from Cork City Centre to Haulbowline, albeit at either a half or hourly service and being a comparatively long journey compared to the car (taking 57 minutes to undertake a journey that can readily be made by car in around 30 minutes). Indeed Usage is understood to be low to Haulbowline itself, reflected by the level of service allowing a maximum of around 100 people/hour by this mode each direction and the fact that while the bus destination is labelled "Haulbowline" it goes to the NMCI before turning round. The bus, while forming a useful connection is significantly reduced in service outside core Monday to Friday 7am-7pm operating hours and provides little flexibility to users.

By Boat

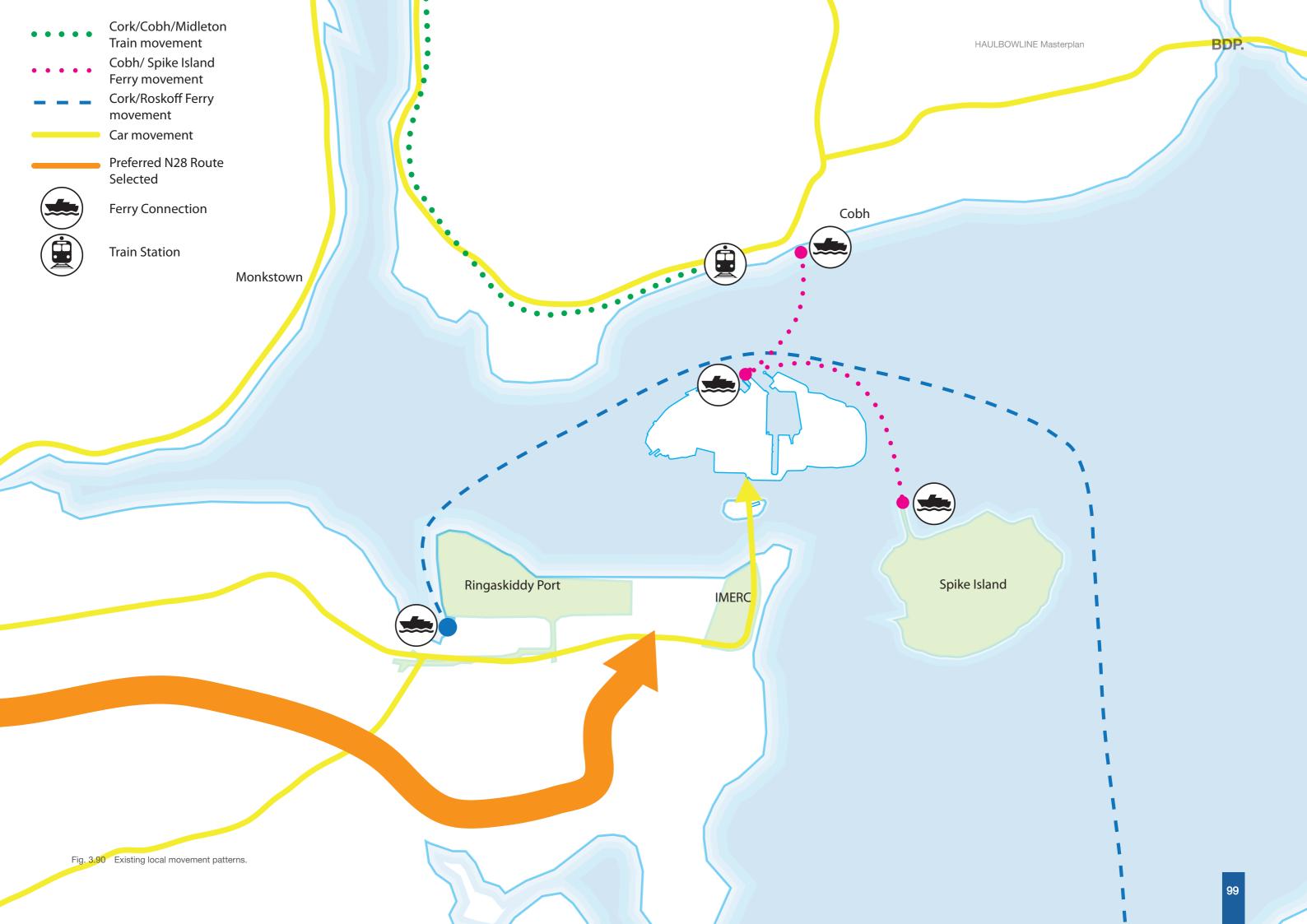
The island is historically oriented to the north and faces Cobh, as the boat was the only means of arrival. The journey time from Cobh is short, around 5-6 minutes, with services being provided to suit Navy personnel.

Use is therefore restricted and relatively low. Most of the infrastructure for such ferry services therefore exists on the North side of the island. The bridge changed that. Today boat access is still from Cobh but restricted to Navy Personnel and invited guests upon their service from Cobh to the north side of Haulbowline and vice versa.

Historical piers related to the ISPAT site still remain on the northern side of the island. These visually appear to be in reasonable structural condition, and have been used for boat services before, although if significant numbers of public users were to access the island via them they would be likely to need upgrade to ensure they are compliant to modern accessibility codes. Any public use of such piers would need to be coherent with Navy security matters, particularly as they are at the entry to the dockyard area.

There is currently no coherent strategy for ferry boats in and around Cork Harbour, either for tourists or commuters. This probably reflects the historical use of the harbour by relatively industrial or "closed" users such as the Port and Haulbowline, and the relatively new focus towards tourism opportunities available.

The Port at Ringaskiddy provides both passenger and freight opportunity. This is particularly relevant in terms of logistics and wider goods access to and from Haulbowline and area. The Cruise terminal at Cobh, although focused towards the visitor economy and peaked by season and arrival days of vessels provides an important potential source of tourism attraction to Haulbowline and the wider area. Haulbowline is for many one of the first glimpses they may have of Ireland.



3.11 Access and Movement Strategy

3.11.4 Movement

Key Movement Considerations and Influences in Masterplan Development

This section of the report considers access and movement matters that relate to Masterplanning of Haulbowline Island. By nature such analysis considers issues, opportunities and implications of proposed land use changes both on and off the island. It considers current core needs related to the Navy and understands relationships with future proposals. This section of the work places significant emphasis on understanding the inter-relationships with other initiatives in the area, such as IMERC and Spike Island Masterplan which, by nature, relate to potential movement circuits and capacity of networks.

As the nature of use of the island and locations around it change the island becomes less "sealed off" from the outside world and has to interact far more with the wider, also evolving environment. A key feature and need of any movement strategy has therefore to be to consider how to maximise the "cumulative" value of Haulbowline with the wider maritime cluster that is developing, but maintain access priorities of its key user, the Naval Service.

Island as an operational Naval Base

The prime consideration that must be made is that the island is and will continue to be an operational Navy Base. The Masterplan must therefore help maintain and enhance its functionality for this purpose. This has several specific implications in terms of access and movement:

- Priority must exist at all times for key naval uses, with the ability for "lockdown" situations to be accommodated should the Navy need them within their base and dockyard;
- Secure areas must be maintained and enhanced across the island, and keep operational efficiency;
- Pedestrian routes must take account of factors such as blast zones from ammunition storage, safe distances from the rifle range and other operational risks;
- Servicing of the island for Naval purposes must come first, both in relation to maritime and road access. In terms of the former the primary servicing is at the northern side, with the fuel jetty and access to dockyard situated here. In terms of the latter the road access must not be impeded by, for example, peak tourist demands and must continue to operationally work for the navy;
- A key opportunity exists for the Navy within the
 Masterplan to re-unite Naval Base and Dockyard.
 At present these are severed by the former ISPAT
 site, meaning that a narrow "neck of road" south of
 the graving dock is the only link. This is important
 as in the future that link will also form the only road
 link from bridge to park on the former tip, and will
 therefore be publicly accessible.

In considering maintenance of access as a Navy base it is important to consider how capacity will depend on the specific land use mixes but more importantly how



Fig. 3.91 Historic wall on Haulbowline. With the increased presence of civilians a primary concern for the Masterplan is maintaining Naval security and operational control of the island.

the location is operated, in particular who is looking to gain access and when. Creating complementary uses clearly increases potential overall capacity. As an example the Navy typically appear to have around 300-400 vehicles on site. If around 60% arrive at peak times around 160 vehicles capacity remains (this is substantiated by figures in the IMERC Masterplan). This would be plentiful if the chosen complementary

land uses are low-trip generating or off-peak, but could quickly be filled if they are, for example B1 office related. Specific Navy use is not known to be quantified in any specific transport study. This is a key gap in data that needs to be filled to ensure ability to both protect capacity for them and plan ahead.

IMERC/NMCI Maritime Cluster

The IMERC Masterplan aims to build a campus "cluster" of maritime related activity to the south of Haulbowline Island between Paddy's Point and Ringaskiddy. This has direct influences on Haulbowline and the Navy. From one perspective it provides support, in terms of skills and education links, from another it creates risk in terms of transport and movement interactions. From a transport perspective we identify five key relevances and interactions with Haulbowline Island Masterplan:

- a) IMERC, adding to the relatively recent NMCI and including the currently under construction Beaufort Centre adds a new but related activity base to the south of Haulbowline which hasn't previously existed. This creates new movement demands, not just from the south, but also in relation to Haulbowline itself (demonstrated by the NMCI use by Navy staff), but also potentially an unmet demand for linkage to and from Cobh. This cluster adds a potential demand "pole" that is not there at present and acts as southern point on the "Cobh-Haulbowline-IMERC" line.
- b) IMERC, by virtue of its international status, should add significant volumes of people wanting interaction with the key assets of Cork City Centre and with the Airport. IMERC has the potential to change circuits and demands. As an example there is not currently enough volume of demand to merit any public transport link from Haulbowline or NMCI towards the Airport. The nature and scale of IMERC potentially changes this and

- potentially helps increase access to Haulbowline. The IMERC Masterplan states 'it is proposed that staff could travel on the Irish Naval Ferry Service from Cobh to Haulbowline. This would allow those staff wishing to use the train service from Cork to Cobh'.
- c) The parking stock proposed at IMERC is significant and proposed to operate in a "shared" or "flexible" nature, rather than a "ring-fenced per user" manner. By phase six, 842 parking spaces are provided at IMERC, a significant number. These potentially provide overflow opportunity for major events at Haulbowline or Spike Island and need to be worked with in such a manner.
- d) The L2545 Local Authority Road runs from Ringaskiddy to the IMERC site, before the road turns into a private road that currently links to the Haulbowline Bridge. Assessment of potential volumes of traffic on these roads undertaken by Punch Consulting within the IMERC Masterplan shows that currently around 240 people access east past the NMCI in the AM peak, most of which could be assumed to be heading to Haulbowline. The figures demonstrate that after the Beaufort building this is predicted to rise to 290 and after full completion of IMERC to 590 plus the existing 240 (around 830). This basically means that there is extremely limited capacity for additional traffic during the AM and in the counter direction the PM peak. Care has to be taken to retain capacity for the Naval service within both the IMERC and Haulbowline Masterplans. There



Fig. 3.92 View of Haulbowline in the foreground, with NMCI and Spike Island in the background (courtesy of the Irish Defence Forces).

is very limited future AM and PM peak capacity likely to be available without significant upgrading between the end of the proposed N28 upgrade and the Haulbowline Bridge. This lends itself to Haulbowline being primarily related to naval uses supplemented by some tourism, with their peaks complementing IMERC and NMCI ones and each other.

e) The IMERC Masterplan shows the entrance at the north east of that site, near Paddy's Point, just south of the Haulbowline Bridge entrance. The egress is shown to the south. The opportunity to create a strong gateway to Haulbowline and IMERC together at this location should not be lost. Although off Haulbowline Island this private link and key junction need to be considered in more depth as part of the "joined up" approach to IMERC and Haulbowline in a "boulevard" format, creating a Naval gateway.

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Port of Cork expansion and relocation

Like most commercial ports, the Port of Cork at Ringaskiddy needs to maintain its competitive advantages and accommodate increasingly larger vessels. The upgrade to the N28 is an example of helping the Port achieve this, with operations consolidating from areas closer to the centre of Cork.

From a Navy perspective care has to be taken that this does not hinder access to the island, either by using up maritime or road capacity.

Tourism Initiatives - Spike Island

Spike Island lies approximately 500m south east of Haulbowline Island. The Spike Island Masterplan demonstrates growth of the island as a major tourist destination with up to 300,000 visitors per year (5,000 per day) at peak times and a demand of 1,000 people per hour at the busiest peak season times. These have to be understood as long term but significant volumes.

The Masterplan does not place significant emphasis on catchment and how people will arrive at Spike Island but does highlight the exceptional scenario of 6,000 people using the event space and needing to depart the island within an hour of event finish. Although exceptional the expectation that only 40% of people would arrive by car for such keeps overall parking volumes down to 960 between Cobh and the Ringaskiddy/Haulbowline area, however the mode split analysis is not substantiated by demonstrating non-car movement beyond Cobh or Ringaskiddy. While there is some discussion of cycle routes, and while we accept they are attractive at certain times,

they are very weather dependent and limited appeal, even if marketed and made more "mainstream".

The shorter term, lower key scenarios anticipate that a parking demand of 100 -150 spaces on Haulbowline would be required with a direct link by ferry or bridge from the south east of Haulbowline to Spike Island. This is a substantial volume of spaces that, unless a wider reason to come onto Haulbowline is provided, does little for Haulbowline itself, other than take capacity from the bridge. It is essential that the following conclusions are made in relation to Spike Island:

- It is not viable that a large percentage of Haulbowline's finite access capacity is taken up by purely Spike Island access. Any Spike Island access via Haulbowline must interact with activities on the latter. No consideration of the impacts on Haulbowline appear to exist in Spike Island documentation, particularly in relation to retaining Naval accessibility.
- How much "linkage" can be created between tourism associated with Spike and Haulbowline Islands. The more that can be created the greater justification of use of the space on Haulbowline can be made, however the more that the link is made the greater the potential for pedestrian demand and better connectivity/layout is required between access point to the island and any Haulbowline attractions.



Fig. 3.93 Aerial of Spike and Haulbowline islands from the north. NMCI is also visible in the background. (Image courtesy of the Irish Defence Forces)

- The amount of flexibility in parking that can be created between Haulbowline Navy, Haulbowline "Other" and Spike Island Tourism uses. Particularly bearing in mind the need to ensure that finite space and access capacity of Haulbowline needs to be managed. It is clear that the Navy have to have first priority in such for operational use, therefore re-emphasising the need to really quantify and understand Navy related parking demand now and in future.
- Whether or not, taking into account the impact on Haulbowline and whether or not parking around IMERC can be "flexible", for major events or peak season it is better to access Spike Island from IMERC area or further south rather than encourage increased numbers of vehicles onto Haulbowline.

Tourism Initiatives - Cobh

Cobh itself has significant appeal as a tourist destination, not just related to 80-100 Cruise Liners that are using it at present but as a destination in itself primarily on a national and local level, but also on an international level.

In relation to Haulbowline it is unconnected except for the Navy. Cobh's key transport asset is the railway link directly to Cork, which provides an hourly service for much of the day taking little over 30 minutes. Although not high profile within Cork, the railway is a strong and pleasant connection but appears significantly undermarketed as a tourist or commuter asset at present. Proximity of station to quaysides is excellent.

Tourism Initiatives - Camden Fort and Crosshaven

Camden Fort is another opportunity based several kilometres to the south of Haulbowline. This is a significant tourist attraction close to the entrance to Cork Harbour. Whilst presently not generating significant volumes of visitors the scale and nature of the attraction combined with other attractions such as Spike Island and Cobh means that there is potential to grow.

Camden and the village of Crosshaven are significant road journeys from Haulbowline and Cobh by road, however there is potential to create boat linkage to the piers close to Camden and into Crosshaven. There is also an excellent cycleway from Crosshaven to Carrigaline, along the former railway line, potentially allowing tourist circuits to be created.



Fig. 3.94 Cunard Liner Queen Elizabeth at berth in Cobh.



Fig. 3.95 Cobh railway station is located directly on the waterfront. Haulbowline Island is visible in the background.



Fig. 3.96 Camden Fort Meagher, originally built to defend the mouth of Cork Harbour now operates seasonally for heritage and tourism purposes.

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On-Island Movement Analysis

Naval Use

The Navy is and will remain the primary function on Haulbowline Island. There are three key areas of interest:

a) Access by Road

Access by road is entirely by the aforementioned bridge from the south. Once on Haulbowline there are different types of vehicular demand created by the navy base and dockyard. The former is primarily, but not exclusively related to staff parking via private cars. There is some degree of loading activity occurring and necessary – for example related to the fuel storage tanks, ammunition stores and other locations. The dockyard area with access to the east of the graving dock requires more heavy vehicle access to service and load ships, but has less day to day requirement for parking.

There is however currently some use of the land for parking to the east of the graving dock, understood from conversations with the Navy to relate to long term parking while ships are away. The Navy have commented that up to 1,000 car parking spaces could be required for three key categories of Navy essential, Navy Visitors and Navy Long Term (while ships are at sea).

Access by Cobh Ferry
 The Navy vessel serves the purpose of transporting staff and light goods to and from Cobh, reflecting the long historical link between

the two locations. This service runs at each peak taking around 5-6 minutes, berthing on the north western side of Haulbowline. The boat also stops at the mouth of the Dockyard to load and offload personnel there.

This vessel is restricted to Naval Personnel and guests only and is not publicly available.

There is a cost to operating this service. If public access were to be available to Haulbowline using this service or similar it could help to cross-subsidise such cost and at the same time bring the navy closer to the people. Clearly in considering this there is the need to consider security aspects of staff and any increased regulatory needs of allowing passengers as opposed to personnel to use such a ferry. It should be noted that in the Beaufort planning application a 15% demand by ferry was suggested from Cobh. There is no provision for this at present.

c) Access around the Graving Dock
A narrow piece of land exists to the immediate south of the graving dock, which serves both access to the east and south sides of the Dockyard but also the East Tip. The latter means that during tip remediation significant volumes of HGV movement will use this link, but also that in future public demand will occur. Clearly the volume and nature of this public demand relates to:



Fig. 3.97 View from bridge approaching Haulbowline Island. There are fine views across the island to Cobh, but the intermediate ISPAT site does not provide an appropriate "sense of arrival" for a national naval base.

- The nature of use on the east tip (which is to be low key recreational);
- The volume and control of parking (if any) supplied at the east tip;
- Whether or not there is an onward capability to move from Haulbowline towards Spike Island from the southwest side of Haulbowline and the nature of demand created by Spike Island;
- Potentially whether or not there is another route to the east tip as discussed earlier across the mouth of the dockyard entrance via a new bridge;
- The entrance to the Navy Base, which is to the north west of the bridge and currently means navigating the southern side of this man-made part of the island;

A key point in relation to Naval operations is the ongoing need to use this piece of land to link Naval Base to Dockyard. Simplification of this would assist future operability.

Internal Vehicular Routeways

There are a number of internal vehicular routeways on Haulbowline island. Most of these relate to the way in which the island has evolved over time. Access is governed by the security procedures and gate, particularly access to the western side of the island. These routes can be summarised as:

- North-South Spine running across the middle of the island on this access and relatively straight, providing linkage from the security gate at the south through to the fuel jetty at the north. This is a clear, through route;
- East-west route across the south. A route across
 the south of the island providing linkage from
 the Naval base towards both former tip site and
 eastern wall of the dockyard. This takes heavier
 vehicles for loading shops;
- Route around island perimeter. Running from the historic buildings at the north around the western side of the island to the security gate in the centre. This route is very lightly trafficked and is primarily for pedestrian use. There is some vehicle movement for loading/unloading of goods;
- There is some traffic penetration into the area approaching the central square/ceremonial buildings in the centre of the Navy Base. This is limited in length and access primarily relates to access for parking.

The most obvious missing link is across the mouth of the dockyard entrance from historic buildings/former ISPAT site to dockyard itself. The nature of the need to allow boats to move in and out of the harbour and lack of moving bridge here means all east west movement is across the south of the island.

Car Parking

It is difficult to substantiate current volume of parking spaces available since much of the parking is not laid out in a "formal bay" manner. Our calculations from mapping and satellite photography indicate that around 400 vehicles are currently typically accommodated. 130 of these (around 33%) were parked to the east of the Graving Dock, while the vast majority (270) were parked to the west having passed through the navy security gate. Of these 106 were parked to around the fuel storage tank area and the majority of the rest were parked in the areas to the north of the entrance gate or the central "administration" area between parade ground and firing ranges. Parking is almost exclusively for Naval personnel at present. Clearly future opening up of the island will change both the nature of parking control but also the management needed of it.

Pedestrian Movement

Pedestrian movement is limited to those with access to Haulbowline at present. The key movements therefore occur in and around active locations. There is a particular barrier to movement between the Naval Dockyard and Base, due to both the presence and lack of crossing ability of the dock/graving dock and the closed nature of the former ISPAT site:



Fig. 3.98 Roads on Haulbowline Island. The island has a number of informal roads that allow access throughout.

- Most pedestrian movement is therefore restricted to local movement within either the Naval Base itself (e.g. from accommodation block to firing range), or within the dockyard area itself. Within the Naval Base there are some topographical changes, particularly to the north side of the island;
- There is a very strong route around the perimeter of the western side of the island which is lightly used but of good quality. This is flat.

Due to the "closed/secure" nature of the island to date there is limited signing and information on the island. There are some former interpretive boards still in place.

Pedestrian access from the bridge is complex due to the relatively undefined nature of the junction there. There is also the need to cross live traffic lanes, which although currently relatively lightly trafficked need to be considered within detailed design stages.

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Working Piers

There are several working piers and boat access points on Haulbowline that need consideration in relation to the Masterplan. These can be summarised (in a clockwise manner from NW corner) as:

- Ferry landing point using simple steps and facing Cobh. Close to the main Navy base activities, close to the current ammunition stores, but on the pedestrian route around the perimeter of the island. Works well for current quick naval linkage to and from Cobh, in relatively deep water and minimal crossing time. Not ideal for public use due to access and security issues;
- Fuel Jetty a fixed jetty on the northern side of the island close to the fuel storage tanks. Primarily used for the purpose stated. Any wider regular use would potentially hinder it's prime purpose. Central to the island;
- Rat Island access points several smaller access points in and around the area close to the historic warehouses, protected from the weather by "Rat Island". Only suitable for smaller boats.
 Would need substantial upgrading for public use.
 Centrally located on the north of the island;
- Former ISPAT pier. Substantial pier at northern tip
 of island close to dockyard entrance. Formerly
 used by staff for ISPAT. Would need some
 upgrading to make compliant for wider use, but
 offers relatively sheltered access point without
 impeding naval access to dockyard;

- Piers/Access at dockyard entrance. Locations
 within naval service control on the eastern side of
 Dockyard, primarily used to access the dockyard
 itself. Unlikely to be of value for public use unless
 new bridge across dockyard were provided;
- Slipways to the west of bridge. South side of the island, provide limited access to buildings formerly used for boat repair. Understood to be relatively shallow water. Consideration of access limitations under bridge required if coming from the east by boat;
- Diving service dock, south west corner of island.
 Wet dock used by diving service. Within the Navy Base, but close to the perimeter route. Understood to be valuable resource for Navy, with little opportunity for wider use.

The majority of these points of boat access are on the northern side of the island. This partially reflects historic use and links of the island, but is also understood to relate to the relative depths and protection offered on that side of the island compared to, in particular the south eastern side of the island. The bridge from Paddy's Point also acts to reduce the propensity of boat activity along the southern boundary with limited clearance height and shallower depths in its vicinity. In developing proposals for boat access from the south (either from IMERC, The Port or Spike Island) these considerations are important.



Fig. 3.99 View of the northern T-shaped naval refuelling pier.



Fig. 3.101 View of the south western naval deep water diving pier.



Fig. 3.100 View of the defunct northern pier.



Fig. 3.102 View of the northern naval "daily" access pier.

Summary

The following summarises how access is gained to different parts of Haulbowline Island:

	Vehicular	Other
Eastern Tip	 Via route south of Graving Dock only Limited current use due to inaccessibility Heavy use during remediation Demand will depend on parking and nature of recreational attraction Limited future use unless substantial parking taken 	 Limited to south of Graving Dock only creating pedestrian conflict with other uses, particularly dockyard. Means that pedestrians from rest of island need to cross path of all vehicles entering the island unless they retain current routes. Ferry access points to Spike are a key consideration
Dockyard	 Via route south of Graving Dock only Primarily heavy goods vehicles Location of parking for Navy "long stay" is critical consideration for future Potential for conflicts with east tip users 	 Low level of linkage for pedestrians to Navy Base Conflicts for pedestrians with access point to Island Difficult to access by ferry at present (requires access into dockyard itself)
Former Steelworks (ISPAT)	 Low current use due to inactivity Very well positioned for access point from bridge 	 Can be accessed by via ferry from north Can be accessed via bridge Current barrier to east / west pedestrian movement in particular
Western Navy Base	 Concentrated movement on north-south access Quiet routes elsewhere within the area Some topographical constraints Parking supply and location ad hoc, but "pulls" traffic into the island further than potentially necessary 	 Good circuit around outer edge of area Relatively quiet pedestrian routes with low volumes of traffic Some pedestrian accessibility issues (but less of an issue while Navy base only) Ferry access to north side only

Fig. 3.103 Access to key locations on Haulbowline.

3.0 ANALYSIS

3.11 Access and Movement Strategy

3.11.5 Challenges

Types of Movement Considered and being catered for in the Masterplan

Haulbowline's development, through a number of stages and over a number of years means that the current layout and access arrangements have evolved over time, rather than being "created" as part of an overall plan. The key movement feature of Haulbowline to date, even when the ISPAT site was fully operational, is that of lack of access except to permitted personnel and visitors. The introduction of public access to the island, a critical consideration of the brief bearing in mind the East Tip rejuvenation, means that it is not just control of access points, but internal layouts and movement patterns that start to matter more. This section considers those movements.

The ISPAT site employed hundreds of people and therefore the island has been used by far more people than currently accessing it. The reality of the evolving situation is that it is not that simple due to two factors:

 Many of those several hundred ISPAT employees came by boat from Cobh, evidenced by the access point at jetties on the northern half of the island.
 Demands of new land uses may be different and therefore Haulbowline needs to be considered in respect of each potential new land use; around IMERC and Ringaskiddy has and is evolving significantly. Our review of each relevant land use change proposal demonstrates that even with planned upgrades to the N28 corridor, capacity approaching the island will be close to fully utilised at peak times and therefore wider thinking about how land uses complement each other needs to be made. This situation did not exist when ISPAT operated. The Port at Ringaskiddy and in particular IMERC (evidenced by traffic figures in their Masterplan) will take spare and created capacity.

Sustainable and complementary land uses and

needs are protected while developing the island

access forms are key to ensure Naval Service

further.

The nature of land use, particularly to the south

Naval Use as the priority

Ongoing Naval use is paramount to success of the Masterplan. There appears to be an absence of comprehensive quantified data on the movement patterns of naval staff and their movement to, on and around the island, and the reasons why such movement occurs or in some cases doesn't. This is understandable since the "closed" nature of Haulbowline and relatively under-developed nature of the access corridors to it have never required such understanding. It is however vital that, going forward, in order to protect their interests the Naval Service works with others to understand and quantify it's movement needs in some detail so as to allow full consideration of "what else" can be accommodated alongside it on Haulbowline and in the wider environment.

There are positive steps being taken by the Navy already in their approach, for example with consideration of opportunities such as electric vehicles, and these need to be built upon going forward.

Logistics uses are key to operational effectiveness of the Navy. While some supplies can come by sea, in particular very large items, most core stocks arrive via the bridge and principally turn right into the dockyard area. Ongoing security and risk management will be imperative as the public access is increased to the island, particularly in relation to their interaction at the northern end of the bridge. There is some access to and from the Naval Base for larger vehicles, although these appear less frequent and a lower proportion of traffic entering that area. These include fuel and ammunition related services, and can include lengthy





Fig. 3.105 $\,$ Future links with the island and IMERC could be potentially electrically powered.

Naval Personnel

There are a variety of types of Naval personnel using the island. The key groups are understood to be:

- Entirely land based "daily staff" including some civilian staff to provide support services;
- Residential staff relatively few in number, particularly when student staff staying in the accommodation block on the southern side of the island are taken from this equation. These primarily live on the west side within the Naval base:
- Staff based temporarily on land (i.e. when not at sea);
- Staff accessing the island to be at sea for a period of time (i.e. they travel to and from the island once at either end of a trip, therefore not creating daily trips);

Each of these groups has different travel demands and movement patterns. More detail is required on each as the Masterplan evolves. These arrive in the two available ways – by car from the south, or by boat from Cobh.

For many their journey is understood to vary according to the nature of their day, however most are felt to remain in and around Haulbowline during their working time. It should be remembered that some staff work unsocial hours, and that some naval personnel, particularly those at sea, are likely to have their primary home elsewhere in Ireland, since the Navy draws its personnel from the entire country not just the Cork area.

Naval students, while relatively few in number have a further characteristic, in that they primarily live on the island but undertake much of their learning at the NMCI to the south. This is an excellent example of how the "maritime cluster" gradually being created to the south both works with the navy, but at the same time requires increasing interaction between Haulbowline Island and the wider environment, creating movement demand across the bridge.

The point made earlier about requiring further data on Naval use and movement patterns is critical in Masterplan development and validation. While the navy state that up to 1,000 personnel can be requiring access to the island or parking at a given time, there is a substantial space difference between providing 1,000 spaces and the observed numbers of around 400 vehicles on a typical day. This is detailed later. This lends to suggest car sharing or access by other modes is common, however care is needed to ensure enough space to maintain operability is retained for navy use, while at the same time not reducing development potential of the navy. Some flexibility, for example in relation to dockyard parking and logistics space being flexible according to needs has to be an important part of the Masterplan.

"Shared Use"

There is some shared use of the island at present, primarily related to staff accessing the tip for remediation purposes. There is very little access use by the general public. Clearly in the past ISPAT meant shared use was a feature although it was "controlled" shared use. The nature of sharing will change with public access when the east tip site is remediated since most of this access will be "uncontrolled". There is some shared use of the bridge, for example to access the graveyard amenity on Rocky Island half way across. Matters of control, segregation and maintenance costs will become key as wider access is opened up across the bridge.

IMERC

The IMERC cluster, while having a navy related function in terms of NMCI will primarily attract a merchant navy focus. While specific impacts and layout considerations are considered earlier in this movement analysis a primary consideration needs to be that the Merchant Navy focus will bring with it different types of demand. If the "International" focus is achieved it will mean greater emphasis on linkage to and from the Airport, and potentially Cork City for wider linkages and recreation. This offers potential opportunities to Haulbowline, in terms of strengthening its relationship with such amenities. As discussed earlier the Beaufort planning application suggests stronger linkages from it towards Cobh. There is understood to be a jetty planned in its vicinity to allow better maritime access, although the nature of the boats and access to it will be limited by depth of water and channel/height restrictions around the bridge. The inter-relationship of IMERC towards Cobh opens up stronger possibilities of combined boat services from here via Haulbowline and/or Spike towards Cobh.



Fig. 3.106 View of the NMCI library. Naval personnel use the NMCI intensely so shared access with the IMERC cluster of buildings is critical.

3.0 ANALYSIS

3.11 Access and Movement Strategy

3.11.5 Challenges

Other Key Issues

Existing Bridge

The single carriageway bridge is used by the Navy for large articulated access vehicles likely to be at maximum permitted length and load. Although not being large in terms of volumes the design of gateways junctions, interaction with any non-Navy vehicles and in particular the ability for "abnormal" or larger loads to be accommodated has to be maintained. This is a key operational need.

In terms of capacity we estimate that around 600-700 vehicles per hour could theoretically be accommodated (i.e. one vehicle every six seconds in relatively free flow conditions). Design manuals typically state a much higher 900 vehicles per hour under free flow, but this route is width restricted. Having even that 600-700 capacity is heavily dependent on the nature of access junctions designed at each end of it. The capacity of the bridge is not currently tested and the reality is that this figure is likely to be lowered significantly due to factors such as turning movements, volumes of Heavy Goods Vehicles (HGVs), interactions with other users and security entrance points. Part of this capacity is already used by the Navy, although this figure is not available at present (see recommendations) and much of the capacity is understood to be being used during East Tip remediation by associated HGVs. Bridge vehicular capacity needs to be used wisely with Navy use being the priority.

The bridge is approximately 500m in total length. This is long enough to be a deterrent to walkers,

particularly in inclement weather, given the exposed location and particularly when bearing in mind that ultimate land use destinations, even with the IMERC buildings, are still perhaps a couple of hundred metres either side. Typical limits for pedestrian walk distances in a third level campus are 500-600m without the campus breaking down operationally. Standard guidance for maximum walking distances to bus stops as an example is 400m, in an urban, not an exposed environment. The nature of provision for those on foot is therefore poor. Bearing in mind the need to prioritise vehicular capacity for Navy use it is important to encourage non-car access and linkages. The consideration of a parallel footbridge is therefore made, something which has the potential to aid secure or prioritised access for vehicles at certain times.

Quay/ Jetty Access Conditions

Maritime conditions are more favourable on the more sheltered northern and western sides of the island since the prevailing wind means that the south and eastern sides of the island are those most difficult to moor safely. This partially explains the lack of amenity in that location, and is replicated on Spike Island and at Camden Fort where the jetties are on the more protected north facing aspects.

Water Depths are very variable around the island, with the deep water channel between it and Cobh (continuing towards Cork) being a key feature and asset of the harbour. The main channel into Ringaskiddy Port is along this route. While not particularly busy there is a need for some protection for smaller boats (evidenced by the presence of Rat Island). The harbour wall is a strong feature on



Fig. 3.107 The existing bridge has been recently refurbished to cater for larger vehicles; particularly important during the remediation works of the East Tip. This will also allow for greater logistical movements by road for the Naval Service.

the northern side of the island along its entire length providing tidal protection. Water depths are generally much shallower on the southern side of the island restricting the number of access points. Additionally the presence of the bridge, with regular structural supports, means that the height and width of boats is further constrained between Haulbowline and the IMERC/NMCI area.

Journey times in the harbour area are not scheduled and therefore timed evidence of speed of journeys is not

available. A typical journey from Cobh to Haulbowline takes around 5-6 minutes. In relation to wider future consideration a journey from IMERC to Cobh via Haulbowline may take 10-12 minutes, depending on stopping location and route. This needs to be placed in context of a "through journey" if possible at present, which would take 5-6 minutes on a ferry followed by a walk across Haulbowline (around 5 minutes), followed by a walk across the bridge and into IMERC (6-7 minutes), totalling 16-18 minutes in reasonable weather.

Car Parking

It is difficult to substantiate parking spaces currently available since much of the parking is not laid out in a "formal bay" manner. Our calculations from mapping and satellite photography indicate that around 400 vehicles are currently typically accommodated. 130 of these (around 33%) were parked to the east of the Graving Dock, while the vast majority (270) were parked to the west having passed through the navy security gate. Of these 106 were parked to around the fuel storage tank area and the majority of the rest were parked in the areas to the north of the entrance gate or the central "administration" area between parade ground and firing ranges.

Within the above figures there is however currently some use of the land for parking to the east of the graving dock, understood from conversations with the Navy to relate to long term parking while ships are away. The Navy have commented that up to 1,000 car parking spaces could be required for three key categories of Navy Essential, Navy Visitors and Navy Long Term (while ships are at sea).

1,000 spaces at a typical car parking space size (2.4m x 4.8m, plus 3 x 2.4m for circulation) equates to around 18720 square metres, or a space nearly 200m x 100m in size (a couple of football pitches). Maximising flexibility of space used for parking to be able to be used by logistics, ceremonial or other uses is critical, particularly if aiming towards this volume of space which is unlikely to be regularly full. Not only is the scale of parking imperative to consider, but so is its location. The relatively short walking distances across the island mean that most users

would be unlikely to be significantly impaired by not having direct access to their final building. There is a need to separate public, daily naval base and dockyard parking, but at the same time there is commonality in that all vehicles arrive and depart from the south and it therefore makes sense to reduce wider impact by focussing the core parking areas close to the gateway.

Secure North-South Access

With the primary historic buildings and ferry access point to and from Cobh being at the northern side of the island and the primary vehicular access point and onward connections to the east tip and Spike Island being at the southern side of the island there is a clear need to consider how a public route can be created along this access yet at the same time maintaining security and separation for prime Naval uses.

In particular there is a need to consider how movement routes can be "locked down" quickly if needed for security reasons, but on a more day-to-day level how the interaction of Naval Base to Dockyard can be dealt with effectively as it perpendicularly crosses and therefore interacts with the north-south movement. These considerations therefore become key considerations within Masterplan development.

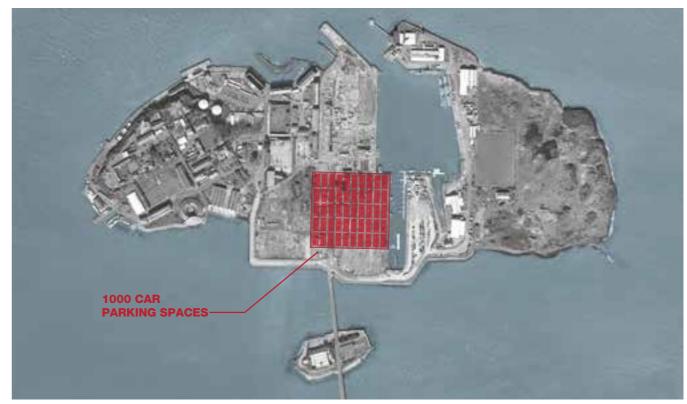


Fig. 3.108 The Naval Service have highlighted that anything up to 1,000 car parking spaces may be required on the island at any one time. Currently the spaces are highly dispersed behind secure lines, and any further car parking will require segregation between public and Naval Services parking.

3.12 Naval Precedents

3.12.1 Overview

As part of the Masterplan process a number of international exemplars were benchmarked. Of particular interest for Haulbowline was the coexistence of operational naval bases beside heritage and cultural visitor destinations.



Fig. 3.109 Haulbowline and Spike Islands, Cork Harbour.

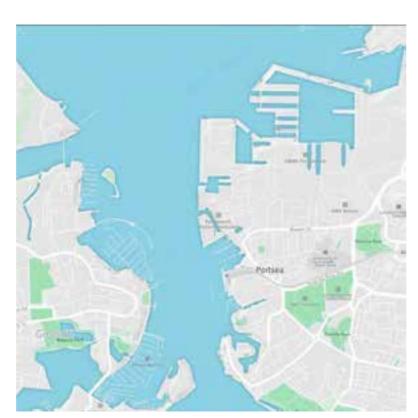


Fig. 3.110 Portsmouth Historic Dockyard, Portsmouth Harbour.



Fig. 3.111 Chatham Historic Dockyard, River Medway, Kent.

HAULBOWLINE AND SPIKE ISLANDS

WORKING NAVAL DOCKS

PRESERVATION

HAULBOWLINE Masterplan BDP.

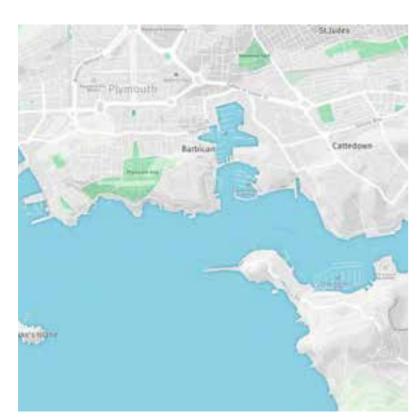


Fig. 3.112 Plymouth Naval Dockyards, Devon.

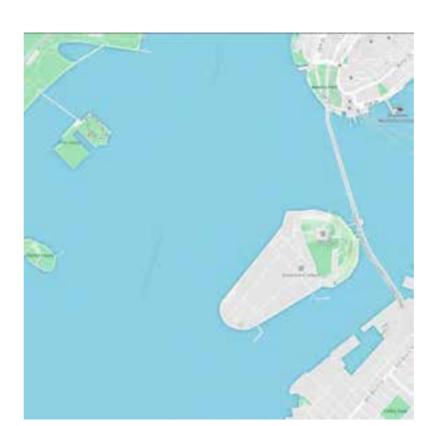


Fig. 3.113 Governor's Island, Hudson River, New York.



Fig. 3.114 Treasure Island, San Francisco.

TOURISM AND RESIDENTIAL

2 ISLANDS IN ONE

REMEDIATION

3.12.2 Portsmouth Historic Dockyard

WATERFRONT PRECEDENT STUDIES: SCALE COMPARISONS, TYPES OF LESSONS LEARNT

Area: Approx 1,214,000m²

The dockyard includes a highly successful visitor centre, with major bespoke attractions such as the Mary Rose centre. Importantly it also has two fine historic ships - HMS Victory and HMS Warrior - as part of the visitor circuit.

IMPORTANCE: WORKING NAVAL DOCKS

Portsmouth Historic Dockyard was considered comparable to Haulbowline, as it is both an active naval base, and adjacent to a major culturally led tourism destination. The lessons learned were that security could be integrated discretely with the naval requirements through the use of careful public realm planning. Portsmouth also has established a wider harbour trust that helps manage and coordinate the development of new buildings, alongside active preservation around the general harbour area.



Fig. 3.115 Haulbowline and Spike Islands, Cork Harbour.



Fig. 3.116 Portsmouth Historic Dockyard, Portsmouth Harbour (scale comparison).



Fig. 3.117 Portsmouth Historic Dockyard, plan.

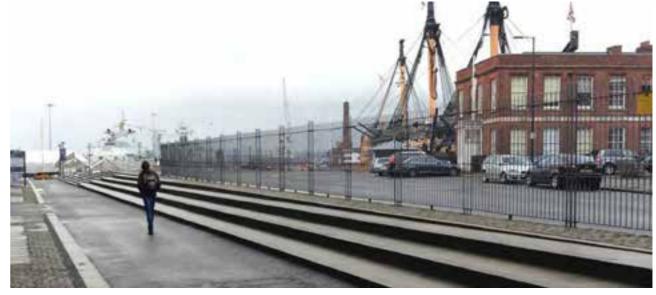


Fig. 3.118 Portsmouth Historic Dockyard. Image shows discrete security boundary.



Fig. 3.119 Portsmouth Historic Dockyard, aerial view.



Fig. 3.120 Portsmouth Historic Dockyard, view from the waters edge.



Fig. 3.121 Boathouse 6, a Victorian structure now houses an indoor visitor attraction centre.



Fig. 3.122 Wayfinding totem.

3.12.3 Chatham Historic Dockyard

WATERFRONT PRECEDENT STUDIES: SCALE COMPARISONS, TYPES OF LESSONS LEARNT

Area: Approx 320,000m²

a seasonally active marine visitor centre. The project is comparable to Haulbowline in that its structures have been refurbished sensitively as a major tourist destination. The refurbishment has importantly acted as an urban regeneration catalyst for contiguous developments, along the river Medway.

IMPORTANCE: TOURISM AND RESIDENTIAL

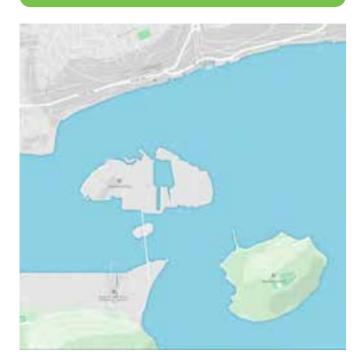


Fig. 3.123 Haulbowline and Spike Islands, Cork Harbour.





Fig. 3.124 Chatham Historic Dockyard, River Medway, Kent (scale comparison).

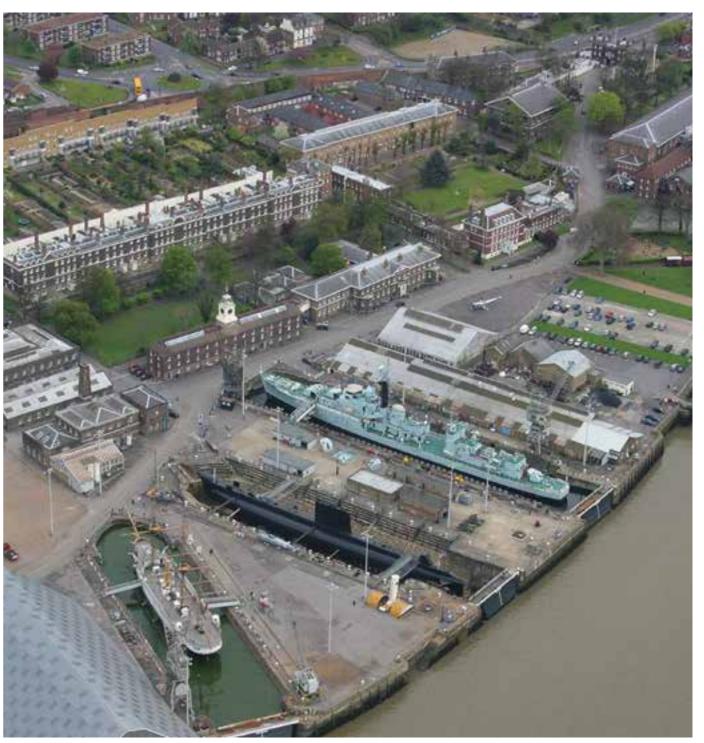


Fig. 3.126 Chatham Historic Dockyard, Aerial View of the Historic Warships.



Fig. 3.127 Chatham Historic Dockyard after renovation.



Fig. 3.129 Chatham Historic Dockyard.



Fig. 3.128 Chatham Historic Dockyard - Mast Houses & Mould Loft after renovation.



Fig. 3.130 Chatham Historic Dockyard. View from waters edge.



Fig. 3.131 Chatham Historic Dockyard after refurbishment.

3.12.4 Plymouth Naval Dockyards

WATERFRONT PRECEDENT STUDIES: SCALE COMPARISONS, TYPES OF LESSONS LEARNT

Area: Approx 23,000m²

Plymouth is comparable to Haulbowline in that it is an active British naval port. Innovative Private Public Partnerships have helped in the development and refurbishment of the historic structures, through the introduction of the residential private sector.

IMPORTANCE: TOURISM AND RESIDENTIAL



Fig. 3.132 Haulbowline and Spike Islands, Cork Harbour.

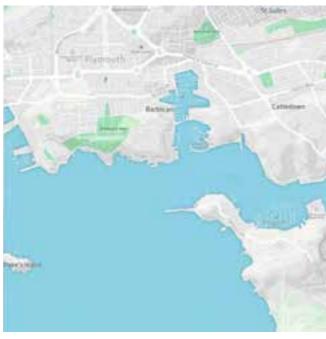


Fig. 3.133 Plymouth Naval Dockyards, Devon (scale comparison).

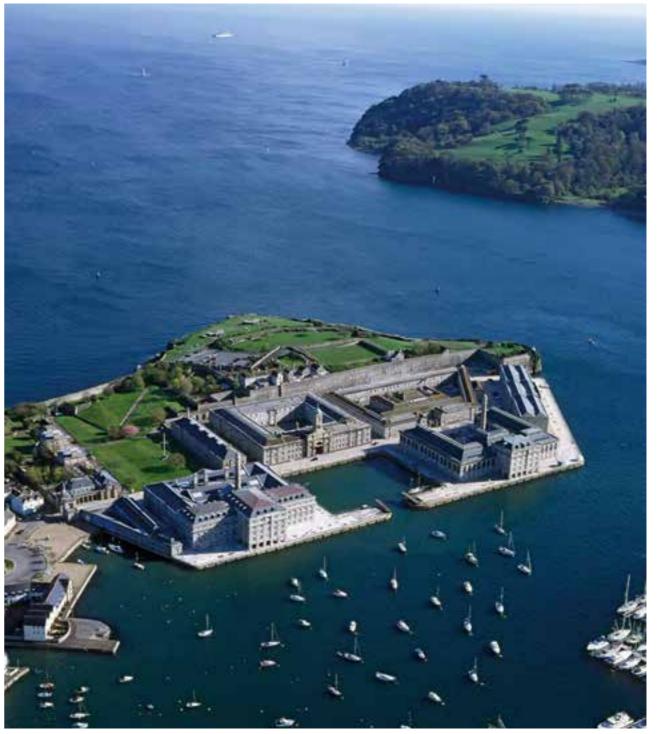


Fig. 3.134 Plymouth Dockyards, aerial view.



Fig. 3.135 Plymouth Naval Dockyard - View of Marine Basin.



Fig. 3.136 Historic Buildings.



Fig. 3.137 Boats docked in the marine basin.



Fig. 3.138 Coast Path Staircase, Plymouth.

3.12.5 Governors Island, New York

WATERFRONT PRECEDENT STUDIES: SCALE COMPARISONS, TYPES OF LESSONS LEARNT

Area: Approx 353,000m²

The island is comparable to Haulbowline and Spike Island together in scale. It is interesting that the island has been developed as a single "concept" for tourism, where the former naval buildings are considered part of the tourist experience.



Fig. 3.141 Diagrammatic analysis of terrain.

IMPORTANCE: - TWO ISLANDS IN ONE - IDENTITY



Fig. 3.139 Haulbowline and Spike Islands, Cork Harbour.



Fig. 3.140 Governor's Island, Hudson River, New York (scale comparison).



Fig. 3.142 Governor's Island in context.

3.12.6 Treasure Island, San Francisco

WATERFRONT PRECEDENT STUDIES: SCALE COMPARISONS, TYPES OF LESSONS LEARNT

Area: Approx 2,331,000m²

Treasure Island is also an artificial island. It is a highly structured Masterplan which is developed around dense clustered urban blocks more familiar in the city context. Importantly landscape is used throughout as a strong ordering principle.

IMPORTANCE: REMEDIATION



Fig. 3.143 Haulbowline and Spike Islands, Cork Harbour.



Fig. 3.144 Treasure Island, San Francisco (scale comparison).



Fig. 3.145 Treasure Island - site plan.



Fig. 3.146 Treasure Island - aerial image.



3.12.7 Scale Comparison



Fig. 3.147 Haulbowline Square.

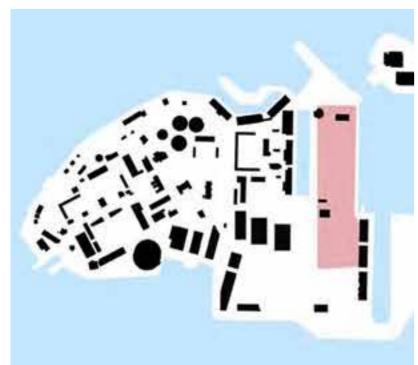


Fig. 3.148 Haulbowline Square - plan view.

The central ISPAT site in Haulbowline is the major Masterplanning challenge for the island. Scale comparisons with Irish and European cities indicate that the space will require a series of major public realm moves, landscaping and activity to assure its success. The scale of the space also will provide substantive opportunities for the logistical future needs of the Irish Naval Service. It will be important to restore the appropriate "sense of place" around the Store Houses. Their original context of the East Camber has been lost and the creation of people scaled central passageway should become a priority in future placemaking moves.



Fig. 3.149 Patrick Street, Cork.

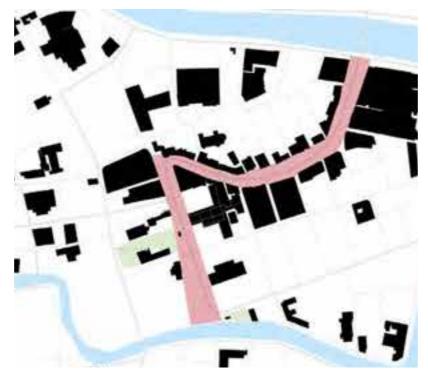


Fig. 3.150 Patrick Street, Cork - plan view.



Fig. 3.151 O'Connell Street, Dublin.



Fig. 3.152 O'Connell Street, Dublin - plan view.



Fig. 3.153 Smithfield Square, Dublin.

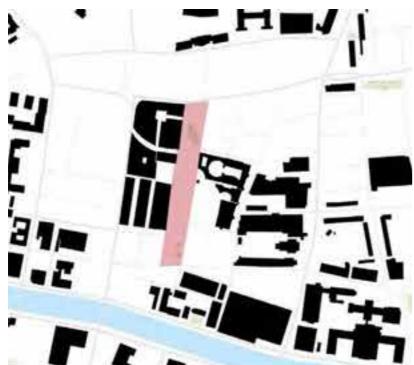


Fig. 3.154 Smithfield Square, Dublin - plan view.



Fig. 3.155 Palais Royal, Paris.

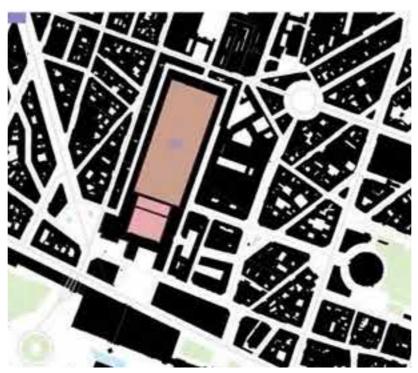


Fig. 3.156 Palais Royal, Paris - plan view.



Fig. 3.157 Schouwburgplein, Rotterdam



Fig. 3.158 Schouwburgplein, Rotterdam - plan view.



3.13.7 Scale Comparison

The Marine Basin is a very large central organiser for the island. Its scale is approximately 9 times larger than the UCC Quadrangle. The basin is capable of having very large structures surrounding it in the future. One of the principles is to maximise the use around the central basin. There exists a clear opportunity for the edges of the basin to be used more intensively.

1875



Fig. 3.159 Drawings of the work on the dockyard.

1910

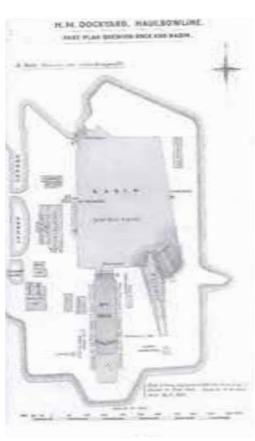






Fig. 3.161 UCC Quadrangle.



Fig. 3.162 UCC Quadrangle overlaid on marine basin: quadrangle fits approximately 9 times within the space.



Fig. 3.163 Merrion Square.



Fig. 3.164 Merrion Square in Dublin overlaid on marine basin.

3.0 ANALYSIS - SUMMARY OF ISSUES

Landscape value

- Haulbowline sits within an area of outstanding natural beauty in Cork Harbour. In itself it is also a very unique landscape that has been crafted over generations. The protection of the island's landscape spaces with the creation of new landscape areas should wherever possible enhance the island's setting.
- View corridors across and through the island should be protected helping to link the communities across the harbour visually.
- The landscape design philosophy should build on the traditions of the harbours fortifications over time. The adoption of axial lines of planting in tandem with the creation of enclosed lawns and outdoor rooms should be encouraged to break down the scale of the island to be in keeping with its heritage areas.
- The existing high voltage ESB lines are visually in an obtrusive view corridor between Cobh and the NMCI, and detract visually from the island's fine coastal setting.

Sea approach

- The island is designed from the sea. Every part of the island's land based development has a very particular relationship to the harbour. The northern quays relate to water depth. The western slipway allows access for divers to access the deep water zones quickly for training via the land.
- The edges of the island are important and the design of activities should be aware of the water depth, and how maritime movements are often related to the island.
- The proposed bridge connection to Spike Island whilst desirable will have to take into account the occasional movement of smaller crafts along Spit Bank between the islands.
- Additional piers have been proposed by Cork County Council adjacent to the IMERC campus for potential small craft and ferry access.

Flooding

- The island has no comprehensive flood assessment completed.
- Overtopping has been seen anecdotally close to the west wall in the dockyard in recent years.

Water Management

 The island's development capacity is limited by the waste water disposal capacity. Any future major developments will require connection to the proposed central treatment plant in Shanbally.

Heritage

- The western part of the island is designated as an Architectural Conservation Area.
- The island's building placement, pathways, landscape and morphology are intrinsically connected to the tradition of the navy. The buildings all have a distinct maritime "feel".
- The curtilage of the heritage buildings are in most cases not regarded as important parts of the island's place-making.

Pedestrian movement

 The normal pedestrian movement across the island has been destroyed by the central ISPAT brownfield site. Pedestrian connectivity between the operational areas of the dockyard and the western base are poor.

Movement and Gateways

- The tourist journey to Haulbowline should start much earlier. Identification of tourism journeys to the island will require a connected Cork Harbour movement strategy linking all modes of travel.
- Access to the island by sea for visitors is from the North West pier. Access is limited to naval operatives and there is no public service connecting the islands currently.
- Access to the island from Cork by rail, road and public transportation is poorly served.
- Pedestrian and cycle access to the island is from the south and there are no designated cycle paths and few public footpaths.
- Car parking is difficult to quantify on the island.
 There is a need for secure naval long term car parking for personnel.

BDP.



Fig. 3.165 Boat House Number 4, in Portsmouth Historic Dockyard, being renovated for use as a ship building third level college.

Remediation

- The remediation of the island is the driving force behind the Masterplan. The remediation process in itself is only the starting point for the island's planning.
- The remediation has a number of unknown "hot spots" which will require careful integration into any plan. A number of hot spots have been highlighted throughout the ISPAT central site.
- Remediation is a highly complex process which will require continued integration with any Masterplan proposals going forward.

Storehouses

- Five of the six store houses are in a perilous state of disrepair and will require substantial investment for their re-adaption for alternative uses.
- The east camber original water way was used as dumping area for waste from the ISPAT and should remain untouched if possible.
- The store houses will require careful screening in relation to the presence of bat roosting.

Ordinance Stores

- The ordinance stores and associated security is located on the north western part of the island.
 This is located here for a number of reasons not immediately evident in any analysis.
- The ordinance stores are serviced directly from the northern pier.
- They back onto the higher cliff face on the island.
 In doing so, they give added blast security for the surrounding base.
- The ordinance stores and their operations are subject to NATO protocols which do not form part of the scope of this study.
- The stores, their placement and security are under review by the naval service at the time of writing of the Masterplan.

Precedents

- The precedent studies identify successful "heritage" working naval bases.
- The bases operate in the case of the Portsmouth Historic Dockyard seamlessly with the navy.
- The preservation of the heritage buildings have been championed in numerous cases by the local naval services.
- These heritage buildings act both as a celebration of achievement, a recruitment mechanism and also an educational and research venue.
- Mechanisms for investment within these areas have been agreed at national levels to act as a catalyst for both private and public sector investment.
- Any plan in a historic base requires a long term vision. There are no quick fixes.
- Portsmouth is now influencing other tourism developments around its hinterland in a very similar manner to Cork harbour. Associated Enterprise zones for marine related activity are now also being planned as part of the trust.
- The plan must be able to change and adapt to needs.

Scale

- The scale of the ISPAT site is the central challenge for Haulbowline. Whilst the space is logistically central to everything any physical development will be limited due to the remediation issues below.
- The space will require "large" scale landscape strategies that will start to break down its scale and impact.
- The dockyard is ideally placed to exploiting large scale adjacent spaces for quayside uses.



The vision section sets out the grand vision for the Haulbowline Masterplan. It is intended as a comprehensive single view of the island as a completed development in future years. The plan describes the different uses of the Haulbowline neighbourhoods whilst suggesting possible uses for the central ISPAT site. It also sets the Masterplan in the local context of Spike Island.





4.0 VISION

4.1 Public Realm Place-Making

Concept

The physical proximity to water based activities and the encouragement of views through the island's landscape are key structuring devices. The clues for the Masterplan are revealing the history of the place in a contemporary way.

A number of themes have emerged as part of the "shared" vision for the island's future:

- 1. A secure home for the navy.
- 2. A restoration and a balance of the island as a shared community.
- 3. A fitting place for the visitor experience.
- 4. An exemplar in green sustainable development and future management.
- 5. A connected place.
- 6. A place for maritime community.

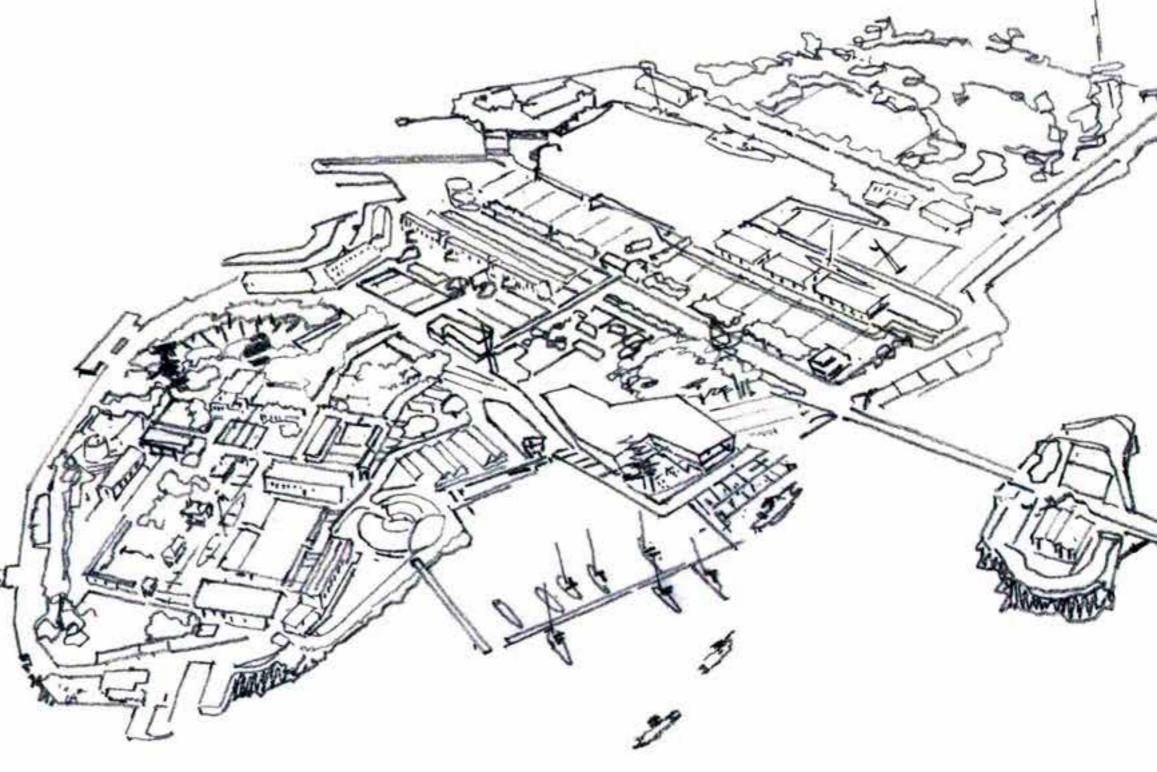


Fig. 4.01 Sketch of the Masterplan - view from south west.



4.0 VISION

4.1 Public Realm Place-Making

Concept

The Masterplan is organised around the creation of a central pedestrian passageway which celebrates embarkation to the island.

The island has historically been organised through a series of man-made lines. The great wall and gateway originally separated the western ordinance zone from the eastern victualling yard. These man-made ley lines were later expanded with the dramatic development of the eastern docks.

The central "grand" passageway creates a new thoroughfare for the island. It is designed as a formal tree-lined avenue that frames views across the harbour to Cobh Cathedral. It is in the tradition of ancient military fortifications and lines found around the harbour.

The passageway is laid out across the island.

It is a formal place that visually connects Haulbowline to its neighbours. Visitors will experience the majesty of the Storehouses along with the maritime technology of the naval dockyard. It is in keeping with the genius loci of Haulbowline – a place which is both of the sea and the land.

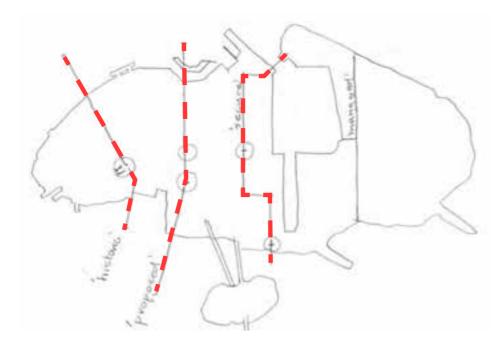


Fig. 4.02 Early diagram showing walls as organising device in the Masterplan.

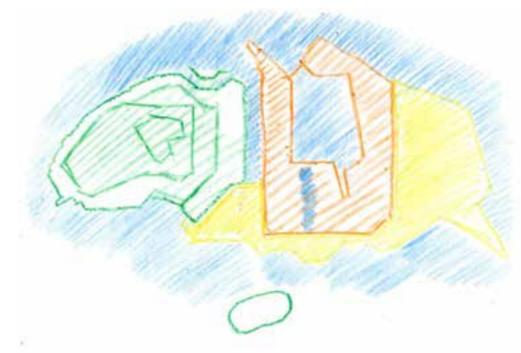
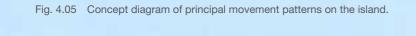
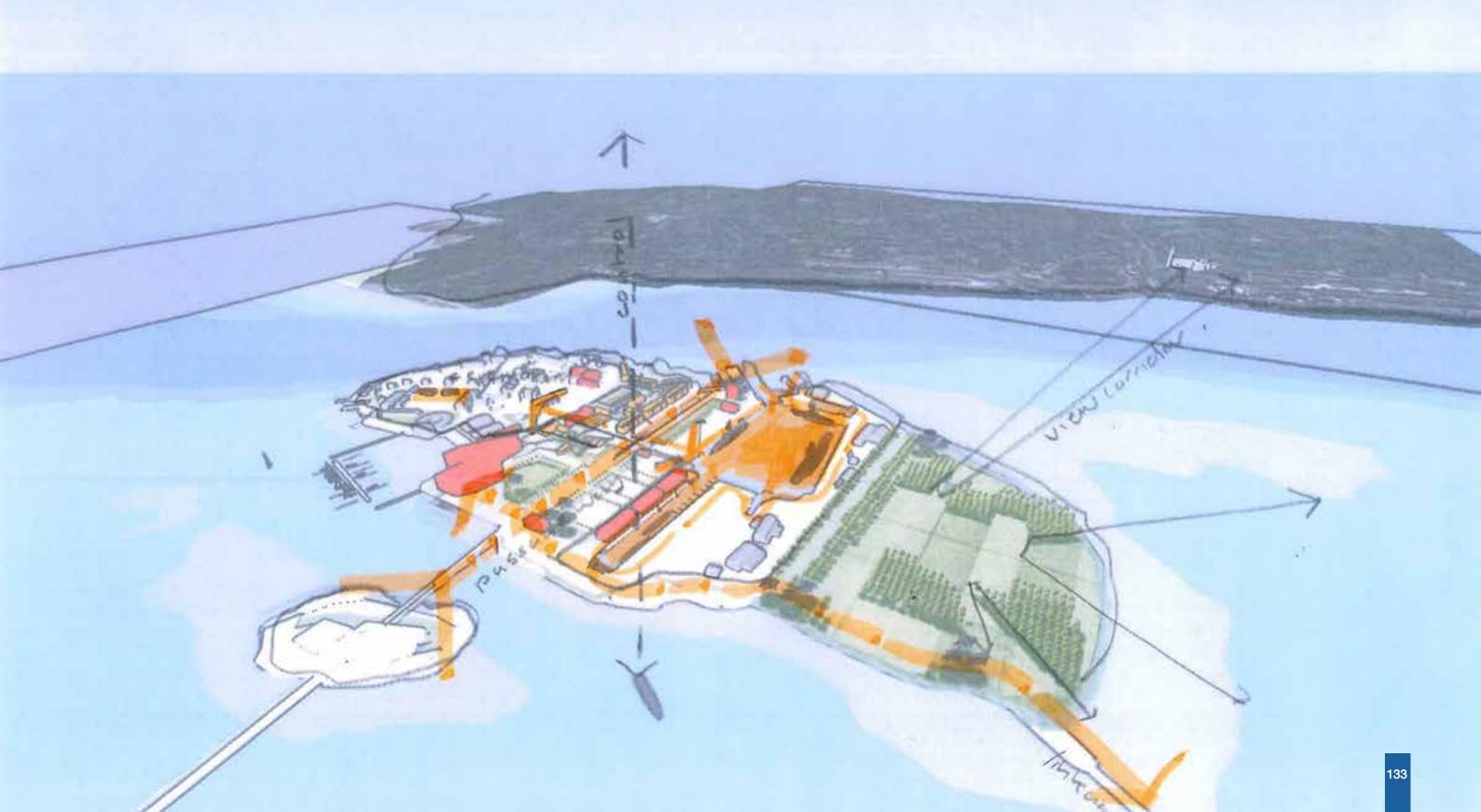


Fig. 4.03 Early diagram showing the zones of the Masterplan and the reintroduction of water.









4.0 VISION

4.2 Overview

The Masterplan has developed through a careful analysis of the island's stakeholder requirements. Throughout the design process it was evident that there are a number of key defining issues that will guide the Masterplanning process and final plan.

- The island is an active Naval Base and the continued secure operation of the Navy and its supporting activities are paramount in any physical development.
- 2. The East Tip remediation has already received Planning permission on the 1st May 2014 and will create a community park. The implementation of the remediation works must be closely integrated within the Masterplan proposals to ensure a coordinated approach to development.
- 3. IMERC is an emerging campus adjacent to the NMCI. It has a common shared vision for the island's future use.
- 4. The Tourism story surrounding Haulbowline, Cobh and Spike Island are richly interconnected.
- The Implementation of the Masterplan must happen on a phased basis. Adaptability and flexibility within the plan should be allowed for by alternative future land uses.
- 6. There are a number of plans for Cork Harbour existing at different stages of development and implementation. The Masterplan whilst standing on its own terms should integrate closely with all of these plans.



Fig. $4.06\,$ View of the Vision Haulbowline Island Masterplan from the north with East Tip park in the foreground and IMERC South in the background.



Fig. 4.07 Plan View of the Vision Haulbowline Island Masterplan from the west, with the active naval base in the foreground and Spike Island in the background.



LEGEND

West Camber - Naval Logistic
--

02. Helipad

03. Car Parking

04. Dock Basin

05. Graving Dock

06. Naval Yacht Club

07. Naval Operational Area

08. Lifting Bridge

09. Naval Park

10. Naval Sports Pitch

11. Spike Island Pedestrian Bridge

- 12. Park Access & Future Jetty
- 13. Orientation Centre
- Naval Security
- 15. Visitor's Lawn
- 16. Visitor Centre
- 17. Energy Centre
- 18. Heritage / Innovation Village
- 19. Rat Island
- 20. Naval Court
- 21. Boat Technology Museum
- 22. Future Oil Storage / Firing Range

- 23. Parade Ring
- 24. Martello Tower
- 25. Grand Visitor Staircase
- 26. Marina
- 27. Water Ferry Quayside
- 28. Ocean Racing Facility
- 29. Boat / Ship Maintenance
- 30. Grand Passage
- 31. Naval Education Building
- 32. Crematorium
- 33. Road Bridge

4.0 VISION

4.2 Overview



Fig. 4.09 View from Martello Tower.



Fig. 4.13 View along west quay wall.



Fig. 4.17 View to Spike Island.



Fig. 4.10 View to the Store Houses.

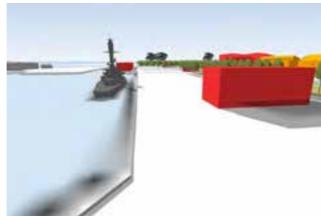


Fig. 4.14 View along west quay wall.

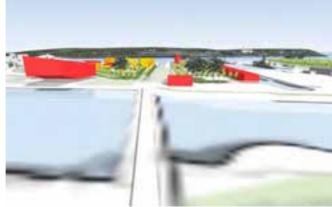


Fig. 4.18 View from approach bridge.



Fig. 4.11 View of East Tip Park.



Fig. 4.15 View of east quay wall.



Fig. 4.19 View across heritage village.



Fig. 4.12 View along central passageway.



Fig. 4.16 View across parade ground.

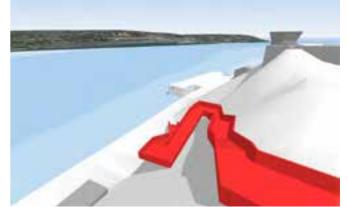
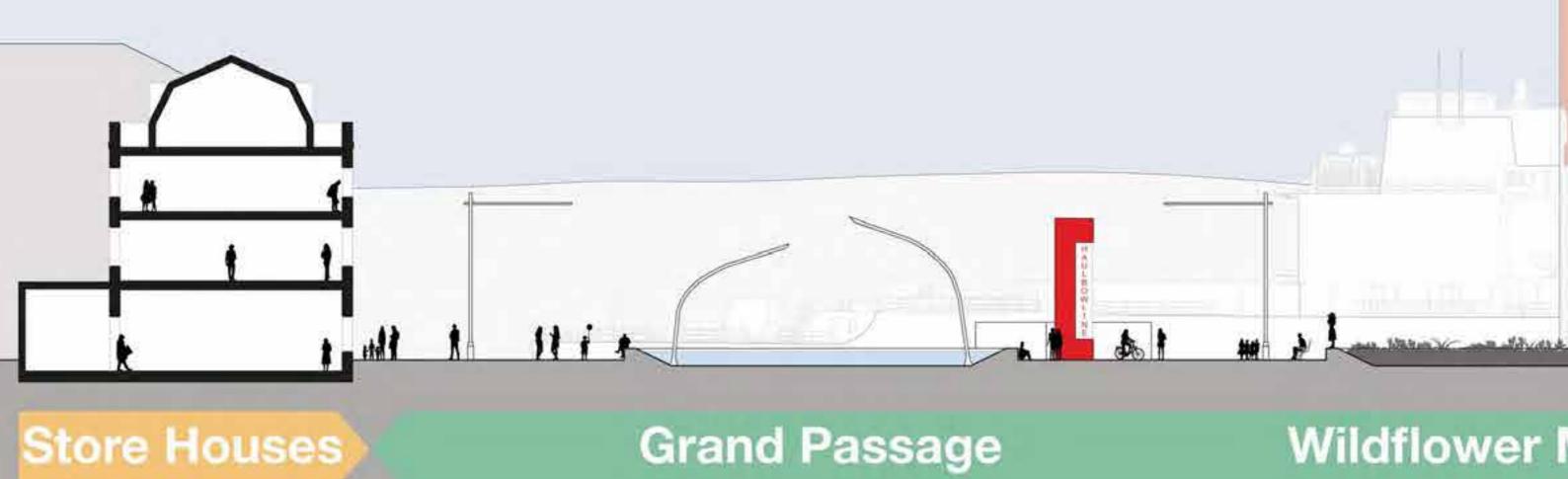


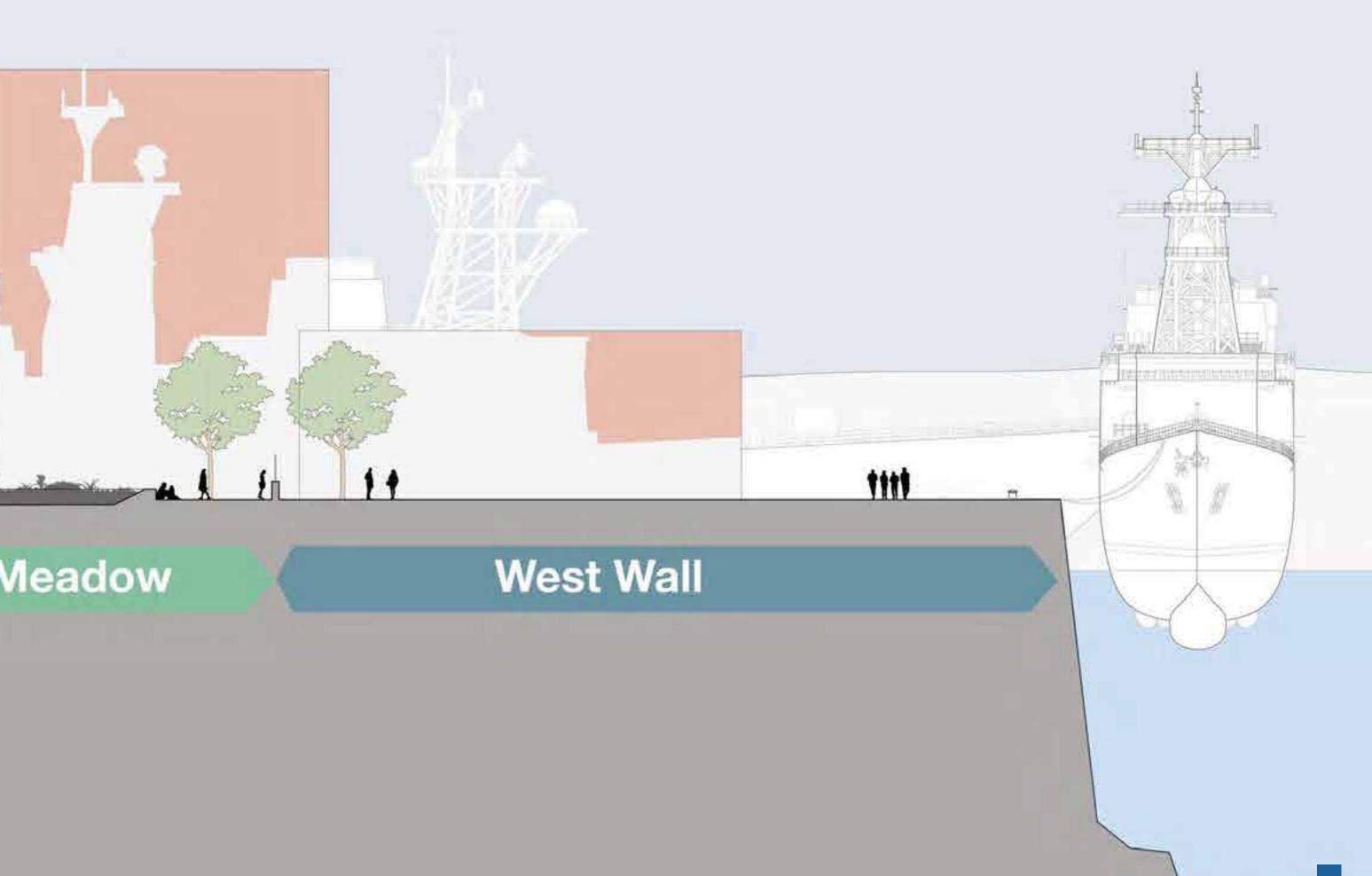
Fig. 4.20 View of grand staircase.





















BDP.

HAULBOWLINE MASTERPLAN

The drivers are laid out in order to reflect the key Masterplanning issues for Haulbowline island. They are intended to be read as an interrelated set of considerations. Each driver sets out key intentions under its terms and suggests potential Masterplanning initiatives. The drivers at times will require substantive additional investigation, survey work and co-ordination. The reader should use the drivers as a suite of considerations for the key areas of the study. As the Masterplan has many stakeholders the drivers all will have varying degrees of significance.



5.0 DRIVERS

1 ACTIVE Naval Base

Securing The Future



Fig. 5.01 Boundaries for the Naval Base.

The island's primary purpose is act as an operational and ceremonial home for the Irish Naval Service. The Masterplan clearly sets out the future secure operational boundaries for the Naval Base. This includes improved logistical spaces for the utilisation of the existing naval basin and graving dock.

2 MARITIME

The Importance of Water



Fig. 5.02 Haulbowline in its maritime context.

The island's development is intrinsically linked with the surrounding waterways. Celebrating the maritime tradition of the island by encouraging greater access to the edges of the island are key parts of the island's future story. The creation of a maritime promenade which connects with Spike Island is intended to create greater participation in the island's shared history with the harbour.

3 SUSTAINABILITY

The Green Jewel



Fig. 5.03 Masterplan Vision East Tip park.

The island will be transformed from an environmental waste land to a green jewel in the bay. The Masterplan proposes a number of environmental initiatives that will reinforce the island's green credentials.

4 CULTURAL

Heritage and Tradition



Fig. 5.04 Historic wall on Haulbowline.

The appropriate and sensitive conservation of the island's unique heritage and archaeology will form part of the broader visitor experience to Haulbowline. The Store Houses should be brought back to full active and dynamic uses.

5 MOVEMENT

Wider Linkages and Connectivity



Fig. 5.05 Main road and train routes.

The island should form the core of nexus of circulation routes: by sea, road and rail, and by foot. Access to the island should be encouraged through the creation of defined "gateways" and hubs for people movement, which are closely integrated with the Naval Base's security requirements.

6 PLANNING CONTEXT

Land Use and Infrastructural Framework

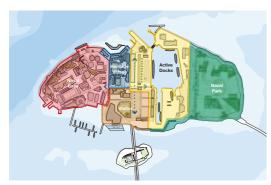


Fig. 5.06 Zoning diagram.

The island is organised as a number of distinct land use zones that can be serviced by a common infrastructural plan. Key sites have a number of alternative uses dependent on future funding and needs.

7 TOURISM & EMPLOYMENT

Encouraging Innovation through Partnerships



Fig. 5.07 Shetland Museum, Shetland, Scotland.

The island's past history has been one of defence. The gradual re-opening of the island to the surrounding communities along with the integration of the Irish Maritime Cluster will create an unique visitor destination.

8 PUBLIC REALM & ARRIVAL

The Creation of an Arrival Experience



Fig. 5.08 View of island approach via road.

The development of an arrival space and cluster of buildings that welcome visitors whilst improving naval logistics is the catalyst for the Masterplan's north-south connectivity with Cobh. The island will now address the southern approach road and bridge for the first time.

9 GENIUS LOCI *

The Extension of the Landscape Tradition



Fig. 5.09 Weathervane, Haulbowline's active naval base. Fig. 5.10 Land use zones.

The island's landscape connects to the physical buildings through generations of planning. The Masterplanning exercise sets out a contemporary landscape utilising the principles of formal landscape planning and place-making.

The spirit of Haulbowline is respected and revealed through the use of tree-lined avenues, and connected spaces.

*Genius loci-the spirit of the place

10 IMPLEMENTATION

Alternatives & Different Futures



The island's Masterplan is robust in that it can allow alternative futures, including a single landscape strategy for the island as a whole with little or no physical development.

This maintains a coherent single Masterplanning story, that is highly adaptable for future uses subject to needs and funding.

ACTIVE NAVAL BASESecuring The Future

Haulbowline Island is an active and fully operational Naval Base.

The Masterplan proposes that the Naval Service continue to operate across the island. The integration of training and ceremony within the western historic part of the base is considered essential in preserving the tradition of the place.

Opportunities do exist for the Naval Service to improve their operations in the future around the dockyard area, as the East Wall's footprint is restricted. The opportunity to develop the West Wall for additional Naval Uses will also provide substantial flexibility for the Naval Service going forward.

The central grand passage way is considered a shared space, albeit under the control of the Naval Service.

The Naval Service will have a number of priorities from the Masterplan proposals.

- The definition of the secure boundaries of the base in a sympathetic manner: in keeping with the island's character. The use of landscaped edges and boundaries integrated with security requirements are essential in creating an island which is viewed as one coherent place.
- The rationalisation of the spaces surrounding the dockyard is now possible due to the decant space now available in the West Wall. It should be noted that the West Wall's remediation and future usefulness will require integration with the remediation plans in order to provide development zones for future buildings (if any).

- The graving dock is a valuable maritime asset. The shared use of the graving dock for more intensive commercial uses should be seen as a benefit.
 This must be balanced with the Naval Service's security requirements.
- The rationalisation of ancillary spaces such as car parking throughout the base should adopt a "Smarter Travel Campus" approach for the whole of the IMERC cluster.
- The heritage village is central to the island's regeneration. The shared use and regeneration of this area has many challenges that will require an adaptable approach to shared access going forward.
- Issues such as the location of the Ordinance stores, Fuel tanks and their access will require separate specialist studies by the Naval Service to integrate these facilities further.

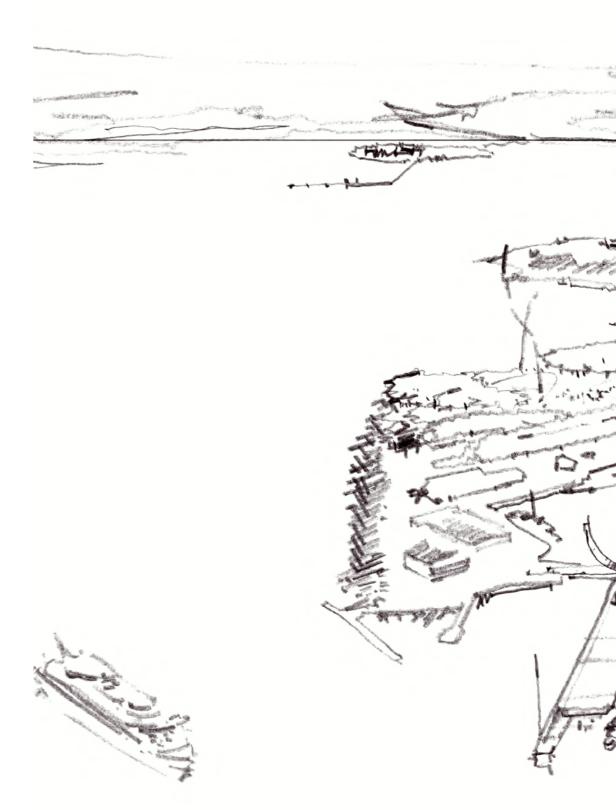
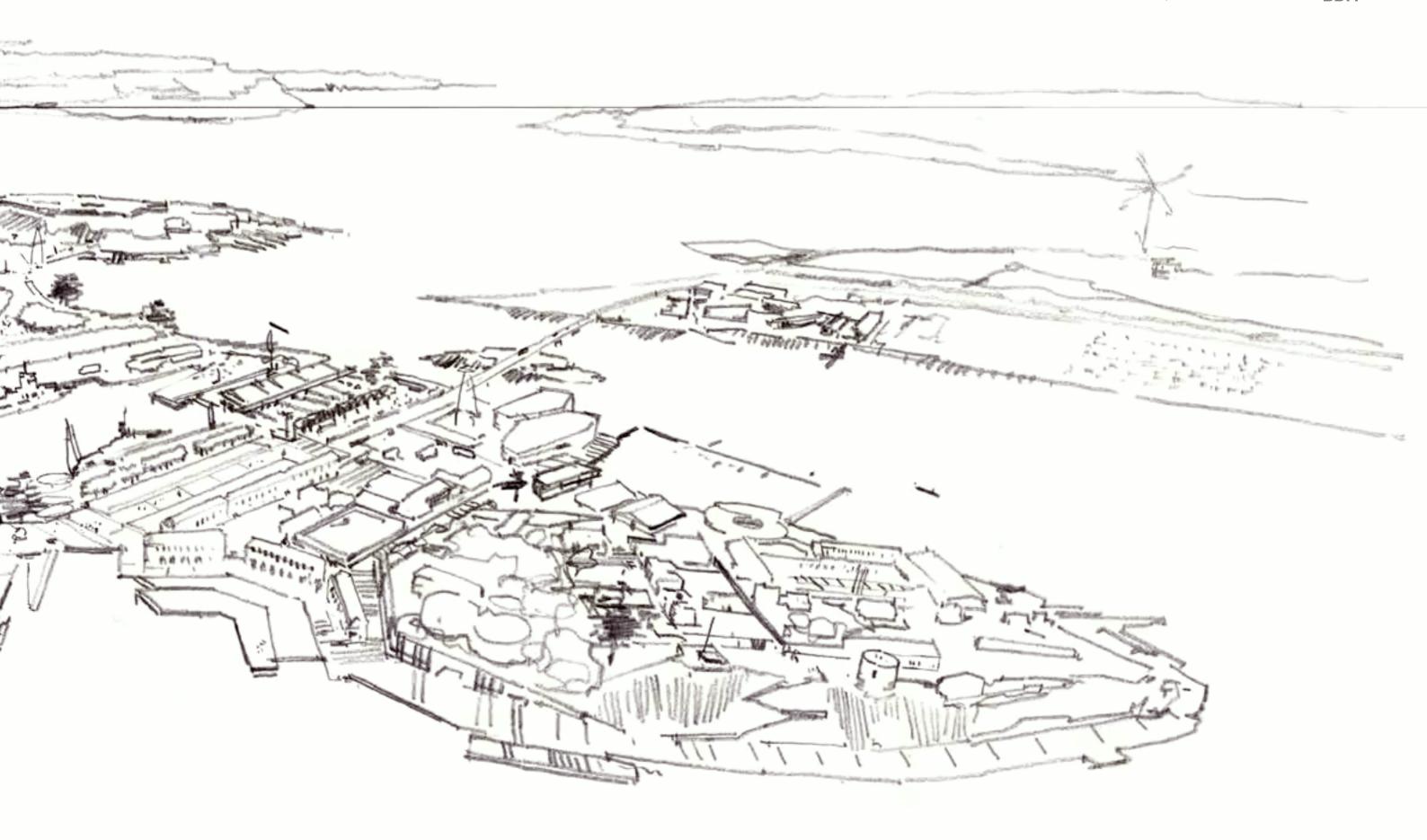


Fig. 5.11 Long term aerial view of island from north west.



ACTIVE NAVAL BASE Securing The Future



Fig. 5.12 Bridge Watchers House and Quay, Rotterdam.

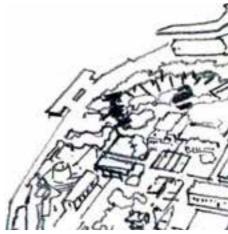


Fig. 5.17 North of island - location of oil tanks.



Fig. 5.13 Shipping Crane, Port Of Oakland.



Fig. 5.18 Lockheed Burbank aircraft plant.

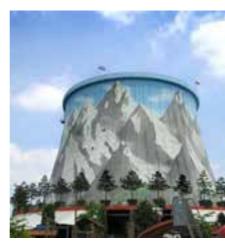


Fig. 5.14 Wunderland near Kalkar, Germany.



Fig. 5.19 Lockheed Burbank aircraft plant.



Fig. 5.15 Gösgen nuclear power plant.



Fig. 5.20 Sprague oil tank, South Portland.



Fig. 5.16 Fire fighting at sea.

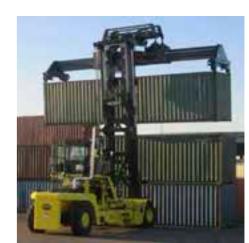


Fig. 5.21 Shipping containers.





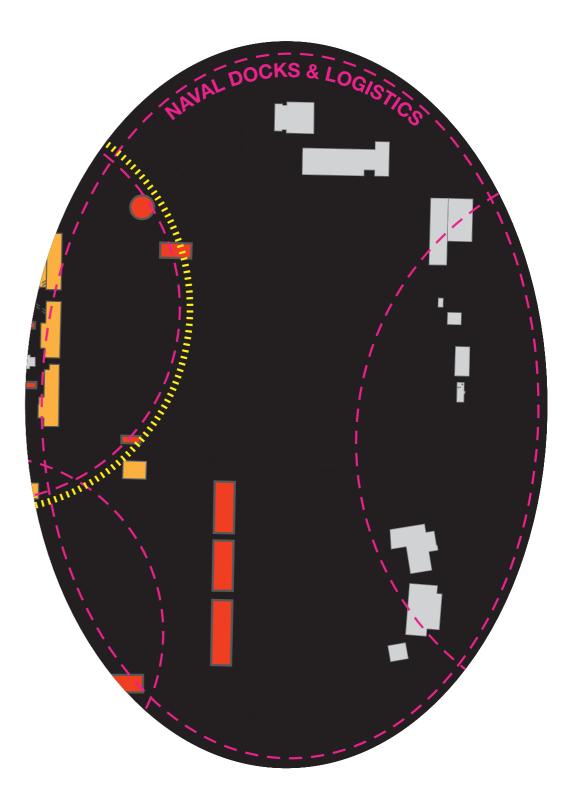


Fig. 5.23 Naval Docks and Logistics.

ACTIVE NAVAL BASE
Securing The Future

SECURE BOUNDARIES

The Naval Base will be provided with a clearly defined secure boundary as part of any initial phasing of the Masterplan.

MASTERPLANNING DRIVER

- -The Naval Base will have direct pedestrian and vehicular connectivity across the island between the Naval Base and dockyard.
- The development of structured screened treelined fenced boundaries that create visual permeability whilst ensuring secure operations are of central importance in place-making within the island.

SECURE INNER ZONE

Zones within the Naval Base will be developed as potential areas for shared use by external bodies. These zones will be subject to access control requirements and security protocols.

MASTERPLANNING DRIVER

The heritage village will adapt the Store Houses as a catalyst for other uses including but not limited to:

- Naval accommodation for crews.
- Short stay lettings.
- Potential for shared office spaces.
- Potential naval museum and visitor centre on the ground floor.
- Naval offices and continued teaching.

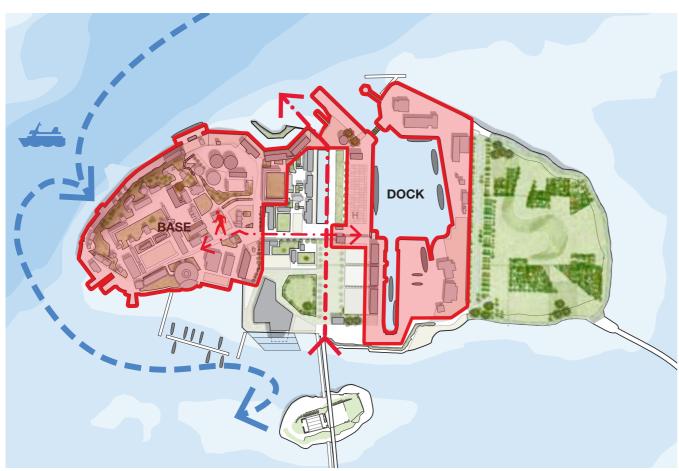


Fig. 5.24 Secure boundaries - normal day.



Fig. 5.25 Secure naval boundaries - restricted island.

PUBLIC ACCESS ROUTES

The potential exists for a public thoroughfare to be created through the heart of the base from Spencer pier. This routeway will require a separate secure line that allows visitors to enjoy the island's naval activities whilst not interfering with naval operations.

MASTERPLANNING DRIVER

The access route could be managed either by:

- Secure lines of enclosure;
- Accompanying Visitors throughout their visit;
- Integrating timetabling of access to the island with operational training schedules.

CENTRAL SECURITY

The Masterplan is laid out to have a single central security point for the naval operations. This location will allow 360 degrees views of the island.

MASTERPLANNING DRIVER

- A single security point will enable access to the entire Naval Base.
- The location can be developed as a central welcome hub for the navy.
- The security position is in the centre of the island and ensures efficiency of operations.
- The security point could be expressed into an "arrival architecture" and become a strong statement of arrival to the Naval Base.

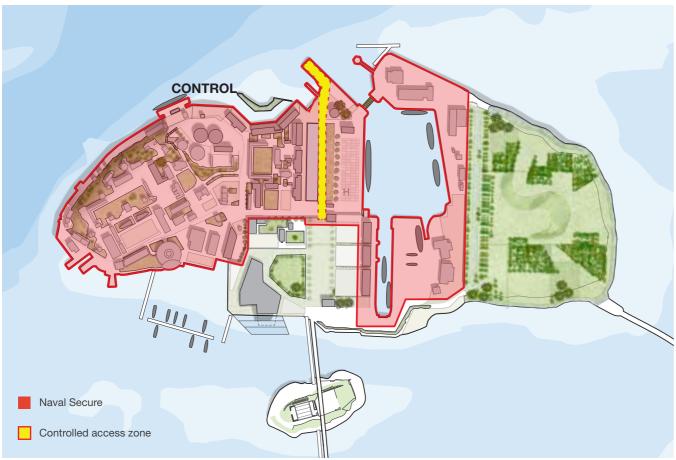


Fig. 5.26 Secure boundaries - Drill-lockdown.

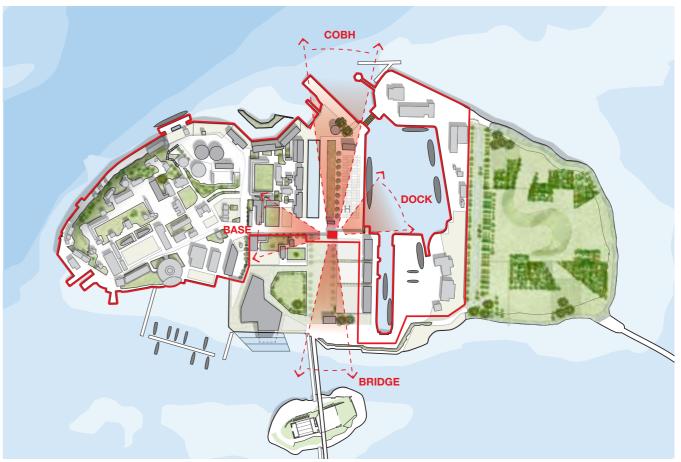


Fig. 5.27 Secure boundaries - Passive central control.

MARITIME

The Importance of Water

The development of the island's southern shore with the water's edge is particularly important. The northern edge is hard working; with pier access for larger vessels from the deep water channel of Cobh Road.

Proposals for the stepping down of the southern edges of the island to the water's edge are also in keeping with other European Harbour developments, notably Copenhagen where the proximity to the water's edge is considered a valuable community asset for swimming and leisure activities.

The opportunity now exists for the southern edges to be softened and for the creation of a more accessible south facing coastal promenade which engages with the elements. The creation of an active southern edge has many benefits:

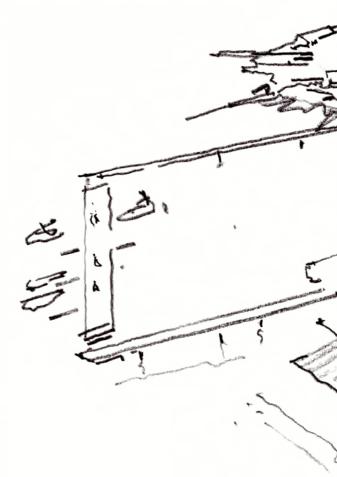
- It will animate the edge of the island upon approach;
- It will have a high amenity value;
- It will help "connect" the East Tip with the arrival space. In itself it is an important infrastructural piece for repairing the island's appearance.

The development of the water's edge promenade also has the opportunity to extend around the island base forming a diverse "heritage" walk. This should be considered a longer term ambition; to have a "connected" island that will have many experiences in one place. This promenade will ultimately connect with Spike Island forming a single destination for the local community and the tourist. It also has the possibility to be integrated further with the Naval Services Strength and Conditioning regime, becoming a training route integral to the island's daily life.



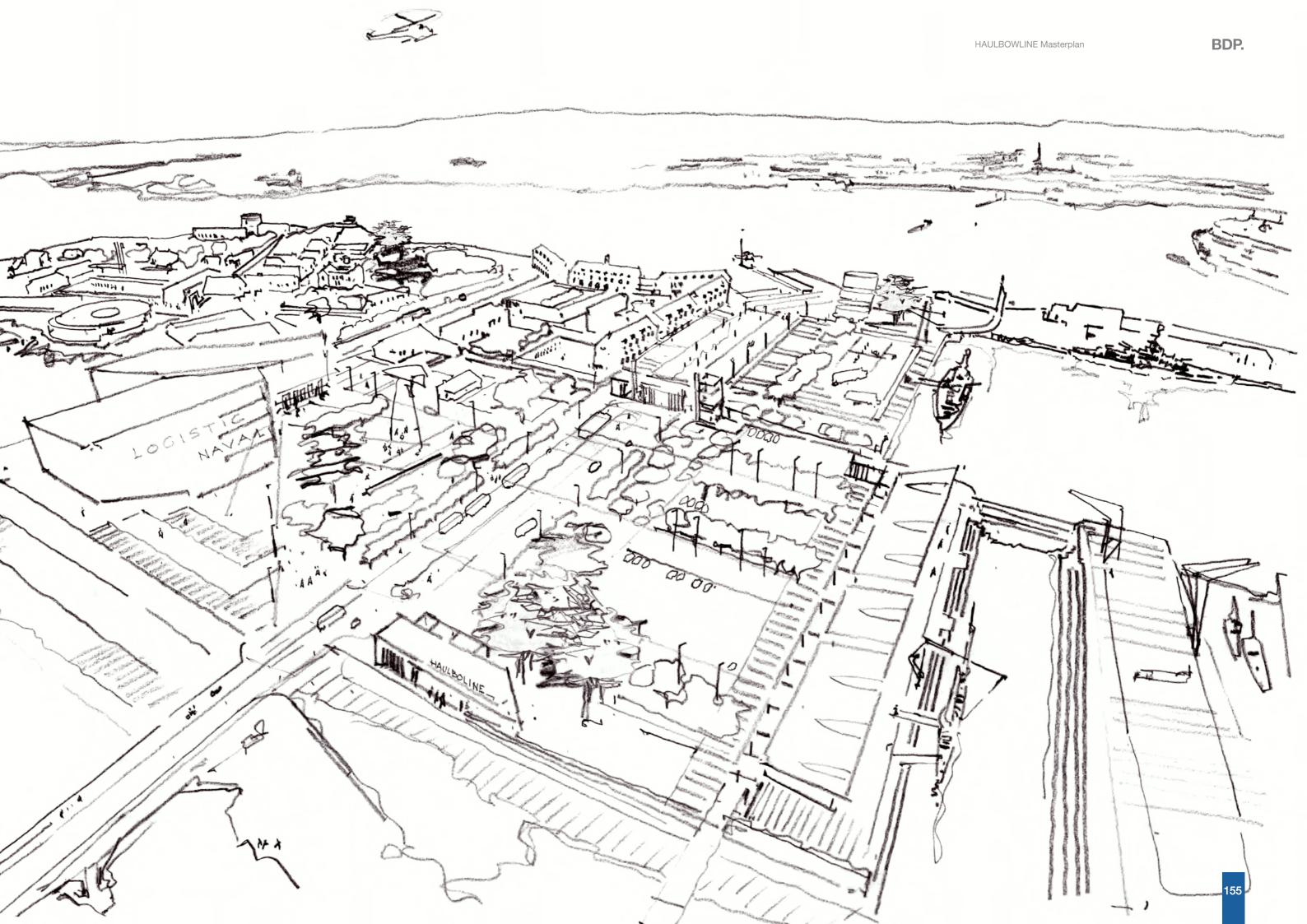
Fig. 5.28 Kalvebod Bølge, Copenhagen.











MARITIME

The Importance of Water



Fig. 5.30 Potential for Ocean racing centre on Haulbowline. Sketch showing centre along the existing graving dock.



Fig. 5.31 Sketch showing Haulbowline in its maritime context.



Fig. 5.32 The Store Houses on Haulbowline have a direct relationship to the water.



Fig. 5.33 Waterway adjacent to Holmen opera house, Copenhagen.



Fig. 5.34 Kalvebod Bølge, Copenhagen.



Fig. 5.35 Sea Organ, Zadar.

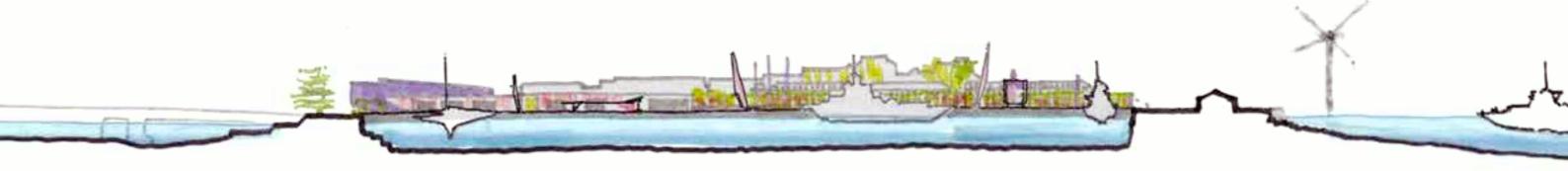


Fig. 5.36 Section through the island and Cobh town.



Fig. 5.37 Ocean Race Centre in Portsmouth.



Fig. 5.38 Kayaking in Cork Harbour.



Fig. 5.39 Visitor experience.



SUSTAINABILITYThe Green Jewel

The island should become an exemplar in sustainable development. This is a multi-facetted approach and it should not be solely about the remediation of the East Tip. An opportunity exists for the island to be regarded as the "best in class", in terms of the future Masterplanning initiatives.

This will require an integrated approach to the future Masterplan process, and a number of key areas should be developed further.

Landscape

The development of a coherent landscape structure across the site which creates the appropriate micro-climate conditions for the larger initial spaces surrounding the central ISPAT site is important to consider.

Re-adaptation

The re-use and re-adaptation of existing structures for new uses is in itself a major "win", as the embodied carbon in the existing buildings is captured. Whilst not without challenges the reuse of the existing buildings for active uses either by the Naval Service or by others is an important central measure for the Masterplan.

Ecology

The island's regeneration will require the creation of a more diverse environment for the surrounding wildlife. The creation of a host environment through the development of the East Tip Park is an important first step in the development of the island's diversity. It has been identified within our scoping exercise that bats are potentially present in the Store Houses and these will require careful integration as part of any readaptation strategy.

Water Management

The island requires a Sustainable Urban Drainage approach which should be integrated with the Masterplan implementation cycles. The development of a SUDS strategy which is also closely integrated with the remediation of the ISPAT site can also provide opportunities for additional water features such as the central passageway's water garden.

Energy generation

The island is part of the broader IMERC cluster and proposals for research floating wind turbines should be integrated with a broader strategy for the island. Currently a disconnected approach to energy generation exists, and an integrated solution could be developed.



Fig. 5.40 Floating wind projects off Hawaii.



Fig. 5.41 Bird box.



Fig. 5.42 Bat box.

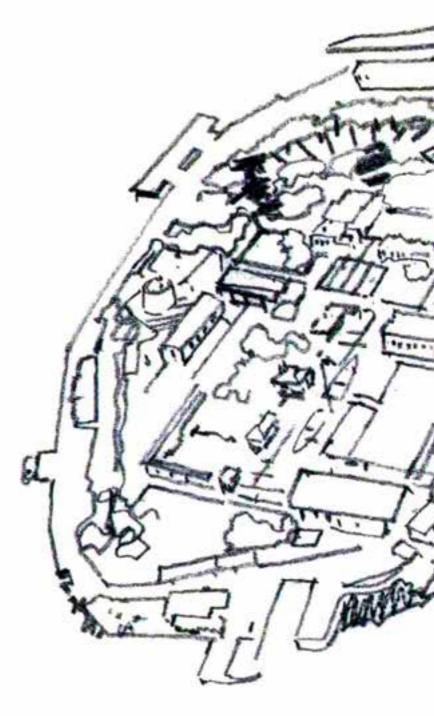
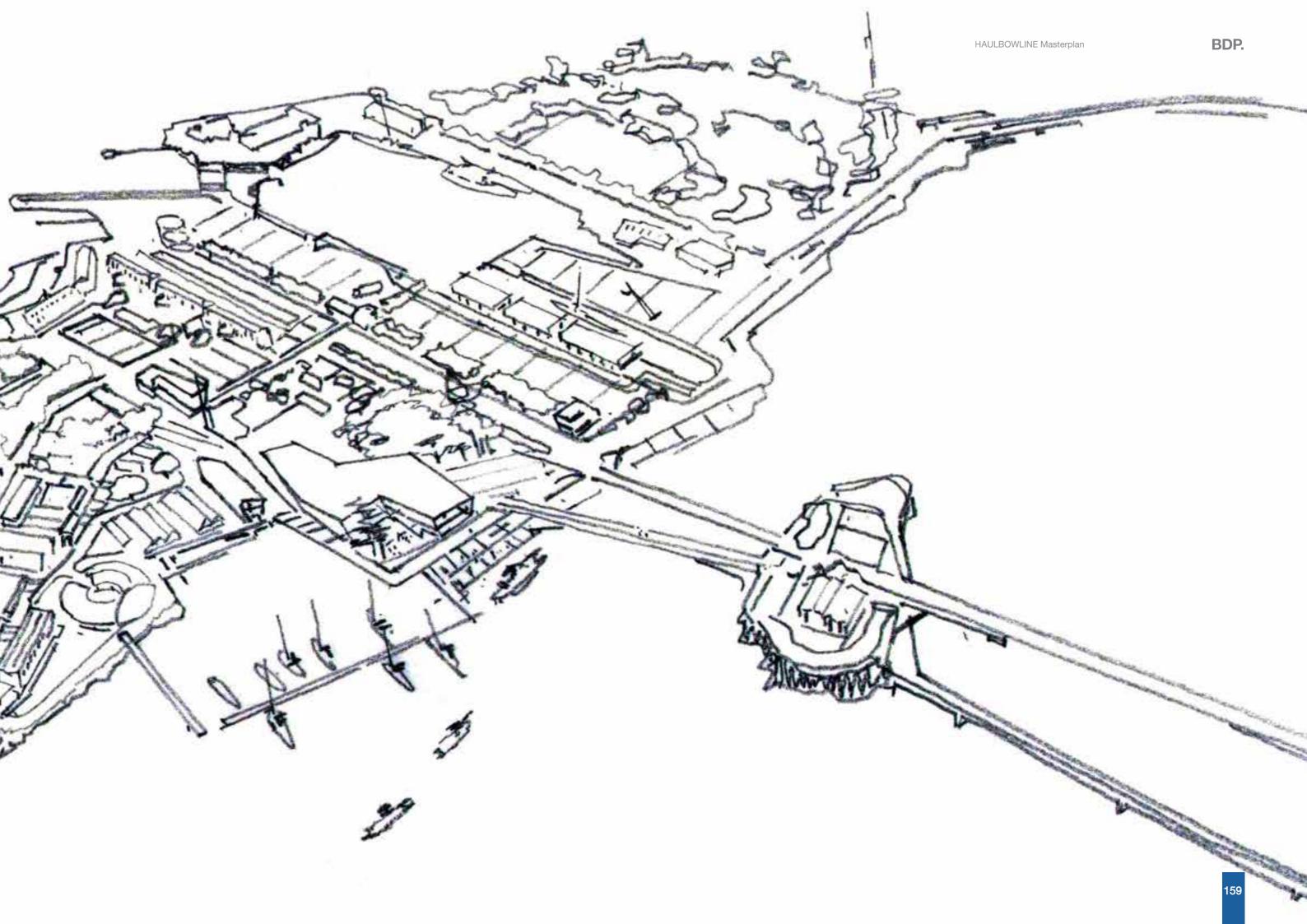


Fig. 5.43 View of island from the south west.



SUSTAINABILITY The Green Jewel



Fig. 5.44 Tagus Linear Park.



Fig. 5.45 Tagus Linear Park.



Fig. 5.49 Birds of Monkstown Creek.



Fig. 5.46 Wayfinding.



Fig. 5.47 Planters reflect the site's character.





Fig. 5.51 Special Areas of Conservation.

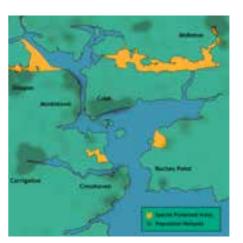




Fig. 5.48 Green belt, Vitoria-Gasteiz.



Fig. 5.52 University Park, Aarhus.



Fig. 5.53 Naval Park as an Arena.



Fig. 5.54 View to Cobh Cathedral from the Naval Park.



CULTURAL *Heritage & Tradition*

The island has some exceptional cultural buildings, notably the Store Houses.

The re-adaptation of these buildings into other uses, that may in themselves change and adapt over time must be a central priority.

The development of a cultural passageway through the island's core, connecting to a wider circuit of tourism routes from Cruise Liners is an unique opportunity. The embarkation on Haulbowline at the traditional northern edge is in itself a very special experience.

The island heritage buildings will require a dedicated Conservation Plan that sets them in an appropriate context. The buildings restoration begins with the landscape. The development of Store Houses as part of a broader heritage setting and curtilage to the island should be an absolute priority for all agencies.

The island's cultural heritage also extends to the dockyard. It is important to recognise that the civil engineering and industrial architecture are also important parts of the island's cultural heritage.

The island also has the potential for Archaeological findings and these have yet to be fully identified. The integration of all of the island's Cultural artefacts are also important for the development of an island Conservation Plan.

Also the island has numerous examples of Cultural assets from the recent naval past. These should be revealed and placed in more public spaces to celebrate the island's operation as a Naval Base wherever possible.

Access to the island's viewing points, the Martello tower also provides opportunities for tourism and education. The careful integration of routeways to these points will provide "ready-made" opportunities to open up parts of the base as part of a naval heritage walk.

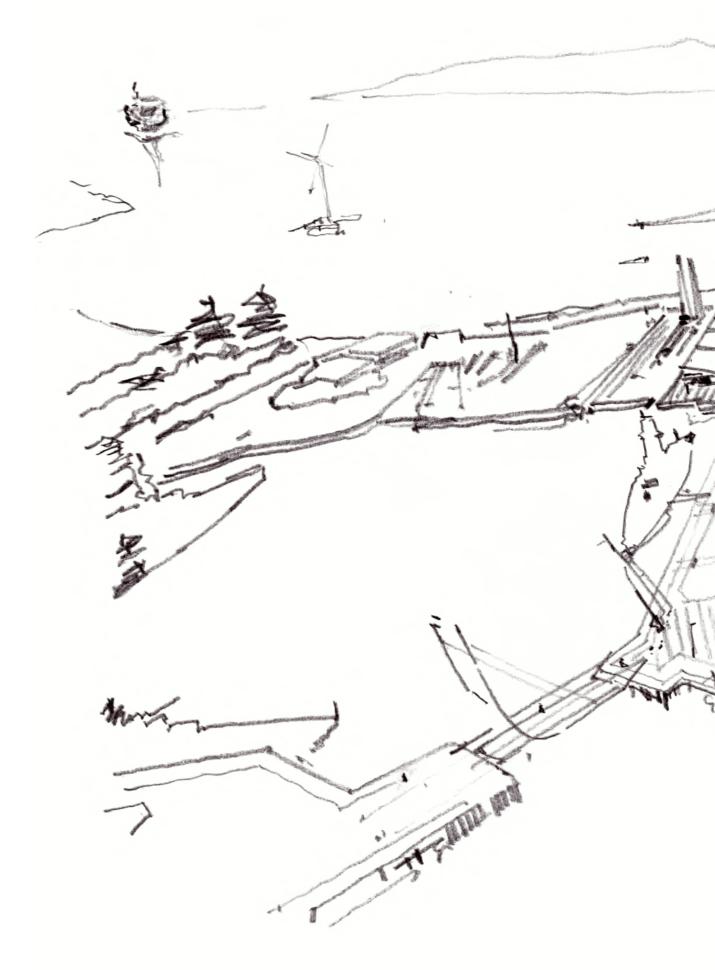


Fig. 5.56 View of Haulbowline Island Masterplan from North looking along the central passageway.



CULTURAL Heritage & Tradition



Fig. 5.57 Building lighting.



Fig. 5.63 Potential of lighting features with water.

Fig. 5.59 Dunkirk night time lighting.



Fig. 5.62 Potential of lighting features.





Fig. 5.60 Portsmouth historic dockyard.



Fig. 5.61 Cornmill Gardens lighting features.



Fig. 5.64 Potential of lighting features.



Fig. 5.65 Above: steelworks, the Netherlands. Right: steelworks after refurbishment.



Fig. 5.66 Haulbowline historic Store Houses.



Fig. 5.67 Saltaire mills, Bradford - lighting.



Fig. 5.68 Above and right: former abattoir converted to film archive.





Fig. 5.69 Heritage Village.

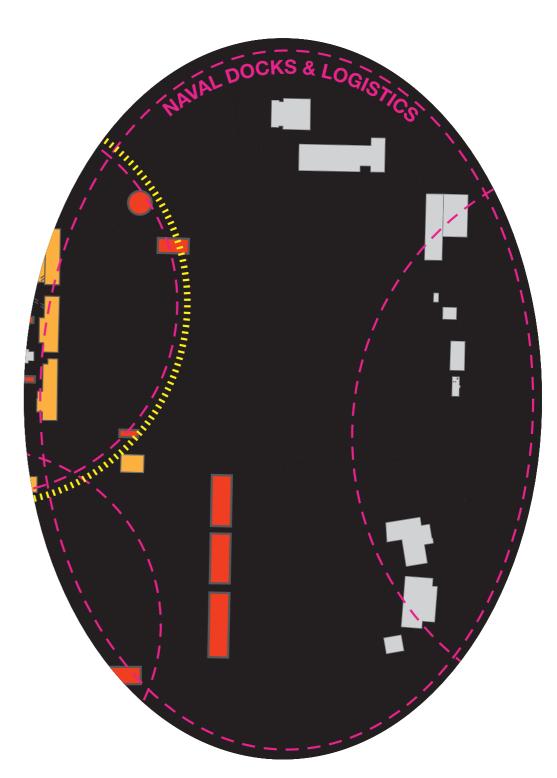


Fig. 5.70 Naval Docks and Logistics.

MOVEMENT Wider Linkages & Connectivity

Access to the island is predominantly by car from the southern bridge. The recent refurbishment of the bridge will cater for larger vehicles during the remediation works of the East Tip.

Access by car should have clearly defined car parking spaces upon arrival in conjunction with naval security requirements. Currently visitor car parking is in the heart of the island and access is controlled.

The bridge provides an exposed space that is not welcoming. It also does not promote the creation of an interconnected "one campus" approach. The development of improved footpaths and cycleways with the IMERC South cluster in the short term must be a priority.

The creation of a pedestrian bridge to Spike Island is in itself a catalyst project for the Masterplan. The bridge is not just a connector but also a place to visit in itself. In the same way Castleford Bridge, in Yorkshire or the Millennium Bridge in University of Limerick are considered as celebrations of the act of walking, meeting and connecting. The design of the bridge must take into account the nature of the small craft movements around the bay especially in the spit bank locality.

The islands will also certainly form part of a future island hopping proposal for Cork Harbour. A number of different pier proposals exist including the refurbishment of the Spencer Pier on Haulbowline and the IMERC South pier. Many different circuits for commercial or leisure routes exist.

The island's central West Wall space provides substantial space for improved naval logistical movements and growth. The scale of the space is substantial and it will also allow a dedicated area for helicopter landing in the centre of the Naval Base.

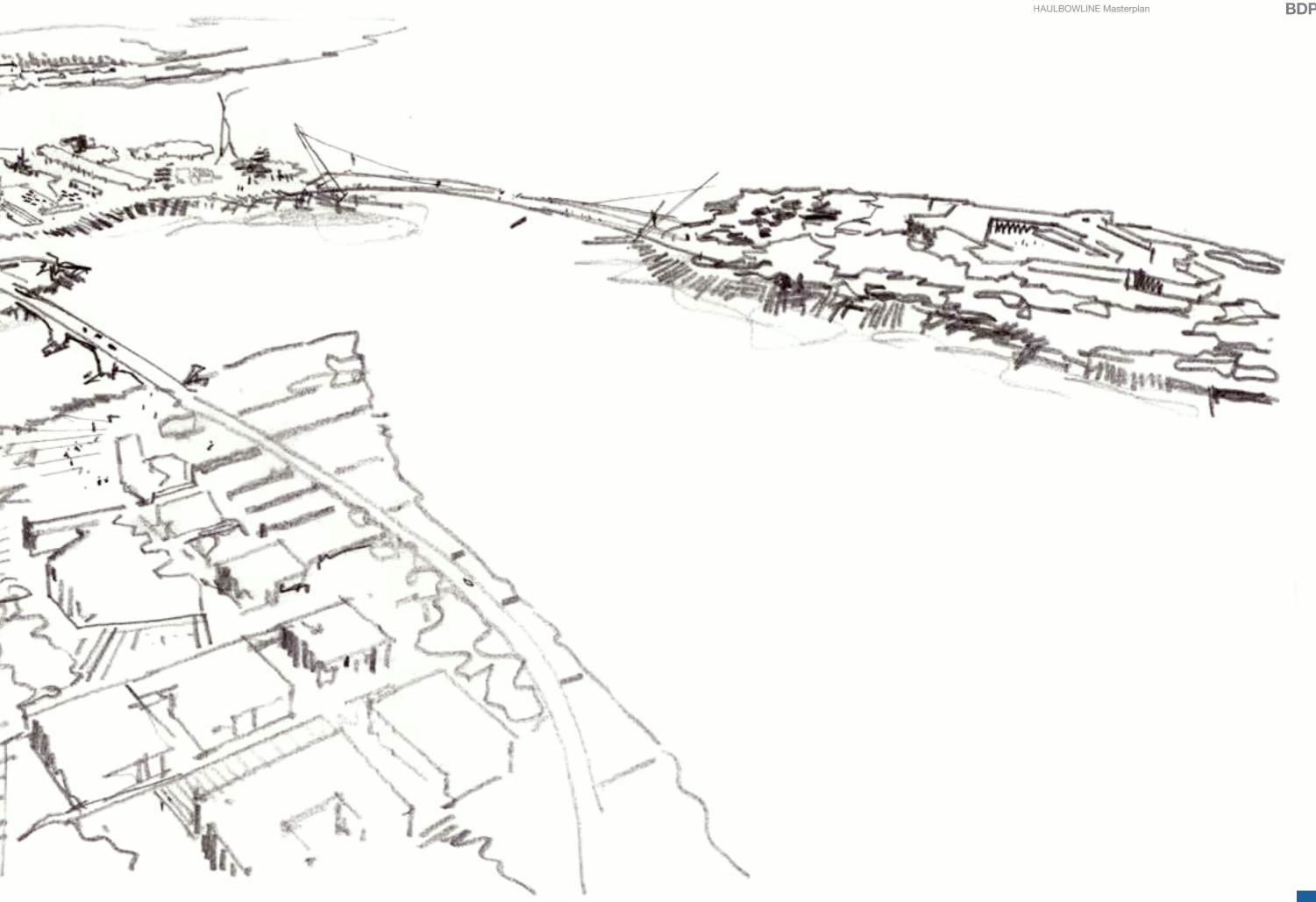




Fig. 5.72 Millennium Bridge, University of Limerick.



Fig. 5.73 View of the bridge approach via the IMERC south cluster to Haulbowline Island.



MOVEMENT

Wider Linkages & Connectivity



Fig. 5.74 Limerick Living Bridge.



Fig. 5.75 Boardwalk, Philadelphia.



Fig. 5.76 Wynyard Crossing.



Fig. 5.77 The potential for coastal runs.



Fig. 5.78 Main road and train routes.

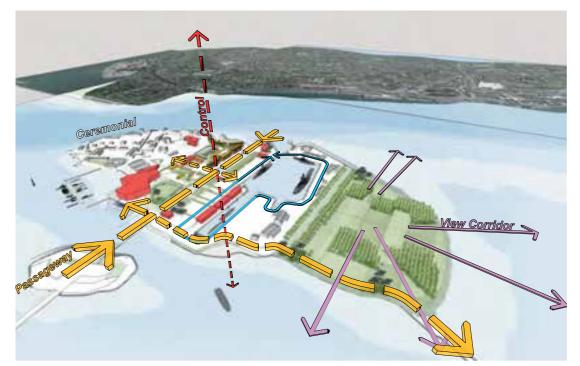


Fig. 5.79 Diagram showing the main movement patterns on Haulbowline Island.

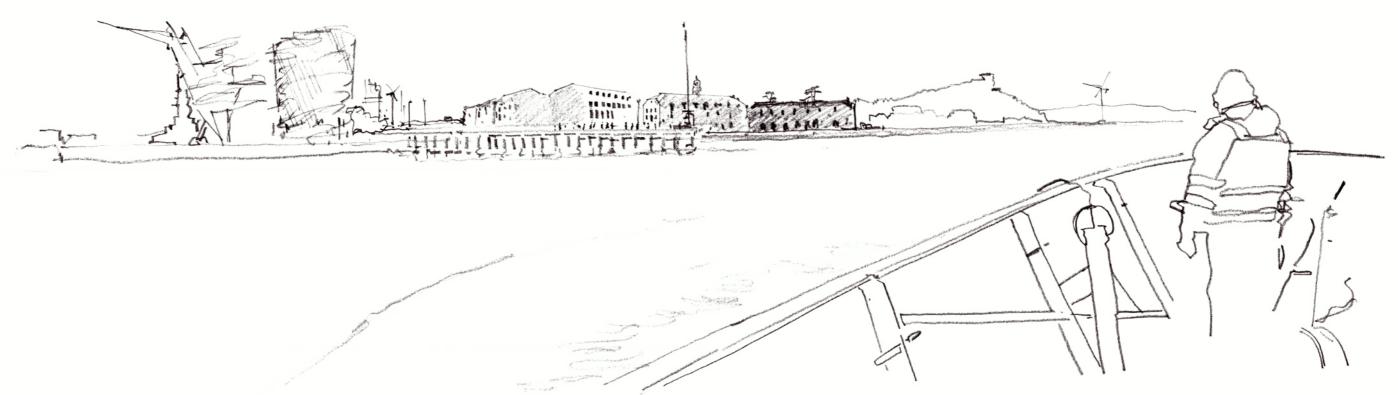


Fig. 5.80 View to the refurbished Spencer Pier from the proposed commuter route.



Fig. 5.81 Commuter Route

BOAT CIRCUIT Commuter Route.



Fig. 5.82 Tourism - Local

BOAT CIRCUIT Tourism - Local.



Fig. 5.83 Tourism - Wider context.

BOAT CIRCUIT Tourism - Wider Context.



PLANNING CONTEXT

Land-Use & Infrastructural Framework

The island should be considered as one place for planning purposes. Notwithstanding this, the organisation of the island into different land use zones for the Masterplan should be considered.

Naval Base

The plan relates to the existing Architectural Conservation Area designation for the island. This is largely the original island footprint to the western edge.

Heritage Village

The space around the six Store Houses is defined as the heritage village. This space is strategically at the centre of the island and is important in that it is considered a major opportunity for future regeneration. The buildings are all in various stages of dereliction and use. The central portion of the heritage village is the existing reservoir area which is still in use for Naval fire drills in particular. It also forms part of the ACA.

The spaces around the heritage village are disorganised, in that the existing base currently operates around the area. The regeneration of this space as an integrated cluster of connected buildings is central to the Masterplan vision. The creation of active uses especially at the street edges of the Store Houses is essential.

Some proposed uses:

- Naval short stay accommodation;
- Enterprise or web facilities for SMEs;
- Naval Visitor Centre;
- Speciality retail;
- Hostel accommodation;
- Offices.

Visitor

The southern tip of the island is defined as the visitor zone for the island. It is intended as a flexible anteroom-space for the naval Base allowing a number of potential future uses:

- Car parking;
- Potential major visitor building of national scale;
- Future Naval logistics centre;
- Extension of IMERC North campus for future educational needs;
- · Pocket park and naval sports field.

Active Docks

The space is designated for the secure operations of the Irish Naval Services.

Naval Park

The renamed east Tip Park is a major community park facility for the eastern part of the island. The routes are laid out to connect with the coastal promenade to form part of a naval training circuit for cadets.

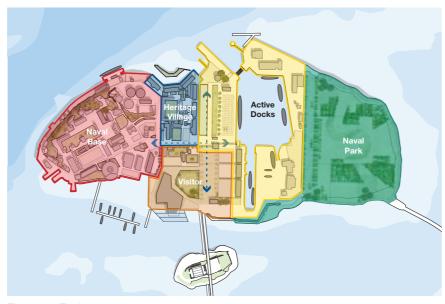


Fig. 5.84 Zoning.

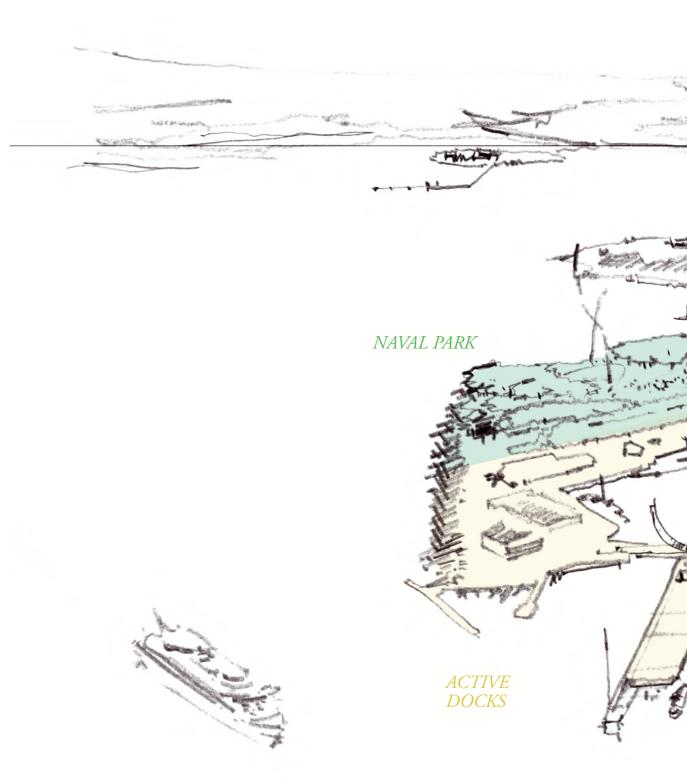
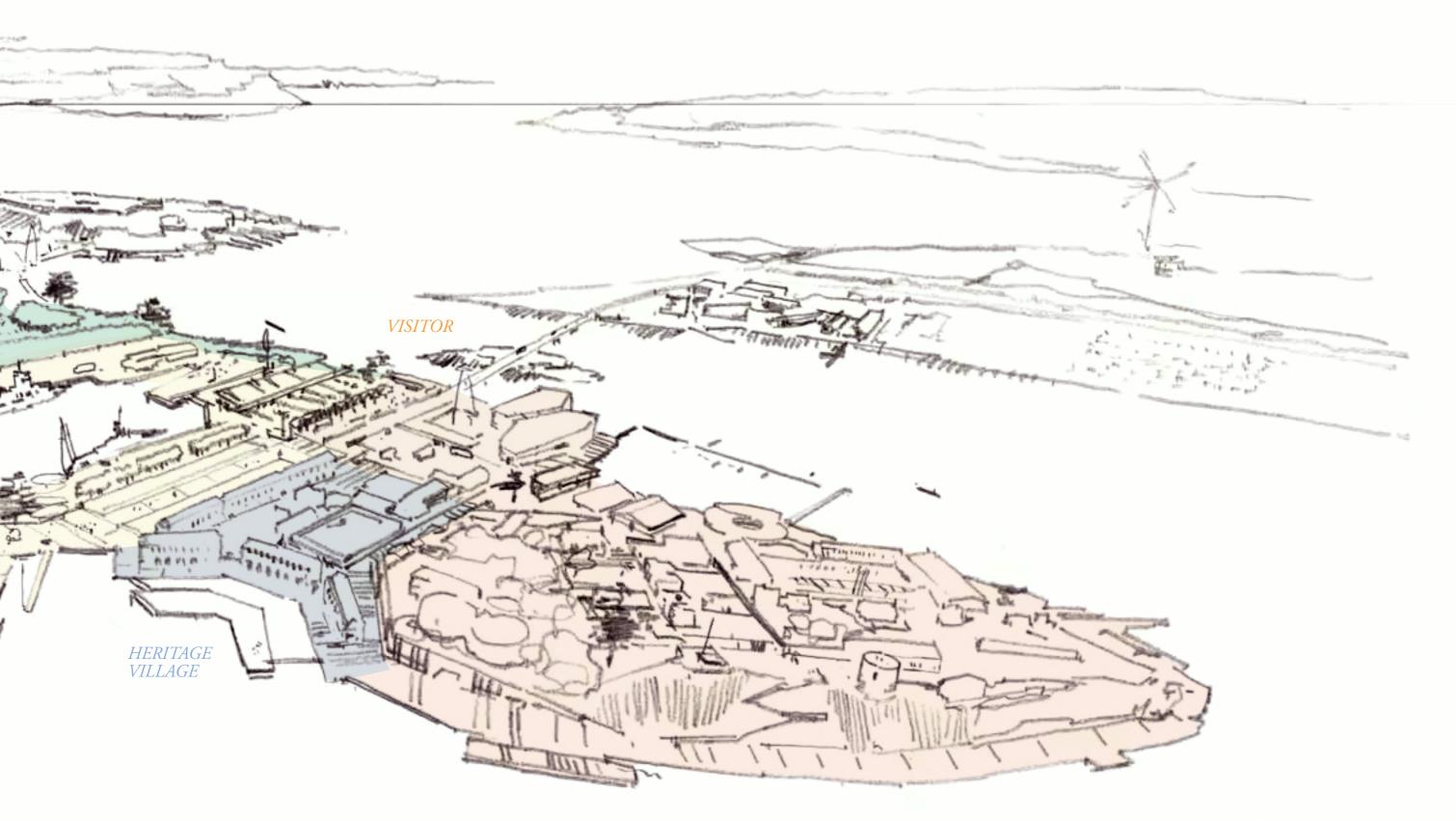


Fig. 5.85 View of proposed land use zones.



NAVAL BASE -ARCHITECTURAL CONSERVATION AREA

TOURISM & EMPLOYMENT

Encouraging Innovation through Partnerships

Haulbowline is strategically located within a number of ongoing tourism initiatives in Cork Harbour. The central "passageway space" of the island which connects the proposed refurbished northern quays and the south arrival space is integral to the Masterplan. This space is intended as formal axis that will assist in the regeneration of the Store Houses due to the increased footfall along its edges.

The space is regarded as a multi-faceted one in that it has both views to the adjacent dockyard along with the potential for new activities along the Store House buildings. The space is also the most direct route from the refurbished Spencer Pier to access the pedestrian bridge to Spike Island for cruise line passengers.

The space is also one that can be used formally for ceremonial events for the Naval Service as well as other larger events. The success of this space will be its adaptability and integration with the Naval Base's security requirements.

The adjacent Store Houses have been continually identified as exceptional buildings and the creation of a shared visitor experience, in conjunction with the Maritime tradition of the island are attractive future possibilities.



Fig. 5.86 Formal parkland tree-lined avenue, Barcelona.

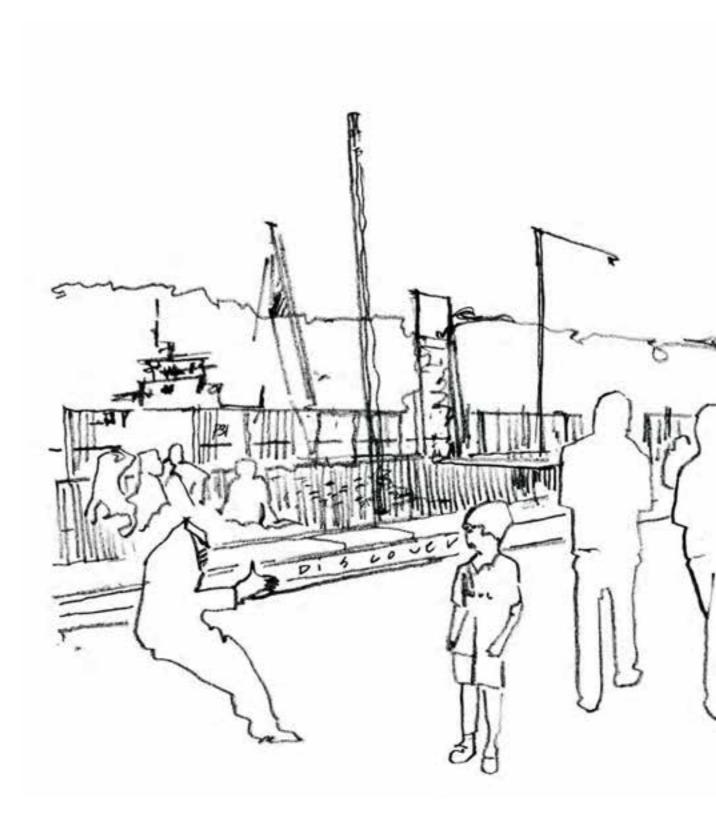


Fig. 5.87 View of "central passageway" being used as a tourism and visitor experience.



TOURISM & EMPLOYMENT *Encouraging Innovation through Partnerships*



Fig. 5.88 Shetland Museum, Shetland, Scotland.



Fig. 5.89 Titanic Belfast.



Fig. 5.90 Mareel, Shetland.



Fig. 5.91 Meditation Pavilion, Kurobe.



Fig. 5.92 Coast path staircase, Plymouth.



Fig. 5.93 Coast path staircase, Plymouth.

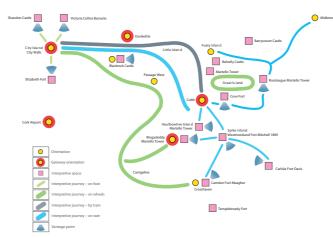


Fig. 5.94 Fáilte Ireland's strategy for the promotion of Cork's architecture of defence.

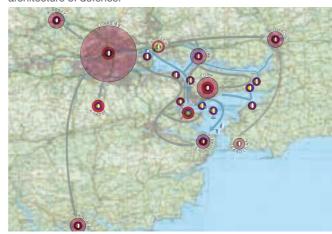


Fig. 5.96 Fáilte Ireland Map of Tourist Hubs in Cork.

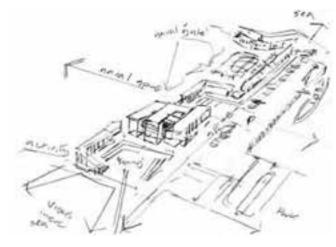


Fig. 5.95 Sketch showing concept of north-south access.



Fig. 5.97 Information display at viewing point by Cork Harbour.



Fig. 5.98 Ferry berthing at Cobh.



Fig. 5.99 Naval park.

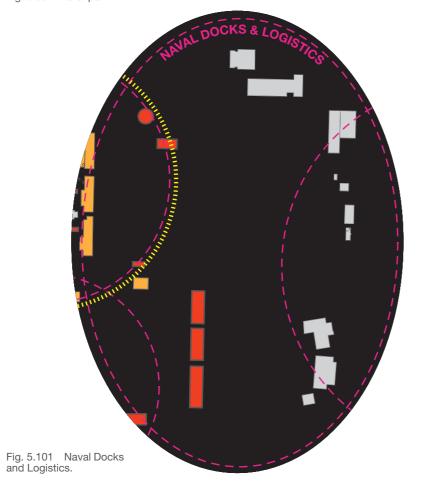




Fig. 5.100 Heritage village.



PUBLIC REALM & ARRIVAL

The Creation of an Arrival Experience

The island is now predominantly approached from the southern edge by road facing the NMCI and the future IMERC cluster.

The approach is far from visually pleasing as the visitor is confronted with desolate brownfield spaces. The impression is further exacerbated by the sheer scale of the central ISPAT site and the magnificent scenic views across to the backdrop of Cobh.

The creation of an improved arrival experience, through the use of framing buildings and landscaping is of paramount importance to the Masterplan. This will begin to happen through the use of strong landscape corridors, that will be subsequently populated by buildings.

The southern site also provides the potential for a major building of quality and indeed scale. The development should face the IMERC cluster in the future in a positive fashion. Historically the island has faced Cobh, but the brownfield clearance has highlighted that there is now a new entrance opportunity to the south.

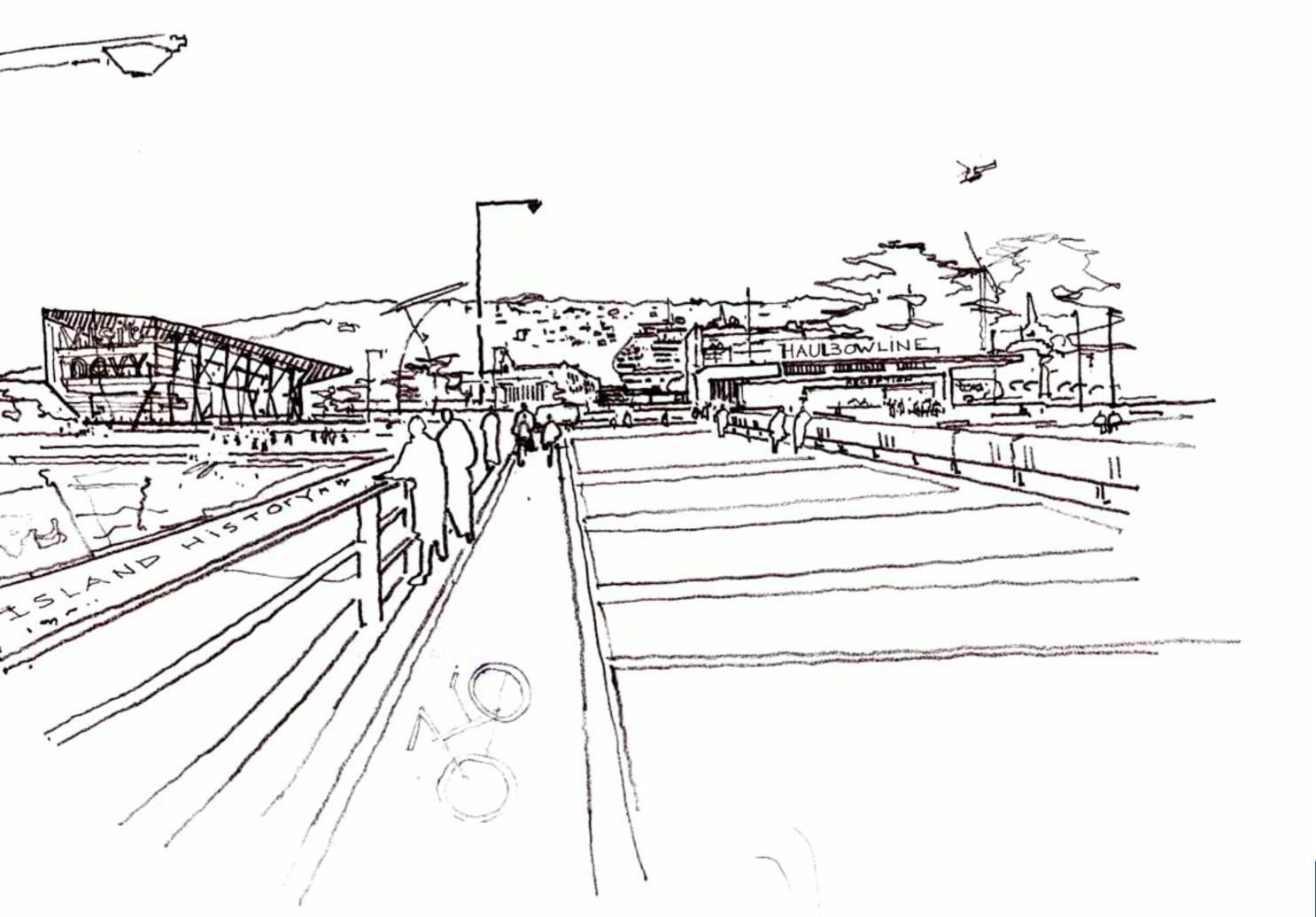
The building, whether it is a bespoke architectural landmark or a functional large scale logistics hangar must be designed to take advantage of the site's place-making qualities. The scale and silhouette of the building will all be of importance. We would also advance that the building could be of significant scale, given the surrounding context.





Fig. 5.103 Approaching Haulbowline by bridge - current first impressions.

Fig. 5.104 View of arrival space in Haulbowline, showing transformed public realm framing views to Cobh Cathedral and the passing cruise ships.



PUBLIC REALM & ARRIVAL The Creation of an Arrival Experience

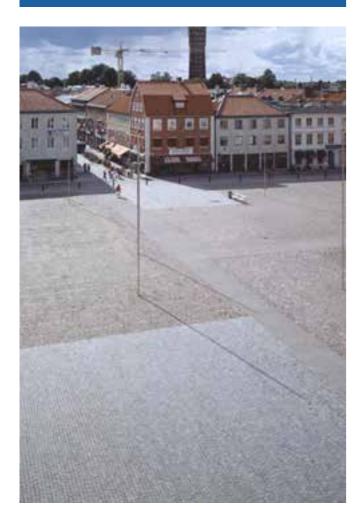


Fig. 5.105 Stortorget, Kalmar.









Fig. 5.106 Materials palette - ground surface study, Stortorget, Kalmar.

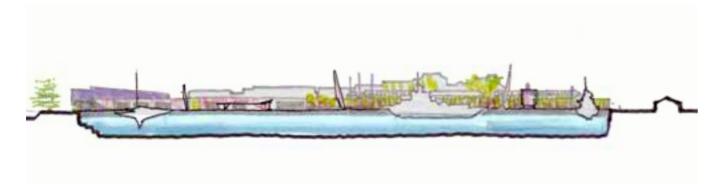


Fig. 5.107 Section through active dockyard, showing main passageway in background.













Fig. 5.108 Public Realm materials and seating all contribute to the look and feel of the place.



Fig. 5.109 Wayfinding totems, utilising corten steel in keeping with the historic district in central Barcelona.



Fig. 5.110 Lighting around the central passageway should be designed, as part of a coherent public realm approach.



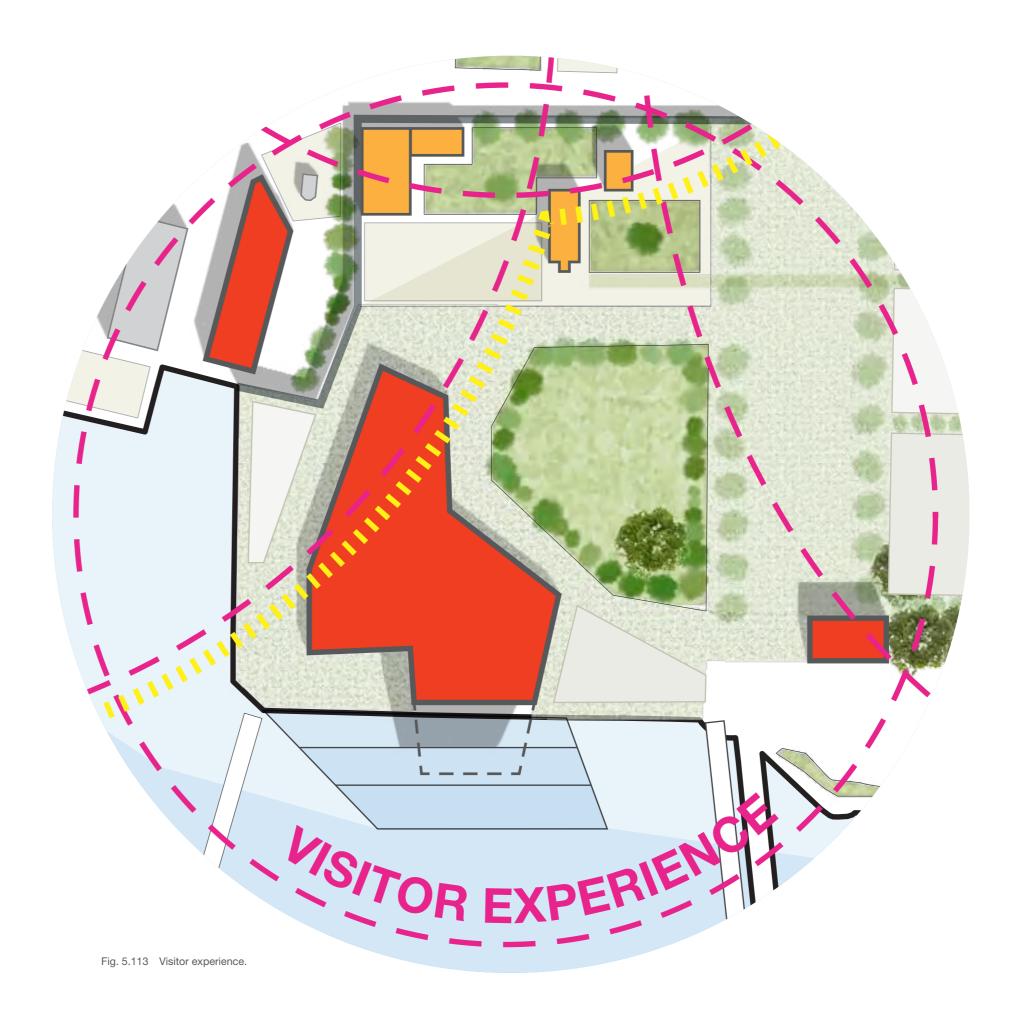
Fig. 5.111 Public Spaces should utilise "industrial objects" as part of the place-making of the island.







Fig. 5.112 Public Realm materials and seating.



GENIUS LOCI

The Extension of the Landscape Tradition

Genius loci means literally the "spirit of the place". It has profound connotations in urbanism in relation to place-making and memory.

The preservation and the revealing of the qualities of Haulbowline are important for the Masterplan. The ISPAT factory obliterated the "thin" line between the island's present and past with a development which altered the island's original function.

East Tip Remediation

"It is an objective of this Masterplan to ensure that the integrity of the licenced site is maintained in the context of proposals in this Masterplan for the enhanced amenity/recreational use of the East Tip site.

Any works on the East Tip site to be undertaken pursuant to this Masterplan shall be undertaken in accordance with relevant waste legislation (Waste Management Acts), and shall take into account the National Hazardous Waste Management Plan (2014-2020) and the Southern Regional Waste Management Plan, as relevant and appropriate.

Any works to the East Tip, including the proposed onward bridge connectivity to Spike Island, shall be subject to consultation with the EPA and other relevant statutory bodies, as appropriate, in order to determine whether a review of the existing licence is required to facilitate this proposal".

Mending the "genius loci" of Haulbowline

This can be translated into a number of ways within the Masterplan proposals.

 The integration of historic buildings with sensitive development of their curtilage, in terms of townscape and place-making.

- The selective screening and organisation of the more unsightly parts of the island through landscape avenues and screening.
- The development of a consistent approach to street furniture through the selection of appropriate seating and lighting fixtures.
- The selection of surfaces adjacent to buildings to soften their appearance, via the removal of larger areas of tarmacadam.
- The development of a series of "pocket parks" throughout the island celebrating the island's historic qualities through the integration of art and naval objects.
- The creation of a Haulbowline Environmental Handbook that defines a way of approaching public realm place-making.

Also the island is an active base. The ability to view the island's larger vessels and cranes from adjacent zones should be considered a dynamic part of the island's culture. The careful planning of the logistical space in the West Wall will also provide opportunities for larger naval structures to be clearly visible as "working" parts of the naval Haulbowline.

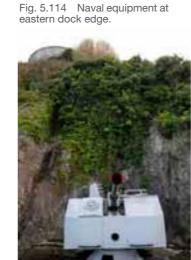


Fig. 5.115 Gun turret on Haulbowline facing north.



Fig. 5.116 Working crane at north quay wall edge.



Fig. 5.117 Existing view from the officer's mess across the back of house activities of the Store Houses.

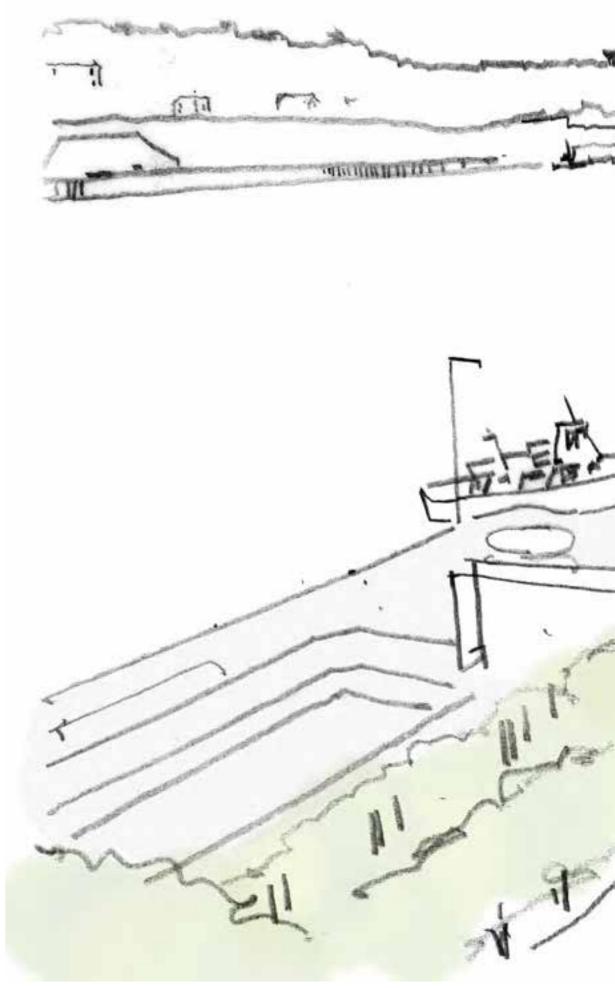
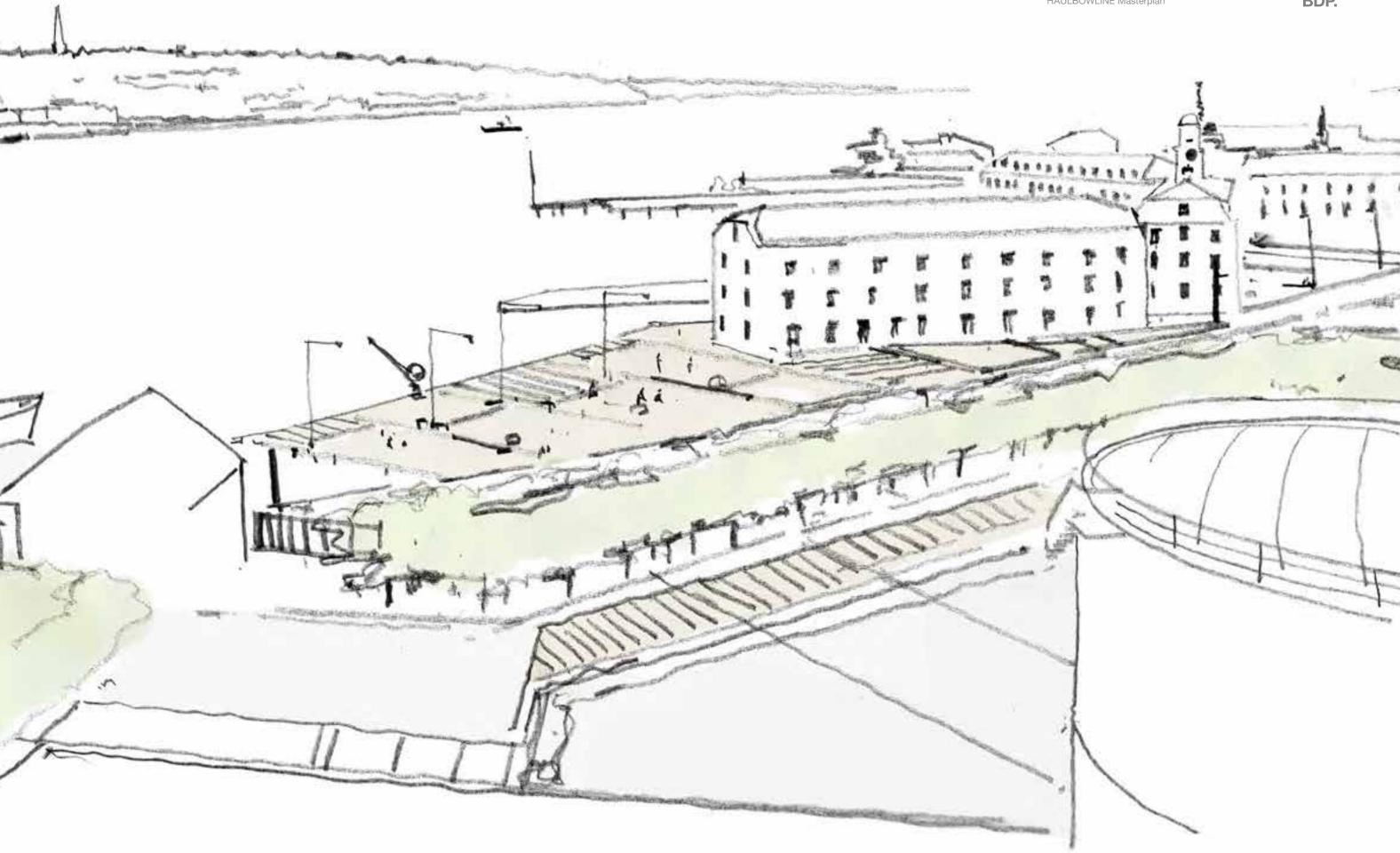


Fig. 5.118 View across the Store Houses illustrating potential screen and improved curtilage to the historic environment.



GENIUS LOCI

The Extension of the Landscape Tradition

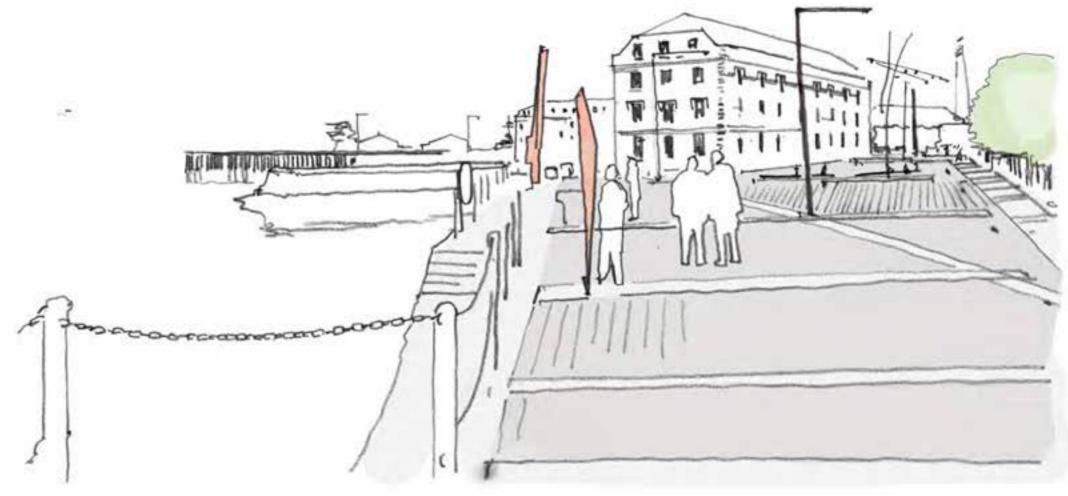


Fig. 5.119 View along the northern pier showing potential screening of adjacent uses. The approach restores the historic curtilage of the Store Houses through landscape, surfaces and street furniture.



Fig. 5.120 Structure in Christiania Square, Oslo: the integration of Fig. 5.121 Existing view. development that underlines its historic context.





Fig. 5.122 Demarcation of spaces though strategic use of surfaces and fencing.



Fig. 5.123 View of Pocket Park in the centre of island showing reclaimed urban spaces. Opportunities exist throughout the island for smaller squares or parks to be developed along the proposed naval heritage walk.



Fig. 5.124 Existing view.



Fig. 5.125 Portsmouth historic Naval Dockyard "corner for knowledge".



Fig. 5.126 View of the naval heritage walk showing improved public realm finishes, street furniture and lighting appropriate to the island's historic core. Whilst the existing context of the west of the island is attractive it will require townscape improvements more in keeping with the island's historic character.



Fig. 5.127 Existing view.



Fig. 5.128 Steps made from reclaimed material.

IMPLEMENTATION

Alternatives & Different Futures

Short Term Primers

"You have to change to stay the same"

Willem De Kooning, Artist

The Masterplan vision is clearly a long term framework for growth. Given the substantial investment in the remediation work for the East Tip and ISPAT sites, the baseline starting point for the Masterplan is a costly one.

Given this and the challenges surrounding capital funding the plan is broken down into a series of stages that will provide a suggested road map for future cycles of growth.

The initial expenditure will be largely based on the development of a sensible "island" infrastructure. There will be a requirement to encourage the use of public spaces in a flexible way, as part of a programme of Haulbowline events that are enacted in parallel to the physical development.

Increasingly cities are utilising temporary parks, and complementary shorter term activities as a form of "urban acupuncture". The development of coordinated temporary interventions should be encouraged to promote a degree of wider citizen participation on the island.

The timing of these strategies in conjunction with the wider developments such as the Spike Island Bridge, the re-adaptation of the Store Houses and the linking of the refurbished Spencer jetty will all promote new ways of seeing Haulbowline.

The impact of early interventions should not be underestimated for the surrounding community. Media attention can be achieved through some "early wins" and interventions.

A number of possible strategies exist as primers:

Colour

The introduction of colour into derelict areas as part of a temporary revitalisation of a plot.

Vegetation

The introduction of temporary planting through the central passage way, utilising colour as a visual stimulus.

Activity

The creation of temporary lawns for "pop up activity" supported by urban furniture.

Urban Lighting

The use of selected lighting events for the temporary transformation of buildings.



Fig. 5.129 The park and potential redeveloped lawns could be utilised for alternative "hobbiest" uses.

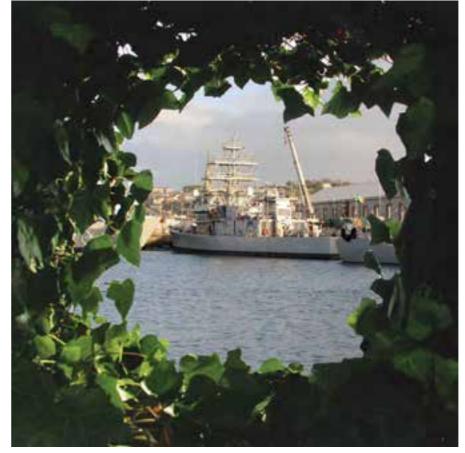


Fig. 5.130 Potential planting regimes could create selected views to the naval basin.



Fig. 5.131 Temporary hedge installation in Rotterdam, promoting greater public participation in the docklands.



Fig. 5.132 The use of colour and integrated planting to soften a derelict plot.



Fig. 5.133 The use of colour to restore an empty site.



Fig. 5.134 The use of colour and planting to celebrate a city corner



Fig. 5.135 Proposed short term plan shows the island being re-greened as part of the east tip remediation. Development plots are laid out but the physical infrastructure of the naval secure boundaries are in place and established.

IMPLEMENTATION

Alternatives & Different Futures

Medium Term Primers

The development of the island beyond the baseline of remediation will also require a degree of innovative business planning and funding. The initial phase must be focused on the refurbishment of the existing six Store Houses. These buildings are of exceptional quality and must be brought back sympathetically to active use.

Initially screening, colour and super-graphics can be utilised to help alter their appearance. However the refurbishment of these properties should be considered in the context of a Heritage Village Sub-Masterplan based on a holistic approach to their complete development.

The Store Houses are the backbone of Haulbowline literally and their regeneration will set the tone for the whole island going forward. As can be seen with Portsmouth's historic dockyard these facilities can be transformed into a special attraction for the wider community and as vibrant location for visitors and the naval community.

The use of lighting to display these buildings to allow them to be visible from Cobh is also an important element of the wider public realm considerations. The development of a lighting strategy for the island which balances both the heritage of the place and the operational base should also be considered.



Fig. 5.136 Super graphics on the Catalunya Museum in Barcelona.



Fig. 5.138 Emscher Landscape Park, Ruhr Valley, Germany.



Fig. 5.140 Re-adaption strategies for existing storehouse structures.



Fig. 5.137 Murray Mills in Manchester - before and after restoration.



Fig. 5.139 Fabra & Coats complex in Barcelona, before and after restoration.











Fig. 5.142 The existing Store Houses provide a substantial floor plate for future adaptive re-use.



Fig. 5.143 The existing interfaces with the surrounding context is a key consideration for the historic buildings.



Fig. 5.144 Collins Barracks showing "pea gravel" ground surface and historic building in background.

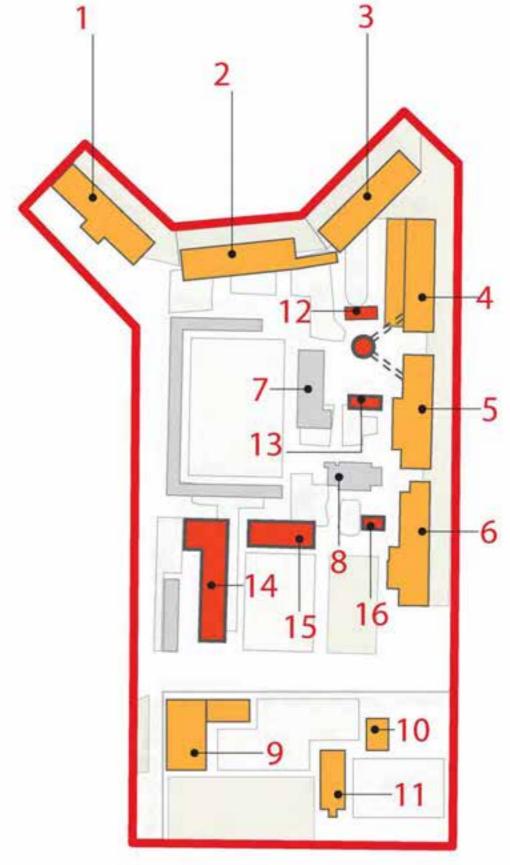


Fig. 5.145 The existing Store Houses numbered 1 - 6.

IMPLEMENTATION

Alternatives & Different Futures

Long Term Primers

The longer term goals for the island will involve many alternative approaches. This is largely restricted to the Visitor zone as the other zones will develop based on the existing patterns of naval use, re-adaptation, continued operational use or by the remediation process.

At the time of writing there exist a number of potential options for the southern tip of the island. All are valid within the context of the Masterplan but are subject to future cost benefit analysis and capital funding. It should be noted that the long term redevelopment of the southern tip could also involve a number of uses and not just one single "big hit" function. However given that the heritage village has the potential for 17,000m² of accommodation the southern tip may be a very long term development option.

However the space does provide an excellent location for more logistical buildings but this should be balanced carefully with its visual prominence. It will be the "key" landmark when viewing Haulbowline in the future from the IMERC cluster and its form, mass and silhouette will require careful architectural consideration.

It also should be noted that the location also frames longer townscape vistas to Cobh Cathedral which are significant vistas across the harbour. As with other Masterplans we would recommend that these vistas should be protected and enhanced.



Fig. 5.147 Industrial but crafted signal box, Basel.



Fig. 5.148 The use of light.



Fig. 5.149 Views across the Thames, to the University of East London, residential buildings sitting on the water's edge.



Fig. 5.150 The creation of an Education and Research IMERC North around the arrival lawns.

Alternative Haulbowline Masterplan Education and Research quarter IMERC North



Fig. 5.151 Alternative Haulbowline Masterplan - Education and Research quarter IMERC North.



Fig. 5.152 Views of Sunderland University stepping down to the water's edge.



Fig. 5.153 The creation of people scaled spaces in University of Sunderland.

Alternative Haulbowline Masterplan Naval and Logistical Centre.



Fig. 5.154 Alternative Haulbowline Masterplan - Naval and Logistical Centre.



Fig. 5.155 The development of logistical buildings as "designed" objects.



Fig. 5.156 The use of material to uplift an otherwise utilitarian shed.

IMPLEMENTATION

Alternatives & Different Futures

Phasing and Implementation

The Masterplan can be implemented over a series of phases. The remediation of the island is a major operation which will require considerable preparation work prior to the implementation of any phase. The integration of the Masterplanning land use zones and access requirements such as roadways will require detailed further site investigation. The Masterplan has endeavoured to avoid "hot spots" with areas that are likely to be highly contaminated in its development of building zones.



Fig. 5.157 Land use zones.

LAND USE ZONES

For the purposes of the implementation cycles, the land has been organised as distinct land use parcels. These parcels will organise future infrastructural grids, secure lines and works packages.



Fig. 5.158 Phase 00 - Remediation Works.

PHASE 00 Remediation Works - East Tip, ISPAT

The remediation of the island is the initial major enabling project for Haulbowline. All other decisions in the Masterplan should be informed by the works. Early definition of the navy's secure boundaries should also be considered within the works. It should be noted that the current road access can largely operate as is until remediation is completed.



Fig. 5.159 Phase 00 - Secure Naval Boundary.

PHASE 00 Secure Naval Boundary

Establishing early in the cycle a secure single naval boundary must be a Masterplan priority.

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Fig. 5.160 Phase 01.

SHORT TERM - PHASE 01 Develop Infrastructural Grid

A utilities framework and grid should be established across the island. This should provide the whole island servicing needs and allow for future needs. Additional Utility and projected capacity studies will be required to identify the requirements of a future "smart grid" for the land use parcels.



Fig. 5.161 Phase 02.

SHORT TERM - PHASE 02 Establish of primary axis

The naval boundaries and gateways should be established alongside a realigned entrance and logistics approach road to the centre of the island. Lighting, wayfinding and pathways should all be developed in conjunction with the setting out of the proposed access roads.



Fig. 5.162 Phase 03.

MEDIUM TERM - PHASE 03 Establish Green Grid & Screening

The landscaping framework plan should be developed in conjunction with phases two and three if possible. The creation of an island park land setting with defined tree-lined avenues and stands should be developed at this stage. The east tip naval park should be developed to link with any potential linkage to Spike Island.

Car parking and access for the park should also be incorporated at this stage along the southern boundaries.



Fig. 5.163 Phase 04.

MEDIUM TERM - PHASE 04 Define Visitor Centre Site, Secure Access to Naval Base, Ocean Yacht Race

The creation of defined land use zones should now be clearly evident on the ground. Secure boundaries and gateways should all be functioning as part of a normal daily functioning base.

The Masterplan development could be halted at this stage or reviewed against emerging requirements and alternative option appraisals. A "do-nothing" approach to the plan could now be established as the key land use parcels will be developed and set out on the island.

IMPLEMENTATIONAlternatives & Different Futures



Fig. 5.164 Phase 05.

MEDIUM TERM - PHASE 05 Refurbish Grain Store Buildings, Naval Boat Buildings, Naval Square, Additional Slip

Car parking and the potential for the development alongside the graving dock now can be developed. This area could be utilised more informally in early stages but as the island develops this area will require a more detailed understanding of the island's car parking and visitor projections.



Fig. 5.165 Phase 06.

MEDIUM TERM - PHASE 06 Visitor Experience, Cycle Bridges, Naval Promenade, Boat House Museum

The graving dock can be more actively used along its western edge for naval uses. The potential for the remediation of the Store Houses now exists as car parking is now in place. However it should be noted that these could be restored at an earlier stage of the implementation cycle.

Naval Museums and information buildings could also be accommodated based on the refurbished Store Houses. The timing of this would require integration with revised access arrangements, public facilities and car parking arrangements.

The gradual opening of the naval promenade could also be developed at this stage as the north-south axis is now established for direct visitor movements. This would be of course subject to naval security requirements.



Fig. 5.166 Phase 07.

LONGER TERM - PHASE 07 IMERC Cluster, Visitor Naval Building, Great Stair, Educational Building, Student Village, Energy Centre

The creations of a visitor experience, a naval logistics hub or educational cluster all are possible.

A major visitor building would integrate into a wider island development, consisting of refurbished Store Houses, and redefined naval boundaries. It should be considered as a major destination building so its location close to the water will act a gateway for the island experience.



Fig. 5.167 Phase 07 - view of arrival centre.

COMPLETION

The Masterplan is a long term vision. It is highly unlikely that phase 7 will complete in the medium term, but the framework should exist for this option to allow for future flexibility.

IMPLEMENTATION *Alternatives & Different Futures*



Fig. 5.168 Proposed Long Term Haulbowline Masterplan, with a major visitor attraction facing the IMERC south campus.



Fig. 5.169 Alternative Haulbowline Masterplan - The Masterplan shows consolidated island development with the southern spaces being utilised for sports pitches and island recreational uses. These uses could be integrated with the Naval Service's Strength and Conditioning cadet training programmes.



Fig. 5.170 Alternative Haulbowline Masterplan - IMERC north. The proposed southern edge illustrates a future "shared" educational third level campus overlooking the water to IMERC south.



Fig. 5.171 Naval and Logistical Centre - The Southern Tip also has the potential for a major logistic centre for the Naval Services. The location is prominent, and the potential for a large maritime "box" to be developed could address the IMERC cluster across the water if appropriately designed.

IMPLEMENTATION

Environmental Considerations

Any proposals for significant development pursuant to this Masterplan shall:

- Take into account relevant environmental sensitivities/vulnerabilities and shall ensure that any such identified sensitivities are appropriately protected, managed and integrated into any future development.
- Be accompanied by an Environmental Management Plan to co-ordinate and assess the proposed development and its integration with the Masterplan objectives. The Environmental Management Plan should demonstrate that significant adverse environmental effects are avoided from the design phase through to any construction, demolition, refurbishment, maintenance and operational works which may arise, through appropriate mitigation measures being considered from the outset.
- Carry out an assessment to ensure that sufficient capacity exists in the critical service infrastructure (drinking water and waste water) servicing the Plan area to accommodate any new development. Consultation with Irish Water will be required in this respect. The potential for overtopping of sea defences in the vicinity of the harbour to the north of the Plan area should be taken into account, having regard to the potential impacts of climate change, may have implications for surface water drainage.
- Take into account the relevant aspects of the following key high level plans:
 - South West Regional Planning Guidelines 2010-2022

- Southern Regional Economic and Spatial Strategy (in preparation)
- National Hazardous Waste Management Plan
- Southern Regional Waste Management Plan
- Cork County Development Plan 2014-2020
- Cork City Development Plan 2015-2021
- South Western CFRAMS (in preparation)
- Midleton Electoral Area Local Area Plan 2011
- Carrigaline Electoral Area Local Area Plan 2011
- Port of Cork Strategic Development Plan 2010
- Capital Investment Plan (Irish Water)
- Irish Water Water Services Strategic Plan (Irish Water)
- Wild Atlantic Way (Fáilte Ireland)
- The requirements of the EIA, Habitats, Birds, Water Framework and Floods Directives, as relevant and appropriate, shall be fully take into account.
- When considering flood alleviation options which may arise out of the flood risk assessment, the potential impacts on environmental sensitivities/vulnerabilities adjacent to the Plan area should also be considered. These include the Great Island Channel (SAC), Cork Harbour (SPA) and Loughbeg (pNHA).
- In respect of any proposals which have the potential to impact upon existing habitats or biodiversity, habitat mapping of the relevant plan area shall be undertaken to inform measures to protect / enhance biodiversity considerations.
 Consultation with the National Parks and Wildlife Service (NPWS) should be undertaken in the preparation of any such habitat mapping.



Fig. 5.172 Karycraft at berth at the pier on Haulbowline Island.

IMPLEMENTATION Traffic Impact

Any proposals for significant development pursuant to this Masterplan shall be accompanied by a Traffic Management Plan for the overall island which will, where necessary, include recommendations and implementation measures for new/upgraded road access, parking, pedestrian and cycling corridors to cater for the likely increase in both visitor numbers and those working in the Plan area.



Fig. 5.173 View of Haulbowline Bridge and Rocky Island. The bridge is approximately 440 meters across, and is approximately a 5 minute walk to the NMCI from the Naval Base. Due to its exposure this is not a welcoming route, and travel is predominantly by vehicle. (Image courtesy of the Irish Defence Forces)





Fig. 5.174 Upgraded cycle corridors will cater for the increase in visitor numbers



BDP.

The recommendations section sets out in detail a number of complex tasks that are required to implement the plan in full or in part. It identifies key areas that require additional work in order to be completed. For the avoidance of doubt these are scheduled across all areas of the Masterplan brief. Many are interconnected and interdependent.



RECOMMENDATIONS

6.0 RECOMMENDATIONS

6.1 Masterplanning

Development Framework

The Masterplan is unique in that there are significant differences within the stakeholder community on how parts of the island can be utilised effectively. On one hand the island is a secure base; on the other it is a potential tourism destination and public thoroughfare.

The Masterplan is intended as a development framework which will allow for additional future development to coexist seamlessly beside the Naval Base whilst maintaining operational security.

-The plan sets out a development framework for future land use plots to be serviced, proposing secure boundaries clearly identifiable through landscape and fence lines. This is of particular importance to the Naval Service in securing their future operational requirements.

Early wins

The Masterplan is an opportunity to change perceptions from the "Toxic" island label.

A communications programme that reinforces the Masterplan "wins" should be started.

Simple measures such as wayfinding and better signage should form the first steps to the Haulbowline story.



Fig. 6.01 The implementation of Wayfinding can incorporate modern technologies.

Naval Operations

The naval security requirements will require a more detailed implementation plan to be developed in tandem with the vision. A number of areas will contribute to this study.

- The defined secure operational perimeter of the Naval Base will require clear integration clearly with the overall vision and adapt locally to emerging access arrangements on the ground.
- The Masterplan vision is highly dependent on a pedestrian north-south access being facilitated and managed by the Navy from the refurbished Spencer pier. The development of appropriate access protocols should be explored utilising lessons from other similar bases.
- Ordinance stores and facilities will require additional risk assessments in line with the Defence Forces protocol. This lies outside the scope of the Masterplan.
- Oil storage. The future capacity, expansion and placement of the storage facilities

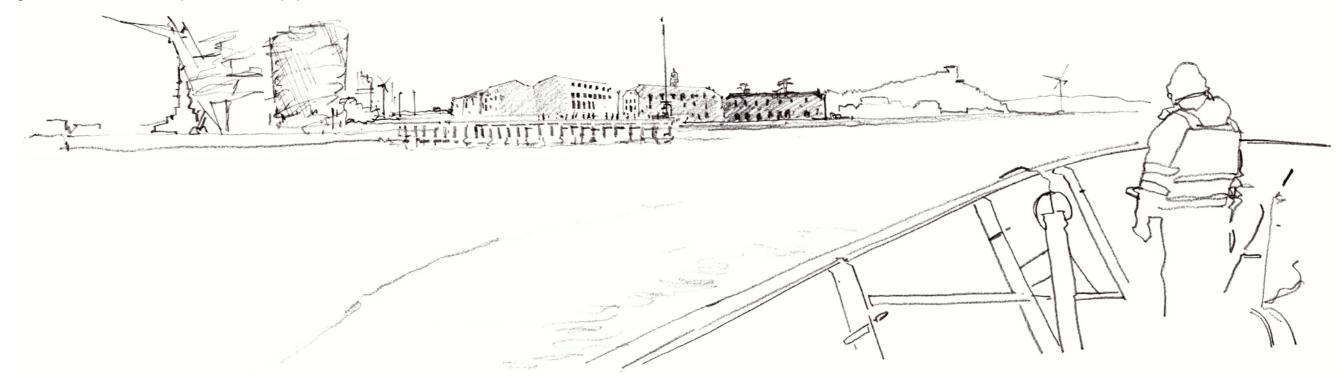
- should be subject to a separate study which is closely aligned to the future needs of the Naval Services.
- The screening and securing of this area in context of the wider visual corridors from the Cobh approach should also be developed and options tabled. The potential for creating a covered oil storage space that conceals the tanks should be considered.

The rationalisation of the Naval Service buildings adjacent to the eastern dock wall should also be investigated further in order to create more flexible, safer and efficient dock side operational environment.

The island should be become an "active" case study in energy monitoring and sustainable brownfield regeneration measures.

The "opening" of the island's naval promenade will provide the opportunity to experience the harbour in different ways. The creation of a one-island pedestrian circuit should be a long term aim contingent on the naval requirements.

Fig. 6.02 View to the refurbished Spencer Pier from the proposed commuter route.



Heritage

Access and movement through the base is still under the control of the Naval Service but the redevelopment of the central "heritage village" area will require flexibility and innovative thinking on all sides. The Store houses are of exceptional heritage interest and their restoration offers the possibility of creating a world class "centre of excellence" for the Naval Service to be showcased.

-The heritage village has the capacity for 14,000m² of refurbished development. The quantum of space is significant in that it provides the potential for adaptable refurbishment" within the core of the island for a variety of uses.

The Naval Service is the custodian of the island. However there are a number of buildings under immediate risk on the island and their preservation will require a "joined up" multi-agency response.

• A Conservation Plan should be compiled. This should typically take the following format:

- Introduction

- An introduction to the site, what it is, where it is located etc.

- An explanation of the document. Its purpose and aims.

- Legal Context

- Full details of any statutory protection of the site and what this means.

- Site Context

- Study of the site context and its historical development.
- Research & Gathering Evidence: Understanding the Site
- Detailed historical background.
- Gathering of cartographic evidence, photographs, illustrations etc.
- Review of primary and secondary sources.
- Survey & Analysis: The Physical Environment
- A written description of all structures and features. This will be supported by and cross referenced with a comprehensive drawn and photographic record of all structures and features and phased plans.
- A condition survey of all structures and features.
- An archaeological assessment of the island,

including the known archaeological sites as well as the potential for sub-archaeology or the presence of archaeological fabric within upstanding structures.

- Establish a criteria for assessing the cultural significance of the site both individually and cumulatively.
- Identifying the significance of the individual elements of the site.
- Identifying the significance of the site as a whole.
- A Statement of Significance.

- Issues and Constraints

 Details of possible issues or conflicts that may arise, such as physical condition, introduction of services, access, setting, landscape, subsurface archaeology, available resources, conflicts between interested parties/groups etc.

- Conservation Policy

 Development of policies or "visions" for the conservation of the site. This section describes the development of policies for a variety of issues such as how to identify appropriate uses, satisfy statutory requirements, work with resources, resolve conflicts, define a conservation philosophy, enhance visitor experience, visitor management and access, setting and landscape, archaeology, architecture, maintain and manage the site, provision of new elements (services, uses, building design), interpretation, education, future research etc.

- Actions

- Set out practicable actions/strategies for the short, medium and long term conservation and management of the site.
- The buildings should be individually assessed and a condition analysis completed, to act as an inventory of the protected structures and their curtilage.
- A desk top Archaeological study should identify any areas of archaeological potential.
- Any clearance of vegetation or demolition of buildings should only occur outside the nesting season, i.e. it should only occur from September to February inclusive.

6.0 RECOMMENDATIONS

6.1 Masterplanning

Catalyst

The East Tip is the catalyst for the island's entire rejuvenation. The landscape design strategy for the park is heavily influenced by the nature of the remediation work. The potential for the park's landscape narrative to be in keeping with the "military" tradition of the adjacent forts is an important design driver. The park should be designed as part of a broader "connected" landscape philosophy. It should not become a place apart. Significant long term opportunities exist for the creation of green rooms framing the magnificent views to the surrounding harbour, and to Cobh and to Spike.

-The landscape design opportunity for the East Tip is an unique opportunity for future regenerations. Thinking around the landscape design should be aligned with the landscape philosophy across the island as a whole. An opportunity exists for a major piece of landscape art to be placed at the entrance of the harbour, in the spirit of the Angel of the North, and this should be explored further.

The Masterplan recommendations are embedded in a series of "Next Steps" that outlines a road map for the successful integration of the Store Houses into a coherent regeneration approach. The suggested uses for these spaces are diverse. It should be noted that the introduction of more publicly accessible buildings within the heart of the base will require further testing based on a detailed agreed implementation plan. As there is currently an absence of capital funding for the immediate refurbishment of the properties, steps should be taken in the short term to secure their fabric to prevent further degradation.

- The refurbishment of the Store House number one in conjunction with the refurbishment of the Spencer naval pier all provide an opportunity for the island's appearance to be improved. It is imperative that the Store Houses are refurbished along with their curtilage. Derelict buildings will not act as attractions for potential future tourists.

Arrival

Arrival by road to the island is currently underwhelming. The experience around this will require major steps for improvement. There is the opportunity to create a better public arrival experience. This will also assist in the logistical movements to the Naval Base. Opportunities are also clearly identified for a rationalised car parking and drop of arrangement which will benefit all visitors to the island base.

-The definition of the public realm through the considered attitude to landscaping, street furniture and signage all starts at this point. Should the Masterplan do nothing more, the southern entrance space requires major interventions on a townscape level to align with expectations of the visitor for Ireland's Naval Service headquarters.

Potential Arrival Space and public realm

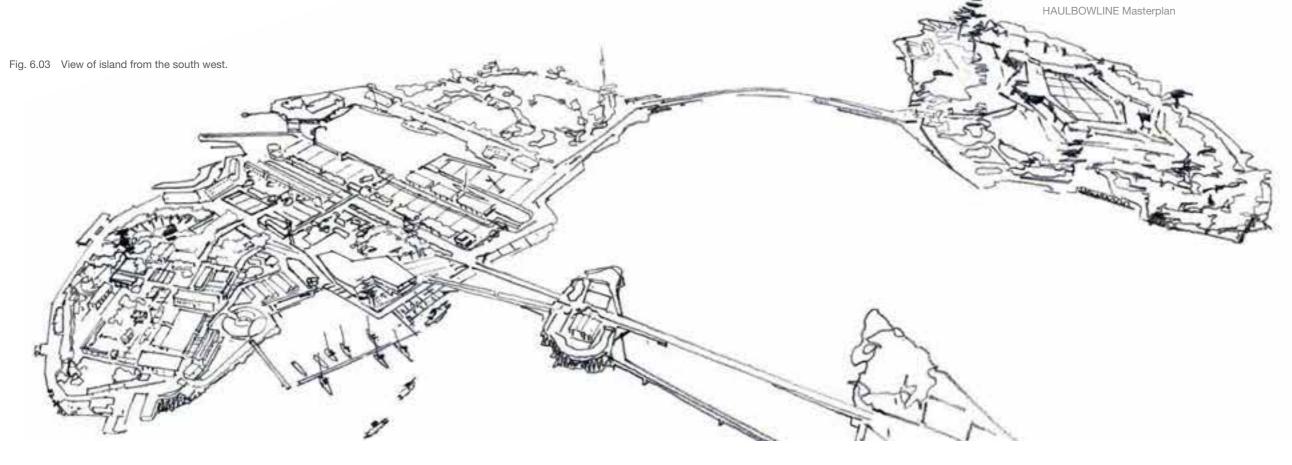
The creation of a coherent arrival space that frames the approach to the island is a key organising principle.

- -The creation of car parking strategy that services the island and also the East Tip should be developed.
- -The development of shared perimeter promenades should be encouraged based on security assessments. The opening of the naval promenade for public walking should be investigated as part of the broader Haulbowline Tourism narrative.

Car parking and mobility

A Mobility Plan for the Haulbowline IMERC cluster should be implemented which reflects current uses and projected modes of travel across the wider campus. At the time of writing this is still unknown.

Commercial ferry routes should be identified and linked with proposed piers to encourage the island as a destination within the Cork Harbour locality.



Infrastructure

The island's land use plan is organised around clear infrastructural routeways. In order for this to be successfully integrated with the future developments a number of civil, mechanical and electrical engineering led studies will be required.

- An existing analysis of the island's existing infrastructural capacity, including surveys and condition reports of existing subterranean systems.
- The existing capability of the treatment plant on Haulbowline Island should be determined including its design capacity and licensing status. If it is found that adequate treatment capacity is not available then it should be made clear that any new building works cannot proceed until such time as problems are addressed.
- Capacity analysis of the island's existing sewerage system and requirements for upgrading will require a dedicated study.
- Water Management on the island will require an integrated management plan that links with the existing demands.

Flood Risk Analysis

A Flood Risk Analysis of the island should be completed and integrated with the wider Cork Harbour plans. No Flood Risk Analysis for the island was available at the time of writing.

Sustainability and Ecology Management

The island should become an exemplar for sustainable planning. The remediation of the island should act as the initial catalyst in creating a whole island "Green" handbook.

- The existing energy demands of the island should be analysed based on empirical data.
 Options for reducing the carbon footprint of the island which involve the wider IMERC campus should also be explored.
- The potential presence of bat roosts will require ecological surveys to be undertaken by the appropriate qualified personnel.
- The ecological diversity of the island should become part of the wider "sustainability story" for the East Tip landscape design.

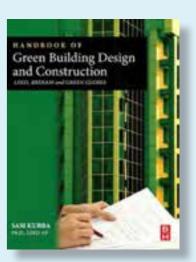


Fig. 6.04 Handbook of Green Building Design and Construction.

6.0 RECOMMENDATIONS

6.1 Masterplanning

Landscape

The island's landscape structure is based on the concept of formal axes and lines on the landscape. This builds on the military tradition of the wider Harbour's fortifications.

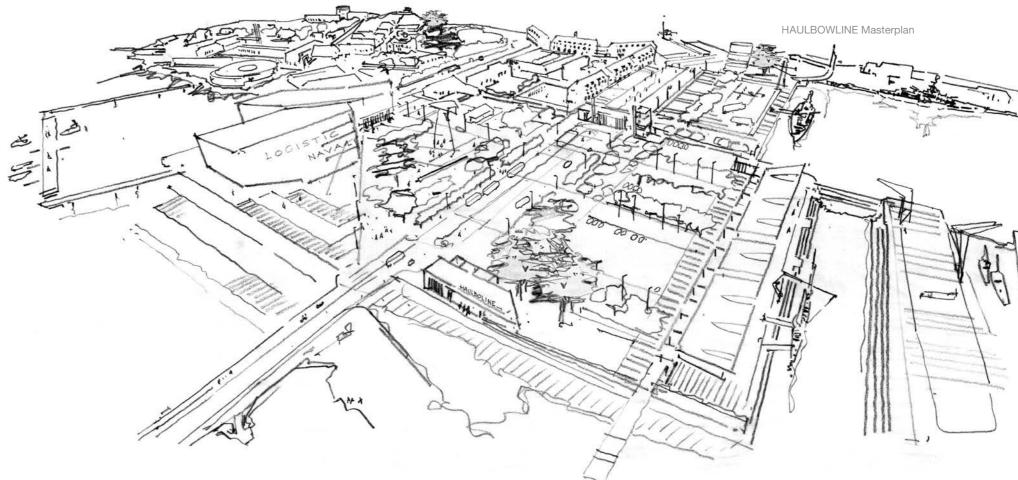
- The agreement of a "one island, one place" landscape philosophy should be clearly defined.
- The landscape structure of the land use zoning should be integrated within the East Tip and ISPAT remediation areas. Tree-lined avenues and fences should be defined in tandem with all security requirements.
- The landscaping scheme should include an open water feature which may result in the retention of the Grey Wagtail population, whilst assisting in a sustainable urban drainage (SUDs) strategy.

Tourism

The Masterplan has a number of potential integrated tourism projects. The viability of these projects is outside the study remit of the Masterplan.

- A destination led tourism plan for Haulbowline should be developed which closely links with other visitor attractions in Cork Harbour.
- Options for the major visitor attraction should be tested in conjunction with the landscape wider Fáilte Ireland initiatives.
- The development of heritage walks tours and access through the base to the Martello towers should be developed in conjunction with a management plan for the Naval Base.
- The integration of an Ocean Yacht Racing hub should be integrated with the graving docks development.
- A Cost Benefit Analysis of the recommendations should be undertaken.

Fig. 6.05 Long term view of the island's arrival space and central passageway.



Passageway

The Masterplan identifies clearly a north-south passageway that has both formal naval use potential and recreational value. Both functions benefit from the proximity to the Store Houses, the views through to Cobh and the potential of linkages with Spike Island as a major tourist destination. It must be noted that the movement through this space will be subject to the control and management of the Naval Service.

-This is the central part of the Masterplan proposals. The creation of the passageway will require the routes to be clearly identified and in turn for the Store Houses 4-6 to be refurbished. The creation of the passageway will also require Spencer Pier to be refurbished in order for the promenade to become active in the first instance.

Pedestrian Bridge

Spike Island will be accessed by the proposed pedestrian bridge and linkage with the East Tip. Haulbowline Island should form part of total visitor experience.

The development of dedicated pedestrian extensions to the existing bridge should also be integrated into a wider network of pedestrian and cycle paths that links to the surrounding harbour communities.

-The bridge should be treated as a major opportunity to provide a dynamic meeting point for both places. It is not only a connector but a "potential event" in itself. Creating access to Spike Island will in the future help to activate the East Tip as part of an unique pedestrian circuit of spaces that would be otherwise hidden from the surrounding communities.

The bridge link requires additional maritime engineering advice in terms of the type of pedestrian bridge required.

RECOMMENDATIONS

6.1 Masterplanning

Public Realm

"Small things Make the past. Make the present seem out of place."

Eavan Boland, "The Old City"

The island should have an integrated public realm and townscape design approach. The development of the island's infrastructure grid should also establish standards for streetscape and landscape. It is critical that the island's "sense of place" is preserved and enhanced wherever possible. This can be balanced with the naval security requirements, through the use of considered landscape edges and sensitive boundary treatments.

- There should be a single coherent lighting strategy across the island. The development of a series of lighting zones and character areas should be progressed.
- The selection of external seating and furniture should also consider the potential for design innovation. The integration of seating along heritage trails and the promenade should allow for opportunities for small gathering areas for ad hoc performance or educational groups.

- Signage should be designed as a single wayfinding brand. The use of sensitive graphics and original branding will contribute to enhancing a single identity for the island early, with relatively modest investment. IMERC and Spike should also form part of this branding narrative.
- The surrounding landscape curtilage around the buildings and base is critical in developing an appropriate sense of place for the island. Landscape and material selection should be sensitively selected especially surrounding the Architectural Conservation Area to contribute to the overall townscape of the buildings.



Fig. 6.06 Wayfinding totems in Barcelona.

Belvedere

The promenade within the island already exists. The "crag and tail" elevation of the island offers expansive views of the bay. The development of the island's "genius loci" through the use of landscape intervention, heritage walks, and the incremental improvement of pathways, are also important parts of the proposals.

-Opportunities to open up routeways to the viewing point and martello tower should be developed in conjunction with the Naval Service. A standalone staircase could also be proposed, accessed from the northern promenade. This would have to be reviewed in the context of the proximity to the oil and ordinance storage security requirements.

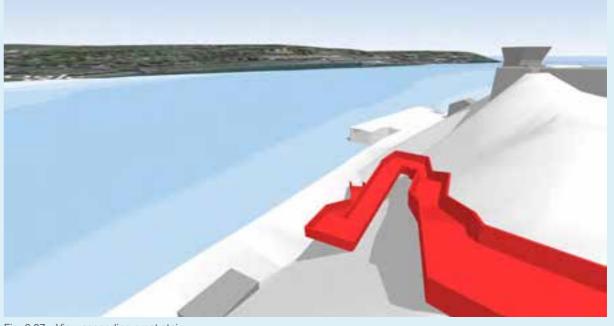


Fig. 6.07 View ascending great stair.

Fig. 6.08. Potential view from top of the island. The "crag and tall" topography offers 360° views of Cork Harbour. The Store Houses are visible to the right of the image.

Costing, implementation and the Store Houses

The development costing should be established.

- The Masterplan areas and future capacities should be developed further in order to establish the quantum of enabling costs required for the island's future development.
- The Store Houses should be initially re-adapted for temporary uses to encourage innovation and shared custodianship. Opportunities for an IMERC North exist in the medium term to complement the educational and research activities already in place.
- Other private public sector partnership models for parts should be developed to assist in "seed" funding for the island's public elements.

Island Trust

The creation of a shared vision for Haulbowline and Spike should be encouraged through a single message for the locality.

- Investigate mechanisms for an Island Trust which connects the stories and aspirations of Cork Harbour's assets.
- The island's unique maritime history, story and value should be communicated to a wider audience.

Fig. 6.09 The active naval dockyard at the centre of the island. Spike Island is visible in the background. (Courtesy of Naval Service)

6.0 RECOMMENDATIONS

6.2 Planning Policy

The statutory planning context does not at present set out any specific land use planning criteria for Haulbowline.

The Midleton Electoral Local Area Plan recognises the potential for heritage and cultural development on Haulbowline, including through linkages with Spike Island and Fort Camden. Potential synergies with the National Maritime College and IMERC are also acknowledged.

The LAP states that the continued existence of hazardous waste material at the former Steel Factory site is a significant restriction to new development. Other constraints to development on the island as identified in the LAP include a lack of adequate mains water supply and wastewater infrastructure; reliance on a single road access point; absence of public transport; and lack of existing community facilities or services.

Other relevant planning policy considerations include the protected structures on the island (Martello Tower and the group of limestone warehouse buildings) and the Architectural Conservation Area designation on the west side of the island. The National Inventory of Architectural Heritage (NIAH) lists a number of other buildings of importance on the island, including the tank building, church, boathouse, a number of houses, and naval office.

The East Tip Remediation project, which will deliver a public park to the east side of the island, is also a significant consideration.

Having regard to the above factors, the principles of the land use planning strategy for the Haulbowline Masterplan are as follows:

Naval Service

Provide for the protection and enhancement of the Naval Service operational area to the west side of the island, a designated Architectural Conservation Area.

Docks

A secure naval promenade can be developed along the north-south axis, allowing for unbroken Naval Service access to the marine basin. There is also the possibility of accommodating controlled visitor movement from Spencer Jetty to the Visitor Arrival space. This would be of course subject to naval security requirements.

Facilitating the delivery of the East Tip Remediation project

Permission has been approved for the development of a public park and associated development on the eastern part of the island. This is a key element of the Masterplan and the Masterplan strategy should ensure synergy and connectivity with the public park to the east of the island. The public park can act as a significant catalyst for tourism related development on the site and can offer a key attraction and identity for Haulbowline. It is considered that further tourism related development could take place to the east of the island, subject to planning permission, in connection with the implementation of the parent permission for the East Tip remediation.

Store Houses

The existing vacant and partially derelict limestone warehouse buildings adjacent to the former ISPAT / Irish Steel site are of exceptional importance in terms of architectural heritage and present an opportunity to accommodate new uses. A range of uses could be considered in these buildings, such as office/ research uses, museum/cultural/civic uses, retail, café, restaurant, and visitor accommodation uses. The area surrounding the limestone buildings can be developed to accommodate a high quality accessible landscaped area.

Centre of the island

The former ISPAT / Irish Steel site in the centre of the island offers the opportunity to deliver a high quality civic space, subject to remediation.



6.3 "Getting to Haulbowline"- Movement and linkages

Navy Data

There is the need for a comprehensive exercise to understand the travel patterns and needs of Navy Personnel and Visitors to be undertaken as a matter of some importance. This will help quantify the specific needs of the Navy in relation to matters such as locations of future access, security and in particular parking stock.

Such work will also help form an important design tool in relation to them quantifying and informing their specific requirements but also allowing "spare capacity", both in terms of vehicle numbers and physical space to be identified in a more robust manner. This exercise will help ensure Navy needs are fully provided for in an effective manner, contributing to improved operations and capacity. This needs to be more than a simple count, being a designed survey and analysis of movement needs and aspirations.

This is important to understand and protect Navy uses within the immediate and wider area Masterplans. It is also important in relation to the Navy's public and government facing role that within the work consideration is made of how the Navy can, within its operational constraints become a "smarter travel" exemplar.

Maritime Access Routes

Development of detailed plans for ferry services, including incorporation of economically sustainable regular "scheduled" services throughout the year from Cobh towards Haulbowline and IMERC needs to be undertaken in some detail, looking at options for routes, vessels and frequencies. This needs to be undertaken involving a wider transport and movement grouping encompassing the future interests of IMERC, NMCI, Haulbowline (including Navy), Spike Island and Cobh Town, rather than led by one of these entities. Only in this way will economies of scale be achieved in a sustainable manner. The detail of such services needs to work closely with development of several jetties/landing points, in particular at North Haulbowline, South Haulbowline and IMERC to give flexibility in routes and circuits. There are commitments made already that require such "cross-harbour" services but which are significantly less economically viable if provided in an uncoordinated manner.

Jetties and Access Points

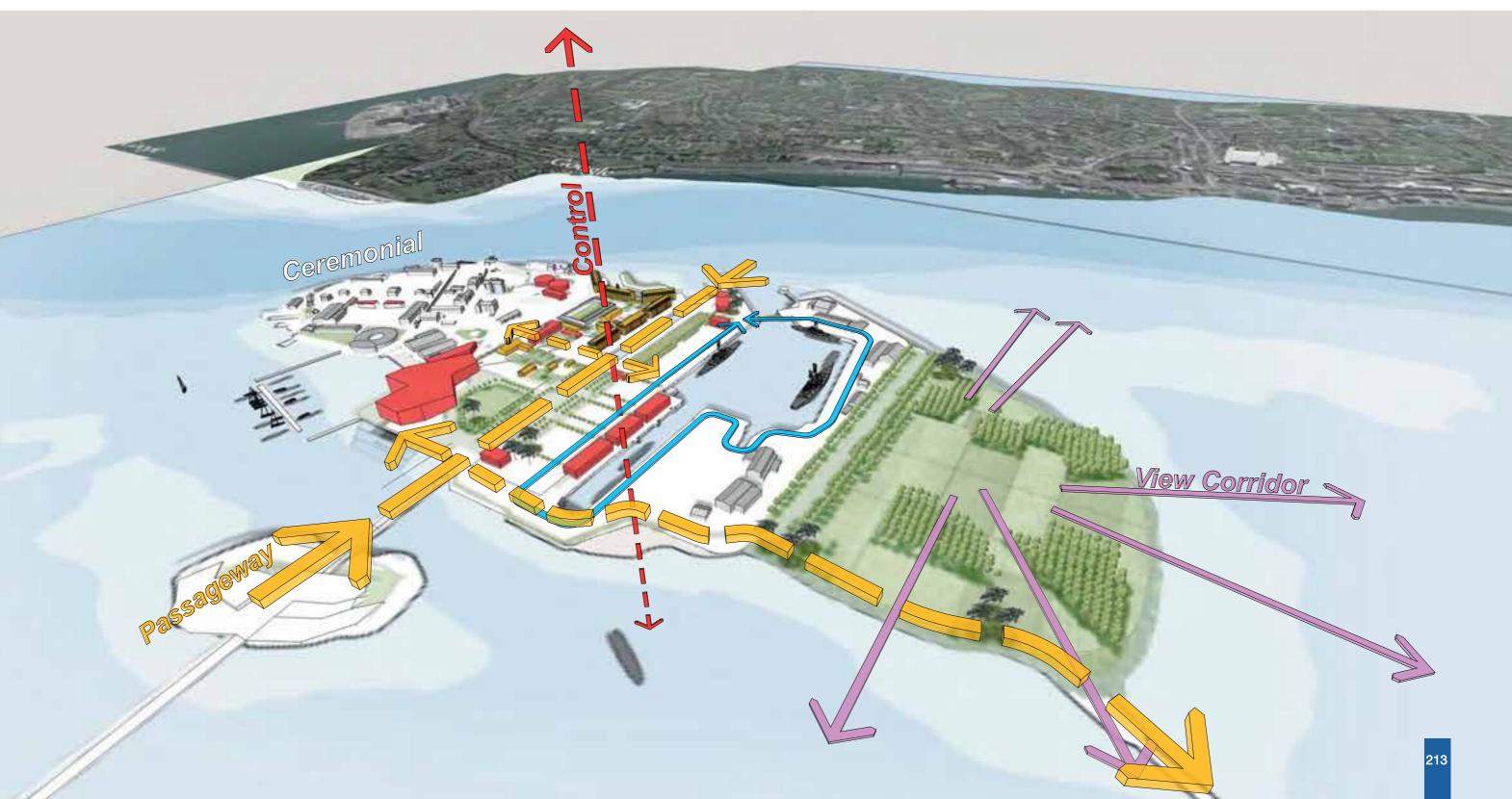
Much of the core infrastructure in relation to jetties is already there. Access at the northern side of the island is possible via the former ISPAT access pier, with localised improvements. Access at the southern side of the island could potentially be created to the west of the bridge, and access near IMERC is already proposed by the Port of Cork. These facilities need to be considered in a wider review of boat based opportunities. The key point is that there is already infrastructure which with relatively little intervention appears to be "fit for purpose" to be used and developed over time. This is not therefore the core cost and allows finance to be spent elsewhere on ensuring key routes are effective.

Paths and Links

In the short term the importance of creating a safe pedestrian link from bridge and major tourist/public access driver towards the park and access to Spike Island at the Eastern end of Haulbowline has to be a major action point. It is at this "central southern" area of the island that interaction between cars and pedestrians is likely to be most significant since both are forced, by nature of the location of the graving dock and dockyard, to use the relatively narrow area of land between graving dock and channel to the south of Haulbowline Island.



Fig. 6.11 Diagram showing the main movement patterns on Haulbowline Island.



6.3 "Getting to Haulbowline"- Movement and linkages

Vehicular Access

Specific attention needs to be given to definition and design of key road gateways. Clearly design of the secure entrance to the Navy Base is most imperative. Additionally strong gateways either side of the bridge are required, to allow flexibility of vehicle movements, reduce conflicts with pedestrians/cyclists and create a strong identity/welcome to Haulbowline. As part of this future, detailed work on parking supply, location and access/egress points to it for all users will be needed. Our recommendation is that increasingly such parking is focused around gateways rather than allowed to be ad hoc or intrusive into the island. Work on parking stock will need to be undertaken closely with Spike Island and IMERC to ensure maximum flexibility but should be undertaken after the "baseline" Navy needs are fully understood (point a). Additionally clear and simple bus and coach access must be provided since these modes reduce reliance on the private car and are more efficient from a "space taken versus people moved" perspective.

Parking location, supply and control is a key part of this vehicular access strategy.

"On the Island" – Focus on Naval Use with a Shared North-South Axis

Navy Relationships with routes

The importance of the maintaining Naval Service operations cannot be overstressed, leading to a focus on developing a shared North-South Axis in a controlled an efficient manner. The key points in relation to this are the need to:

- Improve road gateways to the island (junctions at either end of the bridge) including turn-round areas for key users;
- Create better, more space-efficient yet flexible parking layouts and secure entrance to the Naval base from the southern end of the island;
- Improve "on island" pedestrian routes, in particular
 to reduce future conflict with vehicles and secure
 navy routes. This is most focused on the NorthSouth axis from ferry point facing Cobh to the
 northern (island end) of the bridge, but also relates
 to the proposed linkages to the radar tower and
 towards the east tip/Spike Island access point.

Bridges

It is unlikely that any new road bridge to access the island could be justified under any circumstances unless a replacement one were needed. One was enough for the operational side of both a steelworks and Navy Base. The current investment in upgrading is already underway to allow East Tip remediation and a significant investment in the infrastructure. If more traffic were being accommodated it would be likely to tip a threshold of around 600-700 vehicle trips in the peak hour that we anticipate could be accommodated by the current bridge as a maximum. If that were the case then significant erosion of the landscape and nature of the island would occur with the need to accommodate parking related to such flows.

New pedestrian and cycle bridges from IMERC to Haulbowline and Haulbowline to Spike Island are discussed earlier and should be explored to act not just as increased access to and between the islands, or as part of wider circuits but also as part of the reason or experience in visiting them. They could be the equivalent of a Cork Pier – bringing people close to water in a safe and controlled manner.

Paths and Links

Over time the need to increase access to areas currently outside acceptable boundaries may be more appropriate. These include the following potential areas of action:

A link from the northern ferry hub (former ISPAT pier) towards the radar tower, opening up part of all of the northern perimeter facing Cobh;

Eventually a bridge link across the mouth of the dockyard, although this would require significant further reconfiguration and the need for such a bridge to be lifting in nature. This would create a stronger northern link to the park.



6.3 "Getting to Haulbowline"- Movement and linkages

Walking and Cycling, including inter-island bridges
Development of proposals for improved pedestrian
and cycle access from the "mainland" to the south
around IMERC onto Haulbowline Island needs to be
undertaken and costed. It is clear that there will be
increasing demand for such access both from a naval
service perspective as personnel use amenities and
from any wider public access. The current offer is
felt to be inadequate for future demand and safety,
particularly with a key tourist attraction and IMERC
each side of the bridge. Increasing separation between

the Navy logistics and personnel access needs and

more leisure focused needs is critical.

Similarly a bridge (potentially designed with "features" to allow boat activity to be undertaken) from Haulbowline to Spike Island in the broad area of the current causeway could help - if managed effectively with parking and access to Haulbowline - create a far greater "linked experience", but at the same time be an effective "demand management/smarter travel" tool, reducing reliance on car access.

Provision of a network of separated walking and cycling routes has already commenced in the area, with the Carrigaline to Crosshaven route being an excellent example of a high quality segregated facility. Bridges need to be part of such circuits – for example

the route linked by ferry to Spike island from where a circuit can be completed on foot or cycle can help create both "healthy active" opportunities and sustain new movement circuits. While there is the need to provide better pedestrian and cycle access to Haulbowline, there is even further justification of this when considered in relation to the need to enhance linkages by such modes to Spike Island and therefore the potential of a further bridge from Haulbowline to there. The point about increasing non-car bridge capacity between the islands is that it helps reduce the impact of tourism access on navy operations by reducing tourism reliance on the private car.

Providing increased bridges between islands and to Haulbowline can help develop a sustainable tourist trail where visitors can be effectively managed away from Naval interests. It can help increase overall footfall and capacity, create positive symbolism and encourage interaction with wildlife and landscape, while at the same time forming and important movement and connectivity function. There are numerous examples of bridges in both urban and rural environments creating more than just functional movement capability but becoming "part of the offer" of place. These range from the Peace Bridge in Derry through to relatively low key experiential bridges in National Parks, completing wider trails.



Fig. 6.13 Cork Harbour Cycle loop.



Fig. 6.14 Millennium Bridge, University of Limerick.

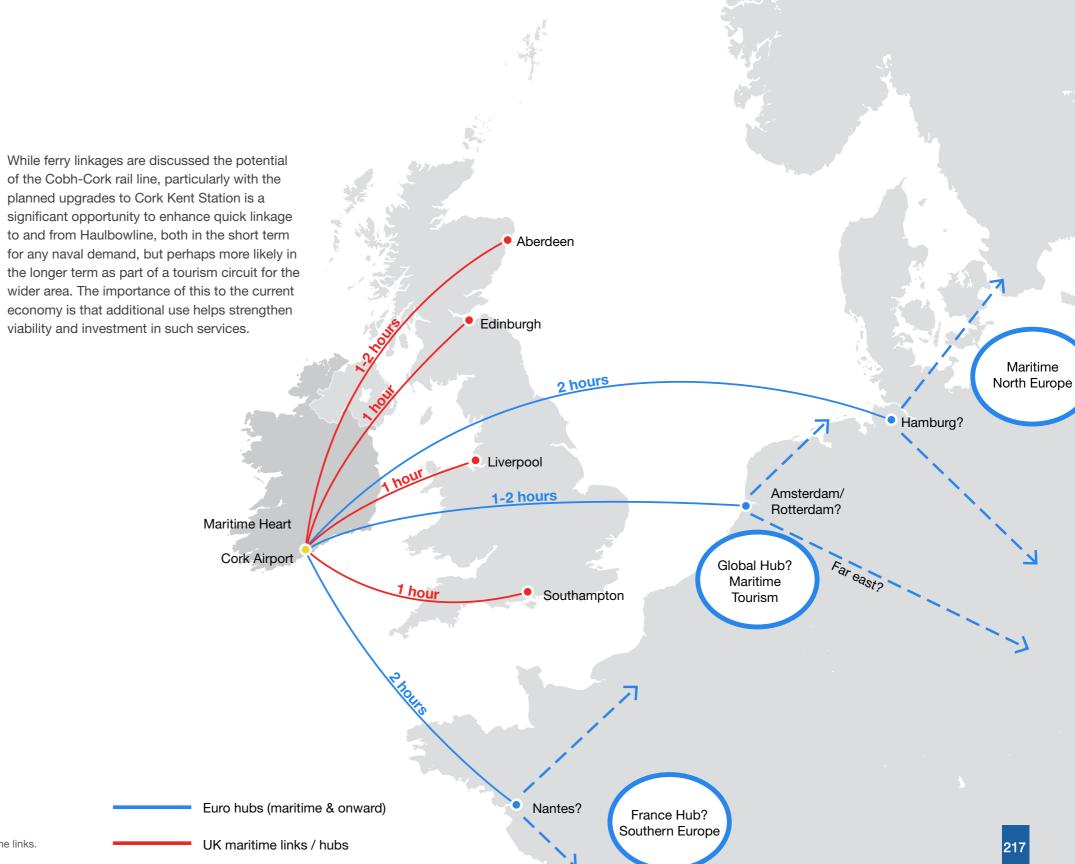
Maritime Access Routes

Development of detailed plans for ferry services, including incorporation of economically sustainable regular "scheduled" services throughout the year from Cobh towards Haulbowline and IMERC needs to be undertaken in some detail, looking at options for routes, vessels and frequencies. This needs to be undertaken involving a wider transport and movement grouping encompassing the future interests of IMERC, NMCI, Haulbowline (including Navy), Spike Island and Cobh Town; rather than led by one of these entities. Only in this way will economies of scale be achieved in a sustainable manner. The detail of such services needs to work closely with development of several jetties/ landing points, in particular at North Haulbowline, South Haulbowline and IMERC to give flexibility in routes and circuits. There are commitments made already that require such "cross-harbour" services but which are significantly less economically viable if provided in an uncoordinated manner.

Thinking and Linking with the "bigger picture". Circuits and Cumulative Route Use

Evidence shows that there is increasing demand to be created for travel around Haulbowline by the range of developments planned, and in the case of NMCI, already implemented. Some examples include:

- The international dimension that IMERC, expansion of the Port of Cork and the Cruise Market bring mean that greater inter-relationship with Cork Airport could be created, including working with them to develop routes to relevant destinations. For example linkage to places such as Nantes, Aberdeen or Hamburg could encourage both tourism but increased business use of the facilities being developed by the European maritime market.
- Bus services are relatively low key at present but increasing demand from the cumulative daily and tourism use could help both upgrade facilities and services for the benefit of all. Bringing buses onto Haulbowline will be dependent on matters such as access rights over private roads, bridges and importantly the right amenities being available for turn-round on the island. Similarly an earlier step in development of better linkages is typically increased and better taxi provision, something that cumulative working between organisations can help influence quality and provision of in the future.



BDP.

HAULBOWLINE Masterplan

6.3 "Getting to Haulbowline"- Movement and linkages

"The increasing importance of neighbours"

IMERC, Beaufort and NMCI are significant developments. These are predicted to utilise much of the capacity of the roads approaching Haulbowline from the south. This fact and the need to protect prime Navy access means that Tourism fits well since it is likely to be complementary rather than conflicting with these more typically "weekday peak" uses. The potential of mixing these activities with tourism is that it gives more regular activity and therefore allows transport amenities to be used more effectively. One example is in supply of ferry services, where Navy and IMERC related demands towards Cobh are potentially strong, but where tourism can fill "void" periods of potential underuse between peak demands. A very good example of this is the Mersey Ferries in Liverpool, where peak commuter services have been retained, partly because of the success of off-peak tourist routes, which allow economies in terms of crew utilisation, boat maintenance and revenue.

We highlight the potential to use IMERC parking for access to Spike Island and overflow for Haulbowline Island at peak tourist weekends as an example of how the overall "place" can work with good relationships between the individual local entities. Great care has to be taken to ensure that other

demands do not conflict with Navy operations. For example a major event at Spike Island must not be allowed to utilise all the movement capacity of Haulbowline. Flexibility of routes and operations to and from such locations is therefore needed. The types of amenities to be provided on Haulbowline need to be complementary in terms of access and movement hours to those of the Navy. In relation to the question of whether a bridge should be supplied to Spike Island we highlight the need to retain flexibility for that site, something that both boats and a bridge together can do. There is however less point in supplying a bridge to Spike from Haulbowline if there is not one to Haulbowline from IMERC and ongoing connections since vehicular demand is not ultimately reduced.

Finally we re-emphasise the key point that future access to and from Haulbowline cannot be seen in isolation, even with the Navy as priority. Increased interaction and transport planning across the range of uses in the immediate "cluster" needs to occur to ensure future ongoing viability and to maximise the significant economies of scale and "crossfertilisation" of activity within the emerging cluster. It can also help ensure future ongoing prioritisation, operation and efficiency for Naval purposes with Haulbowline Island at the centre of Cork Harbour.



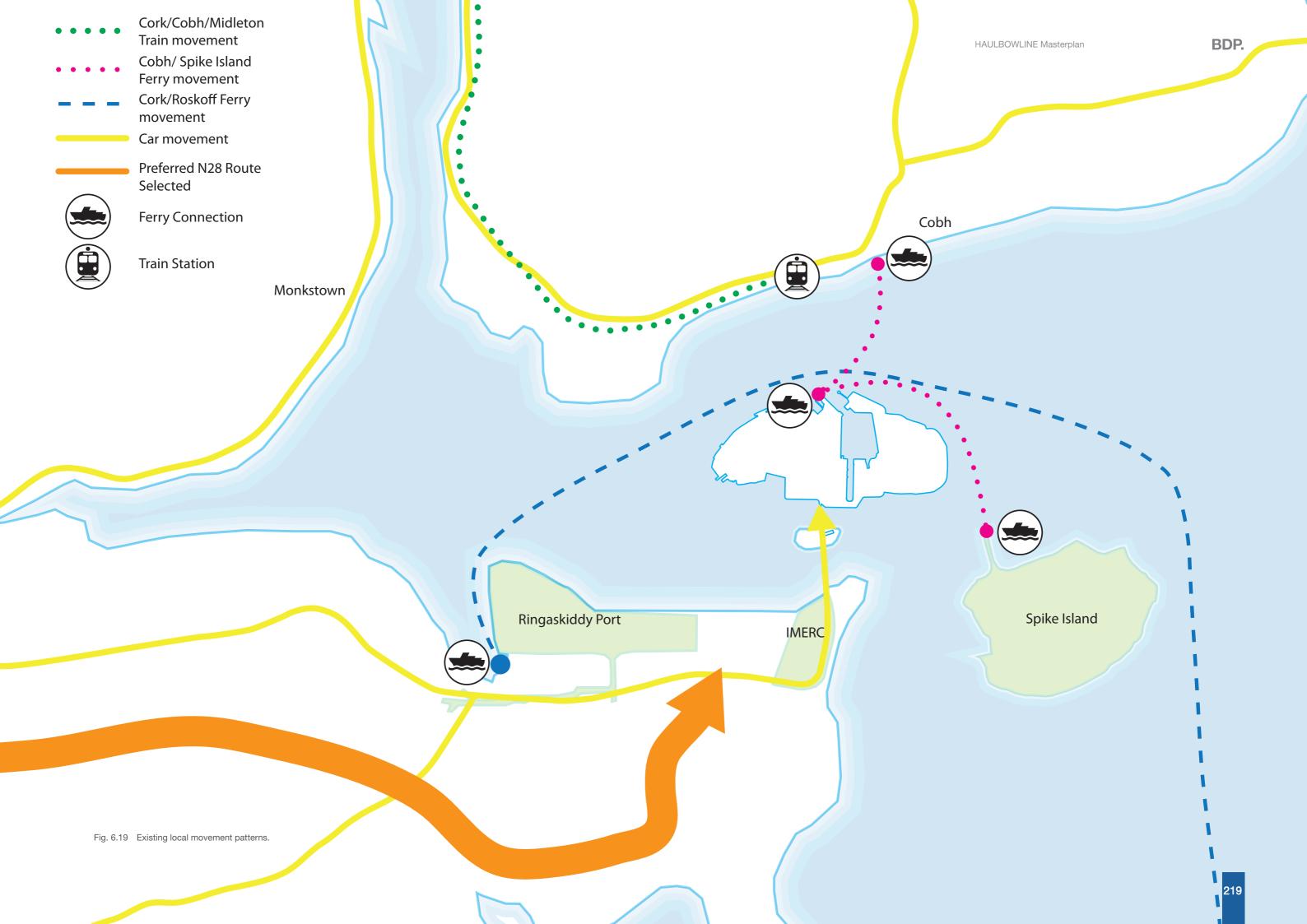
Fig. 6.16 View to the NMCI from the east, with the proposed IMERC Masterplan location in



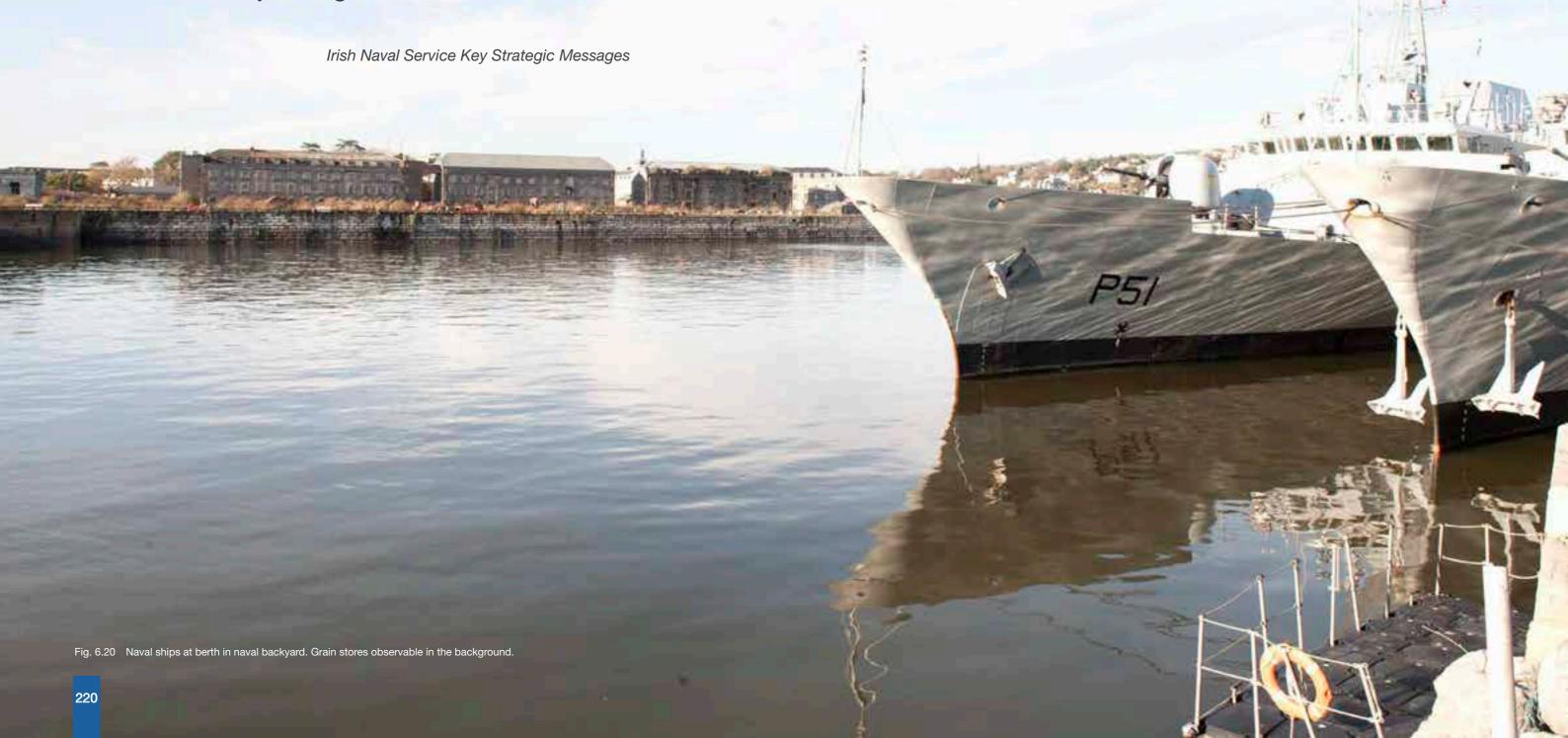
Fig. 6.17 View of Cobh from the water.



Fig. 6.18 Queen Victoria in Cobh.



The Fisheries Monitoring Centre (FMC) at Naval Base Haulbowline, is the designated National centre with responsibility for monitoring all fishing activity (a projected €1 billion Irish industry) within the Irish Exclusive Fishery Limits and all Irish fishing vessels operating around the world.



The next steps sets out the ten issues which are required to be addressed to progress and inform the Masterplan. Throughout the process it has become evident that a number of key additional studies are required based on detailed survey and feasibility studies.



7.0 NEXT STEPS

The Masterplanning process has identified a number of key areas that will require subsequent studies to be undertaken. This will ensure the structured implementation of the proposals. The Masterplan is predominantly a land use plan which identifies potential opportunities and alternatives for future development. It is not intended to be prescriptive.

There is an absence of baseline information, and an island depository of integrated information is required for future planning.

The ten headline recommendations and studies that will contribute to this repository of information are set out here.

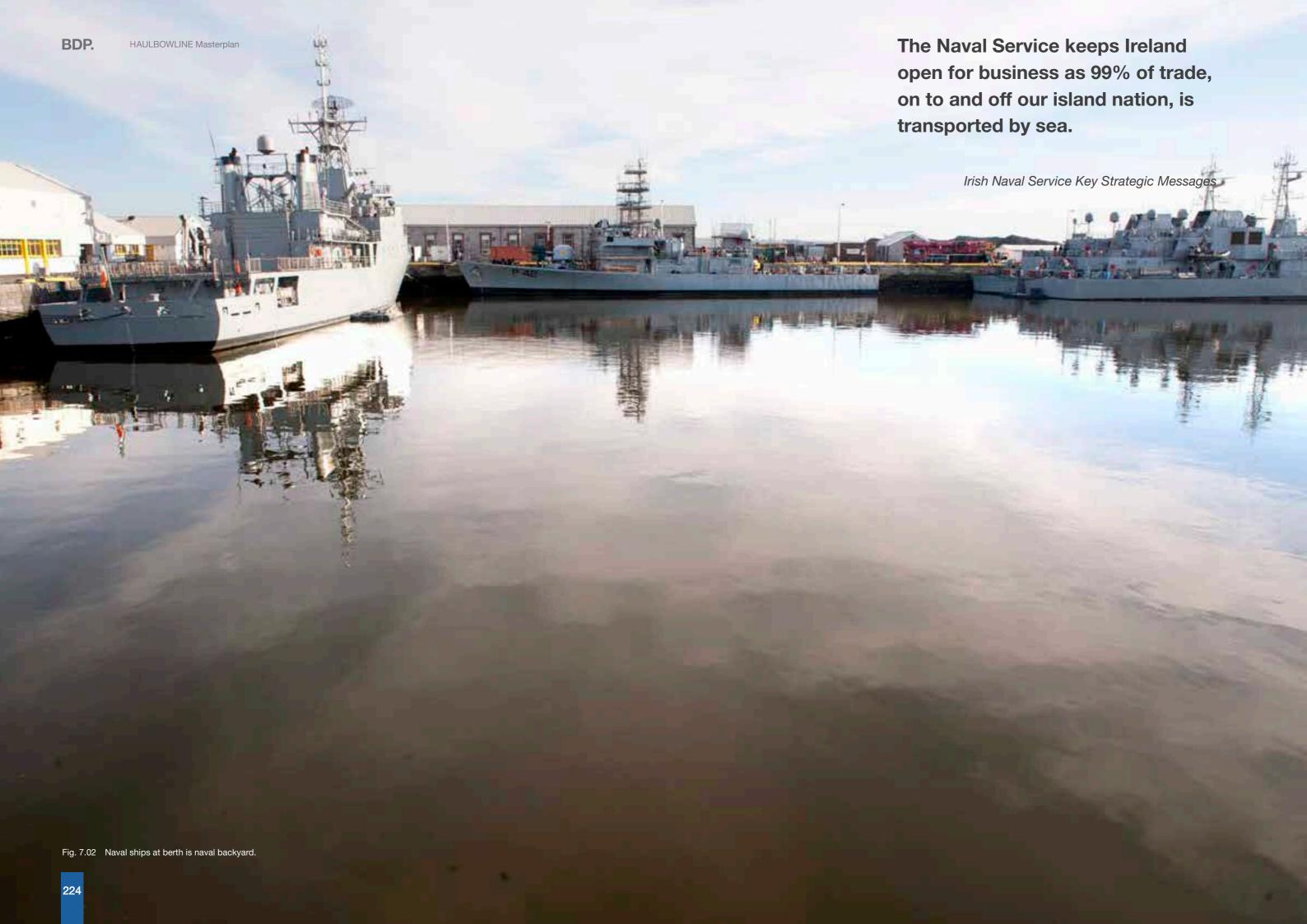
- 1. Develop a Naval operational service security plan based upon the proposed access through the island for visitors.
- 2. A Conservation Plan for the whole island is required to define a future framework for appropriate development.
- A Flood Risk Analysis is required for the island, based on projected sea level changes and records.
- 4. A Mobility Plan for the Haulbowline Island Naval Base should be implemented which reflects current uses and projected additional modes of travel.
- 5. An analysis of the island's existing infrastructural capacity should be prepared, to provide an integrated approach to future capacity planning based on a holistic approach.

- 6. An integrated Sustainability Plan should be prepared that ensures best practice across the island from all stakeholders.
- 7. A detailed implementation regeneration plan should be prepared based on the phased refurbishment of the central Store Houses.
- 8. An environmental landscaping and public realm strategy should be implemented across the island.
- An Economic Cost Benefit analysis of the Masterplan proposals should be developed as part of a business case for the island's regeneration.
- 10. A Masterplan Steering Group should be established as part of a wider Cork Harbour initiative to ensure that the proposals integrate with the wider harbour ambitions.

Summary

There are a number of opportunities for Haulbowline to be restored to its former glory, through sensitive planning, partnership and considered placemaking moves.

-The naval base is an operational base. The coexistence of other uses has happened in other comparable international naval bases. It is hoped that the additional uses would mutually reinforce and complement the activities of the Naval Service through opportunities for recruitment, research, "spin off" activities, and partnerships in the spirit of "blue growth" for the entire maritime cluster.



HAULBOWLINE MASTERPLAN BDP.

The supporting documentation sets out some pertinent information for the Masterplan that should help to complete the broader stakeholder picture. Whilst only a snapshot of some of the issues raised it does highlight how the Masterplan evolved. It includes an outline schedule of accommodation which should be used only as indicative as survey information for the entire island was not present at the time of the study. It does provide a useful starting point for any future studies.

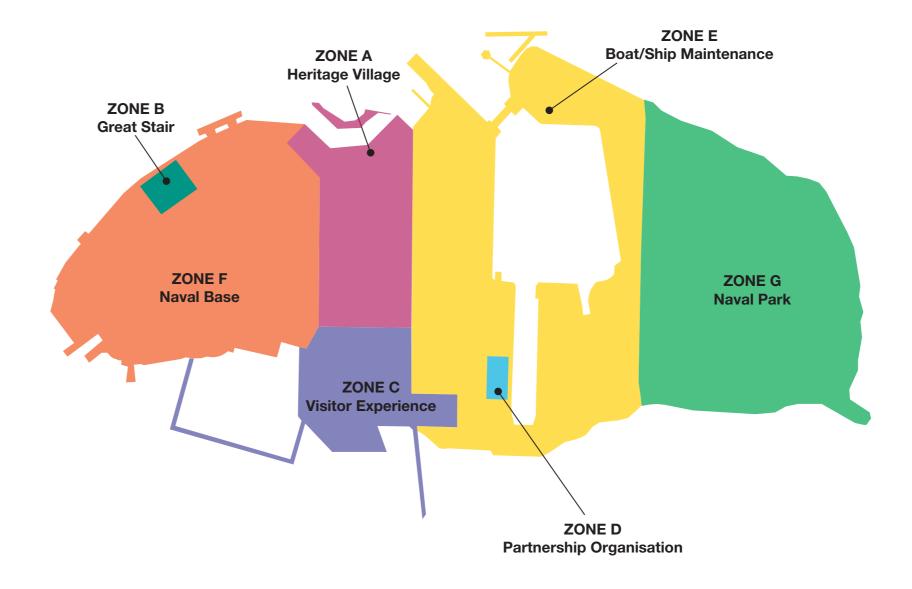


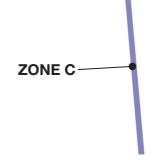
SUPPORTING DOCUMENTATION

8.0 SUPPORTING DOCUMENTATION

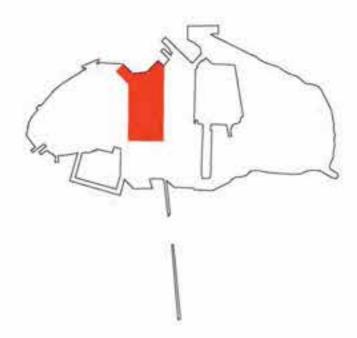
8.1 Proposed Area Schedule

The following pages sets out the area interrogation for Haulbowline Island. The areas are based on existing information made available to the team, and assumptions have been made in cases, where information has been missing. Any future studies will require detailed supporting surveys to validate the area schedule.





ZONE A - Heritage Village



Store	Houses	(Existing)	ř

Name	Reference F	oors Condition	Gross External Floor Area per floor (m²)	Gross External Floor Area (m²) of Building	Notes
Store House	1	4 Refurbished	565	2014	
Store House	2	4 Refurbished	THE SA	2014	
Store House	3	4 Refurbished		2014	
Store House	4	4 Refurbished		2014	
Store House	5	4 Refurbished		2014	
Store House	6	4 Refurbished		2014	
		SUB	TOTAL STOREHOUSES	12084	

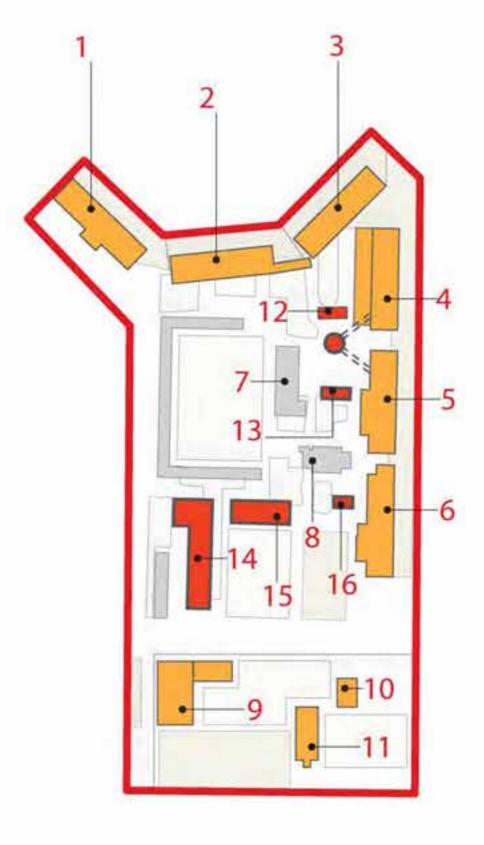
Sundry Buildings (Existing)

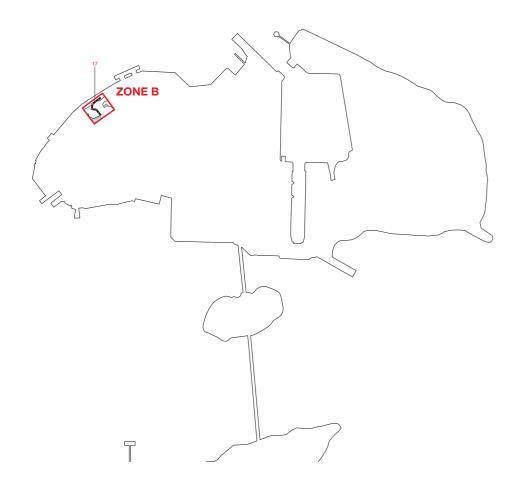
Name	Ref	Floors Condition		Gross External Floor Area (m²) of Building	Notes
35.80	7	1 Existing	333	333	
Hospital	8	1 Existing	230	230	
ISPAT houses	9	1 Existing	583	583	
	10	2 Refurbished	126	252	
	11	2 Refurbished	215	430	
	- A		SUBTOTAL SUNDRY	1828	

New Build

Name	Ref	Floors	Condition		Gross External Floor Area (m²) of Building	Notes
Access/core	12	- 4	New	64	256	
Access/core	13	4	New	64	256	
Access/core	14	4	New	64	256	
	15	4	New	568	2272	
	16	- 1	New	260	260	
				SUBTOTAL NEW	3300	

TOTAL FOR ZONE A 17212



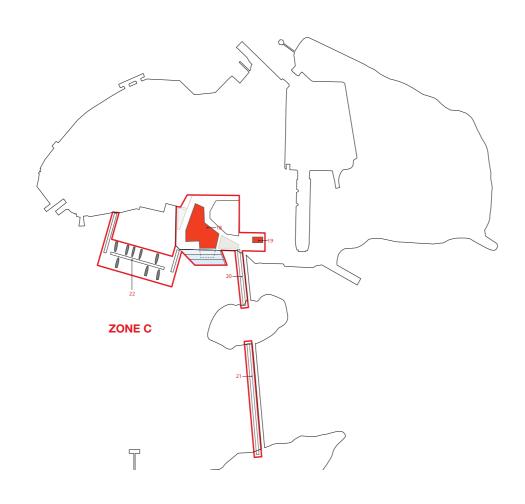


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Name	Ref	Floors	Condition	Gross External Floor Area per floor (m²)	Gross External Floor Area (m²) of Building	Notes
Great Stair	17	N/A	New		289	
				SUBTOTAL NEW	289	

TOTAL FOR ZONE B 289

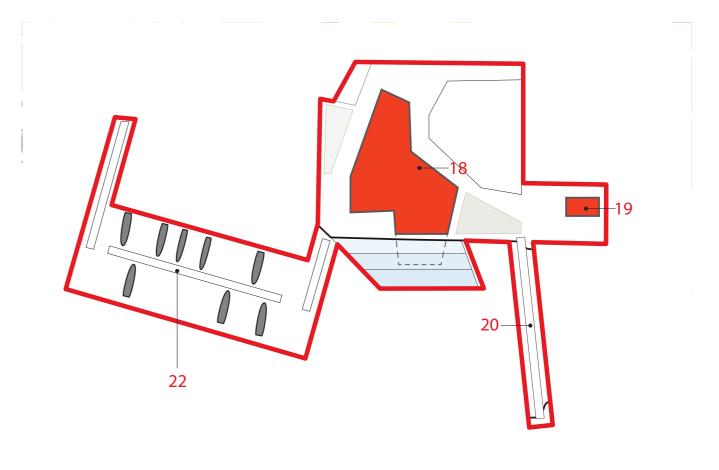




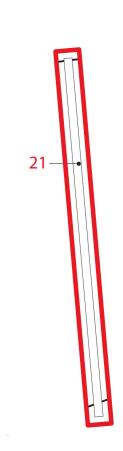
Name	Ref	Floo	ors Condition	Gro	ss External Floor	Gross External Floor	Notes
		-		Area	a per floor (m²)	Area (m²) of Building	
Visitor Building		18	2.5	New	5885	14713	
Control/ Welcome Building		19	2	New	350	700	
		**	-36		SUBTOTAL NEW	15413	

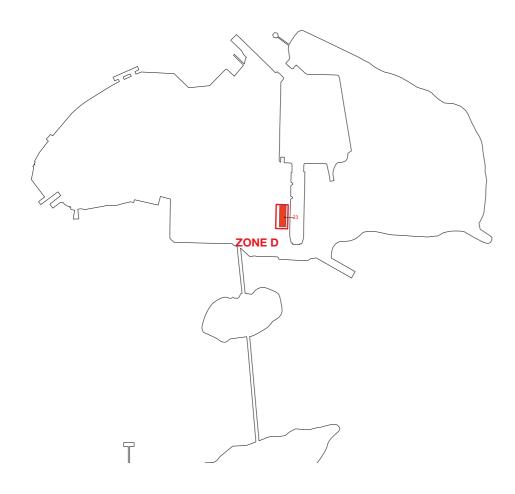
External New Build						ys
Name	Reference	Floors	Condition	Gross External Floor	Gross External Floor	Notes
				Area per floor (m²)	Area (m ²) of Building	
Bridge: Rocky Island -						dimensions:
Haulbowline	20	1	Ne	w	753	150m x 5m
Bridge: Mainland - Rocky						dimensions:
Island	21	1	Ne	W	1422	284 x 5m
			100000			dimensions:
Pontoon	22		Ne	w	1563	260 x 6m
×	1.22	2.1	SUBT	OTAL NEW EXTERNAL	2175	

2	
TOTAL FOR ZONE C	17588



ZONE C

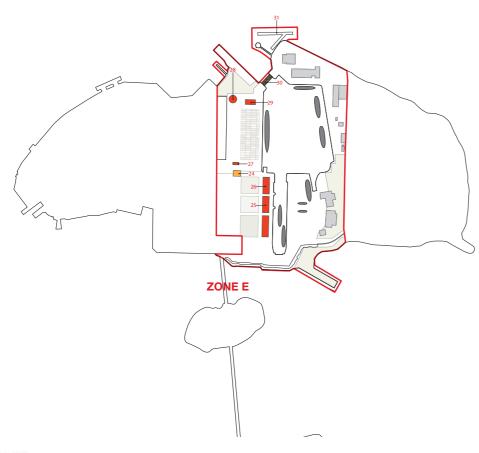




Vew	Build
ACM	Dunu -

Name	Ref	Floors Condition	n	Gross External Floor Area per floor (m²)	Gross External Floor Area (m²) of Building	Notes
Sailing Base	23	1.5	N/A	713	1070	





F	Refurbished	Buildings
_		

Name	Ref	FI	oors Condition	Gross External Floor	Gross External Floor	Notes
				Area per floor (m²)	Area (m²) of Building	
Security Building		24	1 Refurbished		38	
				SUBTOTAL	. 38	
Consequential						
Stair/Core/Access (10%)					3.8	
		S	UBTOTAL SUNDR	Y	42	

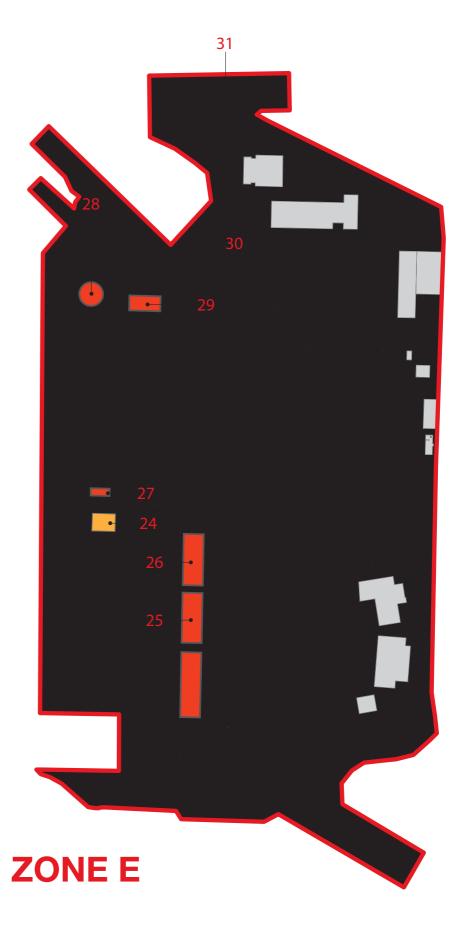
New Build

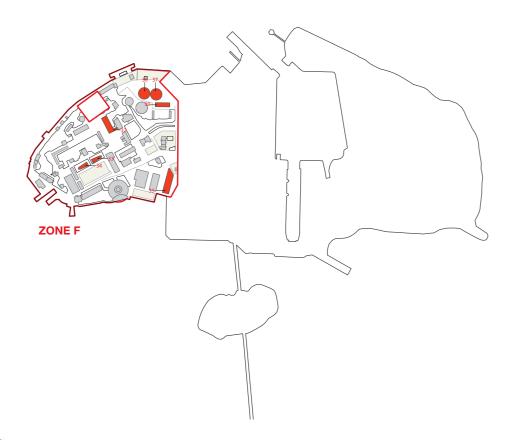
Name	Ref	Floors	Condition	Gross External Floor	Gross External Floor	Notes
				Area per floor (m²)	Area (m²) of Building	
Boat maintenance building	25	1	Ne	W	1070	
Boat maintenance building	26	1	Ne	w	1070	
	27	1	Ne	W	133	
	28	5	Ne ^o	w	1420	
	29	3	Ne	w	900	
		S	UBTOTAL NEV	V	4593	

New External

Dock Bridge	30	1	New	174	
Pontoon	31	1	New	487	dimensions:
	661				

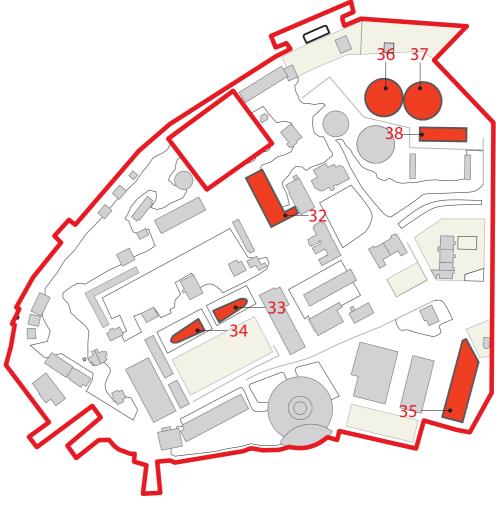
TOTAL FOR ZONE E 5296



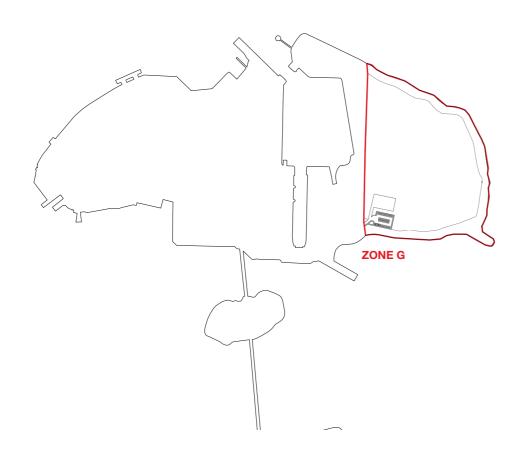


New	Rui	Ide
I VIEW	DIII	1015

Name	Ref	Floors	Condition	Gross External Floor Area per floor (m²)	Gross External Floor Area (m²) of Building	Notes
Naval teaching building	32	2	New		1274	
Covered shed	33	1	New		182	
Covered shed	34	1	New		182	
	35	3	New		2667	
	36	3	New		1932	
	37	3	New		1932	
	38	1	New		1065	
	•		SUBTOTAL		9234	



ZONE F

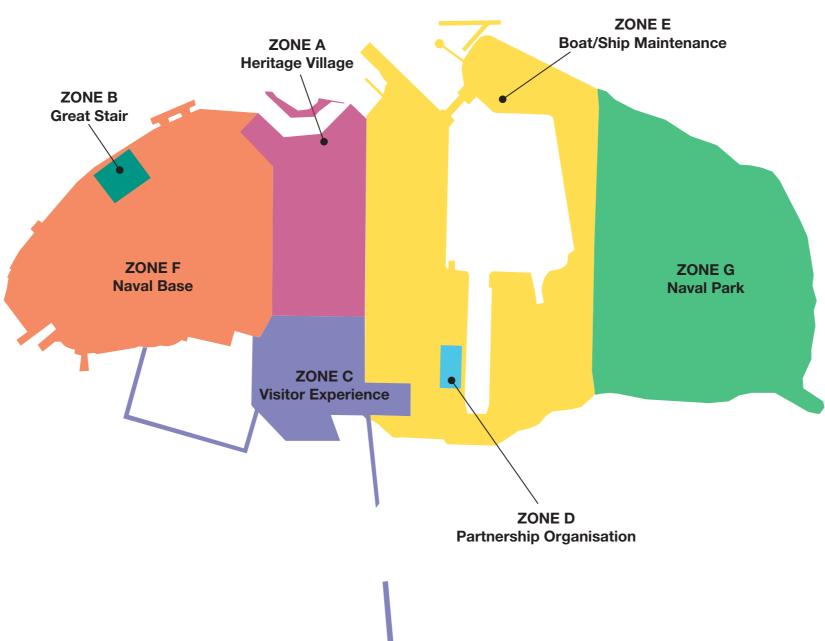


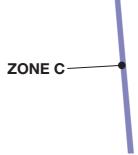
New Builds Name	Ref	Floors	Condition	Gross External Floor Area per floor (m²)	Gross External Floor Area (m²) of Building	Notes
	-	*	SUBTOTA	Ľ	0	



TOTAL FOR ZONE G

0





8.0 SUPPORTING DOCUMENTATION

8.2 Proposed Area Schedule: Totals

HAULBOWLINE ISLAND - AREA ANALYSIS

TOTALS

BUILDING TOTALS

		Area (m²)
Zone A		
Refurbishment		12084
New Build		1828
Existing properties		863
	SUB TOTAL	14775
Zone B		
Refurbishment		0
New Build		289
Existing properties		234
	SUB TOTAL	523
Zone C		
Refurbishment		0
New Build		2175
Existing properties		0
	SUB TOTAL	2175
Zone D		
Refurbishment		0
New Build		1070
Existing properties		0
	SUB TOTAL	1070
Zone E		
Refurbishment		42
New Build		5254
Existing properties		6890
	SUB TOTAL	12186
Zone F		
Refurbishment		0
New Build		9234
Existing properties		38809
	SUB TOTAL	48043
Zone G		
Refurbishment		0
New Build		0
Existing properties		0
	SUB TOTAL	0
TOTAL REFURBISHED		12126
TOTAL NEW BUILD		19850
TOTAL EXISTING BUILD		46796
TOTAL DEVELOPABLE AREA		58922

INFRASTRUCTURE

	Area (m²)
Zone A	
Area Outside Building	14392
Zone B	
Area Outside Building	1963
Zone C	
Area Outside Building	27064
Zone D	
Area Outside Building	802
Zone E	
Area Outside Building	103915
Zone F	
Area Outside Building	49095
Zone G	
Area Outside Building	102100
TOTAL AREA OUTSIDE BUILDING	299331

8.0 SUPPORTING DOCUMENTATION

8.3 Planning Policy

Appropriate Assessment Screening

Appropriate Assessment (AA) relates to the protection of habitats and species within European environmental sites, known as Natura 2000 sites.

Natura 2000 sites are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/EEC). Relevant conservation designations in the immediate surrounding area include Cork Harbour SPA and Monkstown SPA.

The first step in AA is a Screening exercise to determine on the basis of a preliminary assessment and objective criteria if the plan, alone or in combination with other plans, could have a significant effect on a Natura 2000 site in view of the sites conservation objectives.

Openfield Ecological Consultants, in consultation with JSA and the design team, has prepared the AA Screening. The Screening has concluded that the Masterplan is not likely to have a significant adverse impact on Natura 2000 sites.

Strategic Environmental Assessment Screening

SEA is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme before a decision is made to adopt the plan or programme.

The Planning and Development (Strategic Environmental Assessment) Regulations 2004 provide that SEA is mandatory for certain land use plans, such as statutory Development Plans and Local Area Plans. An SEA is not mandatory for the Haulbowline Masterplan.

Notwithstanding the above, the Haulbowline Masterplan sets out a land use strategy for the island, and whilst it is a non-statutory plan, the Masterplan or key elements of the Masterplan may in the future form part of the statutory planning policy framework. It is therefore considered appropriate to undertake a screening process to determine whether SEA should be undertaken.

The screening process is based upon consideration of standard criteria to determine whether the plan is likely to have "significant environmental effects". The result of the screening process will be detailed in a Screening Statement.

The Screening exercise concluded that the Masterplan is not likely to give rise to significant adverse environmental impacts.

Planning Application Procedure

It should be noted that under Section 181 of the Planning and Development Act 2000, as amended, special provisions apply to development by State Authorities, such as the Department of Defence / Irish Naval Service. Section 181 provides that the provisions of the Planning Act shall not apply to certain developments. Part 9 of the Planning and Development Regulations 2001 states that barracks or other buildings, or other premises or installations (including airfields and naval yards), or other structures or facilities, used for the purposes of or in connection with the operations of the Defence Forces, will come within these special provisions. Extensions to such premises or installations will also come within the special provisions. These provisions also apply where any such premises or installation is a protected structure.



Fig. 8.03 Wild Birds on Haulbowline.

The provisions which apply to the specified State Authority developments require the State Authority to publish notice of the proposed development, including plans or particulars providing an outline of the proposed development. Submissions can be made on the proposals. A State Authority then takes into account any submissions received and decides whether or not to grant approval for the development. The development is approved by the State Authority.

Having regard to the above, any proposal by the Naval Service for a development directly connected with the Naval Service operations is likely to fall under these provisions. Any other proposals, for example tourism development proposals, not directly connected with the operations of the Naval Service, will come under the normal planning application procedures.

It is further noted that developments on the foreshore require planning permission under Part XV of the Planning and Development Act 2000, as amended, except where they are exempted development. The "foreshore" in this context is defined as 'the bed and shore below the line of high water, of ordinary or

medium tides, of the sea and every tidal river and tidal estuary and every channel, creek and bay of the sea of any such river or estuary'.

The Planning and Development Regulations 2001, as amended, provide that the following will be exempted development, subject to a number of restrictions, including the following:

Reclamation of an area, not exceeding 100 square metres, of foreshore for the purpose of protecting a pier, slipway or other structure on the foreshore. (Class 54).

The carrying out of development below the high water mark pursuant to and in accordance with a licence under the Fisheries (Amendment) Act, 1997 (No. 23 of 1997) (including a licence deemed to be granted under that Act or the Fisheries and Foreshore (Amendment) Act, 1998 (No. 54 of 1998)) (Class 53).

A Foreshore Licence will also be required under the Foreshore Act 1933, as amended.

8.4 Access and Movement Strategy

Movement - Drivers

This short section focuses on the drivers for change that influence the form of the Masterplan demonstrated:

8.4.1 Naval Use

The key features need to be:

- There needs to be a focus on retaining and upgrading safe logistical access to key points on Haulbowline. These are most notably the dock walls of the dockyard (which will be related to both east and west walls in future). The key point in relation to this is that routes need to be direct and simple and get large vehicles in particular as close to the point they are servicing effectively and be able to turn or move safely within the curtilage provided. This is incorporated, with the west dockyard wall including substantial flexible space on the former ISPAT Site. The importance of this is that it allows more difficult manoeuvres to be "internalised" within the dockyard area, away from public interaction;
- Naval Car Parking needs to be segregated and is likely to be in the region of around 400 dedicated spaces, possibly upwards (depending on analysis). It needs to be efficiently laid out and accessed to avoid degradation of the "estate" by over-intrusion into the Naval base in particular. The parking can at its southern end be within secure areas, but these can be developed to be capable of expansion or contraction to allow flexibility for peak naval or public demands, including alternative logistics use (for example to access the graving dock by large vehicles).

8.4.2 Car Access and Parking – Public

We suggest around 150 spaces serving East Tip and a relatively low key Spike Island access point at the south east of the island. We anticipate around 250 spaces (depending on scale of facility) related to key attraction in south centre of island. This figure needs to take account of access capacity limitations of the bridge and physical space available. For more peaked days, use of IMERC parking, or the flexible space normally within the Naval boundary needs to be a key consideration rather than simply supplying more dedicated parking.

Clearly the specifics of attraction and land use will dictate demand for parking but it has to be supplied within a wider aim of creating sustainable circuits and linkages.

All on-island parking is therefore to be gradually moved towards southern gateway area, reducing cross-island traffic and allowing a strong "arrival" and "departure" focus, but allowing re-emphasising of internal core pedestrian routes.

The provision of an additional bridge for pedestrians and cyclists to ensure safe passage away from the busier road bridge crossing is an important part of the plan. This will help in creating additional capacity for peak times in particular and promotes sustainable access. Clearly relevant cycle parking needs to be provided at key amenities, both naval and public as part of this "car reduction" aim.

8.4.3 Bus and Coach Access and Parking

Bus and Coach can for large groups, whether they relate to special Navy activities or day-to-day use provide space efficient access modes. The ability to supply bus services onto Haulbowline itself becomes more possible in certain scenarios depending on the nature of demand and linkage circuits created, however the ability to access and turn a bus needs to be incorporated as part of the "gateway" environment. Use the economies of scale to provide increased service bus regularity to Cork and establish local linkages towards Carrigaline and Airport area are important. These services need to be promote through "joined up" linkages – e.g. sales and promotion at the Airport of any service towards this locality.

Similarly coach parking can be provided in a relatively informal manner to be able to respond to peaks and troughs in demand that will occur in relation to major events and seasonality. An advantage of designing wider car parking in a flexible manner is that it can be developed to be able to accommodate not just the arrival and departure, but also the layover during visit time of coaches. Coaches by nature of their scheduling need to be placed central to the island, this being logical due to the arrival point from the bridge.

8.4.4 Tourism Circuits

Boat Linkages are an important potential part of access to Haulbowline and the island will increasingly need to be set in the context of the wider Cork Harbour area. There is flexibility in existing infrastructure to be able to cope with different options and the nature of the growth of routes means that infrastructure can be developed with demand.

Importantly the North-south route from Cobh to IMERC should be seen as a corridor, whether entirely by boat, or whether part by boat to Haulbowline then by onward walk, cycle bus or other connection. The pedestrian route across Haulbowline is key to this.

While inter-linkages with the Naval Service boat may be logistically more difficult due to factors such as insurances, ability to use the boat at short notice for Naval priority issues or security matters there could be both economies of scale and "public" interaction benefits to be gained for the Navy by opening up their service. This needs to be part of the wider consideration.

There are numerous combinations of potential linkage circuits to and from Haulbowline. What is clear is that these are currently under-developed both in relation to Haulbowline but also in the wider area. The rail, boat, cycle or bus kind of combinations that may be on offer could provide a significant experience using infrastructure currently primarily supplied for other uses, with the main missing link being the water linkage and the marketing/ticketing side, that "makes it happen". While this is not a core Naval concern there could once again be benefits in working with wider circuits for both staff accessibility and leisure purposes.

Linkage to Spike is a significant opportunity that needs to be carefully choreographed with Haulbowline and IMERC to cope with some of the projected but very peaked demands. Care has to be taken not to over-supply amenity such as Haulbowline based parking, particularly at the expense of Naval operations, but moves such as linked bridges can help create bigger and more viable sustainable circuits, once again capable of attracting other types of events such as fun runs or nature days, that give the island presence and increased public value.

Utilising mutually beneficial assets better should be a shared goal. Much of the core infrastructure already exists in the wider area and on the island, but is either under-utilised or under recognised/supplied. Perhaps the best example is the Cork-Cobh railway which has potential to offer far greater access to the area by having better water-borne linkages or further joint marketing.

8.0 SUPPORTING DOCUMENTATION

8.4 Access and Movement Strategy

8.4.5 Ferry Routes

The options that can be considered for ferry routes are discussed elsewhere in the Masterplan. There are a number of considerations to take account of for ferry movements around the island:

- Road Bridge. The clearance between the soffit of the bridge and the water will generally be too small for ferry access;
- There are draught limitations on the southwest of the island at certain states of the tide. This may initially restrict ferry access but which, if demand warranted it, could be overcome by dredging;
- The currents around the south of the island could require a larger ferry than demand may warrant;
- There is access to the mainland in the vicinity of the College and IMERC where there is an existing jetty that may be a possible calling point for ferries;
- Access to the southeast of the island will also have some tidal restraints and current velocities that need to be overcome;
- An alternative landing point could be Paddy's
 Point where there is the possibility of car parking.
 If a bridge was constructed from Spike Island to
 Haulbowline then, without the bridge being unduly
 high it would remove this option.



Fig. 8.04 Cobh island ferry.

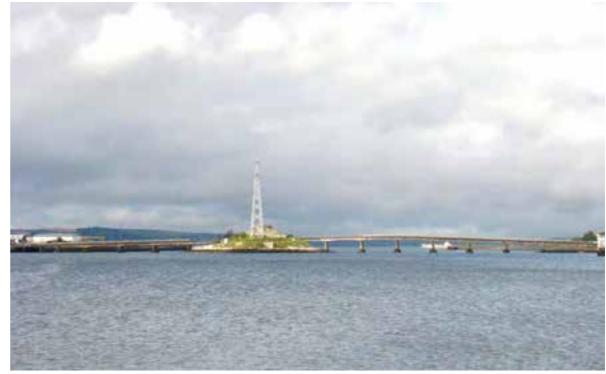


Fig. 8.05 Bridge to Haulbowline Island.

8.4.6 Sustainable Modes

Cork Harbour is a fantastic environment. Haulbowline, particularly in the days of ISPAT, has been seen as one of the less environmentally appealing locations. While the East Tip remediation can supply a changed environment, other factors such as the introduction of cycle routes/hire, electric cars, or better pedestrian routes can help re-enforce this change in nature at a very local level.

Where public are permitted within the island itself the aim should be to provide clear passage with limited parking or vehicular movement interaction. Where not possible (around south side of island) key design of pedestrian crossing points is key.

The overall aim of creating "safe" recognised circuits to both guide/lead pedestrians but also to contain them to desirable locations is a key driver.

FERRY BASED OPPORTUNITIES

Routes	Advantages	Issues
A) Cobh - Haulbowline North.	Direct, Quick, Simple, Efficient, Potential to combine with current Navy use of this route.	Only of use if tourism on north side of Haulbowline. Difficult to link with Spike. Requires onward mode (foot/bus) from Haulbowline towards IMERC.
B) Cobh - Haulbowline South East - Spike - Paddy's Point.	Creates multiple links and flexible. Potentially more economic use of boat when lower point to point demand. Potentially tourist trip in itself (hop on hop off). Harder to serve Haulbowline North.	More indirect for many users. Less attractive for Navy "combination". Requires landing capability at Haulbowline South and Paddy's Point.
C) Cobh - Haulbowline South East and Spike - Haulbowline South East (both with potential for extension to Paddy's Point).	Creates connectivity but retains directness for "through" user. Provides flexibility. Supply on each route can vary with supply rather than "one size fits all" route. Focuses on Haulbowline South and allows facilities to be viable.	Doesn't serve Haulbowline North. Requires two vessels and interchange for Cobh - Spike. No economy of scale with Navy use. More time on water (slower than land) for through users, but more direct.

Fig. 8.06 Ferry based opportunities.

Stakeholder Commentary - Presentations

8.0 SUPPORTING DOCUMENTATION

8.5 Stakeholder Commentary

A number of detailed Stakeholder sessions were held during the Masterplan process. The Stakeholder group for the study are as follows:

- Irish Naval Service
- Department of Defence
- Department of the Environment
- FPA
- Cork County Council
- Department of Agriculture, Food and the Marine
- IMERC partners including UCC and CIT/NMCI
- Fáilte Ireland
- Spike Island Development Committee
- Enterprise Ireland
- IDA Ireland
- Residents of Ringaskiddy and Cobh

The following matrix captures some of the key topics raised at the meetings and the Masterplanning response or mitigation proposed.

The topics are not exhaustive but the key issues raised have been wherever possible addressed in the document. Where the team have been unable to respond these topics have also been highlighted for completeness.

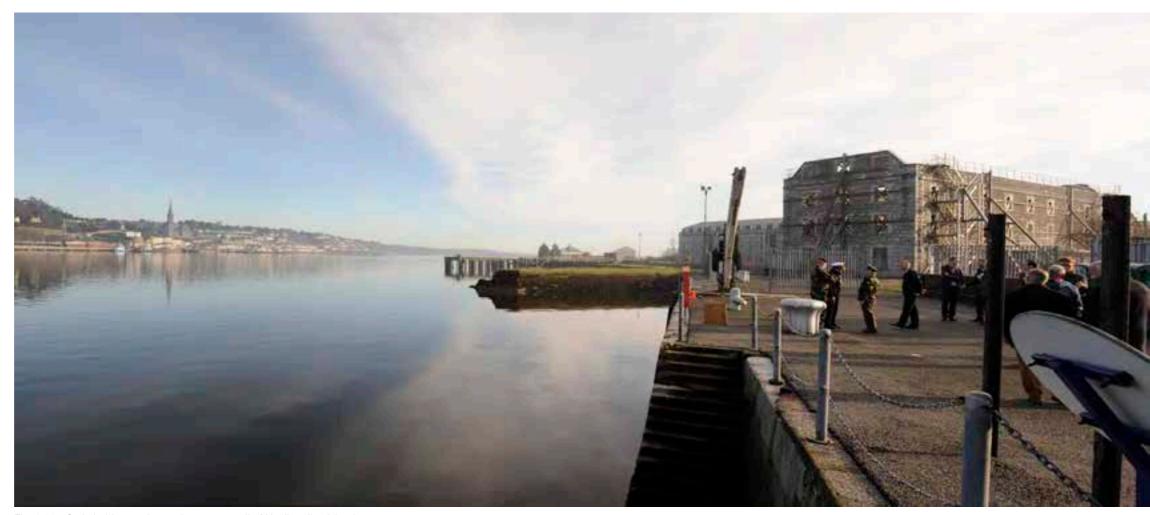


Fig. 8.08 Stakeholders at the northern quay wall of Haulbowline Island.

Stakeholder Commentary

Presentation Number One: Initial Ideas & Analysis

	Issue	Sample Comments	Response
1.	Tourism The Masterplan initial layout was much too focused on tourism and non core naval uses.	Positive: Jewel in Crown of series of islands within natural context of Cork Harbour and history of place and sea-faring. Positive: Main elements for tourism exist with simple repositioning and signage strategy to develop tourist access.	
		Negative: The Masterplan should focus on the Naval Base. The base currently has several hundred people living on Haulbowline. The active military establishment should be given priority. The Naval Base and naval dockyard cannot be viewed separately.	Noted. The team have also been requested under the terms of the Masterplan Study to deliver the following under the heading of Tourism. The initial ideas are centred around an emergent tourism brief as the Naval issues will require ongoing liaison. An assessment of the Tourism Potential to tie in with Cobh, Spike Island, Camden Fort and Cork City and Harbour, including unique tourism offerings that can help develop a destination. This assessment should include the potential of "Cruise Tourism" for cruise ships berthed at Cobh.
		Negative: The events centre should be sensitive to the scale of the conference centre developments in Cork city.	Noted. However the team has also been asked to review the ability for options for a landmark development on the island. This could be an events centre or something of a similar scale.
			Set out options for a landmark development to signal the renaissance of Cork Harbour demonstrating a visionary approach.
		Neutral: There is currently a proliferation of Masterplans in the Cork Harbour area and insufficient inter linkage between them. The Haulbowline Plan must not exist in isolation and there is a need for the final Masterplan to incorporate and link with other plans in the Cork Harbour fully.	Noted. The team are in the process of assembling all of the relevant baseline information for the Masterplan process. Studies around the proposed plan are regarded as integral components to any successful Masterplan and their integration is essential to the final vision.
		Haulbowline represented an opportunity to create a world class attraction to Cork.	Noted.
		Atlantic Gateway Plan	Noted.
		Haulbowline is considered the jewel in the Port's Tourism Plan.	Noted.
		The tourist aspect of the Masterplan will be largely limited to a first stop shop of Spike Island but Haulbowline could be bundled with cruise tours.	Noted.
		Positive: There is a strong link to the USA with American sailors having been stationed in Cobh during the first world war.	
		Potential of land art to communicate arrival and place.	

	Issue	Sample Comments	Response
2.	Transportation The transportation approach should complement the Naval user. The movements of any and all vehicles should focus on the daily requirements of the NS.	Negative: The proposed plan does not consider the naval user and its specific requirements.	Noted. The team will review the naval requirements in greater detail for the Draft Plan and as apart of the Land use studies.
		Negative: The plan emphasises the romantic over the pragmatic needs of the naval user, and the arrival by road via the bridge.	Noted.
		Neutral: The core user on the island and the "day to day movements" of the navy need to be demonstrated clearly.	Noted. The Draft Plan should clearly demonstrate naval movements as priorities in the Masterplan.
		A joint ticketing strategy is being developed, which will assist in linking the Port's tourist attractions, by rail and by boat	Noted.
			"Provide a transportation vision for the Masterplan area to include: - An access strategy based on existing and proposed road infrastructure (N28 upgrade); - Options for potential access to Spike Island – Bridge, Pedestrian Walkway, Ferry; - Options for shore based access to/from Cobh and the greater Cork Harbour Environment; - Pedestrian and cycling movement corridors on Haulbowline - Address the public access arrangements by road and water in order to achieve an integrated transport solution; - Options for slipway access – Cork County Council have commissioned an engineering report on the most suitable location for a slipway."
		The approach to the island will be solved by the N28 as far as the front door to Haulbowline adjacent to the NMCI and IMERC.	Noted.
		Neutral: The capacity of the road bridge to Haulbowline must be established and the point at which traffic flow is constrained.	
		Neutral: There must be a new direct traffic link from the island to NMCI and Beaufort Institute without driving out to the main road as is required in the current configuration.	

	Issue	Sample Comments	Response
3.	Navel Operation The core use of the island was not being placed centrally within the Masterplan thinking.	Neutral. The Masterplan should allow for future growth by the core user (i.e. the Naval Service). The NS will have to take priority over any "softer" uses within the plan.	Noted. The team as part of the terms of the Masterplan will be reviewing land use and this will address areas of potential future growth and implementation cycles.
			Set out a clear context for future land use options and zonings for the Masterplan area, including naval service, public amenity, training, IMERC campus, sustainable energy innovations, marine related amenity, accommodation and other requirements.
		Positive: Aim to incorporate Electric vehicles into plan to private roads.	Confirmation of public and private roads probably need some clarification.
4.	Implementation & Funding The Masterplan vision was too ambitious and did not reflect current funding availability.	Negative: The Spike Island funding had already been cut from a €40M project to a €12M project and funding would be not be available for the Haulbowline Masterplan.	Noted. The team are quested to outline various phases of a Masterplan and the presentation was based on a long term vision for the island to demonstrate suggested potential. The proposals are intended solely as a basis of discussion regarding the potential of the island.
			Any development would require a sensible approach to initial cost planning with respect to implementation cycles.
			Outline short, medium and long term priorities for the future development of the island and costs of developing the Masterplan in a phased approach.
		Negative: The Masterplan was not reflective of the East Tip and its requirements. The risk surrounding the remediation of the East Tip and the availability for funding only extended to the remediation works and not to a grander plan.	Noted. The team have now received the East Tip Remediation proposals and will incorporate these into any plans.
		Negative: The funding for the East tip was ring fenced and did not extend to any remediation works of the Eastern Camber as suggested in the Masterplan.	Noted. The reinstatement of the east Camber was part of a wider discussion on the heritage potential of the Grain Storage buildings, in particular their heritage, curtilage and the use of water as at other ports such as Portsmouth.
			The team have also been asked to explore the heritage of the island as part of the terms of the Masterplan. We believe the context of the adjacent waterways are an important part of that assessment in Masterplanning terms.
			An assessment of the existing condition and proposed future use of the 3 cut limestone buildings on the ISPAT site, Martello Tower and the drydock facility.

	Issue	Sample Comments	Response
5.	Implementation & Funding The Masterplan vision was too ambitious and did not reflect current funding availability.	Neutral: The East Tip is the driver for the Masterplan and the reason behind its needs.	Noted and Understood. However the team have also been asked to review the following in its terms of reference.
			Show provision for an attractive environment with an unique sense of place, public realm and amenity that captures the maritime heritage of Cork Harbour and helps to differentiate Cork Harbour as a growing maritime hub.
		Neutral: The Masterplan document will be used as a tool to generate funding.	
		Neutral: The East Tip remediation works should have cognisance of the wider Masterplan strategy for the island and nothing carried out in the remediation works should limit the future development potential. Likewise the Masterplan must reflect the remediation proposals. There is no money available for the next stage of implementation beyond remediation.	
		Neutral: The Masterplan should input into the new LAP. Haulbowline is currently included in the Midleton LAP.	
6.	Heritage	Neutral: It is highly unlikely that there would be any change to the boundaries of local area plans to create a harbour area plan. The current LAP plans are based on electoral areas.	
	Other	Task to double GDP of the maritime sector by increasing in all activity.	
		Commercialisation opportunities to use partnerships strength.	
		Connections with Education Institutions to be exploited.	

Presentation Number Two: Draft Proposals

	Issue	Sample Comments	Response
1.	Presentation Number Two	Neutral: The Eastern edge of the Naval Base ISPAT site has currently no planned use and the Naval Service Masterplan, is intended to define potential future uses for the area.	Noted. The Naval Service plan and the utilisation of the West wall is considered a logical use of the ISPAT site due to the increased size of the naval vessels.
		Negative: The potential use or re-adaptation of the Boat sheds would have security/access considerations for third parties.	The Final Masterplan has been amended to show only permitted access to the Boat Sheds, and secure boundaries.
		Neutral: The central tank is currently use as a water tank, utilised only for Fire fighting. The island has its own Fire Fighting unit and drills.	The Final Masterplan highlights that this area could be used for either, a raised garden or possible relocated oil storage.
		The tank is not utilised for the island's drainage.	The Final Masterplan will confirm the use of the tank area and make recommendations.
		Positive: The Graving dock is of future strategic importance to the Navy. Both sides are considered important.	Noted. The Masterplan has demonstrated this as a maritime asset.
		Negative: The Navy will require secure car parking on HB for crews at sea. There are 1,000 cars on the island at any one time.	The design Team have carried out a visual survey of the island has suggested a much lower car parking number for the island. It is recommended that a Mobility Study gives empirical data on the car parking requirements. Also the Final Masterplan has defined zones for car parking that can be utilised by the Navy.
		Negative: The oil wharf is not considered suitable for the car park.	Noted. However there could be some car parking adjacent to this area if set out properly.
		Negative: The proposed "Visitor Experience" building encroaches centrally into the Naval zone. The security issues and location of the building was queried.	Noted. The Final Masterplan has re-located the "Visitor Experience" Building to the southern edge of HB addressing this issue fully.
		Negative: The feasibility of the proposed "Visitor Experience" building, was questioned in context of the economic climate. Also the decision for the building to be located on HB was not yet agreed.	Noted. The proposal is based on current briefing guidelines from Cork Co. Co. The location could also be used by other larger facilities such as an educational IMERC North Building cluster or a Naval Storage facility. There also is a "Do Nothing" strategy based on a landscaping approach.
		Neutral: The Navy noted the value of the graving dock as a piece of working infrastructure that they could utilise better, particularly if covered for maintenance.	The Design team have made alternative proposals based on this requirement. It should be noted a covered facility would require substantial investment.
		Neutral: The island is a possible location for a tidal turbine.	This is noted but the viability of a turbine is outside the remit of the study. Also the issue of small crafts passing the south of the island has been raised with respect to the provision of pedestrian bridge to Spike Island.
			The location of a turbine will require an additional study.
		Neutral: The navy have looked at the potential for CHP to be located centrally on HB.	The Design team have proposed that an integrated energy strategy be developed for the island going forward. Issues relating to the viability of CHP were also highlighted in particular, the requirement for a large heat load eg a swimming pool.

Presentation Number Three

	Issue	Sample Comments	Response
1.	Department of Agriculture, Food and the Marine	Neutral: Any introduction should include reference to the "Catalyst for change" from the marine vision documentation.	The Final Masterplan to include the commentary.
		Negative: The Visitor Experience Building, the Lusitania was not agreed in the proposed location, as identified in the Masterplan. Concerns were expressed on the actual viability of the building.	The Design Team noted that HB should be highlighted as a potential for a major Visitor attraction. The Lusitania experience was one possible option, but so were others.
		Negative: The cost of the Visitor Centre was not established or agreed.	The Design Team noted that this was outside the study scope and that a business case was required for the proposals. It was also noted that this would normally precede any Masterplanning exercise.
		Negative: The Masterplan showed major development in the southern edge facing IMERC. Concerns were expressed on the viability of the development.	The Design Team noted that there is a "do nothing strategy" for the Masterplan and that the Masterplan could be simply used as a Land Use Plan as required in the Terms and Conditions of the brief. Individual plots could be developed independently of each other, or not at all dependent on funding streams and timelines.
2.	Irish Navy	Negative: The proposed 1. Causeway to Spike Island – Construction of walkway will not work due to the passage of small crafts through the Spit Bank.	Noted: The Final Masterplan has been amended to illustrate the causeway and bridge removed.
		Neutral: The location of the Lusitania Experience has not been agreed as HB.	Noted: The use of the term Lusitania experience is to be removed from the Masterplan legend for the Final Document.
		Neutral: The southern quay that is proposed should be considered part of a wider marine movement strategy.	The Design team have defined wider boat movements and options as part of the Final Masterplan. It should be noted that these should be subject to an economic business case based on the projected numbers of passengers.
		Neutral: The Navy have commissioned an in-house flood analysis of the island.	The Masterplan is to incorporate the findings within the final report.
3.	Wider harbour communities	Neutral: further emphasis in the report should be placed on the following: - Linkages to the port of Cork - Linkages to the surrounding industries - Cobh and Ringaskiddy communities - Spike Island connectivity and story	Noted: the Final Masterplan will highlight those linkages fully.
		Neutral: The complimentarily between HB, Spike and IMERC should be emphasised.	The Masterplan sets this out in the beginning of the document.
		Neutral: The nearby Vivienne Roche Sculptures are to be relocated from Ringaskiddy.	The sculptures can be integrated into multiple locations on HB in tandem with the defunct naval paraphernalia, as highlighted in the final document, as a sculpture trail.

	Issue	Sample Comments	Response
4.	Fáilte Ireland	Neutral: Amenity Uses for walkers, joggers and casual visitors should be highlighted.	The Masterplan document highlights potential jogging trails subject naval security requirements.
		Neutral: The existing buildings on the island represent a heritage asset that may dispense with the need for new buildings.	The Masterplan defines possible uses for these buildings in the Heritage quarter, that stand alone from major new developments.
5.	Cork County Council	Neutral: The role of Cobh within the wider HB/Spike Island movement strategy, needs careful graphic representation.	Noted: The Masterplan has been revised to reflect this issue.



Stakeholder Commentary - Consultations



Consultation Number One: University Sector

	Issue	Sample Comments	Response
1.	University Sector	IMERC will become the biggest assemblage of maritime energy researchers in the world, when it has full critical mass. It will have links with the 4th Level institutions (Birchwood, Warrington). IMERC is a niche sector.	Noted.
		The Energy island concept and the relationship to the Lower Cork Energy group was considered important.	Noted. This will be reflected in the HB sustainability strategy.
		IMERC is a joint investment across both third level Institutions and the IDA.	Noted.
		IDA would like to attract companies that leverage of the proximity to the Maritime training and research.	Noted.
		The IMERC campus will have 150 researchers and staff on site when the Beaufort Institute opens. The IMERC Masterplan is defined as IMERC South, with HB defined as IMERC North.	Noted. The relationship between the IMERC North and South clusters, exists primarily in the IMERC thinking and not elsewhere in the Masterplan Stakeholders to date.
		IMERC will become more than a "conventional" teaching campus but will be also a "destination" for semesters and "taught" post graduate courses.	Provision for some student residential provision should be developed as part of the IMERC or HB Masterplan.
		CIT are keen to utilise the existing Store Houses for use. There is a particular interest in the relationship between education and "applied areas".	Noted.
		The Enterprise buildings are intended as "grow on" facilities from the educational research based on campus.	
		NMCI will now have 350-500 students and staff with Beaufort with increased visitor numbers.	Noted.
		There is a lack of residential facilities on site close to the IMERC cluster. The presence of SEVESO designated areas in and around Ringaskiddy has resulted in the Development Plan not permitting residential in this region.	Noted. The Masterplan to map out the SEVESO sites and make recommendations as part of the Final Plan on residential provision. The Masterplan also has the potential for some residential on HB, but it should also be noted the lack of facilities to support that community.
		Mixed residential accommodation close by to the IMERC cluster would add value to the campus.	Noted.
		Provision for short term accommodation or "apartment lets" was considered important for increasing summer activity. Also it may or may not be attractive to businesses in the area.	Noted. The HB Store Houses could potentially provide some accommodation, but it should be noted that there are little or any supporting services for residential currently.
		The Gothenburg model of development was cited as a good example of sustainable development and joined up urbanism, research and seasonal use for International students.	Noted: http://www.greengothenburg.se/start/

	Issue	Sample Comments	Response
1.	University Sector		The branding of HB should be part of a broader Cork Harbour Development approach.
		The IMERC site was primarily for Foreign Direct Investment, that would be "kick started" by the IMERC educational Hub and NMCI.	Noted.
		The capacity of the IMERC Campus and it potential future expansion was considered an important factor. HB's southern edge was considered a location for potential shared educational uses defined as IMERC North.	The southern edge of Haulbowline has significant capacity for major development distinct from the Naval Base.
		"Proximity" is considered everything in the IMERC concept.	Noted.
		The Graving dock on HB had potential as a "Test Bed" facility for marine engineering.	Any use of the graving dock would need to be controlled by the Navy, with "spin off" benefits for the landlord.
		The graving dock also had the potential for synergies with maritime heavy engineering.	The team had also indicated the use of the graving dock as a covered space for maintenance.
		The Research Park in Illinois, University Urbana was considered a good comparative example.	http://researchpark.illinois.edu/

Consultation Number Two: Fáilte Ireland

	Issue	Sample Comments	Response
1.	Fáilte Ireland	Positive: There are a series of "disconnected projects" in the wider Cork Harbour Area.	Note: This concurs with the discussions regarding the Masterplan To date and its connectivity with other projects. The Design Team have proposed a "trust" or similar instrument to "collect" these studies and make them communicate for the Harbour and region as a whole.
		Positive: There should be a linkage with the HB Masterplan and the wider tourism narrative for the area.	Note: The design team have met with Colliers to integrate the HB Masterplan with the wider movement and branding ideas for the harbour.
		There is a gap in the harbour that requires a number of key players to think the same way.	The Masterplan clearly identifies this as a need for its implementation.
		Positive: There should be an interpretative framework, that forms a cohesive story for the island within the harbour.	Noted.
		The Interpretative framework should recommend the "optimum" story for each location. - Maritime story - River City - Made in Cork-creative and cultural capitol. Working Harbour.	
		Positive: There are a cluster of linked opportunities with HB.	The Masterplan clearly identifies these via the movement strategy.
		Positive: The tourism plan needed, entry points, viewing points and elevation points.	Noted: The Masterplan proposes: - A major arrival space for HB - A grand staircase to access the Martello tower - View corridors to Cobh across the island and in particular to the Cathedral.
		Neutral: The Public sector should influence the sectors where the private sector cannot reach.	Noted.
		Neutral: the Lusitania is among one of the Visitor attractions that is being considered.	Noted. The Masterplan has identified a location for a Visitor Attraction Building.
		A number of other peripheral stories are being told re HB.	
		Neutral: The IMERC cluster allied with HB and Spike is looking for a trigger project.	Noted.
		Neutral: The journey to HB starts within the City. Easy connectivity by different modes of transportation are essential.	The Masterplan outlines potential movement and connectivity strategies By road - By sea - Other, e.g. greenways

	Issue	Sample Comments	Response
1.	Fáilte Ireland	Neutral: Cobh provides a deep water port for Cruise ships. Currently visitors are being bused to Kerry, away from local attractions.	
		Positive: HB could become known as the boat island.	The Masterplan makes proposals for potential boat building/ research facilities along with the graving dock as a location of Ocean Yacht Racing facilities.
			The Masterplan also proposes that the Visitor Experience would have simulator facilities building on the NMCI's success.
		Positive: If the funding for major redevelopment is absent, HB could also be developed as the "Green Island" concept. Creating an interpretative setting for the Spike Island experience.	The Masterplan proposes a "do nothing" strategy which sees the island being re-greened.

Consultation Number Three: IMERC

	Issue	Sample Comments	Response
1.	IMERC is only one of six similar facilities in Europe.	HB must become a "must visit" for the sailing community as a centre of excellence.	Noted.
2.	IMERC is an ecosystem of investment opportunities.	HB offers a unique opportunity for continued co-operation with NMCI.	Potential for improved bridge pedestrian connectivity proposed.
3.	IMERC is a broader campus concept including Haulbowline.	The Masterplan assists the IMERC campus in offering greater diversity and growth.	Noted.
4.	IMERC, NMCI and the INS	All of the bodies have been operating successfully since 2004.	Partnership and shared visions are already in place for Haulbowline.
5.	The existing graving dock-shared use	The use of the dock for research and educational uses combined with operational use would release this asset which is now unused.	The Masterplan shows potential locations for shared uses subject to the INS security access protocols.
6.	Paddy's point	The area is seen as blocking views to Spike and is considered a left over space. The MP should address this.	Whilst agreed this is outside the study's scope. Any developments to the IMERC campus should develop landscape proposals for this are in due course.
7.	Turbines	Proposed floating turbines are proposed as part of the wider IMERC harbour based activities.	Noted.
8.	Simulators	The use of future simulators could be integrated into any HB Island buildings as a shared educational and visitor attraction.	Noted.



Consultation Number Four: Naval Service

	Issue	Sample Comments	Response		
1.	Irish Navy	Neutral: The ISPAT west wall is the "heart of the whole Masterplanning story", and the centre of gravity.	Noted. The importance of the logistical space in the centre of the island should not be compromised.		
		The area could also be used as a staging area for Irish troops deployment.	Noted.		
		The west wall is of strategic importance for the navy, especially considering the larger ships that will be used.	Noted.		
		Neutral: The integration of security into the Masterplan is a paramount consideration.	Noted. The Masterplan has an outline security approach which defines land use territories, controlled by the Navy.		
		The ships will also have weapons and technology on board which are vulnerable.	Noted.		
		Ordnance storage and use.			
		The use of weapons on the base is fluid due to drill/ training requirements.	Noted.		
		NATO set out parameters and exclusion zones for developments around Ordnance Stores that are mandatory.	Noted. These will be highlighted on the Masterplan separately when available.		
		Arrival to the island by boat is through "supervised Access" only.	Noted.		
		Access to the basin is contingent on the tidal movements and the additional Naval pier is to alleviate these movements if required.	Noted. The Masterplan highlights this in the Final plan.		
		Heritage Open Day walks have taken place in Cork already around the base.	Noted.		
		Spencer jetty requires refurbishment for use.	Noted.		

8.6 Terms of reference for the Masterplan

PROCESS MAP

Methodology

The Masterplan process has been defined in detail by the following process chart which sets out the various tasks for the study. The process is through a series of stakeholder presentations and reviews which are intended to develop a shared knowledge and consensus in relation to the final proposals.

The Masterplan has also relied on a number of other background documents to support its proposals and recommendations.

The Masterplan does not exist in isolation and the interrelationship with other plans has been identified as a key enabler for the Masterplanning goals.

The Masterplan must be compatible with proposals in the Spike Island Masterplan Study 2012 and also take cognisance of the IMERC Masterplan 2013 (Project Brief).

Regional Plans

Indecon report-Cork Chamber of Commerce Report "Cork to the World" Updated Economic Assessment of the N28 Cork to Ringaskiddy Scheme. Fáilte Ireland's Destination Interpretation Work 2013

Contiguous Masterplans

The Cork Harbour Study draft 2011 Spike Island Masterplan 2012 IMERC Masterplan 2013 Cobh Waterfront Masterplan

Island specific plans

Naval Service Masterplan for Haulbowline 2014
East Tip remediation project, planning application, waste licence and foreshore applications.
The potential to create a Naval, or Maritime Museum on Haulbowline Cork Harbour. Scoping Study for the Irish Naval Service and the Heritage Council of Ireland. February 2007.

BACKGROUND DOCUMENTATION Best Practice that Primarily helps achieve Master Plan goals RELATIONSHIP TO MASTER PLAN Best Practice that assists in helping achieve Master Plan goals

Planning Status/relevance	Study	Planning Policy	Vision	Tourism	Integration	Land Use	Connectivity	Adaptive reuse	Green island
REGIONAL	PLAN NAME			+					+
			i i	1	1		İ	1	
	Cork County Development Plan 2009-2015								T
	Midleton Electoral Area Local Area Plan 2011								Ī
	Carrigaline Electoral Area Local Area Plan 2011								Ī
	CASP-REGIONAL								T
	Cork County Metropolitan Cycling Strategy								T
				ļ	-	-	-		┼
CONTIGUOUS	The Cork Harbour Study draft 2011								+
	Spike Island Master Plan 2012		i i						1
	IMERC Master Plan 2013							1	
	Cobh Waterfront Master Plan								1
					ļ				↓
			-	-				ļ	┼
DETAILED PLANS	Naval Service Masterplan for Haulbowline 2014			1					
	East Tip remediation project		ļ						
	Naval Maritime Museum Hertiage Scoping Study								

Fig. 8.12 The diagram describes the relationship of the wider planning environment to Haulbowline Island.

HAULBOWLINE - MASTERPLAN PROCESS

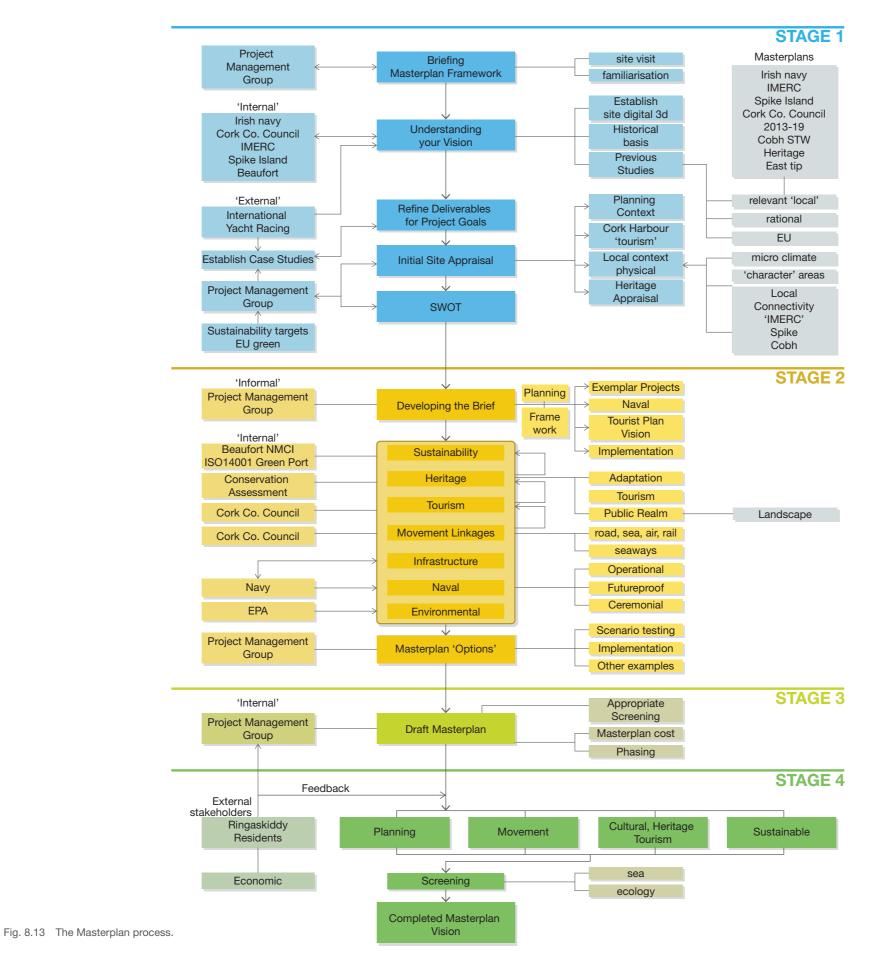
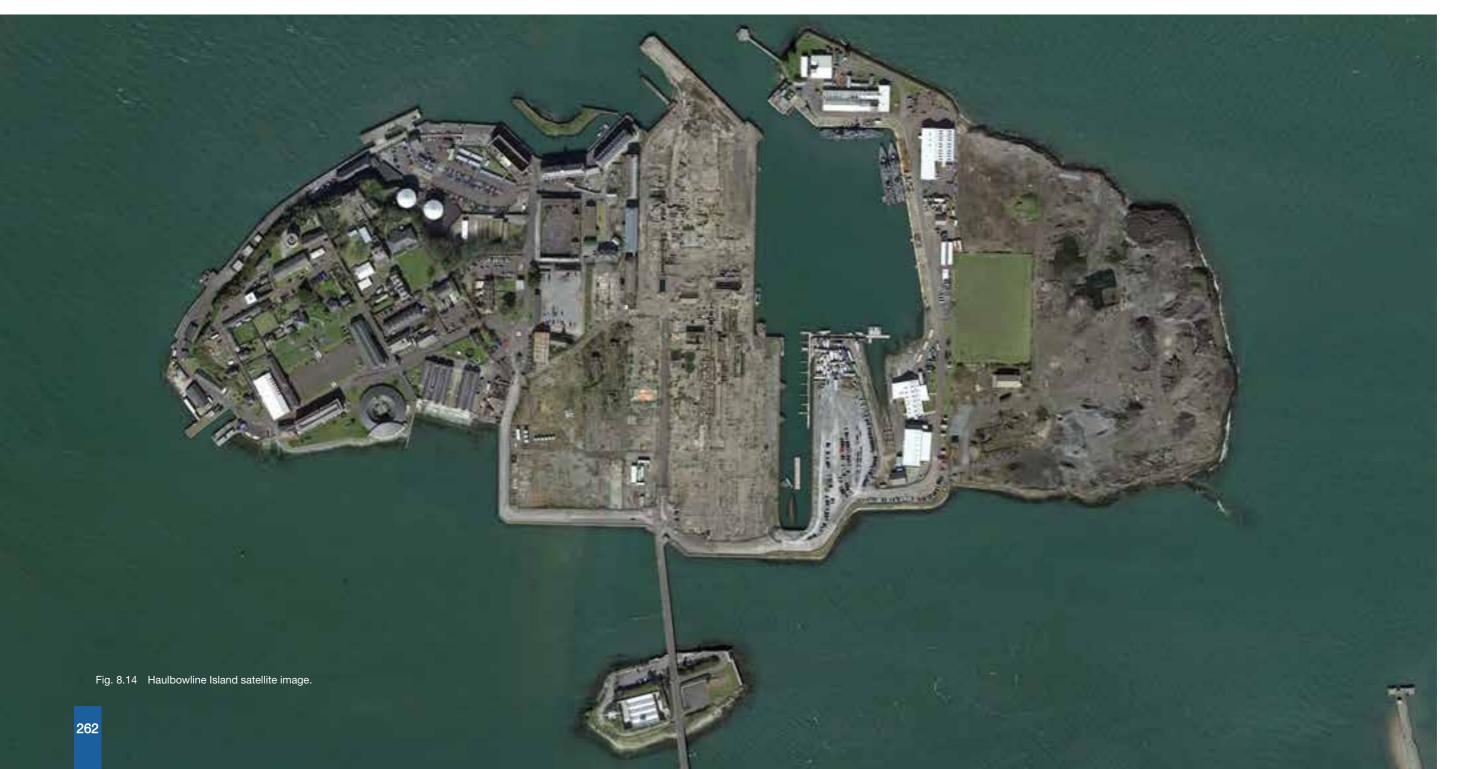


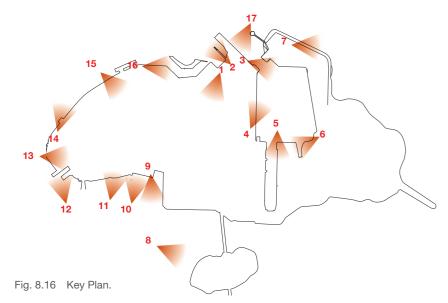
Fig. 8.15 Opposite: Haulbowline Island aerial image from south west.

8.7 Island photographic survey





8.7 Island photographic survey





































8.0 APPENDIX

8.7 Island photographic survey







































8.8 Phasing Schedule to Navy Masterplan

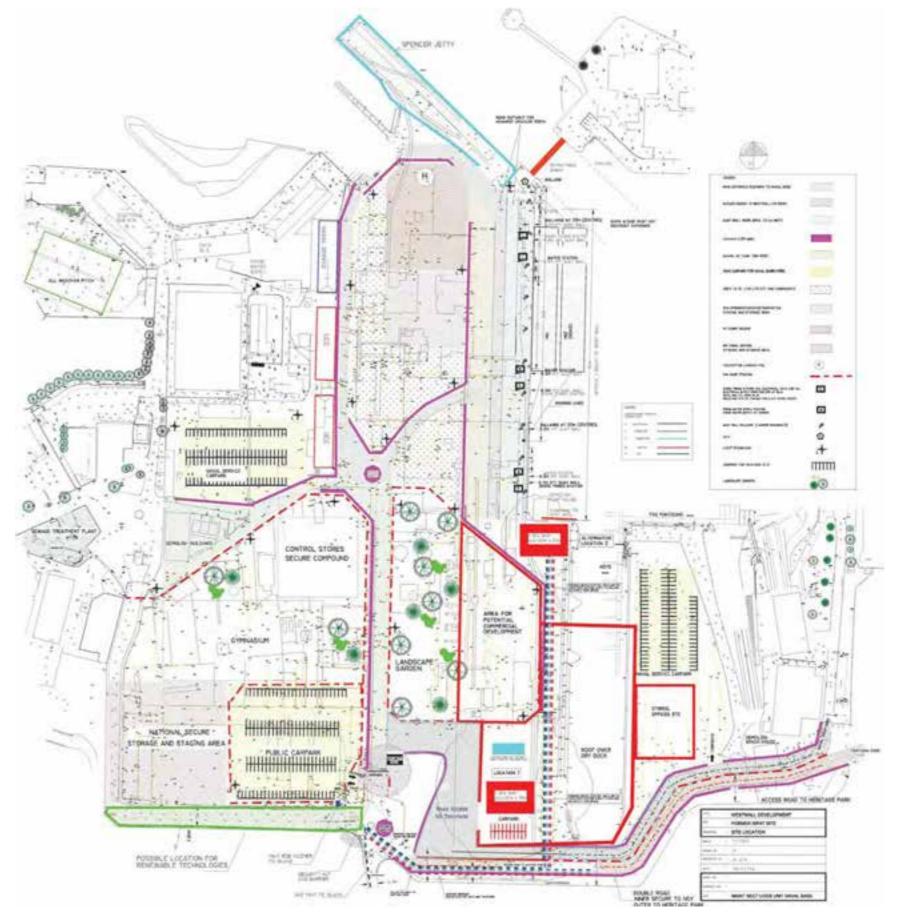


Fig. 8.17 Extract from the Naval Service Masterplan for Haulbowline, 2014.

"This document seeks to establish a Masterplan for Haulbowline aimed at meeting the future needs of the Naval Service, Defence Forces and Department of Defence (DoD) and safeguarding the built, natural and cultural heritage of Haulbowline Island. Simultaneously the plan recognises the need to support and complement the IMERC strategy to add value to the existing critical mass of expertise and infrastructure in the Lower Cork Harbour area"

Naval Service Masterplan for Haulbowline, 2014



NAVAL SERVICE Masterplan FOR HAULBOWLINE 2014







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"We shall not cease from exploration

And the end of all our exploring

Will be to arrive where we started

And know the place for the first time."

T.S. Eliot, Four Quarters

