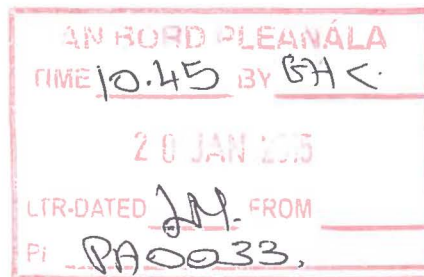


# Strategic Infrastructural Development

Application to An Bord Pleanála  
[Reg. No. PL. 61. PA0033]

Oral Hearing

Galway Harbour Extension



## Engineering Brief of Evidence – Part 2

Presented by:-

Eamonn Waldron  
TOBIN Consulting Engineers

January 2015





## Galway Harbour Extension

### Oral Hearing

#### Brief of Evidence – Part 2

**Eamonn Waldron**  
**TOBIN Consulting Engineers**

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# 1 INTRODUCTION

## 1.1 EXPERIENCE

My name is Eamonn Waldron.

I am a Chartered Engineer [BE, CEng., MBA, FIEI] with over 40 years experience in the planning, design, construction and supervision of major civil engineering projects throughout Ireland.

Relevant Schemes I have managed include:-

- River Fane Water Supply Scheme in Co. Louth.
- Lough Mask Regional Water Supply Scheme in Co. Mayo.
- Waste Water Treatment Plant to cater for the towns of Leixlip, Maynooth and Kilcock.
- Planning, licensing and construction of major engineered landfill sites at Kilconnell (Galway) and Bottle Hill (Cork).

I am a Director of TOBIN Consulting Engineers and currently, Chairman, and have acted in the role of Project Director for the Galway Harbour Extension project since 2011.

## 1.2 BACKGROUND

### Slide 1 – Drg / 2116 [Existing Docks & GHEP]

Galway Harbour Company has for some years, been developing proposals for a Harbour Extension at Galway to address severe constraints to their operations within the existing harbour resulting from:-

- severely restricted access,
- tidal and gated harbour,
- channel too shallow,
- port draught and dimensions too limited,
- inadequate quay length and limited berthage,
- uneconomic vessel size capacity.

The proposed Galway Harbour Extension [GHE] development will address all of the above constraints and provide improved infrastructure to consolidate existing business, develop new business and services, provide for the international cruise liner business, accommodate marine leisure / amenity and tourism, upgrade fishing facilities and facilitate the economic growth of the region. The development will include the relocation of the majority of the existing Harbour related activities including oil and bitumen discharges and other businesses to new Quays, Jetties and Yards to be located at the Galway Harbour Extension.

Slide 2 – Drg. / 2117 [Site Layout Map]

The proposed development is proposed to be developed on reclaimed lands to the South of the Galway Harbour Enterprise Park. The area within which the development is proposed, while adjacent to the Galway Harbour Enterprise Park is in an area designated candidate Special Area of Conservation [cSAC], Special Protection Area [SPA] [both of which are Natura 2000 sites] and proposed National Heritage Area [pNHA].

Over the period 2007-2013, Galway harbour Company has been in consultation with An Bord Pleanála under Section 37B of the Planning and Development Act, 2000, as amended, on the proposals for the Galway Harbour Extension. An Bord Pleanála decided in October 2013 that the proposed development would be strategic infrastructure within the definition of Section 37A of the Planning and Development Act, 2000, as amended, and that any application for permission for the proposed development must be made directly to An Bord Pleanála under Section 37E of the Act.

## 2 CONSULTATIONS AND SCOPING [EIS 2.3]

Slide 3 – Cover Photo.

- 2.1 An extensive consultation process associated with the proposed Galway Harbour Extension has been carried out over the design development period from early 2006 up to the submission of the planning application in early 2014. Meetings were held with many organisations, including with the Planning Authority, Galway City Council, pre-application consultations with An Bord Pleanála, meetings with National Parks and Wildlife Service, a formal public consultation process and many presentations and meetings with a wide range of local and national interest groups.
- 2.2 In all Galway Harbour Company and the designers arranged or facilitated over 170 separate meetings with a variety of organisations and groups. The principal ones are listed below and are fully detailed in Appendix 2.3.7 of the EIS:-

### Parties Consulted

- The Public
- An Bord Pleanála
- Galway City Council Elected Members
- Galway City Council Advisory Group [Senior Management, Roads & Planning]
- Department of Transport, Tourism and Sport
- Department of Environment, Community & Local Government
- EU Commission DG XII
- Galway Transportation Unit
- National Transport Authority
- Coras Iompar Éireann & Iarnród Éireann
- National Parks and Wildlife Service [NPWS]
- Inland Fisheries Ireland
- Galway County Council Elected Members
- Galway Fire & Rescue Services

- Galway Chamber of Commerce
  - An Taisce
  - Political Parties
  - Galway Bay Inshore Fishermen's Association
  - Galway Cycling Campaign
  - Various Resident's Associations
  - Bord Fáilte
- 2.3 Over the period June 2007 to August 2010 four separate pre-application consultations were held with An Bord Pleanála, following which the Board decided [Letter of Confirmation dated 21<sup>st</sup> October 2010] that the proposed development would be strategic development within the meaning of Section 37A of the Planning and Development Act, 2000, as amended, and therefore that any application for permission for the proposed development must be made directly to An Bord Pleanála under Section 37E of the Act.
- 2.4 In November 2011 a submission entitled *“Environmental Impact Statement, Scope and Methodology”* was submitted by Galway Harbour Company to An Bord Pleanála for its consideration. Having consulted various parties and Prescribed Bodies the Board responded in March 2011 with a *“written opinion on information to be contained in an EIS for a harbour extension”* enclosing copies of the written submissions received by them from a number of the Prescribed Bodies from whom they had sought observations.
- 2.5 Arising from concerns regarding potential impacts of the proposed development on designated areas within Galway Bay, pre-application consultations were re-opened with the Board, following which a further four consultations took place over the period October 2012 to July 2013.
- In October 2013 the Board again decided [Letter of Confirmation dated 7<sup>th</sup> October 2013] that the proposed development would be strategic infrastructure within the meaning of Section 37A of the Planning and Development Act 2000, as amended and therefore that any application for permission for the proposed development must be made directly to An Bord Pleanála under Section 37E of the Act.
- 2.6 A number of meetings were held by the design Team and its Environmental Specialists with NPWS over the period March 2010 to July 2013 to discuss issues related to, Natura Impact Statement [NIS], priority habitats, in-combination effects and impacts of the historical development relating to Galway Harbour Enterprise Park (GHEP).
- 2.7 A public consultation seminar, advertised in advance in the local media, was held in the Centre Pier Building at Galway Harbour on 21<sup>st</sup> and 22<sup>nd</sup> January 2011. Representatives of Galway Harbour Company and of the design team were in attendance throughout to meet with and respond to queries from members of the public. Approx. 500 people attended. A copy of the information on display can be found in Appendix No. 2.3.8 of the EIS.
- 2.8 During the Volvo Ocean Race 2012 a stand was staffed at the Volvo Marine Village for 9 days from 30<sup>th</sup> June to 8<sup>th</sup> July 2012 with drawings and a visual model which attracted a continuous audience of local people and interested parties with generally a very positive feedback.
- 2.9 In summary, throughout the 10 years planning life of the project, Galway Harbour Company has made significant efforts to ensure that the statutory agencies, local

communities and the public in general, have at all times been aware of the proposals and of the alternatives considered to deal with the constraints and shortcomings of the existing harbour facilities. They have also used this process to refine the design proposals and to take on board concerns and suggestions offered and to mitigate potential impacts that were indicated may arise during the construction and operational phases of the project.

### 3 OBJECTIVES FOR THE NEW DEVELOPMENT

Having regard to the constraints as outlined earlier, the objectives for the new development were to provide:-

- 660m of Commercial Quay
- Berths to a depth of -12m CD
- Approach Channel and Turning Circle to -8m CD
- Back-up land availability of 40 ha
- Rail access
- Compliance with SEVESO Directives and Irish Regulations transposing same.

A point to note here is that Galway is seeking only to be a Regional Port and in relation to channel and berth depths for the Tier 1 Ports it should be noted that:-

- Cork Port has a channel depth of -12.9m C.D. and a berth depth of -14.5m CD.
- Dublin Port proposes a channel depth to -10.0m CD and a berth depth to -15.0m CD
- The facilities in the Shannon Estuary e.g. Moneypoint, Aughinish, Foynes, have channel depths ranging up to -16.30m CD and berth depths to -20.0m CD
- The Galway proposal on the other hand, which is for a regional Port proposes a max. channel depth to -8.0m CD and a max. berth depth to -12.0m CD.

## 4 SAFETY, HEALTH AND WELFARE

The impacts of the development from concept through to the operational phase, on the Safety Health and Welfare on human beings, has been fully considered in light of current legislation, namely the Safety Health and Welfare at Work Act 2005 together with the statutory instruments brought in under the 2005 Act.

The Client, Galway Harbour Company, appointed TOBIN Consulting Engineers as Project Supervisor Design Process [PSDP] and as lead designer for the project. The obligations under the Act require the PSDP to organise co-operation between the various designers and ensure co-ordination of their activities, all with respect to safe constructability and future maintenance.

For example for the Geotechnical Investigations the Client had to appoint a Project Supervisor Construction Stage [PSCS] to co-ordinate all safety arrangements during the carrying out of those specific works. The PSDP was obliged, under the Regulations, to provide a Preliminary Health and Safety Plan to the PSCS during the tender phase for these works, with the associated differing risks highlighted to the PSCS in each case.

As the project advances through further investigations, detailed design, construction procurement and on-site construction, the PSDP will be required to continue to organise co-operation between all relevant designers and to ensure co-ordination of their design activities with respect to construction safety.

While construction is underway, there will be a host of neighbouring activities ongoing, both adjacent to the Enterprise Park and in the general periphery of the works and the access routes. These bring risk interfaces but the latter will be controlled to a large extent by bringing bulky materials and equipment to the site via sea. In addition, designated storage areas will be provided that will limit as far as reasonably practicable the interface between construction activity and non-construction personnel. The Mobility Management Framework as set out in section 13.5 of Volume 2B (Part 2) of the EIS, while an iterative process, contains the minimum standards to be applied in relation to the construction and operation of the development.

## 5 SEVESO DIRECTIVE CONSIDERATIONS

### 5.1 INTRODUCTION

Section 2.2 of Chapter 2 of the EIS [Economic Justification and Business Case] sets out in the various Tables a summary of the trade carried out at Galway Port over the years 2006 to 2012 and shows that the import of Petroleum Products is a significant trade through the Port.

### 5.2 EXISTING STORAGE AND IMPORT FACILITIES

There are currently two tank farms located at Galway harbour Company lands:-

- Leaside site was established in 1982 and located on lands between Lough Atalia Road and the outlet channel from Lough Atalia, but decommissioned in 2012.
- Enwest / Topaz site was established in 2008 and located in the Galway Harbour Enterprise Park. This is a state-of-the-art storage and distribution facility designed to operate to the highest international environmental and safety standards. The terminal is leased to Topaz Energy Ltd. which imports a range of petroleum products through it. With a capacity to store up to 40,000 tonnes of oil, the potential throughput is some 1.6 million tonnes on the basis that the capacity of the tanks is turned over 40 times.

In recent years oil storage facilities at Drogheda, New Ross, Cork City and Limerick have closed. Dublin, Shannon Foynes and Galway Harbour are the only remaining storage facilities in the State.

Petroleum product is currently discharged to the Topaz site from ships at either Folan Quay or Dun Aengus Quay through 250mm diameter hoses. Separate oil mains run to each terminal. There are three oil mains to the Topaz terminal to allow for simultaneous discharge of more than one product.

The Leaside site was served by a separate facility with discharge points at Folan Quay only.

As both sites involve the handling and storage of potentially dangerous substances, they must comply with the requirements of the relevant directive and regulations.

### 5.3 REGULATIONS

The EC COMAH Directive 96/82/EC(Dec. 1996) as amended by Directive 2003/105/EC (Dec. 2003) also known as the SEVESO II Directive is the main piece of EU legislation that applies to the control of major accident hazards involving dangerous substances. The Directive was implemented in Ireland as S.I. No. 74/2006 – European Communities (Control of Major Accident Hazards Involving Dangerous Substances) COMAHDS Regulations 2006.

The objective of the regulations is to reduce risk to the general public.

Member States are obliged to make arrangements in their Land Use Planning process to prevent incompatible developments encroaching too close to COMAHDS sites and for the suitable location of such sites when initially being established.

Some of the bulk liquids storage tanks contain petroleum products and so come within the COMAHDS Regulations and Planning and Development Regulations 2001-2006.

Those containing petroleum spirit (gasoline) in particular, are required to have significant separation for some types of land use to ensure safety in the event of a rare but possible major accident. The separation distances required have been taken into account in the design of the proposed development herein.

#### 5.4 HEALTH & SAFETY AUTHORITY [HSA] LAND USE PLANNING ADVICE

The HSA has issued a document [Policy and Approach of the Health and Safety Authority to COMAH Risk-based Land-use Planning, March 2010] describing how they provide advice on land use planning issues around Major Hazard sites.

The HSA adopts a three level approach to assessing the tolerability of risk:-

- where risk is intolerable [i.e. very high], **development will “be advised against”**
- where risk is significant, **the risk will be tolerable**, if ALARP [i.e. as low as reasonably practicable] but the Planning Authority should be advised on the risk and take it into account when considering the benefits and costs of the scheme
- where risk is insignificant [i.e. “broadly acceptable”] **“development will not be advised against”**.

#### 5.5 CONSULTATION WITH HSA

Consultation with the HSA was arranged in May 2010 following which ENTEC [now AMEC] were engaged as Specialists Consultants to carry out a Quantified Risk Assessment [QRA] on the proposed facilities. Their Report [August 2011] can be found at Sect. 13.6, Chapter 6 of the EIS.

#### 5.6 QRA BY AMEC

The Report by AMEC considered the following:

- identification of the possible incidents at Topaz and Leaside Sites with off-site impact and review of the consequence distances of these events;
- superimposition of the consequence distances onto the plan of the development to identify which parts of the development could be affected;
- use of site-specific data to establish the probability of the incidents occurring;
- use of information about the development to determine the vulnerability of the population in the event of that the selected events occur;
- determination of the level of risk at the different sections of the development based on a representative set of scenarios;
- assessment of the overall risk to the development with reference to the criteria that are included in the HSA planning approach document and making of a comparison to the current situation.

The report investigates each area of the development examining the risk from the two existing terminals [Topaz and Leaside] and the new Jetty and pipeline which will supply the Topaz site.

The overall conclusion is that the risks are acceptable for the land-based developments in the current application such as the industrial areas and associated occupied buildings, including the marina office.

The risk to the nautical centre is acceptable as most users will be outside. Provided facilities are not specific for school age or those with disabilities and provided it will not be used by more than 1,000 people at a time, it would not be advised against.

The risk to passengers using the cruise ship has been quantified and found to be broadly acceptable when it is taken into account that gasoline off-loading will be restricted whilst the ship is in port.

Any further developments will be reviewed in light of the requirements of the COMAHDS Regulations in order to ensure compliance.

The operation and management of the Topaz and Leaside Terminals are covered by the strict requirements of the COMAHDS Regulations.

These regulations however do not cover the jetty and the pipeline so best practice drawn from international practice, codes and standards have been used by AMEC in the design of same and in the incorporation of risk reduction measures for these installations.

## 5.7 MEASURES TO BE ADOPTED

### TECHNICAL MEASURES – DESIGN

- Jetty and Pipeline will be designed to appropriate International codes of good practice
- Hard arms, which are higher integrity compared to hoses, will be used.

### PROTECTIVE / PREVENTATIVE TECHNICAL MEASURES

- Jetty arms to be fitted with ranging alarms and emergency release couplings;
- The tank inlets to be fitted with non-return valves;
- Pipes to run in a sealed chamber and to be protected by concrete slabs. This chamber to be segregated from other services;
- Pipe route to be labelled;
- Pipe to be externally coated [coating to be selected based on ground conditions];
- Lines to be emptied after transfer;
- Ignition sources to be controlled in locations where flammable atmospheres may form. These to be identified by hazardous area classification according to a recognised code of practice. Electrical and instrumentation equipment to be to an appropriate ATEX rating and measures to control naked flames, hot work and static electricity will be in place;
- As detailed design progresses the pipeline to be subject to a Hazard and Operability study to systematically review provision of safety devices e.g. pressure relief and flame arrestors.

### MITIGATORY TECHNICAL MEASURES

- Surface area of petroleum quay to be designed so that as far as possible spillages will run to an interceptor;
- Booms to be deployed during unloading of petroleum products;

- Oil Spillage Response plan has been developed as set out in Appendix 4.3 of Volume 2C (Part 1) of the EIS and will continue to be further developed on an ongoing basis taking into account foreseeable accidents, and will be implemented and tested regularly;
- Provision to be made for the retention of firewater that may be contaminated.

## MANAGEMENT AND PROCEDURAL MEASURES

- Petroleum unloading operations will be carried out in accordance with good practice as outlined in the International Oil Tanker and Terminal Safety Guide and HSG 186;
- Operatives will be trained in the unloading procedures, the hazards of the products and the actions to take in event of an accident;
- There will be a prohibition on the unloading of Class 1 petroleum products whilst there is a cruise ship in dock;
- Off loading will be continuously monitored at the terminal and at ship so that discrepancies in flow will be quickly identified and transfer can be isolated;
- The pipe route to be entirely under the control of the harbour management company who will control any excavation work required;
- Emergency response plans to be prepared and practiced to ensure that in event of an incident rapid action is taken to minimise consequences. Emergency plans to include rapid isolation in event of a release, deployment of resources such as fire-fighting equipment, booms and spillage recovery equipment, evacuation of non-essential personnel, and provision of information to the off-site authorities;
- Public access to be restricted in the Quays and Jetty. Security to be provided.

## 5.8 INCORPORATION OF MEASURES

The various safety measures proposed in the AMEC QRA have been incorporated into the proposals as submitted with the Planning Application.

In addition account has been taken of the 14 No. observations made by the Galway Fire Authority which is included in Appendix 1 attached to Manager's Report from Galway City Council to An Bord Pleanála [dated 24<sup>th</sup> March 2014] and relevant measures have been incorporated into the design to the extent that it has progressed at this stage.

The documentation submitted to An Bord Pleanála in the EIS also includes the following:

Appendix No. 4.3	Oil Spill Contingency Plan
Appendix No. 4.4	Galfire Plan
Appendix No. 4.5	Port Bye Laws
Appendix No. 4.6	G. Evan Report on Safety Protocols.

## 5.9 OVERALL CONCLUSION OF QRA BY AMEC

- 1) The overall conclusion is that the risks to the land-based developments such as occupied buildings are tolerable when compared to the criteria used by the HSA to assess the level of risk to people.
- 2) The societal risks at the jetty are considered to be tolerable. The separation distances between the jetties and occupied building and passenger terminal comply with recognised good practice.

- 3) Relocating petroleum unloading to the new jetty will reduce societal risk even allowing for increased throughput as there is a much larger surrounding population at the existing facilities at Folan Quay and Dun Aengus docks.
- 4) The risk of a spill in the environment cannot be ruled out. The risks of such a spill to be managed by use of higher integrity unloading arms fitted with emergency release couplings for petroleum liquid transfers. Unloading arms reduce the likelihood of a release that threatens the environment compared to hoses. The design of the jetty and the pipeline route to be such that spills can be contained and recovered as far as is practicable.

Compared to the new jetty, the existing harbour is protected by dock gates so it is easier to contain and recover any spillage before it reaches an environmentally sensitive area. The open nature of the new Port means that this will not be the case and therefore booms will be deployed during petroleum unloading. An oil spillage response plan will be in place.

- 5) From a safety perspective the risks from the pipeline are low and the main concern would be a spill to the environment. These risks can be reduced by the implementation of appropriate leak monitoring systems as well as unloading procedures which ensure vigilance in monitoring offloading progress. Procedures that empty the pipeline following the unloading also help to reduce the risk of a spill as it reduces the potential exposure time of the pipeline when it contains an inventory. Emergency spill protection procedures and appropriate spill protection equipment will also be provided.
- 6) The risks from the Topaz and Leaside terminals to the development have been estimated as being tolerable.

## 5.10 RESPONSE FROM HSA

As stated earlier, consultation with HSA was carried out in May 2010. The HSA were also identified by An Bord Pleanála as a prescribed body and were therefore copied with all documentation related to the Planning Application.

By letter dated 07.03.2014 the HSA responded to ABP as follows:

*"An Bord Pleanála  
64 Marlboro Street  
Dublin 1*

*Our Ref: 66795  
Your Ref: 61.PA0033*

*07/03/2014*

**Re: Planning Application [ref. 61.PA0033] for development by Galway Harbour Company at Renmore and Townparks Townlands, Galway**

*Dear Sir/Madam,*

*The approach of the Authority to Land-use Planning is set out in the document 'Policy & Approach of the Health and Safety Authority to COMAH Risk-based Land-use Planning'. It is available from our website at [http://www.hsa.ie/eng/Your\\_Industry/Chemicals/Control\\_of\\_Major\\_Accident\\_Hazards/Land\\_Use\\_Planning/](http://www.hsa.ie/eng/Your_Industry/Chemicals/Control_of_Major_Accident_Hazards/Land_Use_Planning/). The document should be consulted by you to fully understand the advice given in this letter.*

***In that context, and the Health and Safety Authority remit, in respect of this specific application the following points are relevant:***

- 1. The application is covered by Regulation 27(1)© of SI 74 of 2006.*
- 2. On the basis that no Class 1 petroleum products would be offloaded at the new jetty while a cruise ship is in the harbour, the Authority **DOES NOT ADVISE AGAINST** the granting of planning permission in the context of Major Accident Hazards.*
- 3. The advice is only applicable to the specific circumstances of this proposal at this period of time.*
- 4. Developments around Seveso establishments may have a potential impact on the future expansion of those establishments.*

*If you have any queries please contact the undersigned.*

*Yours sincerely*

*Dermot O'Callaghan*

***Dermot O'Callaghan  
Inspector,***

***COMAH, Chemical Production & Storage (CCPS)***

*Encl. Note on the Approach of the HSA to the Provision of Land-use Planning Advice".*

## 6 INTERACTIONS

### 6.1 INTRODUCTION

The significant impacts of the proposed development and the measures proposed to mitigate these impacts have been outlined in this Environmental Impact Statement. However, in any development with the potential for any impact, there is also the potential for interaction between impacts of the different environmental aspects.

Table 14.1 of the EIS provides a matrix of the relevant interactions for each of the environmental aspects for both the construction and operational phases and after having taken the proposed mitigation measures into account.

This matrix visually displays the interactions between the various headings of Human Beings, Soils and Geology, Terrestrial Ecology, Water [Physical and Chemical], Aquatic Ecology, Noise and Vibration, Air and Climate, Landscape and Visual, roads and Traffic, Cultural Assets and Material Assets.

Examples of significant inter-relationships of aspects of the environment with the potential to be significantly affected by the proposed development are outlined below.

### 6.2 HUMAN BEINGS

The potential for interactions arises with virtually all of the environmental media as non-compliance with specified requirements or standards with respect to say noise and dust could cause disturbance to birds, mammals and aquatic species.

### 6.3 SOILS AND GEOLOGY

Similarly with soils and geology the potential for interactions arises with many of the environmental media for example the management of suspended solids from dredging and seepage from lagoons and any extended period of drilling, blasting and pile driving.

### 6.4 WATER

The potential for interactions arises with human beings, soils and geology and both terrestrial and aquatic ecology. For example, accidental emissions to water bodies and an associated reduction in water quality could lead to secondary effects on aquatic communities.

### 6.5 AQUATIC ECOLOGY

The potential for interactions arises with terrestrial ecology and material assets in that a change in food sources could affect birds, mammals and to a lesser effect fishing.

### 6.6 NOISE AND VIBRATION

The potential here arises with humans, both terrestrial and aquatic ecology and material assets. For example if noise emissions exceed guideline limits, there could be impacts on humans and sensitive receptors e.g. birds, cetaceans and fish.

## 6.7 AIR AND CLIMATE

With this topic the potential for interactions arises with humans, terrestrial and aquatic ecology, water and landscape / visual. If dust emissions were to exceed guideline limits there could be impacts on humans and on sensitive receptors e.g. birds, cetaceans and fish. There could also be potential disturbance from extended use of lighting during construction and operation.

## 6.8 LANDSCAPE AND VISUAL

With this topic there could be reduced enjoyment of existing view but increased amenity and landscaping benefits and increased diversity of terrestrial habitats associated with the landscaping proposals.

## 6.9 ROADS AND TRAFFIC

The potential for interactions arises with the environmental media of humans, water, ecology, noise / vibration and air/climate, through potential for dust, noise, congestion, risk of spillages. Some benefits can arise in operation phase arising from potential for CO<sub>2</sub> reduction.

## 6.10 CULTURAL ASSETS

The potential for interaction arise with human beings, maintaining a maritime culture and with roads and traffic where the design solution for the Lough Atalia Road Bridge work is somewhat constrained by its designation as a protected structure.

## 6.11 MATERIAL ASSETS

The potential for interactions arises with all of the environmental media. Positive impacts arise from tourism, leisure and improved fishing facilities, and generally for business activity and visitors. Benefits also arise from improved storm water management systems and spillage control measures. Disturbance of birds, mammals, and aquatic species and of fishing grounds may however arise as a result of the overall improvements in road and drainage infrastructure.

# 7 COMMUNITY BENEFIT AND AMENITIES

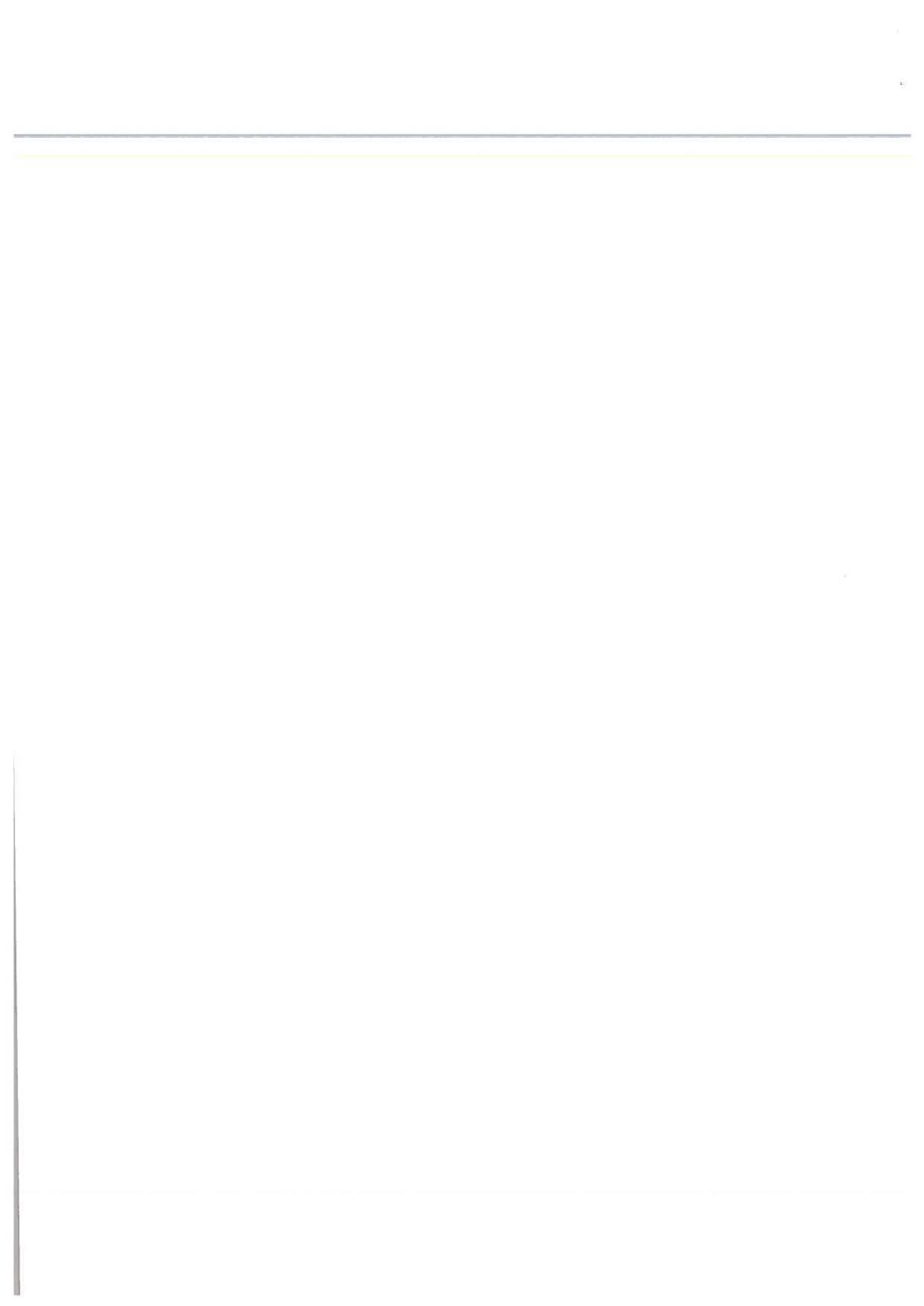
The proposed development of Galway Harbour incorporates facilities that will be of benefit to residents and visitors to Galway City.

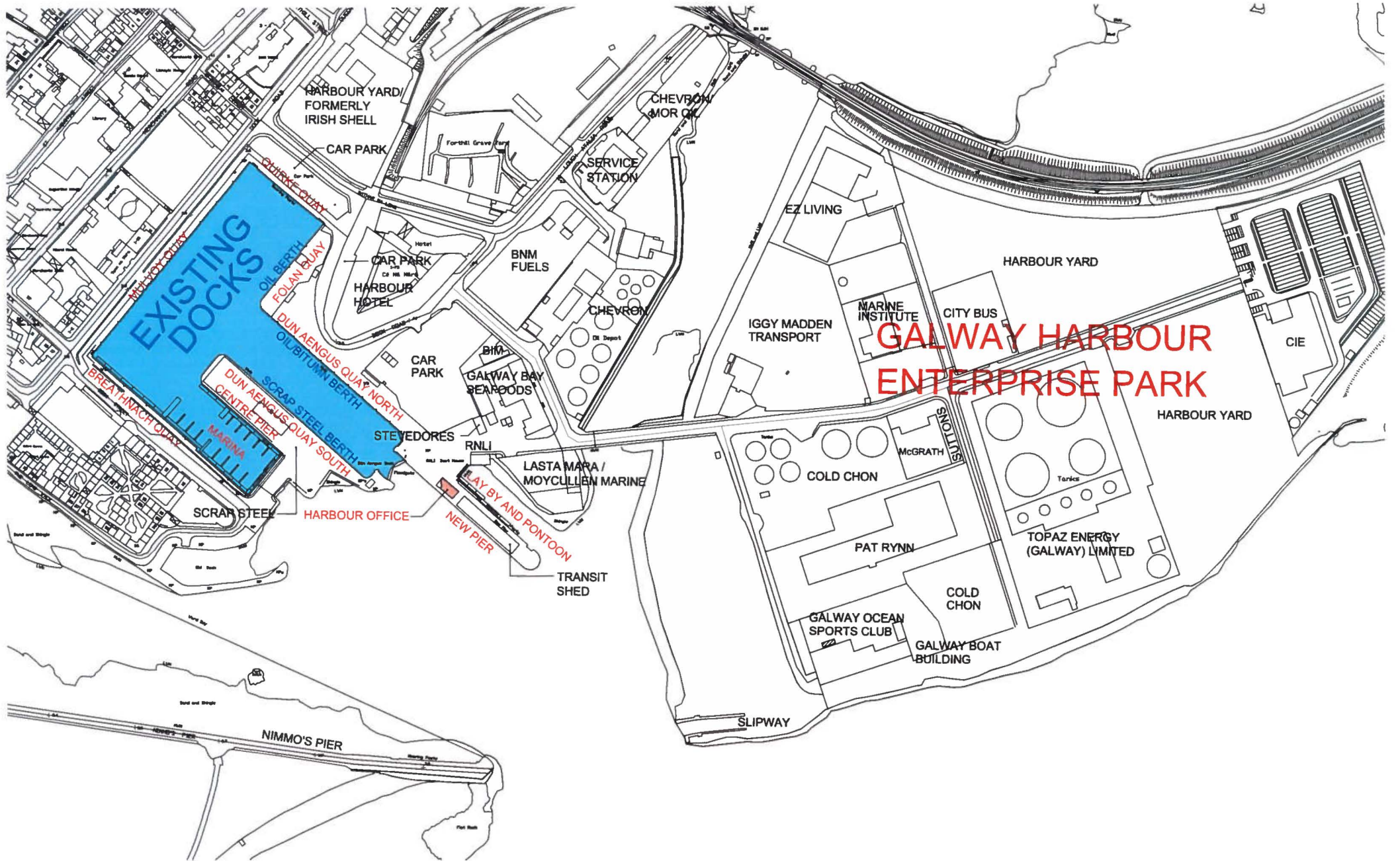
1. The New Port of Galway will be open to public access, in particular, to the new park, coastal walkways and marina. The exceptions being the secure storage areas and working quays where access must be controlled in the interests of public safety and security.
2. There will be open areas, landscaped areas and walkways which will be accessible to the public which will be under the control of the management company for maintenance.
3. The overall area of open space within the proposed development is 4.54 hectares, which includes landscaped parkland areas, the Renmore and Marina promenades and other landscaped areas.
4. There will be bayside promenades that create very valuable links in the wider coastal path network.
5. The New Port Plan includes the provision of a 216 Berth Marina.
6. The New Port of Galway will provide facilities for cruise ships to dock with direct discharge / access for passengers thus increasing the amenities for tourists in the area with passenger and bus terminal for access to the City and Region.

7. The creation of a sheltered area to the east of the development, for safe boating and other water-based activities for junior sailors.
8. There will be a Slipway adjacent to the above.
9. There will be a Nautical Centre Site available with Boat Yard for Sea scouts etc.
10. There will be a Fishing Pier for the relocation of the Local Inshore Fishermen with enhanced floating pontoon facilities and an access ramp and a yard for the equipment.
11. The New Port Facilities allow Galway port to service and facilitate advancement in the Ocean Energy Sector, providing the most direct and efficient access to the "Real Ireland".
12. The Inner Harbour, freed up for increased city leisure, cultural and tourism-based uses and amenities facilitates the introduction of new uses in the inner harbour area that will significantly improve its amenity value.
13. The existing Inner Harbour conflicts with City and residential amenity, will be removed when the commercial / freight operations are relocated to the new Port of Galway.
14. Significant public health and safety benefits when the New Port will accommodate the oil tankers and facilitate the cessation of such use in the Inner Harbour, thereby improving public safety and facilitating the proper and sustainable development of this area.

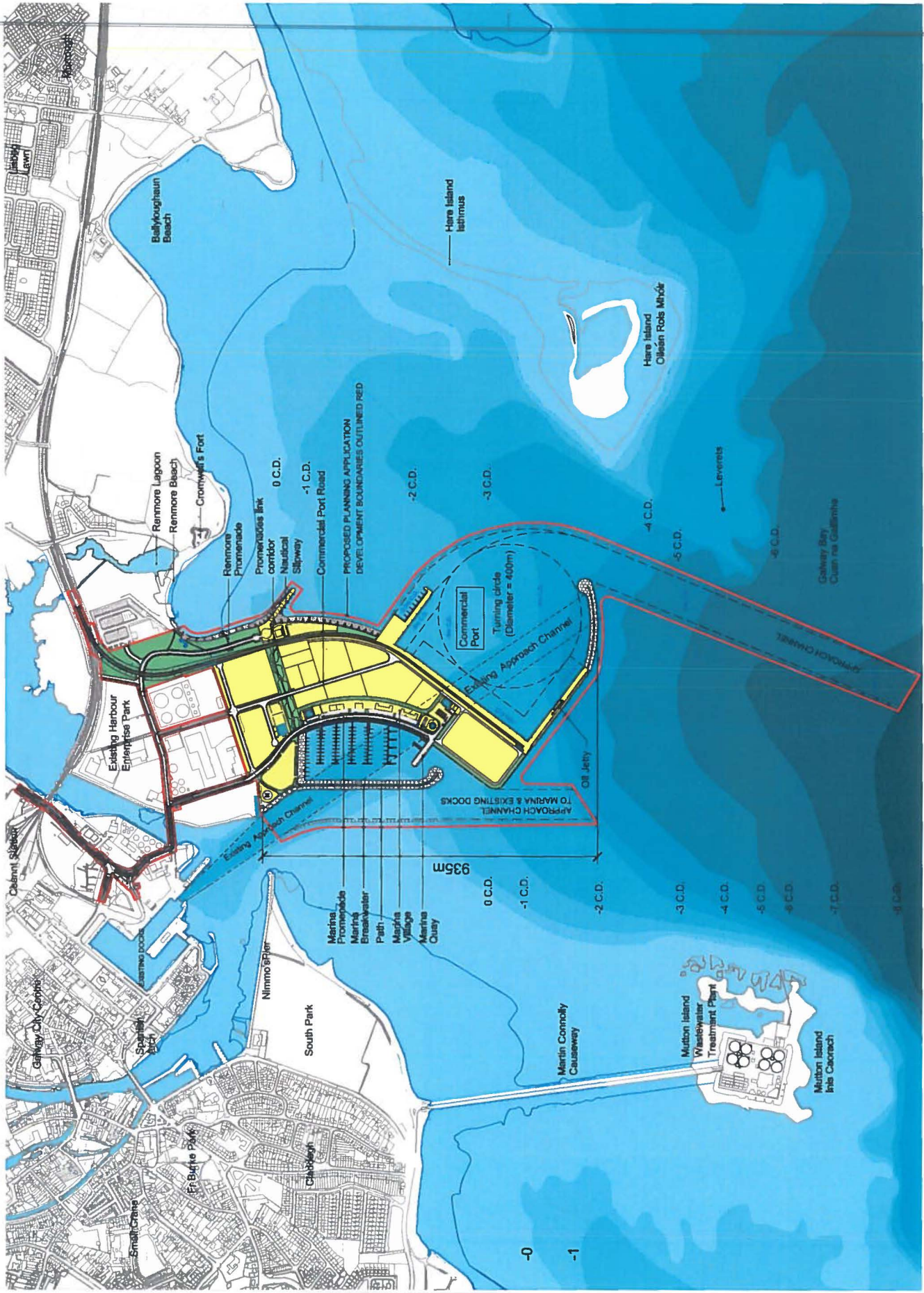
In summary, the proposed New Port of Galway will have a significant positive impact in terms of community benefit and amenities for the following reasons:

- Economic Development and Employment  
The New Port of Galway will address the current limitations at the Inner Harbour which, if not addressed, will ultimately result in the decline and demise of harbour-related activities in Galway City, with consequential negative socio-economic impacts, i.e. Port business preserved and future proofed.
- Public Amenities at the New Port  
The proposed development incorporates public amenities and facilities, including landscaped open space, promenades / bayside walkways, public access and marina and, in addition, it creates a sheltered and safe area for water-based leisure activities, i.e. Public Marina Access enhanced.
- Regeneration of Inner Harbour area  
The relocation of commercial / industrial harbour-related activities from the Inner Harbour facilitates the regeneration and environmental improvement of this inner city area as a new urban neighbourhood and visitor destination, as well as addressing the Seveso II issues associated with oil handling, i.e. City Centre opened to the sea.
- SEVESO II Issues  
It will address the SEVESO II issues associated with handling petroleum products in close proximity to City centre residential and commercial properties.





Existing Docks and GHEP



Site Layout Map



Overall Development

