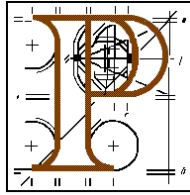


An Bord Pleanála



Inspector's Report

Case Ref: 07 PS0004

Prospective Applicant: Galway Harbour Company.

Local Authority: Galway City Council.

Nature of Application: Written opinion on information to be contained in an EIS for a harbour extension.

Location: Galway Harbour, Galway, Co. Galway.

Date of Site Inspection: 31st January 2011

Inspector Karla Mc Bride.

I recommend that the following written opinion on the information to be contained in the EIS be forwarded to Galway Harbour Company.

WRITTEN OPINION

The EIS for the project must contain the information specified in paragraph 1 of Schedule 6 of the Planning and Development Regulations, 2001 (SI No. 600 of 2001) and the information specified in paragraph 2 of Schedule 6 (referred to above) to the extent that this information is relevant to the nature of the development in question and to the environmental features likely to be affected.

This shall include details of the environmental impacts during construction and operational phases of the development and provide precise, clear and unambiguous mitigation measures where such are proposed, including indicating who has responsibility for implementation of such mitigation and monitoring of the impacts of the development.

The EIS must contain a summary in non-technical language of the information contained in the EIS. The non-technical summary should contain an objective statement in non-technical language of the environmental effects of the development and all significant effects and mitigation measures should be referred to therein.

The description of the development to be contained in the non-technical summary should explain the proposals clearly and unambiguously in terms of their nature, scale and extent in order to allow the public to understand the EIA process and to make submissions in relation to the development.

The EIS in this case should, in particular, contain the information and address the issues referred to below.

Description of Development

- A full and detailed description of the scale, nature and extent of all aspects of the development including details of excavations, harbour construction and foundations and the height of the harbour and related structures relative to the ordnance datum, details of proposed silt containment systems, a schedule of works including timescales, phasing arrangements, any special work practices and the application of specialised machinery/equipment.
- The national/regional/local purpose of/need for the proposed development described in conjunction with any relevant national, regional or local policies and/or objectives.

Alternatives

- An outline of the main alternative locations studied and alternative forms of development design, scale and construction methodologies considered prior to the selection of the preferred development option.
- Justification for choosing the preferred location taking into account the effects on the environment and including the criteria applied in assessing the various alternatives considered. In this context, the likely significant effects on the environment of the various alternative options indicated shall be considered, having regard to the selection criteria applied.

The Receiving Environment

The receiving environment shall be defined to include all areas that would be impacted directly or indirectly by the proposed development. The information contained in the EIS should be based on comprehensive surveys of the area and should include:

- Information on the flora and fauna (including fisheries and aquatic mammals) in the receiving environment and surrounding area and details on their conservation status and ecological importance. The nature and extent of such habitats should be mapped with the footprint of the proposed development overlain. The information should include surveys and details of flora and fauna in the area including:
 - A winter and year round survey of birds (including but not limited to species included in Annex 1 of the Birds Directive) should be provided to determine bird usage of the site and surrounding area, identify breeding grounds, nesting patterns and migration patterns and evaluate the importance of the site and surrounding area for birds.
 - A year round survey of fisheries and aquatic mammals (including but not limited to species included in Annex 11 of the Habitats Directive) should be provided to determine fish and aquatic mammal usage of the site and surrounding area, identify breeding grounds and migratory paths and evaluate the importance of the site for fisheries and aquatic mammals (including a baseline description of the distribution of Harbour Seals, Grey Seals and Cetacea within the zone of impact).
 - An otter and bat survey undertaken at an appropriate time of the year.
- Information on the geology and geomorphology of the receiving environment, including a description of the bedrock, the depth at which the bedrock is encountered, the type and depth of material which overlies the bedrock and the depth at which this material is encountered.

- Information on the chemical composition of the material which overlies the bedrock (including details of any heavy metals and leachate contained in overlying material).
- Information on the bathymetry, oceanography, hydrodynamics, tidal and wave patterns and wave refractions and movements in the receiving environment (including modelling of all hydrodynamic and coastal processes of the tidal system).
- Information on the sediment transportation and deposition regime including particle size analysis, sediment organic carbon and sediment chemistry (heavy metals, persistent organic compounds etc.)
- Details of any likely terrestrial and aquatic archaeological features that may be significant for cultural heritage and which may be affected by the development.
- Details of the existing road network in the greater Galway area.
- Details of the rail links and connections in the Galway area, potential for rail freight business, identification of potential freight destinations, quality and capacity of existing infrastructure, availability of rolling stock and details of passenger numbers.

The information contained in the EIS should contain be based on comprehensive surveys of the area.

The proposed development

- Information on the proposed harbour extension and the location of all proposed structures, including details of their construction and foundations and their height and base level relative to the ordnance datum.
- Details of all dredging, land reclamation and dumping at sea.
- Information on existing sediment contamination within the dock (including chromium, lead and manganese and other heavy metals).
- Details of the construction methods and materials that would be used to construct the proposed development.
- Details of the proposed fill techniques to be used in the land reclamation, the materials proposed, quantity, configuration and constitution including:
 - Materials to be used in the quay wall.
 - Details of the material to be used as fill from seabed to reclaim land.
 - Details regarding additional fill materials (including source, quantum and transportation method).

- Details of any additional protection measures proposed for development, quay walls, breakwaters and reclaimed lands.
- Details of works to provide access for the development, including the construction of access roads and rail links, and works to existing public roads, junctions, bridges and rail links.
- Information on the volume and type of traffic (including details of any unusually heavy, high or wide loads) likely to be generated during the construction phase.
- Calculations of the amount of and a description of the nature of material which would be disturbed or excavated on the site during dredging (including details of heavy metal and leachate mobilisation from the seabed as a result of excavation and ground disturbance.)
- Proposals for the storage and disposal of material excavated or otherwise generated during construction of the proposed development and for the prevention or minimisation of emissions from it to waters.
- Information on the type and quantity of the materials to be used in the construction of the development and on their storage and handling.
- Information on phasing.

Subject Areas

The EIS should, in particular, cover the matters raised below:

Human beings

- Assessment of the likely effects of the proposed development on the health and safety of human beings during the construction and operational phases of the development and in the context of the potential for a major accident.
- An assessment of the impact on human activities (including fishing, general on and off shore recreation, boating activities and water sports in the bay area, River Corrib/City canal system and Lough Atalia).
- An assessment of the impact on the proposal to create a greenway (pedestrian and cycle) link between Oranmore and Barna.

Flora and Fauna

- An assessment of the impact on flora and fauna in the bay area (including mammals, fish and fisheries, birds, aquatic mammals and invertebrates), an assessment of the impact on ecologically sensitive locations and in particular on priority habitats and designated conservation areas (including marine and inter-tidal and sub-tidal environments) in the receiving environment and surrounding area in the following contexts:

- Arising from dredging, excavation, construction and operational activities (including changes in water chemistry, oxygen content and salinity).
- Arising from potential changes in flow patterns and velocity from the River Corrib and Lough Atalia into Galway Bay.
- Arising from potential changes in tidal and wave flow patterns in Galway Bay.
- Arising from changes in patterns of sedimentation.
- Arising from potential disruption of a critical period in the life cycle of a species.
- Arising from increased fish predation by harbour seals and birds arising from the new and elongated configuration of the mouth of the River Corrib.
- Arising from the operational phase of the development including information on discharges to Galway Bay.
- Arising from sound and increased maritime traffic in Galway Bay.
- Arising from accidental spillages.
- Arising from the potential for a major accident.
- The assessment should take account of the cumulative impact of other development (planned, permitted or proposed) including the existing causeway to Mutton Island.

Note: The EIS should contain adequate information to allow for an appropriate assessment of the impact of the development on the Galway Bay Complex Special Area of Conservation (Site code 000268), Inner Galway Bay Special Protection Area (Site code 004031), the Galway Bay proposed Natural Heritage Area and the Lough Corrib candidate SAC (Site code 000297). The EIS should also contain adequate information to allow for the consideration of IROPI (imperative reasons of overriding public interest) in the event that significant and/or irreversible impacts are identified.

Soil

- An assessment of the impact of dredging, blasting and other works on estuarine, marine and glacial soils, geology and groundwater in Galway Bay.
- An assessment of the impact on the sub-surface ground water aquifers during and post construction work.
- Noting that the site contains reclaimed land (the existing enterprise lands) an investigation should be undertaken to assess the potential for any contaminated soil. If affirmative, proposed remediation measures, if any, should be detailed.

- Noting that the site is located to the west of reclaimed land (South Park) an investigation should be undertaken to assess the potential for any leakage of contaminated materials into Galway Bay (by way of leachate or heavy metals but not excluding any other materials). If affirmative, proposed remediation measures, if any, should be detailed.
- Calculations of the amount and description of the nature of material which would be disturbed or excavated on the site and proposals for the storage and disposal of material excavated or otherwise generated during construction of the proposed development and for the prevention or minimisation of emissions from it to waters.

Water/coast

- An assessment of the impact of changes in water quality, hydrogeology and tidal/wave patterns on Galway Bay, the River Corrib system, Lough Atalia and the impacts on the amenity value of beaches in the bay area.
- An assessment of coastal protection works, coastal and marine infrastructure, outfalls, cables etc., sea walls, beaches and recreational facilities.
- A flood risk assessment for the Corrib estuary (including the areas around Claddagh and Spanish Arch) and measures to protect against tidal flooding.
- An assessment of impact of the proposed development (during the construction and operational phases) on siltation patterns throughout Galway Bay including the River Corrib and Lough Atalia.
- An assessment of the impact of depth changes in Galway Bay on the flow of water from Lough Corrib.
- An assessment of the hydrodynamic effects between Lough Atalia and Galway Bay and the potential impact on the existing railway viaduct.
- Maintenance details for the newly formed shipping channel.
- Details of properties or products to be stored on the site and how they could impact on the marine environment and groundwater.
- Details of disposal of treated foul and discharge of storm water and assessment of impact on receiving waters.

Air, climate and noise

- An assessment of air emissions and construction related impacts on climate conditions (including dust).
- An assessment of odours released during dredging (including hydrogen sulphide).
- An assessment of impact on microclimates.
- An assessment of noise arising from both construction and operational phases of the development.

- An assessment of underwater noise and vibration and an assessment of its impact on birds, fish and fisheries and aquatic mammals (including sound pressure levels, sound exposure levels, frequency, bandwidth, duration of explosions).

Landscape

- An assessment of the proposal in the context of the provisions of the Development Plan relevant to the area.
- An assessment of the potential visual impacts of the proposed development when viewed from Salthill, Claddagh, Galway Harbour, Galway City, Renmore and the surrounding road network (including the impact of a fully working harbour).
- Visual impacts of the development to be demonstrated by provision of a representative series of photomontages and 3-D modelling (including the impact of a fully working harbour).

Cultural Heritage

- An assessment of the potential impacts on archaeological heritage in Galway Harbour, Galway Bay and Lough Atalia (including surface, inter tidal and underwater areas).
- The assessment should include a desk-top study and field assessment including underwater dive survey.

Roads, traffic and infrastructure:

- An assessment of the volume and type of traffic (including details of any unusually heavy, high or wide loads) likely to be generated during the construction phase and an assessment of the environmental effects of such traffic.
- An assessment of the volume and type of traffic likely to be generated during the operational phase of the harbour and an assessment of the environmental effects of such traffic.
- An assessment of the volume and type of traffic likely to be generated during the operational phase of the harbour (including the enterprise park) and an assessment of the impacts of traffic generation on the greater Galway road network as well as on the national and non-national road network (including junctions).
 - The assessment should include the N6 and associated junctions (N59, N84, N17, M6, R339 and R338).
 - The assessment should take account of the cumulative impact of other development (planned, permitted or proposed) at the junctions concerned.

- The assessment should identify at what stage of development the necessary road improvements would be constructed.
- The assessment should address the issue of noise pollution.
- Any transport assessment undertaken in relation to the proposed development should be consistent with the requirements and guidelines of the NRA.
- An assessment of all aspects and stages of the proposed development (including pre-construction, construction and post construction).

Other issues

- Details in relation to risk assessment.
- Details in relation to health, safety and welfare, construction management and waste management.

Mitigation

In the event of significant effects on the environment being identified the EIS should contain a clear description of the measures envisaged in order to avoid, reduce and, if possible, remedy any significant adverse effects identified. Mitigating measures should be set out in precise, clear and unambiguous terminology. In addition an appendix listing all/full set of the mitigation measures should be produced.

Recommendation

I recommend that copies of the submissions received from the parties from which observations were requested be circulated to the prospective applicant with the written opinion.

Karla Mc Bride
Senior Inspector
8th February 2011