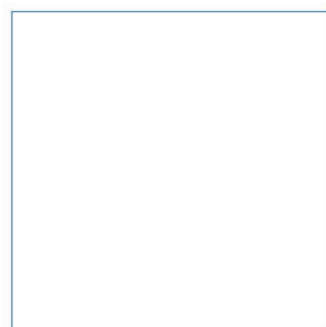
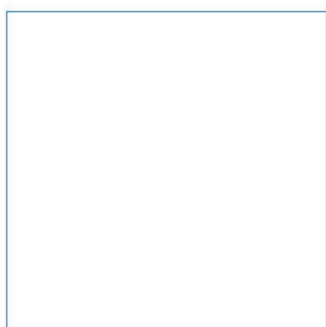
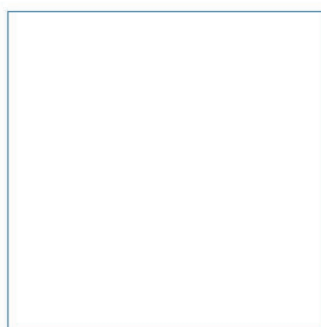


# Associated British Ports

## Immingham Eastern Ro-Ro Terminal

### Preliminary Environmental Information: Chapter 2: Proposed Development

January 2022



Innovative Thinking - Sustainable Solutions

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Preliminary Environmental Information:  
Chapter 2: Proposed Development

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## Document Information

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## 2 Proposed Development

### 2.1 Introduction

2.1.1 This chapter is sub-divided into a number of sections. Following this introduction, Section 2.2 provides an outline description of the proposed development site and surrounding area. This is supported by other topic specific descriptions provided in the topic chapters that follow in this PEIR. Section 2.3 describes IERRT. The location of the proposed development is shown on Figure 1.1 in Volume 2 of the PEIR. The marine works and landside works are shown on Figure 1.2 and Figure 1.3 respectively in Volume 2 of the PEIR.

### 2.2 Application site and surrounding area

2.2.1 A plan of the existing Port of Immingham is shown on Image 2.1. The Port of Immingham lies immediately adjacent to the main deep-water shipping channel which serves the Humber Estuary which means that the Port is able to accommodate and service some of the largest vessels afloat today.

2.2.2 The Port is also well located for onward/inward transport of goods by road. It is easily accessible from the M180 Motorway, and from there to the M1 or the A1 via the M18. The Port also has the added benefit of its own rail terminal and indeed some 25 % of all rail freight in the United Kingdom (UK) originates from the Port of Immingham.

2.2.3 The Port comprises a number of discrete operational areas, with bulk commodities such as liquid fuels, solid fuels and ores, as well as ro-ro (Roll On-Roll Off) freight, being handled from in-river jetties. These include the Eastern and Western Jetties, the Immingham Oil Terminal (IOT), the Immingham Gas Terminal, Immingham Outer Harbour (IOH) and the Humber International Terminal (HIT) as shown on Image 2.1 and Figure 1.1 in Volume 2 of the PEIR.

2.2.4 Traffic and commodities including load on/load off (lo-lo) freight, animal feed and grain are handled mainly at berths within the Port's internal dock and are then moved to an array of storage compounds for onward distribution. Some parts of the Port are subject to the requirements of the Control of Major Accident Hazards (COMAH) Regulations (2015) and the Planning (Hazardous Substances) Act 1990 in light of the types and volumes of materials that may from time to time be present within the port estate.

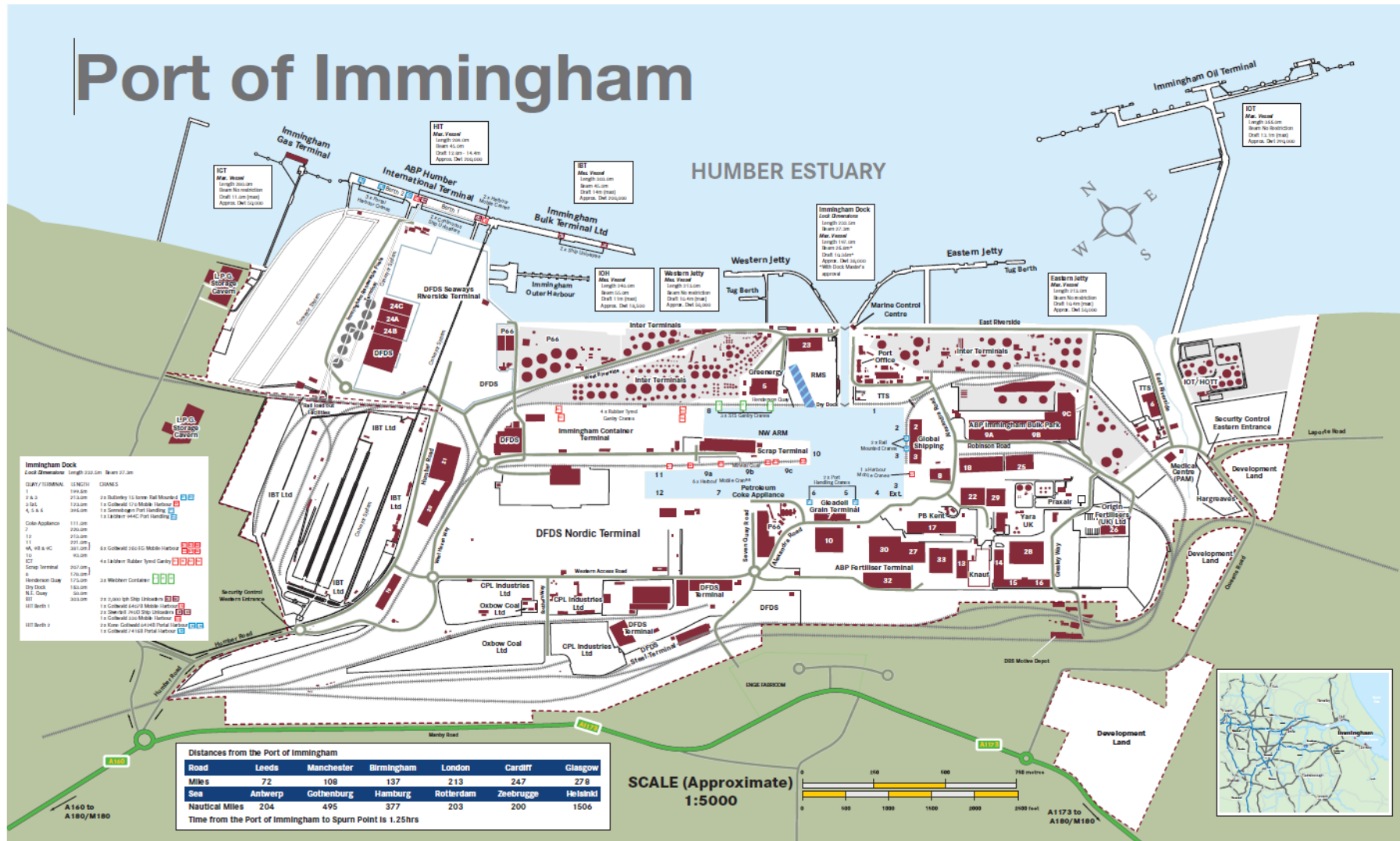


Image 2.1. Existing plan of the Port of Immingham

## 2.3 Project description

### Marine works

#### *Marine infrastructure*

2.3.1 In summary, at this stage it is anticipated that the proposed marine works will consist of:

- An open piled approach jetty which will provide access for vehicles and wheeled cargo to and from the shore to the berths. The approach jetty will be approximately 105 m in length and extend from the shore spanning the existing pipelines and the sea wall, and terminating at a newly created bankseat (foundation for linkspan);
- The linkspan will be a single structure which will allow vehicles and cargo to transfer from the approach jetty across the bankseat to the floating pontoons. It will span the distance between the bankseat and the first pontoon, with its free end resting upon the edge of this pontoon. The linkspan length will be optimised to ensure that vehicular accessibility from the approach jetty to the berthed ro-ro vessels via the pontoons can be maintained at all states of the tide;
- The floating pontoons (two in number) will be approximately 40 m x 90 m with an overall depth of 7 m and will provide the resting point for the moored vessels' stern ramp. The pontoons will each be secured in place by two restraint dolphins which will ensure that they can range up and down freely with the tide;
- Positioned centrally to each floating pontoon and extending away in a north westerly direction, it is currently anticipated will be an open piled finger pier approximately 260 m in length. These will be lined with fender panels on both sides and equipped with mooring infrastructure (fixed bollards and/or quick-release hooks) so that vessels can berth on either side of each pier (i.e. providing up to two berths per pier, four in total);
- The two pontoons will be linked with another linkspan which will hinge on one of the pontoons with the free end resting on the other;
- A capital dredge (as discussed below), will be required to ensure accessibility and safe mooring for vessels at all states of the tide; and
- The dredge berth pocket will be optimised to include side slopes so as to ensure its stability. As noted below, Associated British Ports (ABP) is seeking a beneficial use for the dredged arisings – comprising of alluvial and glacial materials – but if this does not prove possible, then it is likely that the arisings will have to be deposited at licensed sites within the estuary.



## Capital dredge

- 2.3.2 As noted above, the proposed development will require a capital dredge of the new berthing area. At this preliminary stage, the maximum spatial extent of the dredge is currently estimated at being approximately 90,000 m<sup>2</sup>, dredged into existing bathymetry which varies across the area between 4.6 m above Chart Datum (CD) to 9 m below CD. The berthing area with appropriate side slopes will be dredged to a maximum of 9 m below CD, including an allowance for overdredge. The area beneath the floating pontoons will be dredged to 5 m below CD. In real terms this represents a maximum deepening of 11.5 m over a small area, with an average lowering of 4 m. The indicative location of the dredge area that has been identified at this stage of the project is shown on Figure 2.1 in Volume 2 of the PEIR.
- 2.3.3 It is estimated that about 330,000 m<sup>3</sup> of material in total will be removed. This is likely to constitute approximately 20,000 m<sup>3</sup> of boulder clay, alongside 310,000 m<sup>3</sup> of sand/silt (alluvium) *in situ*. This is a preliminary estimate that will be confirmed following the completion of the geotechnical data collection exercise which is programmed to be undertaken during marine site investigations, scheduled for early 2022.

## Disposal of dredge material

- 2.3.4 ABP recognises that it is under an obligation, if possible and practicable, to identify a beneficial use for the dredged arisings. At this stage in the process, however, it is not considered that the dredge material (being predominantly silt and clay) will be of a quality suitable for alternative beneficial use, such as for the purpose of construction/reclamation infill, by reason of its low potential bearing capacity either on land or within the marine environment. In addition, no infill material will be required for the project nor, as far as the applicant is currently aware, for any other project in the locality. The only possible use might be for habitat enhancement in the estuary (i.e., recharge), should such a scheme become available. Even then, the dredge material would have to be of a quality suitable for such use whilst also being consistent with the conservation objectives of the estuary. As far as the applicant is aware, no such scheme exists at present, although the position with regard to all options will be carefully monitored as the project is taken forward.
- 2.3.5 If a beneficial use cannot be identified, then at present, in light of the above, disposal within the estuary would appear to be the only available option subject to the dredge material being deemed suitable for disposal at sea by the Marine Management Organisation (MMO) and the Centre for Environment, Fisheries and Aquaculture Science (Cefas) (see Chapter 8 Water and Sediment Quality). The disposal of the dredge material in this manner will at least have the benefit of ensuring that the sediment is retained within the estuary system, thereby maintaining the existing sediment budget for the wider Humber Estuary.

- 2.3.6 It is currently estimated that about 20,000 m<sup>3</sup> of boulder clay, alongside 310,000 m<sup>3</sup> of sand/silt (alluvium) *in situ* is likely to require disposal in the estuary. In light of the above, at present, it is envisaged that the disposal site HU056 (Holme Channel) will be used to dispose of inerodible clay material, and HU060 (Clay Huts) will be used to dispose of sand/silt (alluvium) material. This is based on the proximity of those sites to the proposed development, and their suitability and capacity to receive the dredged material.
- 2.3.7 To ensure a comprehensive approach to the assessment of the Immingham Eastern Ro-Ro Terminal (IERRT) project, even though disposal at sea may not ultimately be the option adopted by ABP, a preliminary assessment of the effects associated with using these identified sites is included in this Preliminary Environmental Information Report (PEIR). A Waste Hierarchy Assessment (WHA) which will include a more detailed consideration of the alternative options for the dredge material, will be included as part of the Environmental Statement (ES) that will, in due course, be produced as part of the Development Consent Order (DCO) application (see Chapter 5 Legislative and Consenting Framework, Section 5.8).

## Landside works

- 2.3.8 ABP will, following the demolition and removal of a number of existing buildings within the development site, carry out works to improve that part of the application site's surface lying immediately adjacent to the southern end of the proposed approach jetty. These works will be required so as to provide suitable areas to accommodate wheeled cargo and HGVs either awaiting embarkation or collection, together with essential storage. These will be known as the Central Trailer Park, North Trailer Park, East Trailer Park, South Trailer Park and West Trailer Park as shown on Figure 1.3 (see Volume 2 of the PEIR).
- 2.3.9 Being part of the statutory and operational port estate, the vast majority of these areas will only require a simple upgrade, the works required being essentially to bring the area up to a standard sufficient to provide a uniform surface for the handling and parking of wheeled cargo, trailers and HGVs together with storage as appropriate. This will be achieved through the provision of new pavements and associated infrastructure. Some peripheral parts of the areas which will be used for waiting vehicles/cargo trailers are likely to require additional ground works.
- 2.3.10 The terminal areas will be fully fenced to comply with International Ship and Port Facility Security (ISPS) Code criteria and will also require adequate lighting and security provision, which again in most areas will simply represent a replication of lighting and infrastructure already present within the port estate.

- 2.3.11 A terminal building, approximately 1,200 m<sup>2</sup> in size, together with a small welfare building will be constructed on the site. In addition, a small workshop, a UK Border Force building and gatehouse may also be required. These buildings will rest upon either a shallow foundation (strip/pad) or a piled foundation depending upon the ground conditions present. The buildings themselves will not exceed two storeys in height and will generally resemble the style of buildings that already exist within the port estate.
- 2.3.12 A bridge will be required to ensure contiguous terminal operations between the currently separate north and central storage areas. The bridge is likely to be constructed from steel sections and at its highest point, spanning Robinson Road – an existing dock road – and an ABP controlled railway line. The bridge will be designed to normal highway standards.
- 2.3.13 Access to and from the proposed development will be achieved via remotely operated barriers. Rather than operate a gatehouse system, it is currently envisaged that when drivers report in, they will park in the pre-gate parking area and walk on foot to the check-in facilities in the terminal building with paperwork to be processed. Once check-in has been completed, the drivers will make their way back to their vehicles and enter the terminal through the gates.
- 2.3.14 Appropriate drainage and services infrastructure will also be provided throughout the new terminal area as necessary.

## Environmental enhancements

- 2.3.15 Consideration is being given to any soft landscaping/ecological enhancements which might be capable of delivery in what is already an intensively used operational environment. Measures such as landscape planting and bird and bat boxes are being considered.
- 2.3.16 Further details of any environmental enhancements that are proposed will be included in the ES.

## 2.4 Abbreviations/Acronyms

<b>Acronym</b>	<b>Definition</b>
ABP	Associated British Ports
CD	Chart Datum
COMAH	Control of Major Accident Hazards
DCO	Development Consent Order
ES	Environmental Statement
HIT	Humber International Terminal
IERRT	Immingham Eastern Ro-Ro Terminal
IOH	Immingham Outer Harbour
IOT	Immingham Oil Terminal
ISPS	International Ship and Port Facility Security
MMO	Marine Management Organisation
PEIR	Preliminary Environmental Information Report
PLC	Public Limited Company
ro-ro	Roll On-Roll Off
UK	United Kingdom
WHA	Waste Hierarchy Assessment

Cardinal points/directions are used unless otherwise stated.

SI units are used unless otherwise stated.

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