



A17/2a - Volume 2a: Technical Report: Land Use

Transport and Works Act 1992
Boston Barrier Order

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Published by:

Environment Agency
Horizon House, Deanery Road,
Bristol BS1 5AH
[Email: enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk)
www.gov.uk/environment-agency

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Quality Assurance

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| <i>Name</i> | <i>Title</i> | <i>Date</i> | <i>Version</i> |
|-------------|-----------------------------|-------------------|----------------|
| <i>NC</i> | <i>EIA Project Manager</i> | <i>12/08/2016</i> | <i>1</i> |
| <i>EL</i> | <i>EIA Project Director</i> | <i>12/08/2016</i> | <i>1</i> |

EIA Quality Mark



This Environmental Statement, and the Environmental Impact Assessment (EIA) carried out to identify the significant environmental effects of the proposed development, was undertaken in line with the EIA Quality Mark Commitments.

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1 Introduction

1.1 Overview

- 1.1.1 This report forms part of the Technical Reports (Volume 2a – 2d) that support the Boston Barrier Project Environmental Statement (ES) (Volume 1). Volume 2 reports the EIA for the Project, identifying all the predicted effects, irrespective of their significance. Volume 1 discusses only those effects, both temporary and permanent, deemed significant under the EIA regulations.

1.2 The Project

- 1.2.1 The purpose of the Project is to improve the standard of protection from tidal flooding. The proposals would not affect the existing standards of fluvial flood protection provided upstream within the River Witham and South Forty Foot Drain (SFFD). In January 2015 water level management (WLM) was removed from the scope of this current Project. In making the decision, the Environment Agency, Lincolnshire County Council (LCC) and Boston Borough Council (BBC) confirmed that it remains the vision to provide WLM at a later date through a standalone project and consenting process.
- 1.2.2 The Project would connect to the existing defences downstream of the town of Boston. The Project would consist of water-based works (the barrier structure) and land-based work (along the Haven).
- 1.2.3 Defences immediately downstream of the barrier structure would be improved to a 1 in 300 standard of protection as a part of the barrier structure works. This level of protection is to ensure protection against a 0.33% (1 in 300) annual probability of flooding over the 100 year project life.
- 1.2.4 The Project would be constructed south of the town of Boston across the area of the River Witham known as 'the Haven' (see ES (Volume 1): Appendix A; Maps and Figures: Figure 1.1). It would be approximately 100m downstream of Black Sluice, adjacent to the Starch Berth (on the Port of Boston (PoB) estate - left bank) and existing residential properties (along Wyberton Low Road - right bank).
- 1.2.5 It should be noted that, references to left and right bank of the Haven are described in a downstream facing direction. Therefore, the left bank (north side) is on the left side when facing downstream and the right bank (south side) is on the right side when facing downstream.
- 1.2.6 A detailed description of the Project is included in the ES (Volume 1): Chapter 2.

1.3 Purpose of assessment

- 1.3.1 The purpose of this land use assessment is to identify, understand and interpret the land use baseline of Boston relevant to the Project and assess the potentially significant issues scoped in as part of the Project's Updated Scoping Report (Environment Agency, 2014) as outlined in Section 3.4 of this Report. This includes consideration of receptors associated with land use that could be affected during both construction and operation of the Project.
- 1.3.2 The assessment identifies the predicted environmental effects and proposes management and mitigation measures if any, to negate or minimise those effects.
- 1.3.3 The land use assessment has focused on the physical change in land use that has resulted from either the construction or operation of the Project. The commercial impact to PoB that may result from the identified change has been dealt with in the ES (Volume 2d): Navigational Impact Assessment Technical Report and is not considered further in this Technical Report.

1.4 Report structure

- 1.4.1 This Technical Report comprises of the following key sections:
- Methodology: outlines the methodology employed to carry out the assessment;
 - Legislation and planning policy: outlines the key legislation and policies relevant to the Project
 - Baseline conditions: presents the baseline scenario and current local land use conditions;
 - Impact assessment: identifies the predicted impact of the Project on land use during construction and operation and sets out mitigation measures to reduce the significant impacts;
 - Summary: describes the predicted residual significant effects following the implementation of mitigation measures; and
 - References: contains the references and source materials relating to the land use assessment.

2 Assessment methodology

2.1 Introduction

- 2.1.1 In order to carry out an assessment of the impact the Project has on land use, it was necessary to survey and assess the existing baseline conditions of the study area. Following this, the impacts and subsequent effects of the Project on land uses could be determined and have been detailed within this Report.
- 2.1.2 The assessment broadly follows the framework approach described in the ES (Volume 1): Section 3.5. Conclusions were based on a number of factors including:
- The significance of the land uses affected;
 - The magnitude of any impacts identified;
 - Whether the impacts are beneficial or adverse;
 - Professional judgement;
 - Views expressed during public consultation; and
 - Consultation with relevant stakeholders.

2.2 Background research and desk based study

- 2.2.1 The baseline information for this Report has been obtained through a combination of desktop study, site walkover and a review of the other relevant Technical Reports. A desk based study has been undertaken to determine the land uses within the Project area which have the potential to be affected by the Project.

2.3 Consultation

- 2.3.1 Consultation with BBC and LCC has been carried out to understand their aspirations to encourage regeneration in the town.
- 2.3.2 Regular meetings have been held with the PoB since 2014, with the purpose of developing the proposal to relocate the fishing fleet on the PoB's riverside quay, together with the associated mitigation required for the Port. There has been ongoing consultation with the PoB to ensure a good understanding of how they use and operate the various areas within the PoB Estate, including the leased areas. Some of the key matters raised by PoB and included within the Project are requirement for the turning of all vessels outside of the Wet Dock Entrance during closures of the Wet Dock, ensure the quay frontage is operational while the Wet Dock is closed and route of the flood wall and the number and location of flood gates through the PoB Estate.

2.4 Study area

- 2.4.1 The study area considered for the land use assessment is the Project area, (see ES (Volume 1): Appendix A: Maps and Figures: Figures 1.1 and 1.2) and immediately adjacent land uses.

This takes into account the assets and key services and businesses directly affected by the Project.

2.5 Scoping assessment

- 2.5.1 The scoping process for this Project has been carried out using information from Original (2011) and Updated Scoping Reports (Environmental Agency, 2014) and professional judgement, based on our understanding of the baseline environmental conditions and the methods in which the Project would be constructed and operated in. Water level management (WLM) has been removed from the Project. Therefore, land use impacts identified in the Updated Scoping Report (Environment Agency, 2014) due to WLM will not be considered as part of the EIA. The issues not related to WLM identified in the Updated Scoping Report that would have an acceptable level of certainty and unlikely to result in a significant effect have been scoped out. Justification for this is provided in the Updated Scoping Report (Environment Agency, 2014). These issues are not considered any further.
- 2.5.2 Those issues identified as likely to result in a significant effect were identified in the Updated Scoping Report (Environment Agency, 2014) and have been taken forward for further consideration within this ES and are discussed below. This statutory EIA includes assessment of the following potential environmental issues associated with land use:
- Works within the PoB Estate and the land required for right bank construction and maintenance access route off Lealand Way as these may disrupt activities in these areas during construction;
 - Direct impact on Boston Public Footpath No.14 (Macmillan Way) long distance footpath during construction;
 - Works within the PoB Estate along the left bank may limit activities in the area during construction;
 - Land required for the control building would no longer be available for port activities;
 - Permanent change to land use beneath the footprint of the Project within the PoB; and
 - The long term effects of the operation of the barrier on the use of land within the port.

2.6 Assumptions and limitations

- 2.6.1 In quantifying effects, the assessment process aims to be as objective as possible. However, where possible changes have been factually defined and direct loss of features has been quantified. This is generally considered acceptable if based on 'professional expertise', supported by clear evidence, reasoned argument and informed opinion. The conclusions of this assessment therefore combine objective measurement with informed professional interpretation.

2.7 Impact assessment methodology

- 2.7.1 The first stage of the impact assessment is to identify existing land use receptors which may be impacted by the Project. This is done through the baseline assessment. From this, the land use types are given a value based on the significance of value of land. The land use asset is assessed on the quality and the type of land that is to undergo change. Professional judgement is used within these criteria and the land use asset is assigned a value/sensitivity using the definition in Table 2.1 as guidance.

Table 2.1: Definition of value/sensitivity

| Value/sensitivity | Criteria |
|-------------------|--|
| High | Project would result in the permanent loss of existing beneficial land uses, the severance of beneficial uses or prevent the development of designated Local Plan sites/proposals. |
| Medium | Project would result in the permanent loss of existing land uses of a less beneficial nature and would impact upon future development of designated Local Plan sites/proposals. |
| Low | Project would require temporary loss of existing land uses , or cause temporary severance issues |
| Negligible | Barely perceptible changes |

Source: Mott MacDonald (2016)

- 2.7.2 The magnitude of the impact of the Project on the land use asset is then assessed. The impact is evaluated on the basis of the Project's effect on the value of the asset and whether this alters the assets significance in terms of the land use change. These impacts can be positive or negative. The impact is then assigned a magnitude based on the definitions in Table 2.2.

Table 2.2: Definition of magnitude of impact

| Impact magnitude | Definition |
|--------------------------|---|
| Major negative | Changes that totally alter or destroy the value of the asset. |
| Moderate negative | Changes that detrimentally affect the value of the asset. Changes that result in the setting of the asset being noticeably different. |
| Minor negative | Changes that have a limited detrimental effect on the value of the asset. Changes to the setting of the asset that have a slight detrimental impact on significance. |
| Negligible | The Project does not affect the value of the asset. Changes to the setting do not affect the significance of the asset or the ability to understand the context and setting. |
| Minor positive | Changes that have a limited benefit to the value of the asset. Changes to the setting of the asset which have a slight beneficial impact on significance and enhance the areas around it. |
| Moderate positive | Changes that are beneficial to the value of the asset. Changes that result in the setting of the asset being noticeably enhanced. |
| Major positive | Changes that are extremely beneficial to the value of the asset. Comprehensive changes in the setting of the asset which reveal and enhance the significance of the surrounding areas. |

Source: Mott MacDonald (2016)

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- 2.7.3 To ascertain the overall effect on the land use assets from the Project, the magnitude of the impact is cross referenced with the value of the land use asset. As with impacts the effect can be positive or negative and temporary or permanent, depending on the nature of the Project. This is set out in Table 2.3, with major and moderate effects classed as significant.

Table 2.3: Matrix for evaluating the significance of environmental effects

| Magnitude of impact | Value/ Sensitivity | | | |
|--------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| | High | Medium | Low | Negligible |
| Major negative | Major adverse | Moderate adverse / Major adverse | Moderate adverse | Minor adverse/ Moderate adverse |
| Moderate negative | Moderate adverse / Major adverse | Moderate adverse | Minor adverse/ Moderate adverse | Minor adverse |
| Minor negative | Minor adverse/ Moderate adverse | Minor adverse/ Moderate adverse | Minor adverse | Minor adverse |
| Negligible | Negligible/Insignificant | | | |
| Minor positive | Minor beneficial/ Moderate beneficial | Minor beneficial/ Moderate beneficial | Minor beneficial | Minor beneficial |
| Moderate positive | Moderate beneficial/ Major beneficial | Moderate beneficial | Minor beneficial/ Moderate beneficial | Minor beneficial |
| Major positive | Major beneficial | Moderate beneficial/ Major beneficial | Moderate beneficial | Minor beneficial/ Moderate beneficial |

Source: Mott MacDonald, 2016

- 2.7.4 These effects can then be used along with the effects reported for the other environmental subjects to assess the overall impact and acceptability of the Project.

3 Legislation and planning policy

3.1.1 The following are the national legislative requirements relevant to this Project.

3.2 National Planning Policy Framework

3.2.1 The National Planning Policy Framework (NPPF) provides planning policy guidance at a national level.

3.2.2 The NPPF states that sustainable development has a role in promoting social inclusion and cohesion, supporting strong, vibrant and healthy communities by providing the supply of housing required to meet the present and future generation requirements, and by creating a high quality of built environment with accessible local services, that reflects the communities needs and support its health, social and cultural well-being. The planning system can play an important role in facilitating social interaction and creating healthy and inclusive communities.

Delivering a Strong Economy

3.2.3 Paragraph 19 of the NPPF states: "significant weight should be placed on the need to support economic growth through the planning system". Paragraph 21 states that in drawing up plans and policies, Local Planning Authorities should plan proactively to meet the development needs of business and the economy, including the provision of infrastructure.

Good Design

3.2.4 The NPPF places emphasis on the need for appropriate design in any proposal for development.

3.2.5 Paragraph 66 advises that applicants should work closely with those affected by their proposals to evolve designs that take account of the community. The paragraph states: "proposals that can demonstrate this in developing the design of any proposed development should be looked on more favourably".

3.2.6 Paragraph 65 states: "local planning authorities should not refuse planning permission for buildings or infrastructure which promote high levels of sustainability because of concerns about incompatibility with an existing townscape, if those concerns have been mitigated by good design".

Flooding and Climate Change

- 3.2.7 Paragraph 99 of the NPPF states that “when new development is brought forward in areas which are vulnerable to flood risk, care should be taken to ensure that risks can be managed through suitable adaptation measures”. Paragraph 103 states that “when determining planning applications, local planning authorities should ensure flood risk is not increased elsewhere and only consider development appropriate in areas at risk of flooding where it can be demonstrated that development is appropriately flood resilient and resistant”.

Natural Environment

- 3.2.8 Paragraph 111 ensures planning policies and decisions should encourage the effective use of land by re-using land that has been previously developed.

3.3 The Boston Local Plan

- 3.3.1 The Boston Local Plan was adopted following public consultation in April 1999. Following the publication of the Planning and Compulsory Purchase Act 2004, specific policies were secured and saved by the Secretary of State. The saved policies of the Local Plan hold material weight in the determination of planning applications. Policies relating to the changes in land use, and the potential impact of the proposed land use, for the proposed development have been identified below.

Policy 3: Development Management

- 3.3.2 Proposals requiring planning permission for development will be permitted provided that sustainable development considerations are met, specifically in relation to:
- Size, scale, layout, density and impact on the amenity, trees, character and appearance of the area and the relationship to existing development and land uses;
 - Quality of design and orientation;
 - Maximising the use of sustainable materials and resources;
 - Access and vehicle generation levels;
 - The capacity of existing community services and infrastructure;
 - Impact upon neighbouring land uses by reason of noise, odour, disturbance or visual intrusion;
 - Sustainable drainage and flood risk; and
 - Impact and enhancement for areas of natural habitats and historical buildings and heritage assets.

ED1: Economic Development Policies

- 3.3.3 In existing and proposed industrial/commercial areas shown on the proposals map, planning permission will be granted for new industrial or commercial development, or extensions to existing buildings, provided that individual developments will not:

- Generate levels of traffic, dust, noise, smell or other pollution which would significantly harm the environment, local living or working conditions, or the operation of nearby land uses;
- Cause unacceptable harm to the character of the locality due to their nature, scale, density, layout, appearance or level of traffic generation;
- Cause an unacceptable deterioration in the quality of utility services elsewhere; and
- Adversely affect The Wash SSSI or sites of local nature conservation interest.

ED2: Development of Ports

- 3.3.4 In areas of port related development shown on the proposals map (Boston, town centre and Fosdyke insets) planning permission will be granted for development which is associated with the port's activities, provided that it will not:
- Generate levels of traffic, dust, noise, smell or other pollution which would significantly harm the environment, local living or working conditions, or the operation of nearby land uses;
 - Cause unacceptable harm to the character of the locality due to their nature, scale, density, layout, appearance or level of traffic generation;
 - Cause an unacceptable deterioration in the quality of utility services elsewhere; and
 - Adversely affect The Wash SSSI or sites of local nature conservation interest.

G1: Amenity

- 3.3.5 Planning permission will only be permitted for development which will not substantially adversely affect other nearby land users, residents or general character of the area in terms of the development nature, layout, density, appearance or traffic generation.

3.4 The White paper “Local Growth” (2010)

- 3.4.1 The White Paper ‘Local growth: realising every place’s potential’ 2010 outlines the Government’s role in empowering locally driven growth, encouraging business investment and promoting economic development. It sets out to ensure that everyone has access to the opportunities that growth brings, and that everyone is able to fulfil their potential, establishing Local Enterprise Partnerships (LEPs) to drive local economic development forward.
- 3.4.2 The White Paper also sets out a requirement for local authorities to produce local development plans, which would: ‘establish the key strategic framework on infrastructure and would provide the basis for local planning decisions and planning by local communities’. The Project would need to work within these frameworks going forward.

3.5 Countryside and Rights of Way Act 2000

- 3.5.1 Footpaths are restricted byways. A footpath is a Public Right of Way (PRoW) that is used for walking only; restricted byways can also be used by horse riders, cyclists and drivers of any vehicle not mechanically propelled. The category “restricted byways” was established under the Countryside and Rights of Way Act 2000.
- 3.5.2 The legal record of PRoW is the “definitive map” maintained by LCC, the appropriate highways authority for Boston.

3.6 Navigational rights and access to water

- 3.6.1 Coastal recreation has undergone an unprecedented period of change in recent years, with increasing number of people taking up water borne activities. A number of statutory and non-statutory approaches have been employed to “control” recreational activities for nature conservation purposes and to resolve conflicts between different user groups such as zoning, speed control, access allocation, permits etc. In order for the access and public and private rights, under Common Law, a public right of navigation exists on all tidal waters (although not necessarily a right to land or launch a boat). This includes a right to pass and re-pass for any reasonable purpose including recreation, and the owner of the foreshore must not interfere with this right. The public also enjoy ancillary rights, such as anchoring, that are necessary for navigation.
- 3.6.2 The public also has a general right to fish in tidal waters. This right usually includes the right to collect shellfish and bait worms (for personal use only) from the exposed foreshore, provided there is a right of access. The public right to fish may be regulated by bylaws, but not extinguished. There are no other general public rights over the foreshore. Nevertheless, the public may traverse it if there is a lawfully established right of way over the foreshore.

4 Baseline conditions

4.1 Content and scope

- 4.1.1 These baseline conditions provide the evidence base for the assessment of the impact of the Project on land use. It contains information about known and potential land uses within the Project area as detailed in ES (Volume 1): Appendix A: Maps and Figures: Figure 1.1. This chapter explores the various land uses present in the Project area. A historic overview of the study area is undertaken which identifies the historic development of the Project area and how key land uses have established over time including its origin.
- 4.1.2 The Project area includes areas of land required both temporarily and permanently for the construction and operation of the Project.
- 4.1.3 There is no agricultural land within the Project area, therefore changes in agricultural land use are not considered further in this assessment.

4.2 Existing land uses

Industrial or commercial land

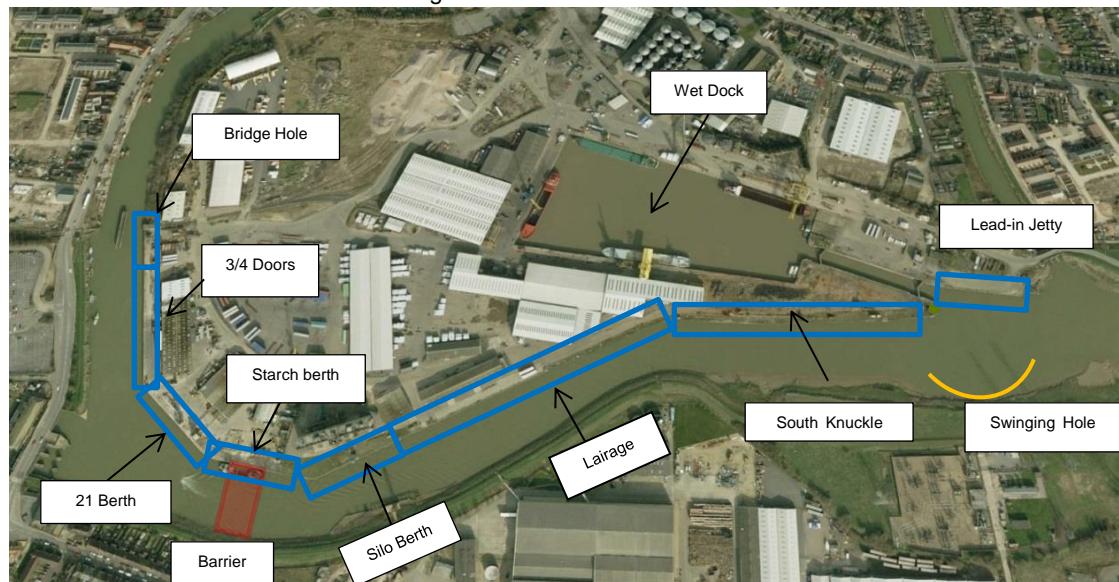
Port of Boston

- 4.2.1 The PoB is a privately owned commercial business.
- 4.2.2 The PoB also acts as the Harbour Authority within their jurisdiction from The Wash to Grand Sluice.
- 4.2.3 The PoB Estate occupies approximately 19ha of land on the left bank of the Haven. The PoB area occupies approximately half of the application boundary, although only a small area of this land will be subject to a change in use. This land is largely occupied by existing industrial buildings, which are leased out to local businesses and fisherman; this includes commercial land for industrial uses. The port's skyline consists of wide range of lifting equipment including overhead gantry cranes and elevators. The dock is surrounded by several covered warehouses for storing cargo. The northern edge of the site consists of grain silos and secure container park. A large area along the quay frontage is used to unload and store scrap metal.
- 4.2.4 The PoB operates on a 24/7 basis with tidal access restrictions. The PoB currently operates berths accessible by lock gates and, on certain occasions, riverside berths (the north quays along the Haven), as shown in Plate 4.1. Ships usually provide 12 to 18 hours' notice prior to calling at PoB. All vessels are required to enter the Haven with a pilot on board. Commercial vessels usually arrive at the port on the top of the tide to maximise water draft and minimise the effect of tidal currents. Navigation between The Wash to the entrance of the Wet Dock takes about one hour.

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Plate 4.1: Port of Boston berth arrangement



Source: MML, Admiralty Sailing Instructions, meeting with PoB 13/08/2015

4.2.5

The PoB can receive commercial cargo ships of up to 6,000 tonnes and currently handles some 850,000 tonnes of cargo annually. This is equivalent to approximately 8 vessels per week, with the largest being 119m in length, a beam¹ of 13.6m and a draft² of 5.5m. Actual vessel movements are highly variable and can be up to 6 movements per tide.

4.2.6

Approximately 350 ships call at PoB each year of which approximately 80 to 90% enter the Wet Dock. The remaining 10 to 20% of vessels, mostly grain cargo ships, use the outside berths. Cargo ships can currently overhang by 20m when moored at the Silo Berth. The riverside berths are composed of the South Knuckle, Lairage, the Silo Berth, 21 Berth and 3/4 Doors have a total length of 700m, with larger commercial vessels are restricted to Lairage and the Silo Berth.

4.2.7

The area of land within the PoB Estate which would be required for the barrier control building is currently used for storage buoys and other port equipment. The proposed access route would utilise the existing internal road network within the PoB, and would connect to the external highway network at St Johns Road.

¹ Beam is the width of the vessel at its widest point.

² Draft refers to the amount of the vessel that sits below the waterline.

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Other industrial or commercial land

- 4.2.8 Several businesses and specific areas of land/buildings owned by the PoB located within the PoB Estate include:
- Dani Foods Ltd - Engages in food processing activities of fish and seafood products. The company was incorporated in the year 2001 and operates as a subsidiary of Conservas Dani, SA;
 - Frontier Agriculture Ltd - Deals with crop inputs and grain marketing business and is jointly owned by Associated British Foods and Cargill plc. It supplies seed, crop protection products and fertilizers to farmers along with agronomy advice;
 - Metsa Wood - Metsa Wood, part of Metsa Group, a Finnish co-operative provides wood products for construction, industrial and distribution customers; and
 - B W Riddle – A metal recycling company operating since 1956. Also provides specialist services including waste management, industrial and abandoned vehicles clearance.

Public Right of Way

- 4.2.9 A public right of way, the Boston Public Footpath No.14 (Macmillan Way), follows the right bank of The Haven, downstream of Black Sluice to the mouth of the Wash then south west towards Stamford, eventually to Abbotsbury on the Dorset Coast. The Boston Public Footpath No.14 (Macmillan Way) provides a link with the Viking Way at Oakham, the Thames Path National Trail near Thames Head and with the South West Coast Path National Trail at the finish. The total distance of the Boston Public Footpath No.14 (Macmillan Way) is 290 miles in length. It connects Boston across the Fens to the western edge at Kate's Bridge, near Bourne in Lincolnshire and beyond, down to Abbotsbury, a village in Dorset, where it finishes.
- 4.2.10 The Boston Public Footpath No.14 (Macmillan Way) is used by the local community and out of town users. The length of the Boston Public Footpath No.14 (Macmillan Way) within the Project area is 500m. The current footpath can be seen in Plates 4.2 and 4.3.

Plate 4.2: Boston Public Footpath No.14 (Macmillan Way) (East)



Source: Mott MacDonald 2015

Plate 4.3: Boston Public Footpath No.14 (Macmillan Way) (West)



Source: Mott MacDonald 2015

- 4.2.11 On the left bank, there are areas of amenity grassland to the right of Maud Foster Sluice, situated in front of St Nicholas's church. This area of grassland will not be required for the temporary or permanent works of the Project and is therefore not be taken forward in this assessment.

The Haven

- 4.2.12 The Haven consists of the section of the River Witham between the Grand Sluice and The Wash and serves as the outfall into the sea for the River Witham and for several major land drains of the northern Fens. The channel width is approximately 50m and consists of intertidal mudflats. The Haven flows through the centre of Boston, passing adjacent to the PoB, and various residential and commercial precincts. The current risk of flooding in Boston is constraining regeneration, business investment and confidence in the town.
- 4.2.13 The Haven provides navigational access between The Wash, the PoB, other quays and moorings within the town. It is also used for recreational navigation and has several sailing clubs which use the Haven regularly during the boating season. The PoB has up to 6 vessels per tide which navigate the Haven to reach the Wet Dock Lock. The river is also used by small recreational vessels, fishing vessels and commercial vessels.
- 4.2.14 The main users of the river are identified in Table 4.1

Table 4.1: Summary of key land use assets considered relevant to the assessment

| Users | |
|--|--|
| Commercial - PoB | PoB is a privately owned commercial business. PoB also acts as the Harbour Authority within their jurisdiction, from The Wash to Grand Sluice. PoB currently operates berths accessible by lock gates and riverside berths (the north quays along the Haven). |
| Boston fishing fleet | Commercial fishing activities in The Wash. The Boston fishing fleet is mainly located just upstream of the Swing Bridge on the right bank of the river next to London Road. It can also be found at intermittent locations on both banks downstream from the Haven Bridge. |
| Other commercial operators | Commercial boat trips serving the tourism industry. |
| Recreational - Sailing, motor boat owner and other non-commercial users. | Two groups of users were identified: Transient inland waterways users navigating between the Lower Witham and the SFFD. The local recreational navigation users are generally affiliated to sailing (Witham Sailing Club (WSC)) or motor (Boston Motor Boat) clubs. Both these clubs have moorings upstream of the Grand Sluice lock and their activities are representative of other recreational boat users with moorings located upstream of the lock. Their activities are generally during the daytime and are split between sailing/boating in The Wash and in the River Witham. |

Source: Mott MacDonald 2016

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The Witham River

- 4.2.15 The Witham is one of the primary river systems in Lincolnshire, flowing from south of Grantham and flowing northwards through Lincoln before turning south-east where it flows into the Haven and discharging into the Wash. The Witham flows over 36 miles from Lincolnshire and has been used for navigation since Roman times and links Lincoln and Boston. The whole length of river canalised which is important for land drainage, flood defence as well as navigation.

Maud Foster

- 4.2.16 One of the key features adjacent to the PoB is Maud Foster Drain, which was cut in the 1560s, with the urban development alongside dating back to the 1800s.

Housing or residential land

- 4.2.17 Residential properties, mostly terraces built during the Victorian period, are present along Wyberton Low Road. Their back gardens face directly onto the right bank of the Haven. There are properties on the north and east of PoB Estate, mainly Skirbeck Road residential area and along London Road.

4.3 Other land uses

- 4.3.1 There is an electricity substation belonging to Western Power Distribution (WPD) approximately 600m downstream from the barrier on the right bank, with open fields to either side of the substation.

4.4 Summary

- 4.4.1 Table 4.2 summarises the land uses within the study area that are considered relevant to this assessment.

Table 4.2: Summary of key land use assets considered relevant to the assessment

| Land use type | Description | Land use value |
|-------------------------------|---|----------------|
| Industrial or commercial land | Land use associated with employment and industry/commercial uses including land related to commercial navigation. | Medium |
| Housing or residential land | Any residential properties adjacent to the Project area | Medium |
| Open Space | Land use utilised for recreational purposes such as the Boston Public Footpath No. 14 (Macmillan Way) and the Haven, within or directly adjacent to the Project area. | Medium |
| Other Land Uses | Fields on right bank adjacent to Wester power Distribution site | Medium |

Source: Mott MacDonald 2016

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5 Impact assessment

5.1 Introduction

- 5.1.1 This chapter considers the impacts and effects during construction and operation of the Project on the land use within and adjacent to the Project area. The assessment is split into two sections; construction effects and operational effects. Construction effects can be temporary, however some works carried out as part of the construction would result in permanent effects. Operational effects would last the lifetime of the Project.
- 5.1.2 Temporary construction effects are effects which would last for all or part of the construction period. Permanent effects are works carried out during the construction period which would result in a permanent change in land use in the operational phase are also considered as part of the construction assessment. Both the temporary and permanent effects of construction would be assessed in the construction section.
- 5.1.3 The predicted operational effects would assess the effects on land uses through the operation of the Project. It would include the effect of the barrier and flood defences when they are in use.

5.2 Construction

Assessment assumptions and limitations

- 5.2.1 This land use assessment has been carried out using the Project design and construction methods described in the ES (Volume 1): Chapter 2 and shown in ES (Volume 1): Appendix A: Maps and Figures: Figures 2.1 to 2.9. The following general assumptions have been made:
- Dredging would be carried out at low tide by barge from the river;
 - Construction would be carried out in line with best practice;
 - Construction would be limited to between Monday and Friday (07:30 to 18:30), except for construction associated with the Wet Dock Entrance where construction would be 24 hours/7 days and dredging which would be constrained by tidal influences;
 - Construction noise would be carefully monitored during construction to minimise impacts on the local area;
 - During construction works the PoB would continue operating;
 - Normal tidal activity would continue in the Haven during the construction period;
 - The sheet piling would visually mature following its installation due to tidal activity;
 - The visual appearance of the Boston Public Footpath No. 14 (Macmillan Way) on the right bank would be re-instated, with natural planting, towards the end of the construction period; and
 - The Boston Public Footpath No. 14 (Macmillan Way) would be diverted during the construction period and there would be no public access to the right bank between Wyberton Low Road and Lealand Way during this time. The footpath would be reinstated following construction.

- 5.2.2 All the construction activities are likely to a lesser or greater extent cause an impact or change to the existing land use.

5.3 Construction impact assessment

- 5.3.1 The Project has been assessed as having a neutral impact and effect on all land use assets within the study area that have not been included in the assessment below. This assessment was carried out in line with the assessment methodology in Chapter 2 of this Technical Report. The way in which these impacts are considered to affect the key assets is assessed below and a summary of effects is listed in Table 5.1. construction effects

Industrial or commercial land

- 5.3.2 As part of the enabling works, the PoB would have restricted access to approximately 0.4 hectares (ha) (2%) of land to allow the contractor to establish the construction compound which would then turn into the barrier control building and storage area. The area of land is currently occupied by PoB's buoy repair shop. As a result of this construction activity, land required for the control building would no longer be available for port activities. A permanent change to land use beneath the footprint of the Project within the PoB is therefore anticipated; however, the buoy repair shop would be relocated to another part of the PoB Estate. Therefore, the overall significance of effect is considered to be minor adverse.
- 5.3.3 The proposed construction site compound on the right bank is within land currently leased by the Environment Agency and therefore, it is considered that there would be no impact resulting from the Project.
- 5.3.4 The width of the Wet Dock Entrance would be increased from 15.3m to 18m to allow for broader vessels to enter the Wet Dock to moor up, rather than use the Haven riverside quays. The construction of the Wet Dock Entrance and its associate gate would result in the temporary loss of land during construction which would continue during the operational phase and therefore result in a permanent change. The construction work would also prevent the PoB using the Wet Dock during the construction period; however, alternative moorings would be provided (see ES (Volume 2d): Navigational Impact Assessment Technical Report for further information). The overall effect of the temporary and permanent loss of land use is considered to result in a significance of effect of minor adverse.
- 5.3.5 As part of the main works, a new sheet piled wall would be installed to reinforcement the quay frontage. This would be carried out along the left bank extending for approximately 820m from the barrier structure downstream and would result in the loss of approximately 0.2ha of the bed of the Haven adjacent to the PoB Estate. These works would result in a permanent change in the land use commencing during the construction phase but lasting into the operational phase. However, due to the small percentage change, the significance of effect is considered to be minor adverse.

- 5.3.6 In addition, construction of the quay wall would prevent vessels arriving at the PoB mooring against the outside quay berths. However, access would be maintained during this period at the berths located within the Wet Dock (see ES (Volume 2d): Navigational Impact Assessment Technical Report for further information) and therefore, this is anticipated to result in a temporary significance of effect of negligible.
- 5.3.7 The existing grain tower conveyor (operated by Frontier) along the left bank of the PoB Estate would be permanently relocated further downstream (approximately 100m). Two new towers would be erected to enable a single extended aerial conveyor to be installed from the Frontier building to the quay. The provision of the two new towers and extended aerial conveyor are assessed to result in a permanent minor beneficial effect.
- 5.3.8 The construction of the left bank flood wall, which extends from the barrier structure through PoB Estate, across the Wet Dock, and ties into the existing flood defences at Maud Foster Sluice, would result in a small loss of land (approximately 0.15ha less than 1%) under the flood wall footprint. This would result in a temporary impact during construction and would continue during the operational phase. This is a small percentage of the PoB Estate and therefore considered to be a significance of effect of minor adverse.

Footpaths and cycle routes

- 5.3.9 Construction of right bank piled flood wall would result in the temporary re-routing of the Boston Public Footpath No. 14 (Macmillan Way), towards the south of the right bank construction compound, following along Wyberton Low Road, through residential areas, onto Marsh Lane, passing through the Industrial Estate, then back onto the original route along Lealand Way.
- 5.3.10 Construction would have a direct impact on Boston Public Footpath No. 14 (Macmillan Way) during construction phase. There would be no public access on a section of the footpath (although diversion would be provided). Due to the temporary nature of the impact, it is considered to result in a significance effect of minor adverse.
- 5.3.11 Cyclist access would be maintained on Wyberton Low Road during the diversion of the three 11kv electrical cables to reduce disruption to users of the National Cycle Network Route 1. However, restrictions may be applied for the safety of the cyclists. Therefore, it is anticipated to result in a minor adverse effect for these receptors.
- 5.3.12 During the construction of the Witham Sailing Club and recreational river user facilities on the left bank, it has been assumed that no diversions of existing PRoW facilities are required and that pedestrians would be able to continue to access Boston Footpath 13/3 during both the construction and operation of these facilities. The number of construction related traffic movements associated with the provision of these sailing club facilities is considered to be minimal, and as such it would be the responsibility of the contractor to allocate Banksmen to

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either side of the Footpath 13/3 in order to delay pedestrians crossing the path when construction vehicles visit the site.

- 5.3.13 No other changes to access routes are anticipated as a result of the Project.
- 5.3.14 Further details of the assessment of the effect on Boston Public Footpath No. 14 (Macmillan Way) can be found in the transport assessment that was carried out for the Project (see the ES (Volume 2d): Traffic and Transport Technical Report).

The Haven

- 5.3.15 The construction of the barrier structure would be located in the Haven, approximately 100m downstream of Black Sluice. It would be situated adjacent to the Starch Berth in the PoB Estate on the left bank and existing residential properties along Wyberton Low Road on the right bank. These works would result in a permanent change in the land use, within the Haven, commencing during the construction phase but lasting into the operational phase. Approximately, 0.12ha of the bed of the Haven would be temporary and permanently lost as a result of the Project. This is considered to result in a significance of effect of minor adverse.
- 5.3.16 Temporary mooring and welfare facilities are proposed for WSC downstream of Maud Foster sluice during construction of the barrier. This area would be reinstated on completion of the construction works and therefore result in a temporary change in land use. This is considered to be a negligible effect.

Housing or residential land

- 5.3.17 The construction of the right bank flood wall and the installation of the diverted power cables would not require the encroachment into the gardens or properties boundaries of residential properties along Wyberton Road, London Road and Marsh Lane. These works would not result in a temporary or permanent change in the land use during the construction or operational phase. The significance of effect would therefore be negligible.

Other surrounding land uses

- 5.3.18 Land belonging to WPD is considered to be unaffected by the proposed construction works due to the localised nature of the works.
- 5.3.19 Temporary storage of dredged materials would be required during construction. Two fields adjacent to the WPD substation have been identified as potential storage areas. These fields are currently used for minor grazing activities; however, they are prone to flooding and have limited agricultural value. The storage of dredged material in these areas would result in a temporary change in land use, resulting in a potential significance of effect of minor adverse.

5.4 Summary

- 5.4.1 Table 5.1 summarises the effects on the land use assets within the study area that are considered relevant to this assessment. It gives a brief description of the issue, a magnitude of impact based on Table 2.2, and a significance of effect based on Table 2.3.

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Table 5.1: Summary of key land use assets considered relevant to the assessment

| Land use type | Activity/Issue | Value/ sensitivity | Magnitude of impact | Significance of effect | Magnitude of impact | Significance of effect |
|--|---|-----------------------|------------------------|---------------------------|------------------------|---------------------------|
| | | | | | Temporary | Permanent |
| Industrial or commercial land (PoB and their commercial operators) | Loss of PoB land for construction site compound and construction of barrier control building | Medium | Minor negative | Minor adverse | Minor negative | Minor adverse |
| | Loss of land due to the widening of the Wet Dock Entrance | Medium | Minor negative | Minor adverse | Minor negative | Minor adverse |
| | Loss of land due to construction of new sheet piled wall to re-inforce the quayside | Medium | Minor negative | Minor adverse | Minor negative | Minor adverse |
| | Temporary change in land use due to the construction of new sheet piled wall to re-inforce the quayside | Medium | Minor negative | Minor adverse | N/A | N/A |
| | Relocation of the existing grain tower conveyor (operated by Frontier). | Medium | Minor beneficial | Minor beneficial | Minor beneficial | Minor beneficial |
| | Loss of land under the foot print of the flood wall on the left bank | Medium | Minor negative | Minor adverse | Minor negative | Minor adverse |
| Housing or residential land | Construction of right bank piled flood wall and diversion of the power cables | Medium | Negligible | Negligible | N/A | N/A |
| Open areas | Temporary mooring and welfare facilities for the WSC as a result of construction | Medium | Negligible | Negligible | N/A | N/A |
| | Loss of land due to the construction of barrier structure in the Haven | Medium | Minor negative | Minor adverse | Minor negative | Minor adverse |
| | Temporarily diversion of the Boston Public Footpath No. 14 (Macmillan Way) and restrictions to the National Cycle Network Route 1 | Medium | Minor negative | Minor adverse | N/A | N/A |
| Other Land uses | Change in land use during construction as a result of storage of dredging material on the fields adjacent to the WPD site | Medium | Minor negative | Minor adverse | N/A | N/A |

Source: Mott MacDonald, 2016

5.5

Operation

Assessment assumptions and limitations

5.5.1

The following assumptions have been made for the operation of the Project:

- The barrier would be operated during tidal flood events only, with the level for operation being a predicted tide at 5.1m AOD or above, and for maintenance. Other than these times normal tidal activity would continue in the Haven; and
- The Boston Public Footpath No.14 (Macmillan Way) would be reinstated following completion of construction of the works on the right bank.

5.5.2

The main activities during the operation of the barrier that would cause the predicted impact is:

- The closing of the barrier and the flood gates within the left bank floodwall during a flood event.

5.6

Operational Impact Assessment

5.6.1

This section would assess the long term operational impact that the permanent structures such as barrier and the flood walls and their assess gates would have on land use in the Project area. This assessment has been carried out in line with the methodology set out in Section 2.

5.6.2

In addition to the permanent impacts discussed in Section 5.3 the operation of the barrier structure in the Haven during extreme tide events and closure of the flood gates within the flood wall would result in a temporary restriction of the use by the PoB Estate and their commercial operators, where it is located in front/riverward of the flood defence. This restriction would be temporary in nature and would not have a significant effect on the land use within the PoB site or on adjacent land uses. Therefore this is considered to result in a significance of effect of minor adverse.

5.6.3

The navigation of the Haven would also be prevented during operation of the barrier. This is further considered in ES (Volume 2d): Navigational Impact Assessment Technical Report.

5.7

Summary

5.7.1

Table 5.2 summarises the operational effects on the land use within the study area that are considered relevant to this assessment. It gives a brief description of the issue, an impact of magnitude based on Table 2.2, and a significance of effect based on Table 2.3

Table 5.2: Summary of operational effects

| Name | Activity/Issue | Sensitivity/ value | Magnitude of impact | Significance of effect |
|--|---|-----------------------|------------------------|---------------------------|
| Industrial or Commercial land (PoB and their commercial operators) | Operation of the barrier and left bank flood wall/flood gates | Medium | Minor negative | Minor negative |

Source: Mott MacDonald 2016

5.8 Mitigation measures

Construction

- 5.8.1 Detailed discussions have been undertaken with the PoB Estate to understand their operation requirements so to ensure that the effects of the construction and operation of the Project on their landholdings would be minimised. This has included discussion on the location of the flood wall and the number, size and location of the access gates to maintain access to operational land. In addition the Environment Agency is preparing a legal agreement with the PoB to compensate them the temporary loss of earnings as a result of the construction of the barrier as well as a result of the permanent loss of land. This is a standard procedure for this type of Project.
- 5.8.2 The Boston Public Footpath No.14 (Macmillan Way) would be diverted during construction and would be re-instated and improved.
- 5.8.3 Additional mitigation measures for the PoB and recreational users of the Haven are provided in ES (Volume 2d): Navigational Impact Assessment Technical Report.

Operation

- 5.8.4 There are no significant effects during operation for land use which require mitigation.

5.9 Residual effects

- 5.9.1 There are no significant residual effects associated with the Project.

6 Summary

- 6.1.1 This assessment considered the effects on existing land uses within the study area for the Project during the construction and operational phases. Environmental effects from other environmental aspects of the Project were considered separately.
- 6.1.2 The assessment concluded that no significant adverse effects were envisaged for the Project. Relatively small areas of land would be required to build aspects of the Project, temporary construction compounds and construction of temporary moorings and welfare facilities for WSC.
- 6.1.3 None of the Project components along the left bank would change the existing industrial land use character of the area and or substantially inhibit the operation of the PoB.
- 6.1.4 There would be temporary change of land use along the right bank as a result of diverting the Boston Public Footpath No.14 (Macmillan Way), restricting the National Cycle Network Route 1 and the storage of dredge material, again this is not considered to be significant.

7 References

Boston Borough Council (1999), Boston Local Plan.

Department for Communities and Local Government (DCLG). (2015). Land Use Change Statistics 2013/2014. Available at: <https://www.gov.uk/government/organisations/department-for-communities-and-local-government/about/statistics>

Environment Agency (2014) Boston Barrier Updated Scoping Report

Port of Boston information. Available at:

http://www.portofboston.co.uk/pages/port_of_boston.htm

The Town and Country Planning (Use Classes) Order 1987 (as amended). Available at: https://www.planningportal.co.uk/info/200130/common_projects/9/change_of_use

UK, Countryside Rights of Way Act (2000), London, UK.

UK, Highways Act (1980), London, UK

8 Abbreviations

| Acronym | Definition |
|---------|---|
| BBC | Boston Borough Council |
| DCLG | Department for Communities and Local Government |
| EIA | Environmental Impact Assessment |
| ES | Environmental Statement |
| LCC | Lincolnshire County Council |
| LDS | Local Development Scheme |
| NPPF | National Planning Policy Framework |
| PoB | Port of Boston |
| PRoW | Public Right of Way |
| SFFD | South Forty Foot Drain |
| UK | United Kingdom |
| WLM | Water Level Management |
| WPD | Western Power Distribution |
| WSC | Witham Sailing Club |

9 Glossary

| Term | Definition |
|--|--|
| Baseline | A description of the present state of the environment with the consideration of how the environment would change in the future in the absence of the plan/programme/project as a result of natural events and other human activities. |
| Baseline studies/ survey | Collection of information about the environment which is likely to be affected by the project. |
| Catchment | A surface water catchment is the total area that drains into a river. A groundwater catchment is the total area that supplies the groundwater part of the river flow. |
| Conservation Area | An area designated under the Town and Country Planning Act, 1990 to protect its architectural or historic character. |
| Countryside and Rights of Way (CRoW) Act 2000 | <p>This Act applies to England and Wales and has five parts: -</p> <ul style="list-style-type: none"> Access to the countryside Public rights of way and road traffic Nature conservation and wildlife protection Areas of outstanding natural beauty Miscellaneous and Supplementary <p>This act increases the protection of SSSIs. Environment Agency plans/programmes/projects must gain consent for works in or near SSSIs using a CRoW form.</p> |
| Cumulative Impacts | The combined impacts of several projects within an area, which individually are not significant, but together amount to a significant impact. |
| Department for Environment, Food and Rural Affairs (DEFRA) | The government department responsible for flood management policy in England. |
| Environmental Action Plan (EAP) | A standalone report or section within another environmental impact assessment document which ensures that constraints, objectives and targets set in the main Environmental Report/Statement are actually carried out on the ground. Actions are separated into those to be carried out before, during and after construction. |
| Environmental Impact Assessment (EIA) | <p>"EIA is an assessment process applied to both new development proposals and changes or extensions to existing developments that are likely to have significant effects on the environment. The EIA process ensures that potential effects on the environment are considered, including natural resources such as water, air and soil; conservation of species and habitats; and community issues such as visual effects and impacts on the population. EIA provides a mechanism by which the interaction of environmental effects resulting from development can be predicted, allowing them to be avoided or reduced through the development of mitigation measures. As such, it is a critical part of the decision-making process."</p> <p>www.iema.net/eaireport</p> |
| Environmentally Sensitive Area (ESA) | An area of particularly high landscape, wildlife or historical importance within which DEFRA offered inducements to encourage farmers to adopt agricultural practices to safeguard or enhance those features. Payments have now been superseded by the ESS. |
| Environmental Statement (ES) | The document produced to describe the environmental impact assessment process where statutory environmental impact assessment is required. |
| Flood risk mapping | A system of maps created by the Environment Agency to show areas that are at risk of a flood that has a 1 in 100 chance (or higher) of occurring in any given year. |
| Health impact assessment | "A combination of procedures, methods and tools by which a policy, programme or project may be judged as its potential effects on the health of a population, and |

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| Term | Definition |
|------------------------------------|--|
| | the distribution of those effects within a population." World Health Organisation. |
| Main river | A watercourse designated by DEFRA. The Environment Agency has permissive powers to carry out flood defence works, maintenance and operational activities on main rivers. Responsibility for maintenance rests on the riparian owner. |
| Marine Management Organisation | An executive non-departmental public body established under the Marine and Coastal Access Act 2009 with responsibilities including marine licensing and working with Natural England and others to manage a network of marine protected areas (marine conservation zones and European marine sites). |
| Mitigation measures | Actions that are taken to minimise, prevent or compensate for adverse effects of the development. |
| Natural Areas | Sub-divisions of England, characterised by wildlife and natural features. There are 120 Natural Areas in England. Designations are managed by English Nature. |
| Natural England | Natural England is an Executive Non-departmental Public Body responsible to the Secretary of State for Environment, Food and Rural Affairs. Their purpose is to protect and improve England's natural environment and encourage people to enjoy and get involved in their surroundings. Their aim is to create a better natural environment that covers all of our urban, country and coastal landscapes, along with all of the animals, plants and other organisms that live with us. |
| Ordinary water course | A watercourse not designated as main river. The local authority or Internal Drainage Board has permissive powers to maintain them. |
| PRoW | Paths and tracks which anyone can use to cross private land. Rights of way exist in towns, villages and the countryside and you have a legal right to use them at any time of the day or night, all year round. |
| Ramsar site | Wetland site of international importance listed under the Convention on Wetlands of International Importance under the Conservation of Waterfowl Habitat (Ramsar) Convention 1973. |
| Scoping | The process of deciding the scope or level of detail of an EIA/ SEA. During this stage the key environmental issues (likely significant effects) of a project/strategy are identified so that the rest of the process can focus on these issues. Issues may result from the proposal itself or from sensitivities of the site. |
| Screening | <p>(1) For environmental impact assessment, the process of deciding which developments require an environmental impact assessment to be carried out and whether this will be statutory.</p> <p>(2) For strategic environmental assessment, the decision on which plans, strategies or programmes require strategic environmental assessment to be carried out and whether this will be statutory.</p> |
| Screening opinion | Statutory opinion from the competent authority as to whether a proposed project requires statutory environmental impact assessment according to the Environmental Impact Assessment Regulations. |
| Strategic Environmental Assessment | SEA is a process designed to ensure that significant environmental effects arising from proposed plans and programmes are identified, assessed, subjected to public participation, taken into account by decision-makers, and monitored. SEA sets the framework for future assessment of development projects, some of which require Environmental Impact Assessment (EIA). SEA is carried out according to the requirements of the SEA Directive 2001/42/EC. |

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