

NORTH LINCOLNSHIRE COUNCIL

LOCAL IMPACT REPORT



ABLE MARINE ENERGY PARK NORTH & SOUTH KILLINGHOLME NORTH LINCOLNSHIRE

Planning Inspectorate Reference:

TR 030001

AMEP LOCAL IMPACT REPORT

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1. INTRODUCTION

- 1.1 This report has been prepared by North Lincolnshire Council in accordance with the advice and requirements set out in the Planning Act 2008 and the Advice Note One: Local Impact Reports issued by the Infrastructure Planning Commission in March 2010.
- 1.2 The Advice Note states that a Local Impact Report (LIR) is a 'Report in writing giving details of the likely impact of the proposed development on the authority's area'.
- 1.3 The Advice Note states that when the Commission decides to accept an application it will ask the relevant local authorities to prepare a Local Impact Report and its preparation should be prioritised and indicate where the local authority considers that the development would have a positive, negative or neutral effect on the area. The Report may include any topics that they consider to be relevant to the impact of the development on their area as a means by which their existing body of knowledge and evidence on local issues can be fully and robustly reported to the Commission.
- 1.4 The Advice Note indicates that topics addressed in the Local Impact Report may include:
- site description and surroundings/location
 - details of the proposal
 - relevant planning history and any issues arising
 - relevant development plan policies, supplementary planning guidance or documents, development briefs or approved master plans and an appraisal of their relationship and relevance to the proposals
 - relevant development proposals under consideration or granted permission but not commenced or completed
 - local area characteristics such as urban and landscape qualities and nature conservation sites
 - local transport patterns and issues
 - site and area constraints
 - designated sites
 - socio-economic and community matters
 - consideration of the impact of the proposed provisions and requirements within the draft Order in respect of all of the above

- development consent obligations and their impact on the local authority's area

- 1.5 The Local Impact Report may also comment on the development consent obligations and the requirements and also any relevant representations.
- 1.6 In producing the Local Impact Report the council has not sought the views of local parish councils and local interest groups as to any particular matters that should be reflected in the report because the parish councils and other local groups have the opportunity, through the consultation process, to make their observations direct to the National Infrastructure Directorate.
- 1.7 The Local Impact Report is intended to be used by the local authority as a means by which the existing body of local knowledge and evidence on local issues is fully and robustly reported to the Commissioners.
- 1.8 The Local Impact Report has been written so as to incorporate the topic areas suggested in the Advice Note (set out above), the subject areas in the Environmental Statement, and the obligations and proposed requirements submitted with the application for DCO.

2. SITE AND PROJECT DESCRIPTION

- 2.1 Able Humber Ports Ltd (Able) propose to develop a marine energy park on the south bank of the Humber Estuary; if consented, the development will be known as Able Marine Energy Park (AMEP). AMEP will incorporate a new quay together with facilities for the manufacture of marine energy components including offshore wind turbines. The development of AMEP, east of North Killingholme, will lie partly within the Humber Estuary, which is designated under European law as an important site for nature conservation and forms part of the Natura 2000 network of sites. This network consists of Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) established under the Birds Directive (Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds) and the Habitats Directive (Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora) respectively. In order to ensure the coherence of the Natura 2000 network of sites is maintained, new intertidal habitat and terrestrial managed grassland roosting and feeding habitat will also be created on the north bank of the Humber. The development on the north bank is referred to throughout this document as "the Compensation Site". Collectively, for the purposes of the Environmental Statement, the development of AMEP and the Compensation site comprise "the Project".
- 2.2 An Environmental Statement (ES) for the Project and report on the findings of the Environmental Impact Assessment (EIA) has been undertaken. It describes the likely significant environmental impacts resulting from the construction and operation of the Project and, where

appropriate, the measures that are intended to mitigate any adverse impacts and how these measures will be secured.

2.3 The application is being submitted to the Infrastructure Planning Commission (IPC) in accordance with the requirements of the Planning Act 2008 (“the 2008 Act”) and the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (“the 2009 EIA Regulations”).

2.4 LOCATION AND DESCRIPTION OF THE SITE

Introduction

2.4.1 The Project incorporates two geographically distinct areas as shown in *Figure 1.1*. [Attached]

2.4.2 The proposed AMEP site is located east of North Killingholme, within North Lincolnshire, on the south bank of the River Humber. The site is approximately 1km downstream of the Humber Sea Terminal (HST) and immediately upstream of the South Killingholme Oil Jetty.

2.4.3 The site, excluding the area of ecological mitigation, covers approximately 268ha, of which approximately 122.4ha is covered by existing consent for port related storage, 100.3ha is existing arable land that will be developed for industrial use and 45ha is reclaimed land from the estuary to provide a new quay. A further 47.8ha of existing arable land will be converted to managed grassland to mitigate for the effects of the development on ecological receptors including birds that use the adjacent Humber Estuary SPA.

2.4.4 A large proportion of the site’s terrestrial area currently comprises hardstanding for the storage of imported cars, particularly in the north east/east of the site and in the west of the site. A railway line passes through the site, and a redundant sewage works can be found to the south west of the site. Former clay pits to the north of the site, which are now flooded, are classified as a Site of Special Scientific Interest (SSSI) and are also part of the Natura 2000 network of sites. A raised embankment along the western boundary supports a flood defence wall, which protects the site from tidal flooding.

2.4.5 The Compensation Site is located on the north bank of the Humber Estuary, within East Riding of Yorkshire, opposite the AMEP site and some 4km to the south west of Keyingham. The site is divided into an area to be developed into intertidal habitat, and an area to be developed as wet roosting and feeding habitat. The proposed intertidal site, known as Cherry Cobb Sands, is roughly triangular in shape and currently comprises arable fields defined at their boundaries by drainage ditches, hedges and a flood defence embankment. The proposed managed grassland roosting and feeding habitat is located at Old Little Humber Farm, and comprises four irregularly-shaped fields defined at their boundaries by drainage ditches and hedges.

2.5 BRIEF DESCRIPTION OF THE PROJECT

2.5.1 An INDICATIVE Site Plan is reproduced. *Figure 2* (attached) This reflects one potential outcome, within the defined boundary, that is consistent with the broad parameters and principles that will guide and direct the detailed layout of the Project [as described in *Annex 4.1 Project Specification*].

2.5.2 AMEP comprises a harbour development with associated land development, to serve the renewable energy sector. The harbour will comprise a quay of 1,279m frontage, of which 1,200m will be Solid Quay and 79m will be a Specialist Berth, and will be formed by the reclamation of intertidal and subtidal land within the Humber Estuary.

2.5.3 Associated development will include:

- dredging and land reclamation
- the provision of onshore facilities for the manufacture, assembly and storage of wind turbines and related items
- works to Rosper Road
- and, the A160 and the A180 and
- surface water disposal arrangements.

2.5.4 Ancillary matters will include:

- the diversion of two footpaths that run along the shore of the Humber, one on the south bank and one on the north bank
- the conversion of a railway into a private siding
- the interference with rights of navigation
- the creation of a harbour authority
- a deemed licence under section 66 of the Marine and Coastal Access Act 2009
- the modification of public and local legislation and
- the compulsory acquisition of land and rights in land and powers of temporary occupation of land to allow Able to carry out and operate the above development.

2.5.5 The facility will primarily serve the emerging renewable marine energy sector including offshore wind, tidal and wave energy generation, by providing a base for the pre-assembly and construction of marine energy components, and for installation vessels. As the market currently stands, offshore wind generation is a more mature industry than either tidal or wave energy, and the development will accordingly focus principally on

offshore wind components at its commencement, but as other technologies develop, the site will be able to serve them. While production focuses on offshore wind, once construction of the offshore wind farms is complete, the harbour will provide a facility from which to operate, monitor and maintain offshore wind farms. Maintenance will include re-powering of Offshore Wind Turbines (OWTs); this is the cyclical process of replacing OWTs that have reached the end of their service life.

2.5.6 At the Compensation Site the existing flood defences will be realigned at the Cherry Cobb Sands site, and ground levels re-contoured to provide new habitat of functional value to wildfowl and wading birds as well as other flora and fauna. The Cherry Cobb Sands Site will be developed within a 115ha plot, with the realigned flood defence wall, drainage features and footpath occupying 13ha. At the Old Little Humber Farm part of the Compensation Site, ground levels will be re-contoured to produce shallow ridge-and-furrow type undulations to retain water on the found surface. These earthworks will be created within a 38.5ha plot.

2.6 THE WIDER CONTEXT

2.6.1 The PROPOSED development of AMEP is directly related to the emerging global project to decarbonise world energy production. The need to decarbonise world energy production, and its overriding benefit to the global environment, is detailed in *Chapter 5* of the Environmental Statement.

2.6.2 AMEP will provide a new and substantial manufacturing base for the offshore marine energy sector. Currently, this market is anticipated to be dominated by offshore wind energy with this sector expected to contribute significantly to a new secure, low carbon and balanced energy mix for the UK.

2.6.3 As well as having quays to receive and export raw materials and products, the development will also provide facilities that are necessary to assemble the offshore generators, including offshore wind turbines (OWTs), in preparation for loading onto installation vessels for direct transport from their place of manufacture to the offshore development site.

2.7 THE DEVELOPMENT

2.7.1 This site lies between the Humber Sea Terminal (HST) and ABP Immingham Port. The boundary of the site lies partially within the Humber Estuary, which is protected under both national and European law, including the EC Habitats Directive (92/43/EEC). The estuary is part of the Natura 2000 network of nature conservation areas within the European Union that has been established to ensure the survival of Europe's most valuable species and habitats. The network currently comprises 25,000 sites and covers over 800,000km² (or 20 per cent) of the EU's total land area and 100,000km² of marine environment.

2.7.2 As the proposals for AMEP will, if consented, cause the loss of a significant area of estuary and intertidal mudflat which are specific features of the Natura 2000 network, it is necessary, subject to the specific requirements of the Habitats Regulations 2010, to provide compensatory habitat to ensure the continued coherence of the network in the future. Accordingly, a related habitat creation site on the north bank (“the Compensation Site”) has been designed to provide new mudflat and estuarine habitat that offers equivalent functional value to the flora and fauna for which the area has been designated. The EIA for the Compensation Site is reported in *Volume 2* of the ES.

2.8 LOCATION OF THE PROJECT

2.8.1 AMEP is situated in an area known as Killingholme Marshes on the southern bank of the River Humber, approximately 2km from the village of North Killingholme to the west, and 3.3km from Immingham to the south.

2.8.2 The site comprises the following development areas:

- Existing terrestrial land – approximately 220ha to industry and 48ha to ecological mitigation
- Existing intertidal area – 31.5ha
- Existing subtidal area – 13.5ha

2.8.3 The proposed terrestrial areas include 122.4ha of land that has the benefit of extant planning consents for port related storage and 11.5ha of land that has temporary consent as a lay-down area during the construction of a biomass fuelled power station. Development has commenced in the area for which planning permission has been granted for port related storage; construction of the power station has not commenced. The balance of the terrestrial areas comprises Grade 3 agricultural land that is allocated for industrial development in North Lincolnshire Council’s Local Plan. This land allocation is continued within the Council’s Core Strategy that was adopted in June 2011.

2.8.4 The western boundary of the development is defined by Rosper Road, which provides access to the A160, part of the trunk road network. Beyond Rosper Road lies the Total Oil Refinery and Conoco Philips Humber Refinery and combined Heat and Power Plant. The eastern boundary of the existing territorial area is marked by the existing flood defence wall, beyond which lies the Humber Estuary.

2.8.5 The intertidal and subtidal areas are located within the Humber Estuary and extend from the existing tidal defences towards the deep water channel that serves the HST.

2.9 DESCRIPTION OF THE WORKS

2.9.1 An indicative site plan, based on the development serving the offshore wind sector, is reproduced in [Figure 2]. The principal elements of the proposal are described below. As discussed in [Chapter 2] the development proposal necessarily incorporates a degree of flexibility with respect to the actual sizing and siting of buildings.

The Quay

2.9.2 Briefly, the frontage will be 1,279m in length and will be located close to the western edge of the existing dredged channel that provides access to HST. This existing channel has consent for capital dredging to 7.2m below Chart Datum (CD).

2.9.3 The quay is proposed to be a solid berth structure for 1,200m of its length with a front wall that comprises a combination of large diameter tubular steel piles alternating with steel sheet piles. This arrangement is commonly referred to as a combi-pile wall. The tubular piles will be tied back with flap anchors that fix the piles in position near their top. These anchors rely on the passive resistance of the quay backfill material. This front wall will return at the southern end of the quay and form part of a specialist berth for emerging offshore wind turbine installation vessels. At the northern end, the quay returns at an angle that is square to the existing flood defence.

2.9.4 A piled relieving slab will be constructed behind the front wall and will enable a range of plant including large dock cranes, up to 1,600t capacity, to operate anywhere on the quay.

2.9.5 The berthing pocket in front of the quay will be over-dredged to the top of the natural bedrock and then backfilled to -11mCD with stone aggregate to enable repeated loading by 'jack-up' barges.

2.9.6 The existing intertidal area between the existing flood defence and the new quay will be filled with sea or estuary dredged material. The upper sections of fill, approximately 1m, will comprise imported stone that will provide a drained heavy-duty pavement for operational plant which will include tracked cranes and self-propelled mobile transporters. The finished level on the perimeter of the quay will be approximately 6.1mAOD. This will ensure that waves within the estuary do not significantly overtop the structure in extreme weather events over the lifetime of the development.

2.9.7 The structural pavement will enable the storage of heavy components. According to *A Guide to an Offshore Wind Farm*, (Crown Estate 2010) the storage space taken up by a single set of turbine components is one hectare. Given that sufficient components need to be placed close to the quay to facilitate efficient loading onto the installation vessels, each quay is provided with around five hectares of lay-down area which will provide for storage of around five complete OWTs.

- 2.9.8 The quay will be drained by a network of land drains that discharge into the Humber Estuary. Drainage water will pass through oil interceptors where a high risk of oil spillage exists.
- 2.9.9 To enable the quay to operate twenty-four hours a day, sufficient lighting will be provided to enable personnel to access, egress and carry out their work safely and to identify any hazards or obstacles in the workplace. Accordingly, external lighting over the quay frontage will comprise 50m towers that will be fitted with directional luminaires to limit spill outside the working areas. Over the operational areas of the quay (notionally taken to be that area within 50m of the quay edge), the lighting will provide average luminance of 50lux, with a minimum of 20lux. Elsewhere, on the storage areas behind the quay, lighting will be designed to provide an average luminance of 20lux with a minimum of 5lux.
- 2.9.10 Navigational lighting will be provided on the quay to enable safe berthing and manoeuvring of vessels.
- 2.9.11 Cooling water infrastructure that serves two nearby power stations, operated by E.ON and Centrica, is routed through the intertidal area north of the quay. A new outfall will be constructed in the quay to allow for the diversion of the existing outfalls given the residual uncertainty with respect to potential accretion in this area as a consequence of the development.

Dredging

- 2.9.12 Compressible silt is present over part of the footprint of the proposed new quay and some may need to be removed by a trailing suction hopper dredger (TSHD) before placing any fill material. A TSHD trails a suction pipe (or pipes) when working, and loads the dredge spoil into one or more hoppers in the vessel. When the hoppers are full, the TSHD sails to a disposal area and either dumps the material through doors in the hull or pumps the material out of the hoppers. It is estimated that approximately 250,000m³ of silt may be removed from the footprint of the quay in this way. The operation is routinely undertaken on the Humber.
- 2.9.13 To enable vessel access to the operational quay and allow berthing alongside its length over a commercially viable tidal range, capital dredging will be required from three distinct areas as described below.
- 2.9.14 **Berthing Pocket:** based on current knowledge of the emerging designs for new generation wind turbines installation vessels, an operational draught of 10m has been adopted. Accordingly, the quay will have a dredged berthing pocket that will be maintained at -11mCD with an initial over-dredge to bedrock; this will allow accommodation of 10m draft vessels with a minimum under keel clearance of one metre. The berthing pocket will be 60m wide. The side slopes of the birth will have a gradient appropriate to the in-situ properties of the bed material.
- 2.9.15 In the area of the berthing pocket, bed levels currently range from around -2mCD to -4mCD. The chalk strata is currently interpreted to be at

approximately -8mCD and -10mCD at the northern and southern ends of the quay respectively (refer to the planning application drawings). A maximum capital dredge of approximately 9m is therefore required to create the berthing pocket.

2.9.16 **Approach Channel:** based on a maintained depth of -9mCD, capital dredging within the approach channel will be around 5.5m at the northern end of the quay but reduce to about 2.5m at the southern end. The majority of the approach is already dredged to allow access to Killingholme Oil Terminal and HST. An initial over-dredge of 0.3m will be undertaken.

2.9.17 **Turning Area:** to enable vessels to arrive and depart at most states of the tide, a turning area will be provided; this will have a maintained depth of -9mCD. In the turning area, bed levels currently average -9mCD and a maximum capital dredge of 1.5m is required.

2.9.18 The table below details the approximate quantities of capital dredging works that will be required depending on the final dredge depth.

Approximate Capital Dredge Quantities

Area	Dredge
Reclamation Area	294,500m ³
Berthing Pocket	827,000m ³
Approach Channel	682,000m ³
Turning Area	132,000m ³
TOTAL	1,935,000m ³

2.9.19 Once the development is complete, maintenance dredging will be required from time to time and an assessment of maintenance dredge requirements at the new development is included in *Chapter 8* of the Environmental Statement.

2.9.20 Offshore wind turbines comprise a number of very large and/or heavy components that need direct access to a quayside as they are too large to be transported by road on a frequent basis. The principal components are:

- Nacelles 150-300t
- Rotors 90-150t
- Towers 200-400t
- Blades 5- 25t (60m long x 5m max width)
- Steel Foundations 600-800t

- 2.9.21 AMEP will provide a heavy component manufacturing base for the manufacture of the above items.
- 2.9.22 The particular mix of manufacturing facilities that will locate to the site cannot be fixed prior to the application. The heavy component manufacturing site is based on the following indicative development proposal for the offshore wind sector:
- 3 nacelle factories producing a total of 600 units per year
 - 2 tower factories producing a total of 400 units per year
 - 2 blade factories producing a total of 1,200 units per year
 - 1 foundation factory producing a total of 50 units per year
- 2.9.23 Based on this indicative mix, the gross weight of goods manufactured on the site would lie within the range 200,000-4000,000t.
- 2.9.24 As the manufactured goods are bulky and, other than blades, cannot be stacked, the factory units require substantial external areas for storage of their finished product. These lay-down areas are designed to be sufficient to ensure that manufacturing is never interrupted by the absence of available storage space.

3. PLANNING APPROVALS FROM 1998

1999/0821 - Planning permission to construct nine below ground multiple steel pipelines with an above ground block valve compound - EIA/APP/FULL - 14/07/2000

2000/1044 - Consent to display a static externally illuminated directional sign - ADV NO CONDS - 29/09/2000

2001/0512 - Form B application to erect a 400kV overhead line - ELEC/NO OBJ - 20/07/2001

2001/0684 - Planning permission to retain the use of land for the storage of trade motor vehicles and to retain portable security office accommodation - FULL/CONDS - 09/11/2001

2001/1119 - Hedgerow removal to enable maintenance of the watercourse - REMOVE - 16/10/2001

2002/1720 - Planning permission to erect a temporary mast and equipment to be used for climate monitoring - FP/CONDS - 02/02/2004

2002/1838 - Planning permission to retain part of site and change use of part of site from industrial land and farmland to vehicle distribution and storage facility for a temporary period of 3 years - FP/CONDS - 13/10/2003

2002/1902 - Planning permission for the construction of a temporary wind turbine (5yrs) - FP/CONDS - 10/02/2004

2003/0237 - Planning permission for the continued use of open parking and storage of vehicles and trailers - FULL/COND - 14/04/2003

2004/1442 - Planning permission to vary condition 9 of planning permission 2002/1838 to allow hardstanding to be laid for storage facility - FP/CONDS - 01/12/2004

2004/1520 - Planning permission for construction of a new road – EIAFPAPP - 18/02/2005

2004/1528 - Planning permission to vary condition 4 of planning approval 2002/1838 dated 13/10/03 to extend the period of use of the site from 31 December 2006 to 31 December 2008 - FP/CONDS - 19/12/2005

2004/1601 - Planning permission to vary condition 9 of planning permission 2002/1838 re hard-surfacing part of the site - FP/CONDS - 20/12/2005

2004/2042 - Planning permission to renew temporary planning consent 2001/0684 dated 9/11/01 to retain the use of land for the storage of trade motor vehicles and retain a portable storage office accommodation - FP/CONDS - 01/03/2005

2005/0562 - Planning permission to retain a port related storage facility (partly under construction) including the erection of various buildings, construction of car parking, erection of lighting towers and 2.4 m high electrified security fencing, and tarmac surfacing of entire site - FP/CONDS - 14/11/2006

2006/0039 - Planning permission to change use of land to port related storage with tarmac finish, and erection of ancillary office, security office, lighting towers, gas tanks and security fencing and visitor parking (New description at applicant's request dated 12/7/06) – EIAFPAPP - 01/08/2007

2006/1133 - Construction of a below ground steel pipeline to convey hydrogen from BP chemicals Salt End to Lindsey Oil Refinery and Conoco Phillips Humber Refinery - FP/CONDS - 06/11/2006

2006/1388 - Planning permission to install exterior lighting columns - FP/CONDS - 08/11/2006

2006/1771 - Outline planning permission to erect a permanent office building, restaurant, laboratory, CAP office building, gatehouse, medical centre, contractors compound, construction village, vehicle check canopy,

car parking and hard standing areas (layout, scale and means of access not reserved for subsequent approval) – EIAOLAPP - 31/10/2008

2006/1873 - Deemed Hazardous Substance Consent to receive, store and distribute refined petroleum products – DEEMEDHAZSUB

2007/0022 - Planning permission to construct a fuelling station with fuel storage and dispensing facilities - FP/CONDS - 23/02/2007

2007/0101 - Planning permission to tarmac the 22.11 hectare site for use for port-related external storage, to include the construction of 2 workshop buildings, a modular office building, a modular security office building, construction of a wash pad and wash bay and construction of associated staff and visitor car parking and install a 3m high security fencing, lighting towers and a sewage treatment plant – EIAFPAPP - 16/01/2008

2007/0365 - Advertisement consent to display 4 no. non-illuminated directional pole mounted signs - FP/CONDS - 01/05/2007

2007/0649 - Advertisement consent to display 2 non-illuminated signs – ADVUNCON - 08/06/2007

2008/0571 - Planning permission to remove condition 1 of planning permission 2004/1528 (use to be discontinued on or before 31/12/2008) to make permanent the existing temporary consented use for vehicle storage and distribution, erect a single-storey security cabin, workshop and office building, raise ground levels to 3.1-4.0 metres AOD and surface with tarmac, install 3.0 metre high electrified security fencing with bird deflectors and erect 4, 30 metre high lighting masts - FP/CONDS - 22/12/2008

2008/0783 - Over ground 10" pipeline between Rosper Road & APT Gas Caverns with underground crossings at three points, (Rosper Road, Drain and Rail Track) - FP/CONDS - 27/08/2008

2008/1375 - Planning permission to vary condition 3 on application PA/2006/0039 dated 01/08/2007 (relating to low level shrubbery and hedging) to replace the words "Within ten months of the permission ..." to "Prior to the commencement of operation ..." - FP/CONDS - 22/12/2008

2008/1401 - Planning permission to remove condition 1 on PA/2004/1528 (use to be discontinued on or before 31 December 2008) and condition 9 on PA/2002/1838 (site to have a permeable surface at all times) in connection with use of land for vehicle distribution and storage - FP/CONDS - 18/12/2008

2008/1428 - Planning permission to remove condition 1(no access and egress from Haven Road) and condition no 2 (the use shall be discontinued before 31 December 2008) on planning permission 2004/1601.- FP/CONDS - 19/12/2008

2009/0599 - Planning permission to construct an 860m long, 7.3m wide tarmac site access road - FP/CONDS - 29/03/2012

2009/1269 - Form B application to construct and operate a 290 megawatt (MW) biomass fuelled electricity generating station – SECSTATE - 10/08/2011

2010/0320 - Planning permission for change of use to B8 and erect security fencing, create hard standing and new access - FP/CONDS - 19/05/2010

2010/0739 - Planning permission to remove condition 5 of planning permission PA/2010/0320 dated 19/05/2010 to allow the storage or parking of HGVs or containers on the whole of the site - FP/CONDS - 01/11/2010

2010/1087 - Planning permission to install a 4km, 400kV underground electrical connection together with associated groundworks and infrastructure - FP/CONDS - 22/12/2010

2010/1263 - Planning permission to construct a test foundation (12 x 12m) and a tower (5m diameter) with a total height of 67m (approximately) - FP/CONDS - 06/12/2010

4. DEVELOPMENT PLAN POLICY AND RELEVANT EVIDENCE DOCUMENTS

4.1 INTRODUCTION AND LOCAL HISTORICAL BACKGROUND

4.1.1 The Able Marine Energy Park (AMEP) proposed site lies within an area that has a long history of allocation for port related development within Development Plans. Previous Development Plans (listed below) have recognised the potential for extending Immingham and Grimsby Ports northwards on to a large flat area of land adjacent a deep water channel of the Humber Estuary to enable additional port related development, including the chemical and power industries which require a more isolated location away from the main urban areas.

- County Development - County of Lincoln – Parts of Lindsey (1955)
- Lindsey Report – March 1965
- Humberside Structure Plan (Approved) (March 1979)
- Humber Structure Plan Interim Policies for the South Humber Bank Industry Area (October 1982)
- Humberside Structure Plan (Approved) (July 1987) (Explanatory Memorandum – March 1988)

- Humberside Structure Plan – Replacement (Consultation Draft) (January 1994)
- East Glanford Local Plan (Adoption Draft) (February 1992)
- Glanford Local Plan (Consultation Draft) (September 1994)
- Regional Planning Guidance 2001

4.1.2 Current Development Plans have continued to support the South Humber Bank allocation in the Regional Spatial Strategy for Yorkshire and the Humber (adopted 2008), North Lincolnshire Local Plan – saved policies (adopted 2003) and the North Lincolnshire Core Strategy (adopted June 2011). The production of various infrastructure studies and masterplanning of the area have also supported the Development Plan Policies. The reduction of the number of land owners, investment from Able UK towards addressing the need for important infrastructure including the requirements of the Habitat Regulations, drainage and flood risk schemes, supportive work from North Lincolnshire Council and Government support for the off shore wind industry has given a reality towards developing and delivering the South Humber Bank allocation. The AMEP proposal takes up around one third of the South Humber Bank allocation. Able UK owns a further substantial area of the South Humber Bank where it has been given planning permission for a port logistics development which will support the AMEP proposal. (Subject to legal agreements being completed.)

4.2 POLICY CONTEXT

National Planning Policy Framework

4.2.1 The AMEP proposal was accepted by the IPC in January 2012. Whilst the previous individual national Planning Policy Statements were used for planning policy guidance. In March 2012 the Government replaced this guidance with a single national guidance document (plus a technical addendum on Flood Risk and Waste) called the National Planning Policy Framework (NPPF). Although the NPPF is a considerable reduction in national planning guidance it does confirm that applications for planning permission must be determined in accordance with the Development Plan, unless material considerations indicate otherwise, and also confirms that planning policies and decisions must reflect and where appropriate, promote relevant EU obligations and statutory requirements. The NPPF has also retained the goal of achieving sustainable development giving equity to the assessment of three sustainable roles of economic, social and environment and introduced the presumption in favour of sustainable development. In striving for sustainable development the NPPF reflects the position of the previous national planning policy statements which have been used as national planning policy guidance throughout the AMEP pre-IPC acceptance. The AMEP proposal meets the relevant NPPF Core Principles set out in NPPF paragraph 17 and has satisfactorily addressed appropriate EU obligations (for example the EU Directives relating to

Habitats and Water) and is in compliance with the Local Development Plan policies (where relevant).

National Policy Statement for Ports January 2012

4.2.2 This is a National Policy Statement (NPS) and provides the framework for decisions on proposals for new port development.

4.2.3 It applies, wherever relevant, to associated development, such as road and rail links, for which consent is sought alongside that for the principal development.

4.2.4 Under the Planning Act 2008 the Infrastructure Planning Commission (IPC) must also have regard to any local impact report submitted by a relevant local authority, any relevant matters prescribed in regulations, the Marine Policy Statement (NPS) and any applicable Marine Plan, and any other matters which the IPC thinks are both important and relevant to its decision.

4.3 CURRENT DEVELOPMENT PLAN POLICY (REGIONAL AND LOCAL)

4.3.1 Development Plan Policy is currently based on the Regional Spatial Strategy for Yorkshire and the Humber 2008, North Lincolnshire Core Strategy (adopted June 2011) and the saved policies of the North Lincolnshire Local Plan (adopted May 2003). The following Development Plan Policies apply to the AMEP proposal.

- *Regional Spatial Strategy for Yorkshire and the Humber*

4.3.2 Policy HE1 of the Regional Spatial Strategy (RSS) for Yorkshire and Humber is the specific Policy that relates directly to the Humber Estuary. This policy also has supporting links to many other Policies of the RSS. Policy HE1 specifically safeguards Port Logistics and estuary related development at the South Humber Bank site. It sets out to improve the sub area's transport infrastructure by safeguarding and increasing the capacity of the main east-west multimodal corridors (relating to road and rail). Policy HE1 also sets out to improve multimodal land access to the Humber Ports and to develop their complementary roles. Finally Policy HE1 sets out to foster collaboration across the sub area between public and private partners to realise the potential of the Humber Ports as the 'Global Gateway' to the region and North UK while at the same time recognising the importance of improving and enhancing infrastructure and nature conservation (Natura 2000 designations and SSSI). Pre-application work has been progressed over a long period of time and the AMEP proposal has satisfactorily addressed these policy issues.

- *North Lincolnshire Local Plan*

4.3.3 The North Lincolnshire Local Plan (NLLP -Adopted May 2003) allocates a gross area of 740.7 hectares of land for estuary related B1, B2 and B8 industrial land uses at the South Humber Bank between South

Killingholme Haven and East Halton Skitter and includes the ABP. This land is allocated under policies IN1-1 and IN4 and IN5. Policy IN4 defines estuary related industrial land uses, and includes the AMEP site. There are other Policies that have links to the South Humber Bank employment site in terms of nature conservation and landscape (in the Landscape chapter). These policies have been saved and run concurrently with the Core Strategy. The AMEP proposal is in compliance with these policies.

- *North Lincolnshire Core Strategy*

4.3.4 North Lincolnshire Council adopted the Local Development Framework Core Strategy in June 2011. Policies CS1 and CS12 identify the South Humber Bank ports as nationally and internationally important and safeguards some 900 hectares of land in and around the port complexes of Immingham Port and the Humber Sea Terminal for estuary related development as well as to support the continued growth of the chemical and renewable energy industries. Policy CS12 has been written concurrently with pre-application work of the AMEP proposal. Policy CS12 continues the aims of the RSS and North Lincolnshire Local Plan by specifically identifying the South Humber Bank as being important for creating port facilities, including the opportunity to specifically create a new port and safeguards the frontage to the estuary for such facilities and Policy CS26 promotes significant transport improvements to rail, water and road transport modes regarding improved accessibility to the South Humber Ports. Directly linked to Policies CS12 and CS26 is an Interim Planning Policy Statement approved by NLC in 2011 that requires Able UK to contribute towards transport improvements within the South Humber Bank Employment allocation. Other policies are not specifically about the South Humber Bank allocation but are nevertheless linked as general policies that bear some significance, for example Policies CS16 (Landscape, Greenspace and Waterscape), CS17 (Biodiversity), CS18 (Sustainable Resource Use and Climate Change) and CS19 (Flood Risk). The AMEP proposal is in compliance with Core Strategy policies.

4.4 PLANNING POLICY OVERVIEW

4.4.1 In the opinion of the local planning authority the AMEP proposal generally complies with Development Plan Policy and therefore the local planning authority has no objections to the proposed development on planning policy grounds.

Supportive Evidence

4.4.2 There are a number of evidence documents which support the South Humber Bank Development Plan Policies. Much of the evidence has been gathered over a number of years towards justifying the South Humber Bank allocation and supporting the AMEP proposal. All of this evidence is included in North Lincolnshire Council's Core Strategy evidence base. The supportive evidence is an iterative process and its progress is summarised as follows:

- **South Humber Bank Feasibility and Masterplanning Study (BDP 2004):** this is a base document that has been changed by the progress of a number of later individual studies and by the progress of Able UK's development approach in agreement with North Lincolnshire Council (NLC) and other organisations.
- **A160 Highway Improvement Scheme (Highways Agency):** reached preferred option stage 2010 and has progressed with some design work. This is a highway improvement scheme that is anticipated to start construction after 2015. This will involve upgrading and dualling the first 1.7 kilometres of the A160 junction, improvements from the A180 to the northern entrance to Immingham Port and other associated highway improvement infrastructure. This highway improvement scheme is identified as a key strategic priority to open up the South Humber Gateway and improve the congested route to the Port of Immingham.
- **South Humber Bank Transport Study (2008 – updated 2010 and interim statement 2011):** this is a study that has been approved by NLC which assessed and identified road infrastructure required on the South Humber Gateway to release this area to its full potential. Subsequently, an interim planning guidance specifying transport infrastructure improvements required within the South Humber Bank Employment Allocation (internal improvements) was produced and adopted. NLC and Able UK have agreed to use this document to resolve transport issues with the AMEP proposal and negotiations are progressing.
- **Killingholme Rail Loop:** this is a proposed scheme in its early stages (long term – post 2015) that will change the rail access into Immingham Dock and the South Humber Bank Employment area from a rail cul-de-sac to a one way rail loop system. Several early options have been looked at by Network Rail in 2008/2009. This will achieve continuous rail access and egress, negate the need to reverse/shunt trains and potentially double rail paths. Although this will benefit the AMEP it is not essential for the Killingholme Rail Loop to be in place for the AMEP proposal to be constructed. North Lincolnshire Council will continue to support this scheme in negotiation with South Humber Bank industrial users and Network Rail.
- **Humber Flood Risk Management Strategy 2008 (under Review):** this Strategy covers all flood compartments of the Humber Estuary, including the area affected by the South Humber Bank employment allocation. The AMEP proposal updates the flood bank strategy for this part of the Humber Estuary by proposing a 1300 metres long new quay that will replace the existing flood bank. This new quay will form a hard concrete defence. Able UK, Environment Agency and NLC have agreed the requirements for this new flood defence provided for in the AMEP proposal.

- ***Killingholme Marshes Drainage Improvements Design Stage 1 Report 2009 (Hannah Reed Associates Ltd 2009)***: this document is the base document for ongoing negotiations between Able UK, NLC, North East Lindsey Internal Drainage Board and the Environment Agency in relation to a new strategic drainage scheme that includes catering for the AMEP proposal. Essentially a scheme has been designed that is appropriate to the scale of development proposed but the exact location of the new pumping station is to be finalised. NLC is in agreement with this scheme, including the options being progressed on the pumping station location.
- ***South Humber Gateway Nature Conservation Mitigation Strategy***: this is an ongoing Strategy document (started in 2008) that includes partnership working with NLC, North East Lincolnshire Council, Humber Industry Nature Conservation Association, Natural England and South Humber Bank industry representatives. The aim of this Mitigation Strategy is to produce guidance for delivering and maintaining future nature conservation sites that are produced as mitigation to development proposals at the South Humber Bank in both North Lincolnshire and North East Lincolnshire. In North Lincolnshire the Able AMEP proposal and the Able Logistics Park proposal have produced agreement on mitigation sites to the satisfaction of all parties concerned and these mitigation sites or option for sites will inform the overall Mitigation Strategy for the South Humber Bank Employment site. The local planning authority is satisfied with the progress made by Able UK on the future provision of nature conservation mitigation in relation to the AMEP proposal.
- ***South Humber Gateway Delivery Board and Working Group***: the Board and Group was set up by North Lincolnshire Council and North East Lincolnshire in 2007 including private and public sector bodies/companies/organisations to oversee development proposals and to help to overcome major infrastructure problems at the South Humber Bank. From the outset the Board and Working Group have supported the AMEP proposal and helped produce a significant amount of evidence included in this list of evidence support.

4.5 KEY POLICY DOCUMENTS LIST

- 4.5.1 This list provides a summary of the key planning policy documents relating to the South Humber Gateway and the Able Marine Energy Park. The older documents are not available in electronic format; however they can be made available in paper form if required. All other documents are listed with web links to access/download them.

Key Documents

- County Development - County of Lincoln – Parts of Lindsey (1955)

- Lindsey Report – March 1965
- Humberside Structure Plan (Approved) (March 1979)
- Humberside Structure Plan - Interim Policies for the South Humber Bank Industry Area (October 1982)
- Humberside Structure Plan (Approved) (July 1987) (Explanatory Memorandum – March 1988)
- Humberside Structure Plan – Replacement (Consultation Draft) (January 1994)
- East Glanford Local Plan (Adoption Draft) (February 1992)
- Glanford Local Plan (Consultation Draft) (September 1994)
- Regional Planning Guidance 2001
- National Planning Policy Framework (DCLG, 2012)
<http://www.communities.gov.uk/documents/planningandbuilding/pdf/2116950.pdf>
- Yorkshire & Humber Plan – Regional Spatial Strategy to 2026 (DCLG, 2008)
<http://www2.eastriding.gov.uk/environment/planning-and-building-control/current-strategic-plans/regional-spatial-strategy/>
- North Lincolnshire Local Plan (May 2003) (NLC)
<http://www.northlincs.gov.uk/environment/planning/spatial-planning/local-development-framework/localplan/>
- North Lincolnshire Core Strategy – Adopted – June 2011 (NLC, 2011)
<http://www.northlincs.gov.uk/environment/planning/spatial-planning/local-development-framework/corestrategy/corestrategydpdadopted/>
- South Humber Bank Feasibility and Masterplanning Study (BDP 2004)
<http://www.northlincs.gov.uk/environment/planning/spatial-planning/local-development-framework/evidence/souhumbafeamasplan/>
- A160 Highway Improvement Scheme (Highways Agency)
<http://www.highways.gov.uk/roads/projects/23843.aspx>
- South Humber Bank Transport Study (2008 – updated 2010 and interim statement 2011) (NLC/Pell Frischmann)

<http://www.planning.northlincs.gov.uk/planningreports/evidencebase/local/shbtransstrat08/shbtransstratfinal08.pdf> (Main Document, 2008)

<http://www.planning.northlincs.gov.uk/planningreports/evidencebase/local/shbtransstrat08/shbtransstratappendices08.pdf> (Appendices)

<http://www.planning.northlincs.gov.uk/planningreports/spd's/planguidnce/ipgshg.pdf> (interim statement 2011)

- Killingholme Rail Loop (Network Rail) – contained in Freight Route Utilisation Strategy (2007) and Strategic Business Plan – Freight Strategy (2007)

<http://www.networkrail.co.uk/browse%20documents/rus%20documents/route%20utilisation%20strategies/freight/freight%20rus.pdf> (Freight RUS)

[http://www.networkrail.co.uk/browse%20documents/strategicbusinessplan/other%20supporting%20documents/freight%20strategy%20\(final\).pdf](http://www.networkrail.co.uk/browse%20documents/strategicbusinessplan/other%20supporting%20documents/freight%20strategy%20(final).pdf) (Business Plan)

- Humber Flood Risk Management Strategy 2008 (Environment Agency)
<http://www.environment-agency.gov.uk/homeandleisure/floods/31704.aspx>

- Killingholme Marshes Drainage Improvements Design Stage 1 Report 2009 (Hannah Reed Associates Ltd 2009)

<http://www.northlincs.gov.uk/environment/planning/spatial-planning/local-development-framework/evidence/kilmardraimp/>

5. LANDSCAPE AND VISUAL IMPACTS

- 5.1 The council considers the methodological approaches as set out and elaborated upon in Chapter 20, Landscape and Visual, of the Environmental Statement – see paragraphs 20.3.5, 20.3.6, 20.3.15 and 20.9.12 - to be acceptable. It also finds that the assessment of impacts upon the character of the landscape, upon visual amenity and cumulative impacts are adequate and fair. The council therefore, considers that *within North Lincolnshire* the local landscape character, visual and cumulative impacts of the proposed development are as stated in Chapter 20 of the Environmental Statement likely to be relatively minor.

- 5.1.1 This assessment however, is in part based upon the consideration that local impacts in the immediate vicinity of the proposed development will be mitigated through landscape planting at the site. The landscaping of development sites is an important material planning consideration and to this extent the landscape master plan AME – 02007 appear to recognise this by indicating the proposed presence of tree lined avenues; grassed area and wildlife sites within and adjacent the development site.

5.2 SITE LANDSCAPING PROPOSALS

- 5.2.1 At first sight, it appears that the landscape strategy and the positioning of buildings as shown upon the master planning for the landscaping of the site meets with many of the provisions of council policy LC 20 (North Lincolnshire Local Plan May 2003 page 188 – saved policy) which amongst other things states: -
- 5.2.2 It is proposed that the following measures will be undertaken throughout the South Humber Bank Landscape Initiative area:
- softening - provision of stepped-back security fences, fringed with shrubs and trees;
 - screening - establishment of mixed broad-leaf and conifer belts;
 - habitat conservation - maintenance of wet areas and other existing features, such as woods and hedges, to provide a good framework for future improvements;
 - habitat creation - introduction of lakes, ponds and marshes;
- 5.2.3 In practice however, the information concerning landscaping the site is somewhat limited. The council considers therefore, that it is not possible to adequately assess whether such planting will mitigate landscape and visual impacts in the manner described within the application.
- 5.2.4 Detailed information upon how the site would be planted – the methods of planting and after-care maintenance; the size and species of what is to be planted, the location of plants, and; methods to be employed to protect planted areas during and after construction; is not given. At 20.7.4 the use of landscape planting, in particular reference is made to the use of native specie tree planting (some of semi mature trees), to “... assist in breaking up the scale and mass of the buildings and hard standings.”
- 5.2.5 The proposed tree planting is however, to be limited to single or double rows of trees set within (relative to the overall site area), narrow confines. Whilst “boulevard planting” may be acceptable as a feature within the site, the efficacy the screen planting for the boundaries of the site with the public realm is in the council’s view, doubtful. The scale of the proposed development is such that there will be a significant local impact upon visual amenity. However, the nature and extent of the stated planting scheme for the site appears far from adequate to produce the level of mitigation suggested.

5.3 LANDSCAPING AND BUILDINGS

- 5.3.1 The council notes the very large size and scale of the buildings proposed for the site (30 meters to eaves and in some cases 45 meters to ridge), is such that the use of *semi mature* trees would be unlikely to produce the effects suggested in the landscape assessment document. Further the use of semi mature trees (8 to 12 meters tall on planting), in such an exposed location would perhaps not be best advised as losses could be high even with adequate and expensive maintenance programmes. Elsewhere, the company has produced landscaping proposals based upon properly researched and designed woodland planting and the council is somewhat disappointing to note that this well thought out approach to the landscaping of this development site is not being replicated.
- 5.3.2 The size and scale of the proposed buildings is such that they will become significant features of the local landscape in particular when viewed from the Humber or from the north bank of the Humber. It appears from the landscape and visual impact assessment that such impacts are not fully addressed. In terms of landscape mitigation the use of dark coloured cladding materials and/or a range of colours for cladding materials should be specified as a means of further mitigating landscape character, visual and cumulative visual impacts.

6. LOCAL TRANSPORT PATTERNS AND ISSUES

6.1 INTRODUCTION

- 6.1.1 This section of the LIR report reviews the outstanding issues associated with highways and transport aspects of the proposals and in particular the matters which require careful consideration in the conditioning of the development to ensure that its impact does not have an adverse impact on the surrounding local road network.

Considerable consultation has been conducted with the applicant and their consultants, JMP to scope out and agree the content of the supporting Transport Assessment. These consultations have been held in conjunction with the Highways Agency, as the scheme has a significant impact on the trunk road network. Whilst the majority of the exercise has been agreed there are a number of issues which have yet to be finalised and there are others where the principle is generally agreed but where there is a need to safeguard the delivery of an effective solution.

In overall terms the highways authority is satisfied that the proposal can with suitable control and mitigation be accommodated on the network without adversely affecting the network. There is however a need to finalise some issues and these are set out below.

6.2 INTERIM PLANNING GUIDANCE

6.2.1 On 28 June 2011, the Authority formally adopted the *Interim Planning Guidance South Humber Gateway – Transport Contributions*, seeking financial contributions from developers for improvements to the local road network to support the planning of major expansion in the South Humber Gateway area.

A full copy of the relevant IPG is included as an appendix to this report.

The South Humber Gateway, which includes the largest port complex in the UK, has seen significant economic growth over recent years and with large areas of development land surrounding the ports there is considerable potential for this growth to continue and the need to deliver new infrastructure to support it. North Lincolnshire Council's Highways Authority are keen to support the continued development of the area and to ensure the necessary infrastructure is planned, designed and delivered to facilitate this growth.

In ensuring the necessary infrastructure is delivered for the whole of the South Humber Gateway area, the IPG facilitates a joined-up approach, rather than dealing with each application in a piecemeal fashion. In addition to supporting new infrastructure, the IPG also supports travel planning initiatives to ensure sustainable infrastructure is promoted within the Gateway area and the delivery of maintenance requirements due to the additional traffic present on the internal network, particularly on highly trafficked roads with a high number of HGVs.

A full analysis of the condition of the network has been undertaken to inform the IPG. In addition, to allow the Gateway to reach its full potential, a Transport Strategy was developed in 2008 (and updated in 2010), looking at upgrading the local infrastructure to meet the forecast levels of future demand over the next 15 to 20 years. The next stage in this process looks at defining and securing the necessary finances to deliver this transport infrastructure, sustainable travel initiatives and maintenance requirements on the Gateway.

The Strategy identified and supported a variety of major highway proposals in the area that are being promoted by others, including:

- The A160 Port of Immingham Improvement Scheme (Highways Agency)
- The A18-A180 Link Road (North East Lincolnshire Council)
- Great Coates Interchange Improvements (NELC/HA)
- South Humber Bank Link Road (NELC)
- Eastgate Link (NELC)

It also identified the following package of improvements to the local highway network to facilitate future growth in the area:

- Complete works on Haven Road – Whilst these works have been partially completed and have improved access to the Humber Sea Terminal, it is recommended that the remainder of the full scheme, which equates to a new roundabout on Rosper Road is implemented.
- Dualling of Rosper Road – dualling of a key existing road to help develop a strong north-south corridor linking the A160 to the areas of development land to the north.
- Improve Eastfield Road/A160 signals – minor widening to this A160 signal junction.
- New roundabout at junction of Eastfield Road and Chase Hill Road.
- New roundabout at junction of Chase Hill Road and East Halton Road.
- Signalise Stallingborough Interchange – signalisation of existing motorway interchange to accommodate committed development traffic and supplement the A18-A180 link.
- A1173 junction with Kiln Lane – provision of a dedicated left turn facility for traffic from the south towards the port.

Whilst the development proposals have been ongoing since before the adoption of the IPG and propose some of the works listed above (including several schemes in the absence of the A160 improvement scheme and the earlier Able consent on land to the north of Chase Hill Road), it is clear that the developer should contribute equitably through the IPG requirements.

With reference to the IPG financial contribution calculation, the adopted guidance states a levy of £2,238 per trip, based on number of additional trips in the worst-case peak hour. However, at the time of negotiations with Able UK, the draft guidance included a figure of £1,966 per trip, therefore in order to ensure a fair approach, it was agreed that the calculation of £1,966 would remain for this development proposal.

Therefore, our calculations sent to the Planning Officer in October 2011, are as follows:

6.2.11 It would be based on a value of £1,966 per vehicle trip generated in the peak hour. In this case, it would be the AM peak hour rather than the PM peak, as this is when more trips are generated.

6.2.12 There are a number of different scenarios that could affect the final AM peak figure and as such these calculations are outlined below:

Before Travel Plan Reductions – 0800 – 0900

Arrivals: 557 Departures: 116 = 673

Total = 673 x £1,966 = £1,323,118

After Travel Plan Reductions – 0800 – 0900

Arrivals: 441 Departures: 92 = 533

Total = 533 x £1,966 = **£1,047,878**

Adjusted Sensitivity Test Arrivals – 0800 – 0900

Arrivals: 441 + 255 = 696 Departures: 92 Total = 788

Total = 788 x £1,966 = **£1,549,208**

The standard peak hour is in fact 0600 – 0700 and therefore, we could argue that the following calculations could be used:

Before Travel Plan Reductions 0600 – 0700

Arrivals: 369 Departures: 666 = 1,035

Total = 1,035 x £1,966 = **£2,034,810**

After Travel Plan Reductions 0600 – 0700

Arrivals: 327 Departures: 589 = 916

Total = 916 x £1,966 = **£1,800,856**

- 6.2.13 Our view is that, whilst most traffic is generated between 0600-0700, we have previously agreed with Able UK that for trip generation purposes the hours of 0800-0900 can be used for assessments. However, the figure is considerably less than that for 0600-0700. Therefore we believe the figure for 0800-0900 before travel plan reductions should be used, which will equate to **£1,323,118**.
- 6.2.14 This also takes into account some of the issues already raised in this Chapter and we would also welcome consideration of the following issues in the remainder of this section.
- 6.2.15 The contribution towards highways improvements will be the subject of a legal agreement which will require the signatures of all those affected by the agreement and may be subject to further negotiations.
- 6.3 IMPROVEMENTS TO HAVEN ROAD JUNCTION
- 6.3.1 A matter still to be resolved is the need for improvements to the junction of Rosper Road and Haven Road which has as yet not been agreed.
- 6.3.2 As previously noted, part of the Interim Planning Guidance and the Transport Strategy includes the upgrading of the existing priority junction to a new roundabout. The need for this improvement has long been an inspiration of the Authority given the existing form of the junction, the high percentage of HGVs using it and the associated safety aspects of it accommodating new traffic.
- 6.3.3 The proposed development will add new traffic to this junction and the Authority have requested that the development fund the identified

improvement scheme, a proposal that has not been agreed with the applicant.

6.4 SHIFT PATTERNS

6.4.1 It is evident from the Transport Assessment that the proposal has the potential to generate significant volumes of new traffic on the local road network and onto the A160 trunk road. Reference is made to Section 6 of the final draft of the TA.

6.4.2 The site once operational will employ some 4,272 staff and will attract some 7,726 vehicular movements per day.

6.4.3 At present the TA methodology assumes a shift pattern which includes shifts commencing outside of traditional peak network times of 0800-0900 and 1700-1800. Thus the trip generation is significantly less in the above network peaks than the hours preceding them.

6.4.4 For example, during the 0800-0900 peak hours it is estimated that the development would attract some 673 vehicular movements compared to 1,035 in the 0600-0700 period.

6.4.5 The level of highway mitigation proposed is thus based on assessments of peak periods, which are peak in terms of general highway networks but not the peak for the development. Whilst not a unique situation, in this particular instance the differences are significant.

6.4.6 The development is therefore reliant on reducing the traffic by adopting off-peak shift patterns, a proposal which is considered acceptable to the Highway Authority in principle, but one which needs to be safeguarded and we would expect this to be conditioned within the Consent Order for the development. The omission of this would have a detrimental effect on the local and strategic road network and be unacceptable for the Highways Authority.

6.5 TRAVEL PLANNING COMMITMENTS

6.5.1 Access to the site by sustainable modes of travel is extremely limited at the present time. Indeed, public transport access is non-existent and there is a very low baseline to work from in terms of improving sustainable connections for such a large potential workforce.

6.5.2 The Authority recognises this and has outlined principles for an *International Gateways: Area-wide Travel Plan* which will cover the South Humber Gateway and Humberside International Airport. We would expect Able UK and any leaseholders to support and commit to the overall principles through their travel plan initiatives and partnership working.

6.5.3 A Framework Travel Plan for this site has been agreed in principle with the Authority. It is however critical that this be conditioned in a manner to maintain its long-term success, particularly given the low baseline position. The FTP passes a reasonable amount of responsibility onto the end users.

6.5.4 The Highway Authority is keen to ensure that suitable control and financial support be put in place to ensure the delivery of the plan and to provide additional support if it fails to meet its targets in terms of sustainable mode share.

6.6 A160 POSITION

6.6.1 The Highway Authority re-iterates its support for the A160 Port of Immingham Improvement Scheme, a major scheme proposal being developed by the Highways Agency to improve the A160 from the port entrance to the A180 at Brocklesby Interchange. At a cost of over £100m this level of infrastructure provision is outside of the ability for individual development to deliver and it is recognised that all parties would like to see the expedient delivery of the full scheme.

6.6.2 Shortly before the preparation of this section of the Local Impact Report, Government announced that the A160 will be given a design budget to allow it to proceed ready for construction after 2015. However, the Government was also clear that, whilst this is a positive announcement for this scheme, there is no guarantee that funding will be available or the scheme will be approved for start of construction in (or after) 2015.

6.6.3 In the interim or absence of the A160 proposals, the applicant has agreed a plan of mitigation measures along the route to offset its own impact on the performance of the network. This is at a level that can reasonably be delivered and ultimately be superseded by the main A160 scheme.

6.6.4 Whilst these junctions fall within the remit of the Highways Agency, they are critical to the performance of the surrounding local road network. A reasonable and sensible package of measures has been agreed which respects the potential for a much larger scheme and presents a reasonable level of responsibility on the applicant. It is noted that the safeguarding of this package of works is critical in the absence of the main A160 scheme, given the uncertainty of timescales and delivery.

7. DESIGNATED SITES AND FOOTPATHS

7.1 PUBLIC RIGHTS OF WAY

Positive Impacts

7.1.1 Provision of new footpaths amounting to approximately 2,750 metres more than the approximately 1,100 metres to be lost. This is to be made up of (1) approximately 2,650 metres from the Humber floodbank at the southern end of the new quay leading south westwards to Rosper Road, then north west along the eastern side of Rosper Road within the perimeter of the development site to a point close to Rosper Road's junction with Haven Road; (2) approximately 350 metres along the western side of Chase Hill Wood; and (3) approximately 850 metres between Public Footpaths 74 and 77 (all as per PRow Fig. 1).

- 7.1.2 The new footpaths will be provided under section 136(1)(a) of the Planning Act 2008 (namely, “an order granting development consent may extinguish a public right of way over land only if the decision-maker is satisfied that an alternative right of way has been or will be provided”). Two of the extra lengths of footpath are outside the development site. All of them, however, are on land within Able UK’s control. Moreover, all three links are necessary if walkers are to be given a safe detour over the shortest possible distance. From south of the proposed quay, there is at present an uninterrupted footpath along the Humber bank all the way to South Ferriby, a distance of about 26 kilometres. Haven Road itself is not a safe alternative. It is mostly narrow and in frequent use by lorries.

Neutral Impacts

- 7.2 None.

Negative Impacts

- 7.3 The loss of approximately 1,100 metres of footpath along the Humber bank (see PRow Fig. 2).

- 7.3.1 Able UK envisage a hiatus of approximately two years during which neither the length of Public Footpath 50 over the proposed quay nor the alternative length of footpath from the Humber bank to Rosper Road will be available owing to construction activity. This is to be mitigated by Able UK making temporary provision for the required duration of an additional approximately 900 metres of footpath alongside Rosper Road, but within the development site, between the permanent new footpath alongside Rosper Road and Public Footpath 100/Marsh Lane to its south. The latter also connects Rosper Road with the Humber bank (see PRow Fig. 3). Rosper Road is neither pleasant nor interesting. Walking alongside it is expedient rather than desirable. The less walkers have to do so, therefore, the better.

8 HISTORIC (BUILT) ENVIRONMENT

- 8.1 On evaluating the AMEP Assessment of settings on the significance of heritage assets doc.ACW283/4/0 this report concentrates on the high adverse impact on the significance of the group of three Grade II listed 19th Century lighthouses on the South Humber Riverside and the lack of mitigation proposed to negate the high adverse impact.

8.2 NORTH KILLINGHOLME LOW LIGHTHOUSE

- 8.2.1 Lighthouse and adjoining lighthouse keeper’s house, now house. 1851 by William Foale for Trinity House, with later alterations and additions to rear. Brick, smooth-rendered to lighthouse, rough-rendered to house. Slate roof to house.

8.2.2 The AMEP Assessment for setting effects on the significance of the heritage assets DOC.acw283/4/0 States 'there will be a high adverse impact on the significance as the group as a whole'.

8.3 IMPACT ON SETTING

8.3.1 Regarding North Killingholme Low Lighthouse the AMEP assessment does not mention that the Quay Storage compromises the riverside setting built out into the river. The riverside setting has now totally changed to that of industrial landscape. It also does not mention the loss of original green open field setting from the inland construction. This is evident as you walk in both directions along footpath SK/50 past the lighthouse along the Riverside i.e. from the northwest and southwest. There is no proposed mitigation on the impact on the setting of this lighthouse.

8.4 IMPACT ON THE STRUCTURE AND HISTORIC FABRIC OF NORTH KILLINGHOLME LOW LIGHTHOUSE

8.4.1 The report DOC.ACW283/4/0 states that there is a threat to the physical structure of the building caused by the vibration from the construction of the Energy Park.

8.4.2 The mitigation states that 'a management plan will be agreed by the council'. This is insufficient in regards of detail. At a minimum at this stage would be for experienced structural engineers should be employed to evaluate the situation, undertake a risk assessment with a programmed plan of action in place to mitigate against possible damage.

8.4.3 There is no point in having a watching brief on the lighthouse if it is damaged to such an extent during the works that it would have to be demolished.

8.4.4 For instance before the work commences should the threat be identified in the risk assessment, the foundations could be strengthened or structural scaffolding could be erected during the work.

8.4.5 If you own a listed building national legislation in this case the Planning (Listed Building and Conservation Areas) Act 1990 puts the onus on the building owner to keep them in a structurally sound wind and watertight condition. The same Act gives the LPA powers of prosecution to ensure this status is maintained.

8.4.6 It is recommended that a risk assessment report with appropriate mitigation is prepared before the determination for the Energy Park.

8.4.7 The second point regarding this lighthouse is at present the building is in use as a residence. There are no proposals for the use of the building in the future. Listed building are best conserved for the future if they have a use and are looked after and maintained not left derelict.

- 8.4.8 If it is just left empty and disused the likely result is it will deteriorate through time and its life, as a nationally important heritage asset will be lost.
- 8.4.9 Since the site owners have decided to obtain a listed building and considering the large scale development and finances the council would expect that some resource be used to find a long term use for the lighthouse. There are various options it could be used as an office or a really positive approach would be to use it as a small visitor centre for the Humber bank this could be for the industrial working as well as the extensive bird life in the region. Interpretation of 19th century maritime history could also be included as part of the visitor centre.
- 8.4.10 What is proposed at present is a significant loss of historic setting, the lighthouse becoming disused and the possibility of damage during the construction works. Council local plan policy (saved policy) HE 5 Development in Listed Buildings states:
- ‘The council will seek to secure the preservation, restoration and continued use of buildings of special architectural or historic interest. When applications for planning permission relating to a listed building or listed building consent are being assessed, the primary consideration will be the need to preserve or enhance the fabric and character of the building. Permission or consent will not be granted unless it has been demonstrated that the proposed works would secure this objective. The Council will encourage the retention and restoration of the historic setting of listed buildings. Proposals that damage the setting of a listed building will be resisted.’*
- 8.4.11 The proposal does not adhere to the council’s policy on how it expects listed buildings to be dealt with within its area. There are no proposals to mitigate against these negative impacts, ie loss of historic setting, loss of public access and threat to the long-term future of the building, which is not in the public interest.
- 8.4.12 It is therefore recommended that a use is found for the lighthouse preferably one with community benefit.
- 8.5 EFFECT OF PROPOSAL ON THE SETTING OF GRADE II LISTED KILLINGHOLME HIGH LIGHTHOUSE, KILLINGHOLME NORTH LOW LIGHTHOUSE AND KILLINGHOLME SOUTH LOW LIGHTHOUSE
- 8.5.1 The AMEP report states there will be a High Adverse Impact on the significance of the group as a whole. The report states that the new structures to the north and west will no longer allow clear visibility from the river, which is correct. However what it does not mention is that due to the loss of the public footpath no SK/50 on the River Frontage (the length that runs along The Quay Storage Area in the river) the views from the northwest along this stretch of footpath will no longer be available.

- 8.5.2 What has not been mentioned in the report is that this is a well-used footpath, which provides an uninterrupted route along the river frontage. The loss of this stretch of footpath effectively severs this route and will reduce the access for people walking along the river and viewing the historic lighthouses.
- 8.5.3 The proposed diversion route is inland to the south west of the development and provides no worthwhile views to the lighthouses.
- 8.5.4 Footpath SK/50 continues past the development passing all three lighthouses to the immediate south east of the site. Document reference TRO30001/APP/11 shows that this footpath will be used for construction traffic as a temporary measure.
- 8.5.5 It is necessary and essential that this length of footpath remains open and in good condition. This is now the only length of footpath where the public can walk along the riverside and see the three lighthouses together in their riverside setting.
- 8.5.6 If for whatever reason this was lost then there would be no public access where the three listed houses could be viewed together along their riverside setting. Public access along this stretch of footpath should therefore, always be maintained in a manner suitable for pedestrians after construction is completed should approval for the scheme is given.
- 8.5.7 The AMEP Assessment of settings doc.acw283/4/0 has stated that there is a high adverse impact on the significance of the asset. There are no proposals to mitigate against these impacts. One way of getting a heritage gain to negate this loss would be to use North Killngholme Low Lighthouse as a visitor centre with interpretation of early 19th century maritime activity. In this way the loss of historic setting and public access to some extent has some positive outcome i.e. the continued useful function of North Killingholme Low Lighthouse and provision of understanding of the location in early phases of maritime activity in this area.

8.6 HISTORIC ENVIRONMENT - MARINE AND TERRESTRIAL

Archaeological Impact – Marine and Intertidal

- 8.6.1 The archaeological potential of the development area in respect of maritime activity is considerable. The environmental assessment to date has comprised a review of existing data sources and available geotechnical data including boomer survey, bathymetry and magnetometer survey, and the results of a vibrocore survey. A walkover survey of the foreshore appears to have been carried out from the adjacent sea wall.
- 8.6.2 This work has usefully identified a number of features of potential significance including jetty timbers visible on the foreshore, as well as features on and below the sea bed including, a possible wreck, other potential structures and deposits that indicate the presence of buried land

surfaces dating to the Mesolithic and later prehistory. There is potential for the intertidal and maritime area to contain well-preserved remains including boats, military remains, and other maritime structures of most periods of prehistory and historic times.

- 8.6.3 The construction of the quay, berthing pocket and dredging area, as well as associated works to realign drainage outfall and the provision of a new pumping station, amongst other works is likely to have an impact on well-preserved archaeological and palaeo-environmental remains contained in the intertidal and marine environment.
- 8.6.4 The intention to carry out further survey work to refine the impact assessment and the details of a mitigation strategy to be set out in a Written Scheme of Investigation (WSI) and agreed with the local planning authority is welcome. It is proposed to carry out all further marine archaeology work following consent. The council considers that the assessment survey work should be carried out in advance of a consent in order to inform the decision making process.
- 8.6.5 Survey should include an assessment of the intertidal zone that has not yet been undertaken. The WSI should include detailed methodologies for all assessment and proposed mitigation work, including a clear procedure for post-fieldwork assessment and reporting with updated project designs and proposals for publication. All works should be undertaken by a suitably qualified archaeological organisation as approved by the local planning authority. The WSI should also include a protocol for unexpected discoveries.

Archaeological Impact – Terrestrial Archaeology

- 8.6.6 The desk based assessment and preliminary stages of archaeological field evaluation have to date identified a considerable number of heritage assets within the study area. These sites reveal the nature of human occupation within this changing landscape since early prehistory, perhaps most particularly during the Iron Age, Roman and Medieval periods. Maritime and military activities are also well represented and the potential for the discovery of further sites is recognised.
- 8.6.7 The significance of the heritage assets have been graded to allow an assessment of the magnitude of impact of the development proposals. Grading of significance is a largely subjective exercise. The significance of some of the assets that have yet to be fully assessed is likely to be understated. This would apply in particular to those sites identified during recent geophysical survey that appear to be typical of Iron Age/Romano-British settlements in this area (Table 18.4, sites 60-64). These have been assigned as grade D Not Significant; similar magnetic anomalies in the maritime surveys are graded C, of Local Significance. Further survey work will necessarily result in a reassessment of the significance of these and other assets and of the overall magnitude of impact.

- 8.6.8 The development area contains several discrete Iron Age/Romano-British settlements such as sites 13 & 14 (NB erroneously referred to as sites 12 & 13 in the Environmental Statement paragraphs 18.5.20-21). Site 14 is located within the area of the existing planning permission for port related storage (PA/2006/0039). This permission included a mitigation strategy to preserve the archaeological remains in situ below a tarmac surface engineered for general vehicular use; the site is currently used for vehicle storage however the archaeological area has never been developed.
- 8.6.9 Able UK propose to include this former agreement as their mitigation strategy for the Marine Park development. The council does not require this. The site is within the Heavy Component Manufacturing Park area of AMEP where huge loads will be stored and trafficked around the area. We consider it most unlikely that preservation in situ can be successfully achieved for shallow buried archaeological remains during the operational phase of AMEP. A programme of full excavation, post-excavation assessment, analysis and publication of the results will form the appropriate mitigation for this site.
- 8.6.10 The assessment has correctly summarised the impacts on terrestrial archaeology associated with the Construction site. The impact from the construction of individual buildings, including the new pumping station, should also be considered, together with associated groundwork. Dependent on the results of further archaeological survey work, the overall predicted effects could rise from minor/moderate to high significance. Comments on the Listed Lighthouse are provided separately below.
- 8.6.11 The council therefore welcomes the proposal to carry out further survey work. This should include earthwork and fieldwalking surveys, palaeo-environmental sampling, and trial trenching. In addition, a structural survey of the three listed lighthouses should be undertaken. This work should be completed before any consent is granted. This will allow for the review of impacts on the terrestrial archaeology associated with the Construction site, and for a detailed programme of mitigation to be prepared.
- 8.6.12 The WSI should include detailed mitigation measures for those heritage assets, for example site 14, where sufficient assessment information is currently available, with mitigation proposals for other sites agreed as soon as adequate information becomes available. Where preservation in situ may be proposed, the operational impacts of AMEP must be taken into account. All works should be undertaken to recognised professional standards by a suitably qualified archaeological organisation as approved by the local planning authority.
- 8.6.13 The council believes that there will be opportunities for local community engagement with the archaeological works proposed in the WSI. Other opportunities may include educational and interpretation work such as the preparation of a heritage trail for the South Humber Bank, and potentially some public use of the lighthouse. The WSI should set out the requirement for archaeological organisations undertaking works to include appropriate

arrangements for public open days, school site visits, and to provide real-time publicity information via traditional and electronic media. Planning obligations may also be appropriate to secure public benefit of their heritage, including re-use of the lighthouse.

- 8.6.14 The development of the marine energy park will result in the loss of a number of historic hedgerows that meet the Criteria of Importance in the Hedgerow Regulations 1997 by virtue of being part of a field system that pre-dates the Enclosure Acts of 1845. This will include the loss of the important historic hedgerow that forms the parish boundary between North and South Killingholme. The parish boundary will no longer be legible on the ground. The historic pattern and character of the landscape will be lost under the development.
- 8.6.15 Turning to the assessment of impact on the settings of heritage assets, representative views to and from the development site are required to adequately assess the local impact. Only one of the viewpoints and photomontages produced for the general Landscape and Visual Impact assessment is useful for the heritage assessment, from the listed brickwork chimney. Comparisons can be made of the visual impact on Thornton Abbey, a significant visitor attraction for North Lincolnshire, with the landscape visual impact assessment in the vicinity of Wootton and Ulceby, and on residential receptors at South End Goxhill, where there is predicted to be moderate adverse impact, and yet the heritage assessment for Thornton Abbey is for a minor adverse impact. We consider that the production of photomontages from Thornton Abbey and the listed lighthouses are essential to an informed assessment of impact upon significance (the lighthouses are further considered below).
- 8.6.16 The heritage assessment correctly identifies visual impacts of the development and the dynamic nature of the industrial backdrop. The scale of the backdrop appears to be underestimated, as there are stacks between 60 and 130 metres high. The scale and impact of the proposed AMEP also appears to be underestimated, given that some of the buildings for the site are to be 45 metres to eaves height, and crawler crane gibs will be up to 150 metres high. There will be up to fourteen turbines standing on the quayside with a blade tip height up to 165 metres.
- 8.6.17 With regard to the Draft Development Consent Order the council welcomes the inclusion of requirement 13 (Schedule 11). The written scheme of investigation incorporating detailed mitigation measures should be agreed before any consent being granted. The 'condition' should refer specifically to the agreed WSI documentation for the marine and terrestrial archaeology. The council support the requirement (3) for any archaeological works to be carried out by a suitably qualified person or body. Such persons and/or organisation should be acceptable to the local planning authority in order that we can ensure all standards are met and effectively monitor the mitigation works.

8.6.18 There should be additional requirements as follows:

- To secure the implementation of the agreed scheme of works in accordance with approved details and timings,
- To secure completion of the site investigation and post investigation assessment set out in the approved written scheme of investigation and to ensure provision is made for analysis, publication and dissemination of results and archive deposition prior to the commencement of the operational phase of the site [or defined areas]
- To deposit a copy of any analysis, reporting, publication or archiving required as part of the mitigation strategy with the North Lincolnshire Historic Environment Record within an agreed period
- To secure the implementation of an approved Management Plan for the listed lighthouse.

9. SOCIO-ECONOMIC IMPACT

9.1 SOCIO-ECONOMIC CONTEXT

9.1.1 North Lincolnshire has a varied and successful history of industry and commerce. The skills base is diverse and covers the key sectors of: metals and engineering, logistics, chemicals and food and drink. Gross Value Added (GVA) is not available at North Lincolnshire level but, according to the latest figures, NUTS 3.1 2009, the value of the Northern Lincolnshire economy was £5,389m, approximately £16,938 per capita, a higher GVA per head figure than the rest of the sub region.

9.1.2 North Lincolnshire has a working population of 100,600 and an economically active population of 78,100. Around 73,800 people are employed in North Lincolnshire and the area is a net importer of workers. Population projections from the Office of National Statistics, 2010, suggest that the population of the area is likely to increase by almost seven per cent between 2010 and 2020 and by over 14 per cent between 2010 and 2035.

9.1.3 82% of the people employed in North Lincolnshire are from the area with the rest coming from neighbouring areas such as North East Lincolnshire, West Lindsey, Doncaster, Hull and the East Riding.

9.1.4 North Lincolnshire's central UK location and extensive transport infrastructure has established the area as a global gateway for logistics and distribution. This unique position provides businesses' with a major competitive advantage and easy access to 370 million customers in Europe and 40m people in the UK within a four-hour drive. Within the area there are five power stations, two major oil refineries (which provide 27% of the UK's oil refinery production) and a good representation of foreign-owned companies.

9.1.5 The South Humber Gateway ports of Immingham, Killingholme and Grimsby are the busiest in the UK by tonnage of cargo handled. More than 11% of the country's sea-borne trade are processed through the ports of Immingham, Grimsby and Killingholme.

9.2 IMPACT

9.2.1 The significant financial investment in the development of the Able Marine Energy Park (AMEP) will bring confidence to the renewables sector industries and wider business community to further invest and locate to the area. The South Humber Bank is fast becoming recognised as the major location for the developing renewables sector and this will also have a further positive impact by strengthening the existing sectors in the area including petrochemicals, ports and logistics. Since details of the development became public there have been an increased number of investment enquiries from renewable sector companies and other associated supply chain businesses and industries. There is evidence that these enquiries have increased particularly over the last year.

9.2.2 The build phase of the AMEP will create 419 temporary jobs during the construction phase which is likely to run over a number of years. Of these jobs a number will be temporary jobs created through sub-contracted works within local firms. Local sub-contractors will also benefit by being able to safeguard jobs providing a further positive impact on the local economy. As a result of an increased number of people working in this location there will be a resultant increase in spend in the local shops and eateries and a greater demand for short-term accommodation for workers travelling from outside the area. The accommodation and tourism sector will need to grow to meet demand creating a positive impact on the economy.

9.2.3 Once the AMEP is operational there will be 4271 direct jobs created predominantly in manufacturing although new occupations will be brought to the area requiring varying levels of skills. This is in addition to the 5,100 jobs that are to be created through the Logistics Park which is also located on the South Humber Bank. Local residents will have a significant opportunity to improve or diversify their career from their current employment. The development will provide local jobs for young people entering the jobs market for the first time, who live in the surrounding rural locations. Based on this level of job creation there are more jobs than there are likely to be applicants from the North Lincolnshire area so the likelihood is that some people will travel from outside the area whilst others will decide to relocate and move to the area. This will have a positive impact on the housing market creating additional demand for properties and both private and social lettings. The increase in population will increase demand for other public services.

9.2.4 Following the initial first-stage investment of the new manufacturing businesses on the AMEP there will be further investment in the South Humber Bank through associated supply chain companies co-locating

for financial advantage. Non-renewable sector companies in North Lincolnshire and surrounding areas will also benefit through providing supplies and services to these first-stage companies such as: office supplies, service industries, finance & legal, logistics, training, etc, all bringing an additional benefit to and increased sustainability of the local economy. It is estimated that a further 10,400 further jobs will be created in the area due to the secondary investment stage.

9.2.5 The AMEP project will create benefit to the local community through enhancing and improving the transport infrastructure across the whole of the South Humber Bank. New roads and improvements required as part of the development in the locality will provide improved access for local residents and businesses. However, it is recognised that there will be temporary inconvenience whilst the works are undertaken and there will be an increase in the number of vehicular movements in the area although the additional roads and improvements made will mitigate the impact on local residents. There may also be other potential “enhancement” schemes within individual settlements as part of a Section 106/Community Infrastructure Levy process that will provide new benefits to local residents.

9.2.6 The allocation of an Enterprise Zone to this area will provide further sustainability to the local economy. Companies that locate to this area may benefit from Enhanced Capital Allowance which allows a company to gain tax benefits in relation to capital investment helping with cashflow and initial investment costs. Business Rate Retention would allow the local authority to retain business rates in the North Lincolnshire area which would be used to grow the economy by creating localised incentives to stimulate business growth. North Lincolnshire has also been successful in securing Regional Growth Fund and will work with companies locating to the South Humber Bank to ensure delivery of the new job opportunities.

10. NOISE, LIGHT, AIR QUALITY AND LAND CONTAMINATION

10.1 INTRODUCTION AND TERMS OF REFERENCE

Environmental Impacts Covered in this Chapter

10.1.1 This chapter addresses the environmental impact of the development on local residents. The environmental impacts considered in this chapter are:

- Air Quality;
- Contaminated Land;
- Light;
- Noise and Vibration;
- Statutory Nuisance;

10.1.2 North Lincolnshire Council's comments concerning these impacts have been made with reference to the applicant's Draft Development Consent Order, the Environmental Statement, and the Statutory Nuisance Assessment

Receptors covered in this chapter

10.1.3 The limitation of receptors considered is as follows:

- The comments in this chapter relate to human receptors only;
- Consideration of impact has been limited to local residents and does not extend to impacts relating to environmental impacts in the workplace for people working on the development site;
- The comments relate to residents on the south bank of the Humber;
- The impact for residents of the following properties is not covered because the applicant has stated that they will be purchased and will no longer be residential properties:
 - North Low Lighthouse, Station Road, South Killingholme DN40 3ED;
 - The Look Out, Station Road, South Killingholme DN40 3ED;
 - Station House, Station Road, South Killingholme DN40 3ED.

10.1.4 Having considered the applicant's Environmental Statement it is clear that the residents of these three properties would suffer severe significant adverse environmental impacts if the development went ahead with these properties remaining occupied.

10.2 AIR QUALITY

10.2.1 (Ref: 17.1.2: The construction and operation of the AMEP has the potential to result in impacts on air quality. The key issues of interest are:

Construction Phase:

- road traffic;
- shipping;
- construction dust.

Operational Phase

- *road traffic;*
- *shipping; and*
- *emissions from paint spraying of products.)*

- 10.2.2 The processes identified within the methodology are those that will have the greatest negative impact on pollution levels within the local area. The cumulative impact of these processes will be significant if not adequately controlled and present a compliance risk to EU Air Quality Objectives at specific locations. The Environmental Statement is not clear however as to the preferred ground type in storage areas. *Requirement 20 of Schedule 11 of the Draft The Development Consent Order offers the opportunity to address this through requirement for areas in which there are heavy vehicle movements to be hard surfaced in preparation for the operational phase to prevent lift off producing significant levels of dust to be transported off site. Table 17.2 presents the EU Air Quality Objectives for which the Local Authority is concerned. This development could create a situation whereby these objectives may not be met. The control of these sources is critical in meeting EU Objectives. Failure to meet the Objectives will result in declaration of an Air Quality Management Area.*
- 10.2.3 *(Ref: 17.1.4: Other potential sources of emissions are considered to be insignificant. Sources of emissions that are considered to be insignificant include use of mobile and non-mobile machinery on site during the construction phase, mobile machinery and welding activities on site during the operational phase.)*
- 10.2.4 The use of mobile machinery on site during the construction phase of this project is likely to have a negative impact on PM₁₀ and nuisance dust levels within the local area although the significance of which may not be great in isolation. Experience of machines such as mobile crushers highlight the levels of dust emitted when in operation. These should have been included within the assessment so that the cumulative impact of the construction phase can be fully understood. *Requirement 20 of Schedule 11 of the Draft The Development Consent Order offers the opportunity to address this.*
- 10.2.5 *(Ref: 17.3.6: Emissions from workshops and maintenance bays are also considered to be insignificant as these will represent only small and localised sources of emissions and are therefore not included.)*
- 10.2.6 Workshops and maintenance bays can make a major contribution to pollutant levels and will have a negative impact on pollution levels within the local area although the significance of which may not be great in isolation. These should be included within the assessment so that the cumulative impact of the operational phase can be fully understood. *Requirement 20 of Schedule 11 of the Draft The Development Consent Order offers the opportunity to address this.*
- (Ref: Road Traffic)*
- 10.2.7 There are critical locations within the local area where the Annual Mean Nitrogen Dioxide (NO₂) level is close to or above the EU Air Quality Objective. Any increase in road traffic will have a negative impact on NO₂ levels at all locations within the local area. The significance of these impacts will be emphasised at the critical locations where increases in NO₂

levels will lead to the declaration of an Air Quality Management Area (AQMA).

(Ref: *Shipping*)

- 10.2.8 The introduction of more shipping movements to an already busy port will have a negative impact upon PM₁₀, NO₂ and SO₂. The significance of additional shipping movements may not be significant within the local area however, the cumulative impact of this and other on site activities make contribute to an increasing baseline level of a number of pollutants.
- 10.2.9 *(ref: Rail Movements - 17.3.25 On this basis, no consideration was made of rail emissions outside the site boundary. However, in order to capture impacts of site operations as a whole, the rail sources were included in the modelling of sources arising from the AMEP site itself. The key emissions of interest associated with rail locomotives are SO₂, NO₂, NO_x and PM₁₀.)*
- 10.2.10 The major concern around rail traffic are the emissions from stationary engines. Should idling engines stand close to residential receptors there will be a significant negative impact on air quality. Should short term EU Air Quality Objectives be exceeded there may be a requirement for North Lincolnshire Council to declare an AQMA.
- 10.2.11 (Ref: 17.3.29: In terms of potential impacts to health arising from VOC emissions, the exact composition of the paint used is not known. Instead, the approach has been used whereby overall VOC emissions have been estimated (as described in detail in Annex 17.1) and the assumption made that all emissions occur as benzene. This represents a worst-case approach as benzene has a stringent air quality standard, compared to other VOCs which are likely to be in the paint. This ensures that any impacts are overestimated.)
- 10.2.12 The release of VOCs through paint spraying will have a negative impact on air quality objective compliance and odour issues. The methodology is correct to assume that all emissions are released as Benzene giving a worst case situation. The spraying of the turbines should trigger an Environmental Permit controlling the release of VOCs and ensuring a scaled reduction over years of operation.
- 10.2.13 (Ref: 17.3.47: There are a number of proposed schemes in the vicinity of the AMEP which are not yet constructed but which, when operational, may have a significant impact on air quality. These sources of emissions are therefore not reflected in the existing baseline and therefore need to be considered separately.)
- 10.2.14 The Environmental Statement makes reference to the cumulative impact of the development as a whole. The cumulative impact of the development will have a negative impact on air quality within the area. The area is already occupied by a number of industrial processes. The existing processes combined with the committed port development as well as future growth will impact upon the area. Although the model cannot

account for non-committed growth it should be noted that the modelled results will not accurately reflect the situation.

10.2.15 (Ref: 17.7.2 A detailed dust management plan will be developed prior to the commencement of construction activities. The dust management plan:

10.2.16 *will set out in detail the mitigation and control measures that will be utilised and how these will be implemented across the site.)*

10.2.17 The Environmental Statement identifies potentially significant impacts on receptors from construction dust. The dust management plan is critical in controlling the dust and should be approved prior to implementation. The control of dust is covered within the Draft Development Consent Order.

10.2.18 (Ref: Annex 17.1; 2.1.3 *These data are obtained from roadside sites, in the case of Killingholme 4 and 5, these sites are immediately adjacent to the A160, Humber Road and therefore overestimate pollutant concentrations at actual receptors adjacent to the road.)*

10.2.19 The locations mentioned are critical sites with existing air quality issues. Any additions to the number of vehicles on the road, specifically vehicle types associated with this activity, will have a negative impact on NO₂ levels. The report states that after bias correction and fall off with distance these sites should not be an issue. These sites are recording levels well above the objective for NO₂ and cannot afford further vehicles on the road if they are to achieve compliance.

10.3 CONTAMINATED LAND

10.3.1 The AMEP application has the potential to have a negative impact in respect of land contamination by introducing receptors to any unknown land contamination on site and by opening pathways to any potential ground gases from the former Lindsey Oil Refinery landfill site situated within 250 metres to the west of the application site.

10.3.2 North Lincolnshire Council is satisfied that the inclusion of the proposed conditions 12 (1), (2) and (3) of Schedule 11 of the Draft Development Consent Order will adequately address this impact.

10.4 LIGHT

10.4.1 The lighting associated with construction and operation of the development has potential for both light pollution and light nuisance.

10.4.2 The Environmental Statement identifies a moderate significant light impact on the amenity of Hazel Dene, Marsh Lane.

10.4.3 *Requirement 20 of Schedule 11 of the Draft Development Consent Order includes provision for the control of light emissions.*

10.5 NOISE AND VIBRATION

Introduction

10.5.1 Chapter 16 of the Environmental Statement describes the assessment of the noise and vibration impacts of the development by establishing baseline ambient noise levels and comparing this to predicted noise levels associated with the following aspects of the development:

- Construction noise and vibration;
- Operational noise and vibration (including rail transport and shipping);
- Road traffic noise for construction and operational phases of the development.

Legislation, policies, guidance, standards, and other guidelines

10.5.2 Section 16.2.3 of the Environmental Statement lists the legislation, policies, guidance, standards, and other guidelines considered relevant to the noise assessment. When considering impacts for local residents, North Lincolnshire Council will also include reference to the World Health Organisation Guidelines for Community Noise 1999, and the World Health Organisation Night Noise Guidance for Europe 2009. These WHO documents have not been included in the applicant's list, but they are mentioned in *Annex 16.5 Baseline Noise Assessment Methodology*.

Operational Noise Assessment Criteria

10.5.3 North Lincolnshire Council is satisfied with the criteria setting the rating levels for the operational assessment criteria. These provide suitable criteria for assessment of likely noise impact of operational noise when considering an overview of likely activities on site in terms of average noise levels measured as L_{Aeq} . The criteria are based on noise rating levels which add a 5 dB penalty onto the predicted levels. This penalty helps to allow for any acoustic characteristics which may add to the adverse impact over and above the actual decibel level measured/predicted.

10.5.4 For some noise sources, especially those operating at night, it may also be necessary to assess the impact by considering the number of times that a maximum noise level would be exceeded. The World Health Organisation Guidelines for Community Noise 1999, state that even when the total equivalent noise levels are fairly low, a small number of noise events with a high maximum sound pressure level will affect sleep. The guidelines indicate that sleep disturbance may be caused by events during the night-time for which the maximum sound pressure level exceeds 60 dB L_{Amax} outside bedroom windows.

Construction Noise Assessment Criteria

10.5.5 The applicant's criteria for construction noise assessment have been derived with reference to *Department of Environment Advisory Leaflet 72 (AL72)*.

10.5.6 (Ref: 16.5.17 AL72 states that the noise level outside the nearest occupied room should not exceed:

...70 dB(A) in rural, suburban and urban areas away from main road and traffic and industrial sources.....)

10.5.7 When considering the AL72 recommendation for a limit of 70 dB(A), it must be remembered that this document was produced in 1968 and that the noise limits given in this document were based on the following criteria:

“Noise from construction and demolition sites should not exceed the level at which conversation in the nearest building would be difficult with the windows shut”.

10.5.8 The AL72 document does not address the protection of residential amenity in gardens and other outdoor living areas, nor the quiet enjoyment of living rooms. In contrast to AL72, the *World Health Organisation Guidelines for Community Noise 1999* are based on extensive research into the adverse health effects of noise exposure and include the following recommendation:

“To protect the majority of people from being seriously annoyed during the daytime, the outdoor sound level from steady, continuous noise should not exceed 55 dB L_{Aeq} on balconies, terraces and in outdoor living areas. To protect the majority of people from being moderately annoyed during the daytime, the outdoor sound level should not exceed 50 dB L_{Aeq} . “

10.5.09 These WHO guidelines also include guidance concerning the assessment of noise impact based on criteria other than L_{Aeq} . This includes consideration of acoustic characteristics and the recommendations for limits in terms of maximum noise levels measured as L_{Amax} .

10.5.10 Given the results of the baseline noise survey, the scale of the development and the prolonged period of construction noise exposure for local residents, the criteria for construction noise at 70 dB(A) for day-time and 60 dB(A) for evening as shown in *Table 16.3*, are likely to be too high to allow robust assessment of noise impact.

10.5.11 There are also limitations to setting the criteria for construction noise assessment based only on the L_{Aeq} parameter over the whole day, night or evening. The A-weighting of the results may underestimate noise impact associated with the acoustic characteristics of the noise (e.g. tonal noise, impact noise). The averaging of the noise over the whole day may underestimate adverse impact if there are prolonged quieter periods interspersed with short periods of very loud noise. At night-time, consideration should be given to criteria for limiting the number of events where L_{Amax} exceeds 60 dB outside bedroom windows (see 9.5.3 above).

10.5.12 The magnitude and significance criteria for construction noise are summarised in *Tables 16.4* and *16.5*. *Table 16.4* shows that daytime

construction noise levels between 55 dB(A) and 65 dB(A) would be assessed as “minor impact”, with noise levels less than 55 dB(A) being assessed as “negligible impact”. These “minor” and “negligible impacts” are then listed in Table 16.5 as being “not significant”. When considering the concerns outlined above concerning the limitations of the applicant’s construction noise assessment criteria, it follows that 65 dB(A) would be too high a noise level to be “not significant” in this area where existing background noise levels at many sensitive locations are currently well below this level. For example, Location EH5, Swinster Lane, the baseline noise survey reports overall daytime noise levels as 31 dB(A) measured as L_{A90} and 46 dB(A) L_{Aeq} .

Traffic Noise Assessment Criteria

- 10.5.13 Method of assessment, magnitude and significance criteria described in the Environmental Assessment are appropriate for assessment of the traffic noise impact.

Prediction of Operational Noise Impact- AMEP

- 10.5.14 Tables 16.10 and 16.11 show the predicted operational noise levels listed as L_{Aeq} , dB(A). For the purposes of this Local Impact Report it is assumed that the predicted noise levels shown in these tables are Noise Rating Levels, $L_{Aeq,1h}$ for daytime and $L_{Aeq,5min}$ for night time, as per the applicant’s noise assessment criteria for operational noise. The predicted noise rating levels indicate that AMEP operational noise levels will be lower than existing background noise levels for both daytime and night time. The adverse noise impact associated with AMEP operational noise is therefore predicted to be negligible.
- 10.5.15 Although the applicant’s Environmental Statement indicates that operational noise will have negligible adverse impact on residents; this assumes that the noise sources will be those listed in Annex 16.4, with the general layout as shown in the application. Changes in layout and additions/changes to noise sources may lead to increased noise impact. Changes to building and plant design may affect noise insulation assumptions used in the modelling, which may also lead to increased noise impact. Without knowing the detail of the actual development for each area of the site, it is not possible to predict the noise impact beyond the generic approach that has been taken for this Environmental Statement.
- 10.5.16 It is not clear that all noise sources have been included in the Noise Model Source Data, (Annex 16.4). For example:
- The source data listed includes nine dockside cranes but does not mention davit or gantry cranes that are referred to in Chapter 4 for the positioning and assembly of heavy components;
 - The source data does not include testing of operational turbines, although Chapter 4 indicates that OWTs will be tested on site.

- The external noise sources listed are limited to the vehicle noise for trains, SPMTs and heavy lift fork-trucks; with no other external operational noise sources listed.
- Noise data for movement of components and OWTs is limited to the vehicle/engine noise data, there is no information concerning other noise associated with the use of these vehicles, such as movement alarms. There is no data concerning noise associated with the handling of the heavy steel components such as clangs and bangs.
- Although train arrival/departure data is included, there is no information to allow assessment of the impact of trains idling close to residential properties, or whether any steps are in place to avoid this.

10.5.17 It is not clear that all acoustic characteristics of noise sources have been addressed. The noise modelling data includes some information to enable prediction of whether the noise sources that are listed will have tonal characteristics. However, there is no data to indicate how any other acoustic characteristics have been addressed (e.g. impulsive noise, intermittent noise, amplitude modulation etc.). It is important to establish and verify the data relating to tonal and other acoustic characteristics to be able to have confidence in whether or not to apply the 5dB(A) penalty to the specific noise level to give the rating level.

10.5.18 The Draft Development Consent Order does not contain any requirements for the control of operational noise. Requirement 20 covers the control of other emissions from the development, but does not include noise and vibration.

10.5.19 For the reasons given above, it will be necessary to have noise control measures in place to ensure that the predicted negligible noise impact will be achieved and maintained during the lifetime of the development. (This could possibly be done by adding noise and vibration to the list in requirement 20. –(1)(a) of Schedule 11 of the Draft Development Consent Order.

Prediction of Construction Noise Impact

10.5.20 Although concerns are expressed about the high noise levels used for the assessment criteria (sections 9.5.5 to 9.5.10 above), it is noted that the predicted daytime and night time noise levels for mitigated construction noise are significantly lower than those listed for *Criteria for Construction Noise Assessment* in *Table 16.3*. The predicted levels are generally below existing ambient noise levels and are below the WHO Guideline values.

10.5.21 The predicted construction noise impact assessment indicates that adverse noise impact will be negligible. The predicted impact is based on an “A”-weighted average noise level which may underestimate impact if there are certain acoustic characteristics (as described in sections 9.5.5 to 9.5.10 above). For this reason it is necessary to maintain best practicable

means for mitigation of noise, even in cases where predicted impact is negligible.

- 10.5.22 *Requirement 19 of Schedule 11 of the Draft Development Consent Order* includes provision for the control of noise during construction

Prediction of Traffic Noise Impact

- 10.5.23 The operational traffic noise assessment shows significant adverse noise impacts at some residential locations.

- 10.5.24 For example on Manby Road at Location “south of A” there is a reported 7.9 dB increase in the $L_{Aeq, 1hr}$. This increase occurs during night time hours at 5am. The existing level at 5am is 54 dB, which is already above the 45 dB(A) level recommended by the WHO Guidelines for Community Noise (with reference to sleep disturbance, although it is recognised that the averaging time is longer for the WHO guidelines). The operational road traffic will increase these night time noise levels to 62 dB(A).

- 10.5.25 Although the impact is described as “moderate”, it must be remembered that it is occurring in some locations that already have levels higher than those recommended by WHO, so it is very important to address this impact.

Vibration

- 10.5.26 The assessment of vibration indicates that there will be no significant impacts for the residential locations under consideration (i.e. excluding locations S1 and S2).

10.6 STATUTORY NUISANCE ASSESSMENT

- 10.6.1 The conclusion of the AMEP *Statutory Nuisance Assessment* states:

“It has been demonstrated in Section 1.2.1 and Section 1.2.2 that the Project would have no residual air quality or noise/vibration impacts. Section 1.2.3 identifies that the Project would have a residual light impact on one residential receptor. All the impacts identified by the Environmental Statement would be suitably mitigated and secured by appropriate conditions and requirements.”

- 10.6.2 This conclusion supports the need to include requirements for the control of noise and vibration in the Development Control Order. As stated in Section 9.5.17 above, it will be necessary to have noise control measures in place to ensure that the predicted negligible noise impacts will be achieved and maintained during the lifetime of the development. (This could possibly be done by adding noise and vibration to the list in requirement 20. – (1)(a) of Schedule 11 of the Draft Development Consent Order).

11. FLOOD RISK, DRAINAGE, WATER SUPPLY AND WATER QUALITY

11.1 LOCAL DEVELOPMENT PLAN POLICY

11.1.1 North Lincolnshire Local Plan Policy DS16 (Flood Risk), DS13 (Ground Water Protection and Drainage) and Core Strategy Policy CS19 (Flood Risk including drainage) principally apply directly to the AMEP proposal regarding flood risk and drainage. In the opinion of the local planning authority the AMEP proposal generally complies with these Policies and is explained in the following paragraphs.

11.2 FLOOD RISK

11.2.1 The Humber Flood Risk Management Strategy 2008 (currently being reviewed) covers all flood compartments of the Humber Estuary, including the area affected by the South Humber Bank employment allocation. The AMEP proposal updates the flood bank strategy for this part of the Humber Estuary by proposing a 1300 metres long new quay that will replace the existing flood bank. This new quay will form a hard concrete defence. Able UK, Environment Agency and NLC have agreed the requirements for this new flood defence provided for in the AMEP proposal.

11.2.2 The high majority of the AMEP site lies within EA flood Zone 3a (high flood risk) with a very small percentage close to Rosper Road in EA Flood Zone 1 (low risk) and 2 (medium risk). However, the Strategic Flood Risk Assessment (SFRA) 2006 and any updates of this document take precedence over the EA flood maps. The high majority of the AMEP is within SFRA Flood Zone 3(i) and 3(ii) (high flood risk) with a very small percentage close to Rosper Road within SFRA Flood Zones 1 and 2. The SFRA 2006 is currently being reviewed and includes flood hazard mapping and climate change predictions until 2115. It is likely that the high flood risk zone will increase due to more accurate flood mapping and a longer term of climate change prediction being applied. With these issues in mind it is best to treat the whole site as being in the high flood risk category and plan development accordingly. Flood hazard mapping is available for the AMEP site and should be used to calculate floor levels of buildings and planning for safe development on-site and not making flood risk worse off-site.

11.2.3 The local planning authority is satisfied that the proposed AMEP development cannot be located elsewhere on a reasonably alternative site as the proposed use is unique in its type and scale, is a water compatible use and more suitable to be located next to an estuary and its deep water channel. In this respect the proposed AMEP satisfies the NPPF Sequential Test.

11.2.4 The AMEP proposal is considered to be water compatible development as defined in the NPPF and table 3 confirms that development is appropriate and an Exception Test is not required. The Environment Agency has given guidance to Able UK on emergency planning incorporating safe development techniques within the AMEP proposal.

11.2.5 Able UK has consulted in detail with the Environment Agency on the flood issues outlined above and the local planning authority is satisfied with the progress on flood risk made by Able UK on the AMEP proposal. The Environment Agency's comments to the IPC should be taken account of relating to detailed flood risk solutions for the AMEP proposal to be acceptable.

11.3 DRAINAGE

11.3.1 The surface water drainage of the AMEP site is managed by the North East Lindsey Internal Drainage Board (NELIDB). Able UK have been in negotiation with North Lincolnshire Council and the NELIDB since 2008 (within the remit of the South Humber Bank Delivery Board and working group) to develop a drainage strategy for Killingholme Marshes. The AMEP proposal is located within Killingholme Marshes. The evidence document is the "Killingholme Marshes Drainage Improvements Design Stage 1 Report 2009 (Hannah Reed Associates Ltd 2009)". This document is the base document for ongoing negotiations between Able UK, NLC, NELIDB and the Environment Agency in relation to a new strategic drainage scheme that includes catering for the AMEP proposal. Essentially a scheme has been designed that is appropriate to the scale of development proposed but the exact location of the new pumping station is to be finalised. NLC is in agreement with this scheme, including the options being progressed on the pumping station location. The local planning authority is therefore satisfied with the progress being made on the Killingholme Marshes Drainage Scheme.

11.4 WATER SUPPLY

11.4.1 Anglian Water has been a member of the South Humber Gateway Delivery Group since August 2009 and has worked in partnership with North Lincolnshire Council and other members of the working group to achieve an adequate water supply to the existing South Humber Bank employment site and its predicted future growth. The estimates for programmed growth have been accounted for by Anglian Water by including these growth calculations in Anglian Water's investment plans (five year investment plans approved by Ofwat). For example an improvement scheme at Elsham Water Works has already been approved under Anglian Water's Investment Plan 2008-2013 (approved by Ofwat) and has been completed which increases water supply to development at the South Humber Gateway, including to the AMEP site.

11.5 WATER QUALITY

11.5.1 It is important that water quality is protected and enhanced and relevant actions will be required in development proposals to meet the European Union's (EU) Water Directive. The Environment Agency monitors water quality on an annual basis in delivering the Humber River Basin Management Plan (RBMP) and it is the Environment Agency's responsibility to deliver relevant actions to ensure compliance with the EU Water Directive. This position is confirmed in North Lincolnshire Council's

Core Strategy in the monitoring section of the Environment and Resources chapter. It is for the Environment Agency to liaise with Able UK with regard to the AMEP proposal. The local planning authority is not aware of any issue ever being raised by the Environment Agency relating to water quality with regard to the AMEP proposal and the local planning authority is therefore satisfied that the AMEP proposal meets the water quality requirements under both the EU Water Directive and the Humber RBMP.

12: BIODIVERSITY AND ECOLOGY

12.1 SCOPE OF COMMENTS

12.1.1 The Biodiversity and Ecology section of the Local Impact Report shall focus primarily on those local impacts that may not be addressed by statutory consultees. For that reason, effects on the internationally important Humber Estuary SAC, SPA and Ramsar site, for which the Planning Inspectorate is the Competent Authority and Natural England is the Nature Conservation Adviser, have been consciously excluded from this account. The report shall also omit reference to the nationally important features of North Killingholme Haven Pits SSSI that could be affected by the Able Marine Energy Park proposal. Note, however, that North Lincolnshire Council has commented in detail at the pre-application stage, on the Scoping Report and on the Preliminary Environmental Information Report (PEIR). Most of the comments made previously appear to have been considered by the applicant and incorporated into the project design and mitigation proposals.

12.2 LOSS OF STATION ROAD FIELD LOCAL WILDLIFE SITE (LWS).

12.2.1 The submitted Environmental Statement (ES) identifies that the proposal will result in the loss of Station Road Field LWS. The applicant proposes to create replacement species-rich neutral grassland in the wetland bird mitigation area (Area A). The approach set out in section 11.7.36 of the Environmental Statement is acceptable to North Lincolnshire Council, assuming it is technically feasible in terms of soil nutrient status and other soil properties. To allow for uncertainty about the success of habitat creation, the area of neutral grassland created should be greater than the area of the existing LWS.

12.2.2 The Council supports the proposal to collect seed from key neutral grassland indicator species in the LWS for use on the mitigation site. The use of green hay would not be acceptable however, as the existing sward contains a high percentage of undesirable species. Species such as the uncommon, but locally frequent, Hairy buttercup *Ranunculus sardous* should be allowed to regenerate naturally from the seed bank on the mitigation site. The Council would, in addition, support the use of a Lincolnshire origin wildflower and grass seed mix for a neutral grassland community comparable to those parts of the LWS that are in good condition. We also support the proposal to use disease-resistant elms.

12.2.3 Where such habitat creation is proposed as mitigation, it will be necessary to measure and consider physical conditions including (but not exclusively) soil conditions and hydrology. The applicant should follow the standards set out in Natural England Technical Information Notes. Sward management for feeding and roosting waterbirds can be carried out so as to also benefit species-rich neutral grassland. The resulting sward should be monitored and any required remedial measures should be carried out accordingly.

12.2.4 Without mitigation, the loss of the LWS would be a certain negative impact of County importance. Assuming the above approach to mitigation and enhancement is followed through the requirements of the Order, then the Council considers the overall effect on neutral grassland to be a neutral or minor positive impact of County importance.

Great Crested Newts and other amphibians

12.2.5 North Lincolnshire Council supports the approach to translocation and ongoing conservation of great crested and smooth newts, as set out in sections 11.7.12-11.7.20 of the ES. It expects the approach to pass the three tests of European Protected Species licensing, though that is a matter for Natural England and the Planning Inspectorate. The Council strongly supports the inclusion of the mitigation area known as “Area B” in the proposed Chase Hill Wood Local Nature Reserve (LNR). It encourages timely confirmation and commencement of this approach, so that the LNR can be declared, in its entirety, in a single process to meet other project deadlines.

12.2.6 Without mitigation, the effect on Great crested newts would be a certain negative impact of County importance. Assuming the above approach to mitigation and enhancement is followed through the requirements of the Order, then the Council considers the overall effect to be neutral.

Bats

12.2.7 The ES also identifies the loss of bat foraging habitat. North Lincolnshire Council supports the mitigation and enhancement measures set out in sections 11.7.26-11.7.29 of the ES. However, the submitted Landscape Masterplan is described as “Indicative”. Our understanding is that flexibility has been designed into the Marine Energy Park Scheme so that the layout can be altered to suit the requirements of wind turbine manufacturers. This creates a degree of uncertainty as to the length, location and degree of connectivity of new bat foraging corridors. Care is needed to ensure that the Order requirements are adequate to secure the required habitats.

12.2.8 Without mitigation, the effect on bats would be a certain minor negative impact of local importance. Assuming the above approach to mitigation and enhancement is followed through the requirements of the Order, then the Council considers the overall effect to be neutral or minor positive.

Farmland birds

- 12.2.9 North Lincolnshire Council agrees that the losses to UKBAP priority species and their habitats will be of an extent and magnitude as described in the ES. The losses will largely be to declining farmland birds, but declining woodland species such as Willow tit may also be affected. Creation of the wetland bird mitigation area (Area A) will provide mitigation, and perhaps enhancement, for species such as lapwing, skylark, reed bunting and yellow wagtail. However, our view is that areas of tree, hedge and shrub planting in amongst the industrial areas, whilst useful, are not likely to fully provide for species such as bullfinch, willow tit, tree sparrow and turtle dove.
- 12.2.10 Through discussion with Humber INCA, Area B and other parts of the proposed Chase Hill Wood LNR could be managed to provide for Willow tit and other woodland species.
- 12.2.11 Without mitigation, the effect on Priority birds would be a certain negative impact of District importance. Assuming the above approach to mitigation and enhancement is followed through the requirements of the Order, then the Council considers the overall effect to be positive for birds of wet grassland and neutral or minor negative for other species.

Water Voles

- 12.2.12 North Lincolnshire Council agrees with the approach to water voles set out in the ES. Without mitigation, the effect on water voles would be a certain negative impact of County importance. Assuming the ES approach to mitigation and enhancement is followed through the requirements of the Order, then the Council considers the overall effect to be a significant positive one.

Trees and hedgerows

- 12.2.13 Trees and hedgerows to be lost from the application site are of local importance. The Indicative Landscape Masterplan, once implemented, will provide a degree of mitigation for these losses. However, uncertainty about the ultimate layout and quantity of planting (see "Bats" above) also applies here. After mitigation, the loss of trees and hedgerows will be a minor negative impact of local importance.

Overall approach to biodiversity

- 12.2.14 North Lincolnshire Council encourages development that not only mitigates for harm to wildlife but also provides biodiversity enhancement. This reflects our commitment in policy CS17 of the North Lincolnshire Core Strategy and our duties under Section 40 of the Natural Environment and Rural Communities Act 2006.

13. WASTE

- 13.1 This chapter of the report considers the information contained within the Environmental Statement and concerns the expected impacts of the AMEP in relation to waste produced during both the construction and operational phases of the development and how these will be mitigated.
- 13.1.2 A desk top baseline assessment has been completed which focuses on three main waste sources:
- Waste arising during construction
 - Waste arising from manufacturing operations
 - Waste arising from general office operations
- 13.1.3 A review of all relevant legislation has been completed and the requirements acknowledged, including the need to draft a Site Waste Management Plan (SWMP) before any development commences. This has not yet been drafted. The SWMP will provide a more detailed assessment of the specific arrangements made for managing wastes generated during the initial construction phase. Until the SWMP is drafted for consideration, the comments made here can relate only to the assumptions made within the Environmental Statement.
- 13.1.4 Reference is made to the proposed Waste (England & Wales) Regulations 2011 which transpose the requirements of the revised EU Waste Framework Directive into UK law. These regulations have now been enacted. The regulations confirm the requirement to regard the Waste Hierarchy as a priority order which must be adhered to when managing controlled wastes. The order is:
- Prevention
 - Preparation for re-use
 - Recycling
 - Other recovery
 - Disposal
- 13.1.5 The Environmental Statement highlights the intention to manage both construction and operational wastes in accordance with best practice having regard to relevant legislation, policies and guidance. Best practice is not specifically defined but the achievement of this will depend to a significant extent on individual behaviour and adherence to adopted management systems including ISO 14001. This is acknowledged.

- 13.1.6 In considering the impacts of the proposal, reference has been made to the substantial volumes of dredgings, spoils, soils and excavated material produced during the construction phase. It is acknowledged that these could, if not properly controlled, impact on the surrounding environment and other sensitive receptors. Where these materials can be re-used, without treatment, they will fall outside the scope of the waste management regulatory regime and as such are not considered in this section of the impact report.
- 13.1.7 Other materials produced during both the construction and operational phases will fall within the definition of controlled wastes. It is predicted that these will be generated in relatively modest quantities (580 tonnes/month in the operational phase) and 70% of the waste could be recovered for recycling. Wastes will be managed in accordance with the waste hierarchy with landfill being the disposal option of last resort.
- 13.1.8 A preference is stated for the disposal of residual waste through incineration with energy recovery and reference is made to suitable incineration capacity within North Lincolnshire and the immediate region. No such capacity exists within North Lincolnshire. Permitted facilities do exist within North East Lincolnshire and are currently under construction within the County of Lincolnshire.
- 13.1.9 Adequate permitted landfill capacity does exist within North Lincolnshire and the estimated 2500 tonnes requiring to be landfilled will not impact significantly on this capacity.
- 13.1.10 Residual and Cumulative impacts have also been considered and the view expressed that these will be of no significance. The relatively small volumes of waste produced support this statement.
- 13.1.11 Mitigation measures proposed appear sufficient for wastes generated during both the construction and operation phases. The actual effectiveness of these will not be known until the development commences.

14. **HEALTH**

14.1 INTRODUCTION

- 14.1.1 This chapter addresses the health impact of the development on local residents.
- 14.1.2 North Lincolnshire Council's comments concerning these impacts have been made with reference to the applicant's Draft Development Consent Order, the Environmental Statement, and the Statutory Nuisance Assessment.
- 14.1.3 It is noted that a Health Impact Assessment has not been undertaken on the basis that one was not recommended by neither the Primary Care Trust nor the Health Protection Agency. Despite this, overall the section of

the application relating to health is comprehensive and considers a range of impacts together with mitigation proposals. Reference is made (para 24.3.1) to the population level of determinants of health although only a limited number of those determinants have actually been assessed. The focus appears to have been on those health impacts requiring mitigation with little attention given to the positive impacts.

14.1.4 The health impacts considered are mostly outward looking in that they consider the effects on the nearby population only. More emphasis could be given to health impacts on the wider community such as the creation of jobs as well as the 'internal community' - the workforce during and after the construction.

14.1.5 Many of the health impacts of the development have been covered in detail in Chapter 9 Environmental Impacts and therefore are only summarised in this chapter. The impacts on health by different determinants and pathways considered in this chapter are:

- Socio-economic
- Landscape and visual
- Traffic and Transport
- Noise
- Air quality
- Workplace

14.2 SOCIO-ECONOMIC

14.2.1 The creation of 4100 FTE jobs is a positive health impact. The baseline data for the area shows a good level of employment but low level of educational achievement. Local employment is cited as potential mitigation for the impacts from the increase in local transport and yet the application contains little detail on how local companies and the local employment pool with low educational achievement will be assisted to compete effectively during the construction phase or achieve the academic standards required for the new employment opportunities during operation. It is unclear how the local community's health will benefit from the socio-economic elements of the development.

14.3 LANDSCAPE AND VISUAL

14.3.1 The negative health impact relating to the quality of views experienced by people living, working or visiting the surrounding area is noted. The Environmental Statement identifies a moderate significant light impact on the amenity of Hazel Dene, Marsh Lane. However *Requirement 20 of Schedule 11 of the Draft Development Consent Order* includes provision for the control of light emissions.

14.3.2 There is mention of loss of local footpaths that currently cross the site including the Humber coastal footpath. There needs to be adequate provision for alternatives in the plans including recreational (green) space for both staff and local residents to maintain opportunities for physical activity.

14.3.3 Green space, recreational areas as well as planting schemes to minimise visual impact could be used to offset the negative health impacts for the local community and employees.

14.4 TRAFFIC AND TRANSPORT

14.4.1 The negative health impacts associated with increased traffic noise, higher likelihood of road traffic accidents and reduced air quality are noted.

14.4.2 The operational traffic noise assessment indicates significant adverse noise impacts at some residential locations.

14.4.3 The negative health impacts of traffic and transportation could be mitigated by encouraging alternatives to the car for the daily commute and some provisions to actively promote increased use of public transport, cycling and walking. A workplace travel plan could address this.

14.5 NOISE

14.5.1 The potential impacts from noise during construction and operation have been covered extensively in Chapter 10. To summarise, for the construction phase the applicants have used noise assessment criteria that do not adequately address the protection of residential amenity and therefore are set too high and will result in negative health effects. For operational noise it is not clear that all potential sources have been included and the draft Development Consent Order does not contain any requirements for the control of operational noise leading to the potential for significant negative health impacts during operation.

14.5.2 See 14.4.2 above re traffic noise.

14.6 AIR QUALITY

14.6.1 The potential impacts on air quality during construction and operation have been covered extensively in Chapter 10. In summary the key negative impacts are:

- Road Traffic - There are critical locations within the local area where the Annual Mean Nitrogen Dioxide (NO₂) level is close to or above the EU Air Quality Objective. Any increase in road traffic will have a negative impact on NO₂ levels at all locations within the local area. The significance of these impacts will be emphasised at the critical locations where increases in NO₂ levels will lead to the declaration of an Air Quality Management Area (AQMA).

- Rail Traffic - The major concern around rail traffic is the emissions from stationary engines. Should idling engines stand close to residential receptors there will be a significant negative impact on air quality. Should short term EU Air Quality Objectives be exceeded there may be a requirement for North Lincolnshire Council to declare an AQMA.
- Shipping - The introduction of more shipping movements to an already busy port will have a negative impact upon PM₁₀, NO₂ and SO₂. The impact of additional shipping movements may not be significant within the local area however, the cumulative impact of this and other on site activities may contribute to an increasing baseline level of a number of pollutants.

14.7 WORKPLACE

- 14.7.1 The development will be a major employer in the area and an employee Healthy Workforce Strategy would be beneficial to mitigate the negative health impacts of the work environment and to maximise the benefits of being in employment and keeping the employees fit and healthy and encouraging well being.

15. PLANNING OBLIGATIONS

15.1 BACKGROUND

- 15.1.1 In 2011 the council adopted Interim Planning Guidance for the South Humber Gateway – Transport Contribution. This document is referred to in Chapter 6 of this LIR and in Appendix 6.
- 15.1.2 The council maintain that because of the AMEP proposal highway improvements are necessary and are a reasonable request.
- 15.1.3 Furthermore, informed by a highway condition survey there are parts of the local network that are failing constructionally and if left unattended will deteriorate to such a degree that the safe and free flow of traffic using AMEP will be prejudiced.

15.2 THE AGREEMENT

- 15.2.1 The council propose to require a Planning Obligation to secure funding that is to be used for highway improvements and to carry out repairs.
- 15.2.2 Both actions are considered to be necessary, relevant to the development and reasonable.
- 15.2.3 Accordingly, under Section 106 of the Town & Country Planning Act 1990 the council will, by agreement with Able UK, provide the Examining Authority with an Agreement which will only become effective in the event of the DCO being granted, before the end of the Examination Period to secure the sum of £1.32m or other suitable figure to be agreed for the specified highway works.

- 15.3 COMMISSIONER'S QUESTION
- 15.3.1 With reference to Question 74 of the recently released commissioner question, Chapter 15 of this LIR details the council's position.
- 16. CONSIDERATION OF THE PROVISIONS AND REQUIREMENTS OF THE DRAFT ORDER**
- 16.1 The Examining Authority attention is drawn to the following chapters and paragraphs where specific comments are made with regard to the DCO and in particular the 'Requirements'.
- 16.2 The comments made are specific and self-explanatory, however, if the commissioners wish further information the council will be pleased to provide same.
- 16.3 TERESTRIAL ARCHAEOLOGY
Paragraph 8.6.17
Paragraph 8.6.18
- 16.4 NOISE, LIGHT AIR QUALITY AND LAND CONTAMINATION
Paragraph 10.02.02
Paragraph 10.02.04
Paragraph 10.02.05
Paragraph 10.02.17
Paragraph 10.03.02

Paragraph 10.04.03
Paragraph 10.05.18
Paragraph 10.05.19
Paragraph 10.05.22

Paragraph 10.06.01
Paragraph 10.06.02
- 16.5 BIODIVERSITY AND ECOLOGY
Paragraph 12.02.04
Paragraph 12.02.06
Paragraph 12.02.08
Paragraph 12.02.11
Paragraph 12.02.12
- 16.6 HEALTH
Paragraph 14.03.01
Paragraph 14.05.01
- 16.7 North Lincolnshire Council welcomes the requirements for landscaping set out in requirements 5-7 of Schedule 11 of the Draft Development Consent Order. Where trees, shrubs and hedgerows are to be planted to create natural habitat, in areas A and B and along proposed habitat corridors, we

request a requirement for native species of UK origin. Wildflower seeds or plants should be of UK origin as a minimum standard, and Lincolnshire origin where available.

16.8 It also welcomes requirement 14, securing the submission and implementation of an ecological management plan for each stage of development. However, many different mitigation measures and enhancements are proposed in the ES and the various consultation responses. Furthermore, the ultimate project may be rather different from the Indicative Proposals submitted to date. This could lead to a divergence of expectations between the developer, the planning authority and interested parties. To provide clarity and an agreed position, it may be helpful to secure a comprehensive register of all the ecological mitigation and enhancement measures that will be required at some point in the delivery of the project. It will then be easier to ensure that these are included in the management plans for the appropriate stage(s) of development.

16.9 Compensation and mitigation, particularly in relation to International Nature Conservation Sites and European Protected Species, may need to be in place and fully functioning before the commencement of development. It is not clear that the proposed wording for requirement 14 can secure this. The council would welcome clarification of that point.

16.10 The Council welcomes requirement 22 as set out in Schedule 11 of the Draft Development Consent Order.

17. SECURITY AND POLICE ISSUES

17.1 The Police will look for consultation on the Plans when they are submitted to make recommendations in line with Secured by Design principles. Areas are as follows:-

Special Branch Port Security/Counter Terrorism Security Advisor

- Overall security of the Dock's areas;
- Security of vulnerable buildings, (If there are any depending on products stored e.g. Bonded warehouses);
- CCTV coverage on site including ANPR;
- Lighting in respect of perimeter security;
- UKBA controls for freight and possible passenger checks, including search area's for;
- Both;
- Accommodation for Police staff/ UK Border Agency.

Unit Executive Officer, Air Support Section

- 17.2 Please find below, the advice the Police would offer to ABLE UK, it does change obviously depending on the question asked and the heights and locations given, i.e. a structure may be below the mandatory height for lights to be fitted, but may be in an area we regularly fly at low levels, in which case I would politely request the owners to consider lighting.
- 17.3 "Structures above 150m limit will require to be lit in accordance with Article 219 of the UK Air Navigation Order. This Article requires that for en-route obstructions (i.e. away from aerodromes) lighting only becomes legally mandated for structures of a height of 150m or more. However, structures of lesser high might need aviation obstruction lighting if, by virtue of their location and nature, they are considered a significant navigational hazard. Generally, structures less than 150m high and away from the immediate vicinity of an aerodrome are not routinely lit for civil aviation purposes.
- 17.4 The structures planned by Able UK are obviously higher than the 150M limit and will, therefore, require lighting when erected on either a permanent or temporary basis where the structures are erected at any times during the hours of darkness.
- 17.5 When in place offshore, there will need to be a number of structures lit, where they are in a group and their height exceeds 60M above sea level.
- 17.6 Broadly speaking, the structures need the relevant lighting. For direction and advice on this ABLE UK need to contact the CAA as it is the governing body.
- 17.7 The earlier they contact the CAA the better, as the lighting can be planned and built into the structure from the manufacturing stage, retro fitting can be extremely expensive.
- 17.8 As an Emergency Air Unit we would wish to be consulted and we would like to see the planned layout, so that we are aware of any dangers to us as we fly operations in and around that area". If contact is made with the CAA, one of their recommendations will always be to contact the local emergency service, which has an aviation section.
- 17.9 There are directions set out with regard to light intensity and type of light, but these mainly relate to structures where mandatory lighting is required. Lighting on structures that do not fall into the mandatory requirement can be agreed locally between the owners and local authorities.
- 17.10 The CAA also need to be informed of structure over 300 feet has to be notified to the CAA for charting for civil aviation purposes. I understand that the structures will be transported in the upright position which brings up other issues in relation to notifying the CAA for the purposes of charting their locations.

- 17.11 The Police as Crime Prevention Design Advisor would recommend that the site be planned and built with Secured by Design principles and would direct Able UK to www.securedbydesign.com, especially the 2010 Commercial Building, Part 1: Industrial and Warehouse Developments. This area is recorded as an "Average Crime" area (Police UK), but there have been issues with crime and anti-social behaviour. Therefore, working with the Crime Prevention Design Advisor from the Planning stage gives guidance to applicants on the layout, design and physical security of a development and can secure the awarding of the site the "Secured by Design" Award. (The latest SBD Award has been given to the London 2012 Olympic Park).

Casualty Reduction Officer

- 17.12 The Police would like to use this opportunity to improve the road network in the area and consider an operation "Stack" type situation with the emphasis being on any pile up of HGVs not stopping the supply of fuel from the refineries due to tankers not being able to reach the refineries. As far as I am concerned, I welcome the Able development, but would like to see measures installed that would prevent issues such as traffic congestion at peak shipping times, maybe incorporating waiting areas away from the carriageway for LGVs, as well as consideration being given to servicing the needs of drivers, lorry parks, rest areas, etc.

- 17.13 The A160 improvement scheme may well alleviate some of the current issues we have with breach of weight restrictions, excess/inappropriate speed, anti social behavior by drivers, etc., but all these things need evaluating at an early stage.

Safer Neighbourhoods Officer - Rural

- 17.14 Concerns have been raised already at local Neighbourhood Action Teams about the level of traffic that comes through Ulceby and Croxton villages when there has been an incident on the M180/A180. Given that if there are 5 million tonnes of extra freight to come through the docks, and incidents do occur, then the impact on the local villages and roads would be horrendous. There is insufficient truck stopping areas and local parking in the area is at a premium with lorries already parking within the Scunthorpe area where we are experiencing high levels of crime, e.g. diesel thefts.

- 17.15 The Police would ask that they are consulted at the earliest possible opportunity.

- 17.16 Crime prevention advice is currently given free without the intention of creating a contract. Neither do the Home Office or the Police Service take any other legal responsibility for the advice given.

- 17.17 The advice is based on information supplied and current crime trends in the area concerned. I can only give a view on what measures might

reduce the risk of crime and there can be no guarantee that the measures will prevent crime and disorder.

- 17.18 Without prejudice to any other obligation imposed upon it, it shall be the duty of each local authority to exercise its various functions with due regard to the likely effect of those functions on, and the need to do all that it reasonably can, to prevent crime and disorder in its area: Section 17(1) of the Crime and Disorder Act 1998.
- 17.19 Developers, architects and Planning Authorities are guided to the Secured by Design website for advice on the importance of community safety and crime prevention in sustainable design. The website offers detailed information and checklists to assist this and promotes accreditation to this Association of Chief Police Officers {ACPO} initiative. Individual schemes can be certificated and individual developers, architects or suppliers of building products can be accredited for their work. Humberside Police Architectural Liaison Officers can provide further guidance and are the first point of contact for Secured by Design Certificates. ACPO are of the view that Secured by Design is becoming a development standard and one that occupiers will increasingly expect to see in new premises. www.securedbydesign.com.