EP UK Investments

South Humber Bank Energy Centre Project

Planning Inspectorate Reference: EN010107

South Marsh Road, Stallingborough, DN41 8BZ

The South Humber Bank Energy Centre Order

Document Reference 8.1: Applicant's Comments on Relevant Representations

Applicant: EP Waste Management Ltd
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GLOSSARY

Abbreviation	Description
ACC	Air-cooled condenser
CCGT	Combined Cycle Gas Turbine
CEMP	Construction Environmental Management Plan
CHP	Combined Heat and Power
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order: provides a consent for building and operating an NSIP
EfW	Energy from Waste: the combustion of waste material to provide electricity and/or heat
EIA	Environmental Impact Assessment
EPH	Energetický A Prumyslový Holding
EPUKI	EP UK Investments Ltd
EPWM	EP Waste Management Limited ('The Applicant')
ES	Environmental Statement
ExA	Examining Authority
FRA	Flood Risk Assessment
ha	Hectares
HRA	Habitats Regulations Assessment
mAOD	Metres Above Ordnance Datum
MW	Megawatt: the measure of power produced
NELC	North East Lincolnshire Council
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project: for which a DCO is required
PA 2008	Planning Act 2008
RDF	Refuse derived fuel
PPs	Protective Provisions
RR	Relevant Representation
SAC	Special Area of Conservation
SHBPS	South Humber Bank Power Station
SoCG	Statement of Common Ground
SoS	Secretary of State

SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
tpa	Tonnes Per Annum
UKWIN	United Kingdom Without Incineration Network

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1.0 INTRODUCTION

1.1 Overview

1.1.1 This 'Applicant's Comments on Relevant Representations' document (Document Ref. 8.1) has been prepared on behalf of EP Waste Management Limited ('EPWM' or the 'Applicant'). It relates to the application (the 'Application') for a Development Consent Order (a 'DCO'), that has been submitted to the Secretary of State (the 'SoS') for Business, Energy and Industrial Strategy, under section 37 of 'The Planning Act 2008' (the 'PA 2008').

1.1.2 EPWM is seeking development consent for the construction, operation and maintenance of an energy from waste ('EfW') power station with a gross electrical output of up to 95 megawatts (MW) including an electrical connection, a new site access, and other associated development (together 'the Proposed Development') on land at South Humber Bank Power Station ('SHBPS'), South Marsh Road, near Stallingborough in North East Lincolnshire ('the Site').

1.1.3 A DCO is required for the Proposed Development as it falls within the definition and thresholds for a 'Nationally Significant Infrastructure Project' (a 'NSIP') under sections 14 and 15(2) of the PA 2008.

1.1.4 The DCO, if made by the SoS, would be known as the 'South Humber Bank Energy Centre Order' ('the Order').

1.1.5 Full planning permission ('the Planning Permission') was granted by North East Lincolnshire Council ('NELC') for an EfW power station with a gross electrical output of up to 49.9 MW and associated development ('the Consented Development') on land at SHBPS ('the Consented Development Site') under the Town and Country Planning Act 1990 on 12 April 2019. Since the Planning Permission was granted, the Applicant has assessed potential opportunities to improve the efficiency of the EfW power station, notably in relation to its electrical output. As a consequence, the Proposed Development would have a higher electrical output (up to 95 MW) than the Consented Development, although it would have the same maximum building dimensions and fuel throughput (up to 753,500 tonnes per annum (tpa)).

1.2 The Applicant

1.2.1 The Applicant is a subsidiary of EP UK Investments Limited ('EPUKI'). EPUKI owns and operates a number of other power stations in the UK and is a subsidiary of Energetický A Prumyslový Holding ('EPH'). EPH owns and operates energy generation assets in the Czech Republic, Slovak Republic, Germany, Italy, Hungary, Poland, Ireland, and the United Kingdom.

1.3 The Proposed Development Site

1.3.1 The Proposed Development Site (the 'Site' or the 'Order limits') is located within the boundary of the SHBPS site, east of the existing SHBPS, along with part of the carriageway within South Marsh Road. The principal access to the site is off South Marsh Road.

1.3.2 The Site is located on the South Humber Bank between the towns of Immingham and Grimsby; both over 3 km from the Site.

1.3.3 The Site lies within the administrative area of NELC, a unitary authority. The Site is owned by EP SHB Limited, a subsidiary of EPUKI, and is therefore under the control of the Applicant, with the exception of the highway land on South Marsh Road required for the new Site access.

1.3.4 The existing SHBPS was constructed in two phases between 1997 and 1999 and consists of two Combined Cycle Gas Turbine (CCGT) units fired by natural gas, with a combined gross electrical capacity of approximately 1,400 MW. It is operated by EP SHB Limited.

1.3.5 The Site is around 23 hectares ('ha') in area and is generally flat, and typically stands at around 2.0 m Above Ordnance Datum (mAOD).

1.3.6 A more detailed description of the Site is provided at Chapter 3: Description of the Proposed Development Site in the Environmental Statement ('ES') Volume I (Document Ref. 6.2 / APP-034 to APP-055).

1.4 The Proposed Development

1.4.1 The main components of the Proposed Development are summarised below:

- Work No. 1— an electricity generating station located on land at SHBPS, fuelled by refuse derived fuel ('RDF') with a gross electrical output of up to 95 MW at ISO conditions;
- Work No. 1A— two emissions stacks and associated emissions monitoring systems;
- Work No. 1B— administration block, including control room, workshops, stores and welfare facilities;
- Work No. 2— comprising electrical, gas, water, telecommunication, steam and other utility connections for the generating station (Work No. 1);
- Work No. 3— landscaping and biodiversity works;
- Work No. 4— a new site access on to South Marsh Road and works to an existing access on to South Marsh Road; and
- Work No. 5— temporary construction and laydown areas.

1.4.2 Various types of ancillary development further required in connection with and subsidiary to the above works are detailed in Schedule 1 of the DCO.

1.4.3 The Proposed Development comprises the works contained in the Consented Development, along with additional works not forming part of the Consented Development ('the Additional Works'). The Additional Works are summarised below:

- a larger air-cooled condenser (ACC), with an additional row of fans and heat exchangers;
- a greater installed cooling capacity for the generator;
- an increased transformer capacity; and

- ancillary works.

1.4.4 A more detailed description of the Proposed Development is provided at Schedule 1 'Authorised Development' of the draft DCO and Chapter 4: The Proposed Development in the ES Volume I (Document Ref. 6.2 / APP-034 to APP-055) and the areas within which each of the main components of the Proposed Development are to be built is shown by the coloured and hatched areas on the Works Plans (Document Ref. 4.3 / APP-010). Three representative construction scenarios (timescales) are described within Chapter 5: Construction Programme and Management in the ES Volume I (Document Ref. 6.2 / APP-034 to APP-055) and assessed in the Environmental Impact Assessment ('EIA').

1.5 Purpose of this Document

1.5.1 This document is intended to summarise the Applicant's present position on the matters raised in all relevant representations ('RRs') submitted in respect of the Application.

1.5.2 The full text of the RR and the Applicant's comments on each RR are provided in separate sections of this document dedicated to each RR received. These are as follows and the ordering corresponds to the order in which they appear on the Planning Inspectorate project web page:

- Section 2 - Response to Philippa Roddis RR (Document Ref. RR-010);
- Section 3 - Response to Humberside International Airport RR (Document Ref. RR-007);
- Section 4 - Response to the withdrawn Cadent Gas Limited RR (Document Ref. RR-003);
- Section 5 - Response to National Grid Gas & National Grid Electricity Transmission RR (Document Ref. RR-006);
- Section 6 - Response to United Kingdom Without Incineration Network (UKWIN) RR (Document Ref. RR-012);
- Section 7 - Response to Public Health England RR (Document Ref. RR-011);
- Section 8 - Response to Paul Hamilton RR (Document Ref. RR-009);
- Section 9 - Response to Environment Agency RR (Document Ref. RR-005);
- Section 10 - Response to Network Rail Infrastructure Limited RR (Document Ref. RR-001);
- Section 11 - Response to Anglian Water Services Ltd RR (Document Ref. RR-002);
- Section 12 - Response to Natural England RR (Document Ref. RR-008); and
- Section 13 - Response to Royal Mail Group Limited RR (Document Ref. RR-004).

1.5.3 The document has been submitted for Deadline 1 of the Examination.

2.0 RESPONSE TO PHILIPPA RODDIS RR

2.1.1 The RR provided by Philippa Roddis (RR-010) is as follows:

"The principal submissions I intend to make in relation to the application are around carbon emissions, sustainability and community benefits."

2.1.2 The Applicant notes the RR provided by Philippa Roddis and, as no specific comments on the proposal have been made, refers the ExA to the following ES documents:

- ES Volume I, Chapter 7 'Air Quality' (Document Ref. 6.2.7 / APP-041) provides an assessment of the effects of the Proposed Development in terms of air quality. It confirms that the operation of the Proposed Development will require an Environmental Permit from the Environment Agency to ensure adequate safeguarding and operational procedures are in place and, with the measures secured in the Permit, no significant effects on human health receptors or ecological features will arise;
- ES Volume I, Chapter 15 'Socio Economics' (Document Ref. 6.2.15 / APP-049) provides information on the likely significant social and economic effects of the Proposed Development and includes the benefits of the Proposed Development in terms of employment generation both through direct employment and wider benefits for the economy; and
- ES Volume I, Chapter 19 'Sustainability and Climate Change' (Document Ref. 6.2.19 / APP-053) provides information on and assesses the potential effects of the Proposed Development upon sustainability and climate change, including greenhouse gas emissions. The Proposed Development will be designed to be resilient to the predicted effects of climate change, and the carbon intensity of the operational Proposed Development compares favourably to the current grid average carbon intensity, because it will beneficially avoid greenhouse gas emissions from landfill and metals that will be recycled from bottom ash to displace the use of virgin materials.

3.0 RESPONSE TO HUMBERSIDE INTERNATIONAL AIRPORT RR

3.1.1 The RR provided by Humberside International Airport (RR-007) is as follows:

"Our reference: B-HUY-009-2020-A Your reference: EN010107 04 June 2020 Dear Sir/Madam Proposal: Electricity generating station Location: South Humber Bank Power Station Site, South Marsh Road, near Stallingborough, DN41 8BZ I refer to your email dated 27 May 2020. Thank you for consulting the Airport with the above proposed application. The proposed development variation has been further examined from an aerodrome safeguarding aspect and does not conflict with safeguarding criteria. Accordingly, this department does not object to the proposal. Should you require further information relating to aerodrome safeguarding issues at Humberside Airport, please do not hesitate to contact me directly on 01652 682028 or via email using safeguarding@humbersideairport.com"

3.1.2 The Applicant notes Humberside International Airport's RR confirming no objection and has no further comments to make.

4.0 RESPONSE TO THE WITHDRAWN CADENT GAS LIMITED RR

4.1.1 The RR provided by Cadent Gas Limited (RR-003), which has been withdrawn, is as follows:

"Representation on behalf of Cadent Gas Limited (Cadent) to the South Humber Bank Energy Centre Development Consent Order (DCO) Cadent is a licensed gas transporter under the Gas Act 1986, with a statutory responsibility to operate and maintain the gas distribution networks in North London, Central and North West England. Cadent's primary duties are to operate, maintain and develop its networks in an economic, efficient and coordinated way. Cadent wishes to make a relevant representation to the South Humber Bank Energy Centre DCO to protect its position in light of infrastructure which is in close proximity to the proposed Order Limits. The documentation and plans submitted for the above proposed scheme have been reviewed in relation to impacts on Cadent's existing apparatus located within this area, and Cadent has identified that there is a high pressure (major accident hazard) gas pipeline that runs approximately 1 meter or closer from the western boundary of the projects Order Limits. There are also medium pressure gas pipelines in close proximity to the Order Limits. Cadent is concerned that the high pressure gas pipeline could be affected during the construction of the proposed project and requests that further information is provided to their Plant Protection Team (PLANTPROTECTION@CADENTGAS.COM) so the impacts can be fully considered and assessed by September 2020. Cadent wishes to reserve the right to make further representations as part of the examination process but in the meantime will continue to engage with the promoter to better understand the works and the potential impacts on the high pressure gas pipeline. Subject to obtaining the relevant information requested from the Promoter, and following further assessment of that information, if it is considered the proposed works pose sufficient risks to the high pressure gas pipeline then Cadent will request a protective agreement."

4.1.2 The applicant acknowledges that Cadent Gas has withdrawn its objection. Comprehensive agreement has been reached with them in a Statement of Common Ground ('SoCG') also submitted at Deadline 1 (Document Ref. 7.11) and which confirms that no matters remain outstanding. The Applicant therefore has no further comments to make.

5.0 RESPONSE TO NATIONAL GRID GAS & NATIONAL GRID ELECTRICITY TRANSMISSION RR

5.1.1 The RR provided by National Grid Gas & National Grid Electricity Transmission (RR-006) is as follows:

"Representation by National Grid Electricity Transmission Plc and National Grid Gas Plc in relation to the South Humber Bank Energy Centre Project ("the Project") National Grid Electricity Transmission Plc and National Grid Gas Plc (together "National Grid") wish to make a relevant representation to the Project in order to protect its position in relation to infrastructure and land which is within or in close proximity to the proposed Order limits. National Grid's rights to retain its apparatus in situ and rights of access to inspect, maintain, renew and repair such apparatus located within or in close proximity to the Order limits must be maintained at all times and access to inspect and maintain such apparatus must not be restricted. The documentation and plans submitted for the Project have been reviewed in relation to impacts on National Grid's existing apparatus and land interests located within this area. The following assets, which form an essential part of the electricity transmission and gas networks in England and Wales are within, or in close proximity to, the Order limits:

- *Electricity Transmission Overhead Lines*
- *2AH 400kV Overhead Line and Tower*
- *Above and below ground associated apparatus. Substation*
- *South Humber Bank 400kV Gas Transmission*
- *Feeder Main 9 – Brocklesby to Stallingborough*
- *Above and below ground associated apparatus*

National Grid will require protective provisions to be included within the DCO to ensure that its interests are adequately protected and to ensure compliance with relevant safety standards. National Grid notes that draft protective provisions for its benefit have been included in the draft Order submitted with the application for the Project and is liaising with the Promoter in relation to amendments required to these protective provisions. National Grid will keep the Examining Authority updated in relation to these discussions. As a responsible statutory undertaker, National Grid's primary concern is to meet its statutory obligations and ensure that any development does not impact in any adverse way upon those statutory obligations. National Grid reserves the right to make further representations as part of the examination process but in the meantime will negotiate with the Promoter with a view to reaching a satisfactory agreement."

5.1.2 The Applicant notes the comments made on behalf of National Grid Gas and National Grid Electricity Transmission Plc (together National Grid ('NG')) in its RR and would refer the ExA to the draft SoCG between the parties that has also been submitted for Deadline 1 (Document Ref. 7.6).

5.1.3 The draft SoCG covers the agreement that has been reached in respect of (i) the Electrical Connection and (ii) the Gas Connection. In respect of Land Matters and the DCO, it is agreed that a group company of the Applicant owns the freehold for the AGI and substation but that leases are granted to NGG and NGET accordingly. It is also agreed that the Applicant is not seeking any powers of compulsory acquisition in the draft Order.

5.1.4 In respect of the Protective Provisions (PPs), the Applicant provided a copy of its preferred form of PPs to NG on 22 April 2020 and has been liaising with NG's solicitors to seek a response. NG's solicitors responded with comments on the PPs on 17 November 2020. The Applicant will continue to liaise with NG's solicitors with a view to agreeing the PPs as soon as possible, and will update the ExA accordingly.

6.0 RESPONSE TO UNITED KINGDOM WITHOUT INCINERATION NETWORK RR

6.1.1 The RR provided by United Kingdom Without Incineration Network ('UKWIN') (RR-012) is as follows:

"The proposal is not needed and if it were to go ahead it would result in unacceptable adverse climate impacts and would hamper efforts to decarbonise the electricity supply. UKWIN disputes the flawed methodologies and assumptions adopted by the applicant for their needs and climate change assessments. The disbenefits of the scheme outweigh any benefits of the scheme, and should therefore be refused permission."

6.1.2 The Applicant disagrees with the RR, and as no specific comments have been made refers the ExA to the following application documents containing the assessments referred to.

6.1.3 For matters associated with the need for the Proposed Development, the Applicant refers the ExA to Section 6 of the Planning, Design and Access Statement (Document Ref. 5.5 / APP-024) and ES, Volume I, Chapter 6 'Need, Alternatives and Design Evolution' (Document Ref. 6.2.6 / APP-040). These set out the need for new electricity generating capacity, the role of EfW plants and the contribution that can be made to waste management objectives. These documents highlight that the needs case is underlined by the energy NPSs[1], and national waste policy and strategy[2]. The validity of this needs case is further supported by recent evidence from National Grid (Electricity System Operator), the Department of Business, Energy and Industrial Strategy, and the National Infrastructure Commission (the government's official independent advisors on major long term infrastructure challenges)[3].

6.1.4 Further support is also provided within the Fuel Availability and Waste Hierarchy Assessment (Document Ref. 5.7 / APP-026). This document identifies a clear national need for new energy recovery plants in suitable locations to replace landfill, divert residual waste being exported over longer distances for energy recovery elsewhere, and replace less efficient EfW plants.

6.1.5 For matters linked with climate change, the Applicant refers the ExA to ES, Volume I, Chapter 19 'Sustainability and Climate Change' (Document Ref. 6.2.19 / APP-053) and ES Volume III, Appendix 19A 'Greenhouse Gas Emissions Assessment' (Document Ref 6.4.28 / APP-138). These documents

[1] National Policy Statements for energy infrastructure. Department for Energy and Climate Change. (June 2011). Retrieved from https://www.gov.uk/government/publications/national-policy-statements-for-energy-infrastructure

[2] National Planning Policy for Waste. Department for Communities and Local Government, (October 2014) Retrieved from https://www.gov.uk/government/publications/national-planning-policy-for-waste

[3] Various supporting documents referenced within Section 6 of the Planning, Design and Access Statement (Document Ref. 5.5 / APP-024) (see pages 53-60).

use conservative methodologies to assess the effects of the Proposed Development and highlight the mitigation proposed to ensure the Proposed Development meets the key sustainability requirements as set out in national and local policy.

6.1.6 The Greenhouse Gas Emissions Assessment concludes that the carbon intensity of the Proposed Development compares favourably to the current grid average carbon intensity. The methodology and assumptions are based on published guidance (as set out in Section 4.4 of ES Volume III, Appendix 19A 'Greenhouse Gas Emissions Assessment' (Document Ref 6.4.28 / APP-138)) and expert professional judgment and the Applicant considers the assessment to be robust.

6.1.7 Since the Proposed Development would generate more electricity than the Consented Development for the same fuel throughput, its carbon intensity is demonstrably lower than the carbon intensity of the Consented Development.

6.1.8 Furthermore, a range of conservative assessments were made regarding traffic generation (fuel delivery transportation and other traffic) and these were agreed with the local highways authority and Highways England. The transport assessment is described within ES Volume III, Appendix 9A, Transport Assessment (Document Ref. 6.4.12 / APP-115.

6.1.9 For matters on the key benefits of the Proposed Development as well as its likely significant adverse effects, Section 8 of the Planning, Design and Access Statement (Document Ref. 5.5 / APP-024) should be reviewed. The benefits identified include; provision of energy in a timely manner; reliable base load generation; reducing waste passing down the waste hierarchy; not affecting the implementation of waste plans; a lower carbon intensity than the Consented Development as a result of the higher planned operational efficiency; making effective use of existing employment land; economic benefits; a financial contribution to wetland habitat; and onsite biodiversity provision. In contrast, the only likely significant adverse effects are an effect on visual amenity due to the Proposed Development from one viewpoint and cumulative effects due to the Proposed Development and other proposed developments on the same viewpoint and one other. Consideration of all relevant potential effects are set out in topic chapters within the ES Volume I (Document Ref. 6.2 / APP-034 to APP-055). The conclusion is that on balance the benefits of the Proposed Development considerably outweigh its limited adverse effects.

6.1.10 A further balancing of impacts and benefits was carried out for the Consented Development by North East Lincolnshire Council which found in favour of granting planning permission. This can be viewed in the report at Appendix 1 of the Planning, Design and Access Statement (Document Ref. 5.5 / APP-024). This is capable of being built out. Since the Planning Permission was granted the Applicant has obtained an Environmental Permit and is now seeking to improve the efficiency of the plant by making this DCO Application.

6.1.11 In conclusion, the Applicant has considered UKWIN's RR and considers that the Proposed Development is needed, will not result in unacceptable adverse effects on climate, and supports efforts to decarbonise the UK's electricity

supply and improve the management of residual waste. This conclusion is based on material set out in the Application Documents, which provide robust and referenced assessments and appraisals of the Proposed Development against relevant government policy and strategy and recent official evidence and independent expertise. Taken together these indicate that the limited adverse effects of the Proposed Development are outweighed by its benefits.

7.0 RESPONSE TO PUBLIC HEALTH ENGLAND RR

7.1.1 The RR provided by Public Health England (RR-011) is as follows:

"Thank you for your consultation regarding the above development. Public Health England (PHE) welcomes the opportunity to comment on your proposals at this stage of the project. PHE notes that we have replied to earlier consultations as listed below and this response should be read in conjunction with that earlier correspondence. Request for Scoping Opinion 18th September 2019 Response to Section 42 10th December 2019 We are satisfied that our comments in previous correspondence have been addressed. In addition, we acknowledge that the Environmental Statement (ES) has not identified any issues which could significantly affect public health. We are satisfied that the wider determinants of health have been adequately assessed, using a suitable methodology. On the basis of the documentation as reviewed we have no additional comments to make at this stage and can confirm that we have chosen NOT to register an interest with the Planning Inspectorate on this occasion Please do not hesitate to contact us if you have any questions or concerns."

7.1.2 The Applicant notes Public Health England's RR confirming no objection and has no further comments to make.

8.0 RESPONSE TO PAUL HAMILTON RR

8.1.1 The RR provided by Paul Hamilton (RR-009) is as follows:

"I am concerned over the size of the project, this will be one of the largest in the UK in a small town. Therefore our we burning our own local refuse or shipping it in from around the country, from areas that do not want refuse burning in their own area. I am concerned that this will promote waste production rather than reducing and recycling. I am concerned about the environmental monitoring of the extremely small particulate matter, pm 2.5 and smaller. As far as I'm aware there are no systems capable of continuous monitoring of such particles. I am also concerned about the health impacts of small particles on the respiratory system, these small particles are likely to cause long term health problems perhaps of the nature of asbestos, will we be looking back in 20 or 30 years thinking why did we think it was a good solution to the problem."

8.1.2 In relation to the scale (fuel throughput) of the Project, it should be noted that the National Planning Policy for Waste (DCLG, 2014) notes at paragraph 4 that new waste management facilities should align with the proximity principle i.e. that waste should generally be disposed of as near to its place of origin as possible, but will need to "*serve catchment areas large enough to secure the economic viability of the plant*." Fuel may be sourced from regional and national suppliers and it is known that waste is exported from Immingham. The Fuel Availability and Waste Hierarchy Assessment (Document Ref. 5.7 / APP-026) demonstrates that there is an adequate supply of fuel both regionally and nationally.

8.1.3 The available data as presented within the Fuel Availability and Waste Hierarchy Assessment (Document Ref. 5.7 / APP-026) shows there is no financial incentive for waste producers to send waste to the Proposed Development that could otherwise be reused or recycled. Landfill tax and the relatively high cost of sending waste to an EfW plant, as well as Government policy, will maintain the strong incentives for local authorities to prioritise recycling where it is technically and economically feasible to do so.

8.1.4 The Applicant considers the location is suitable, being well separated from population centres, and the designated HGV route does not pass through villages or towns to reach the Strategic Road Network. This has been recognised through the granting of planning permission for the same scale (fuel throughput and building dimensions) of plant via the local planning process in 2019 ('the Consented Development').

8.1.5 In relation to small particulate matter (PM2.5) the Government has set ambient air quality targets in relation to PM2.5. The ES (Document Ref. 6.1-6.4 / APP-033 to APP-139) that accompanied the DCO application assessed the levels of PM2.5 predicted to occur from the plant and demonstrated that the air quality targets would be met.

8.1.6 An Environment Agency internal briefing note (available at http://www.esauk.org/application/files/3815/4514/8158/180817_ briefing_on_UKWIN_particulates_article_V1.0.pdf) states:

"There is currently no validated, commercially available equipment for continuously monitoring PM10 and PM2.5 emissions from EfW plants. Instead, plants are required to continuously measure total particulate matter (TPM). TPM includes particulates of all sizes including PM10, PM2.5, PM1 etc as well as ultrafine particles (i.e. particles with a diameter of less than 0.1 micrometres).

Equipment is available to monitor PM10 and PM2.5 discontinuously i.e. by using temporary monitoring equipment to sample the exhaust gas and then working out the results in a laboratory. Indeed, all new EfW plants are required to carry out this test when they first start operating. However, the concentrations of PM in the exhaust gases of modern EfW plants are so low that it is very difficult to get an accurate result from these tests, and will remain so until new monitoring methods and technology can be developed, validated and standardised for use."

8.1.7 As part of the process for determining applications for Environmental Permits the Environment Agency consults Public Health England. The Environment Agency would not issue a Permit if it was considered that the emissions from the installation would cause significant pollution or harm to human health.

8.1.8 There is an Environmental Permit in place for the Consented Development which does not require continuous monitoring of PM2.5 but requires the operator to establish the size distribution of particulate matter within six months of completion of commissioning. It is likely that a similar condition would be included in the Permit for the Proposed Development.

8.1.9 In addition, as confirmed by the agreements made with the Environment Agency in the signed SoCG submitted at Deadline 1 (Document Ref. 7.3), the Environment Agency is content with the approach taken in respect of permitting of the Proposed Development and agrees that the proposed stack heights and the measures proposed to control emissions are appropriate and represent Best Available Techniques (BAT) for the Proposed Development.

8.1.10 Public Health England has not raised concerns as is outlined within its RR set out earlier in this document.

8.1.11 In conclusion the Applicant has considered Paul Hamilton's RR and considers that the matters raised are fully dealt with in the Application Documents and the Environmental Permit.

9.0 RESPONSE TO ENVIRONMENT AGENCY RR

9.1.1 The RR provided by the Environment Agency (RR-005) and the Applicant's Response is provided in the below table:

Text from Relevant Representation	Applicant's Response
1.0 Introduction *1.1 The Environment Agency is an executive non-departmental public body established under the Environment Act 1995. It is an adviser to Government with principal aims to protect and improve the environment, and to promote sustainable development. It plays a central role in delivering the environmental priorities of central government through its functions and roles. It is also an adviser to local decision makers in its role as a statutory consultee in respect of particular types of development, as listed in Schedule 4 of the Development Management Procedure Order 2015. For the purposes of this Development Consent Order (DCO) application, we are a statutory interested party.* *1.2 The Environment Agency takes action to conserve and secure proper use of water resources, preserve and improve the quality of rivers, estuaries and coastal waters and groundwaters through pollution control powers and regulating discharge consents. We have a duty to implement the Water Framework Directive.* *1.3 We have regulatory powers in respect of waste management and remediation of contaminated land designated as special sites. We also encourage remediation of land contamination through the planning process.* *1.4 The Environment Agency is the principal flood risk management operating authority. It has the power (but not the legal obligation) to manage flood risk from designated main rivers and the sea. The Environment Agency is also responsible for increasing public awareness of flood risk, flood forecasting and warning and has a general supervisory duty for flood risk management. We*	All noted – no response required.

also have a strategic overview role for all flood and coastal erosion risk management.	
2.0 Scope of these representations *2.1 These Relevant Representations contain an overview of the project issues, which fall within our remit. They are given without prejudice to any future detailed representations that we may make throughout the examination process. We may also have further representations to make if supplementary information becomes available in relation to the project.* *2.2 We have reviewed the DCO application, Environmental Statement (ES) and supporting documents submitted as part of the above mentioned application, which we received on 27 May 2020. Our comments are presented under topic headings.*	All noted – no response required.
3.0 Environmental Permit *3.1 This site is currently permitted to operate an existing power station and an energy from waste plant, which was granted planning permission under the Town and Country Planning Act 1990 – referred to as the 'Consented Development'. The project under this application seeks to improve the efficiency of the Consented Development to a gross electrical capacity of up to 95MW. It is our view that changes to the design to achieve this have not significantly affected the air dispersion modelling.* *3.2 The existing power station and Consented Development have the benefit of a joint operating permit issued by the Environment Agency. Discussions between the operator and our National Permitting Service are taking place. An approach to vary the existing permit to increase the electrical output for this*	The Applicant refers the Examining Authority to the SoCG between the Applicant and the Environment Agency submitted at Deadline 1 (Document Ref. 7.3). The SoCG covers the agreement that has been reached in respect of the requirement for an Environmental Permit for the Proposed Development and that the Consented Development already has a Permit in place. The Applicant refers the Examining Authority to Section 4.1 (Environmental Permit) of the SoCG.

development, alongside transferring it into a new separate permit, are being considered.	The SoCG also covers effects on air quality, noise and other emissions, flood risk, water resources (including surface and foul water drainage), contaminated land and groundwater, construction environmental management plan and pilling requirements, combined heat and power (CHP) readiness and biodiversity. There are no matters of disagreement between the parties.
4.0 Flood risk *4.1 We have reviewed Chapter 14 in relation to flood risk together with Appendix 14A (Flood Risk Assessment (FRA)). Schedule 2, Requirement 22 of the DCO secures the mitigation proposed in respect of critical equipment assets and a place of safe refuge, both to be elevated to a level no lower than 4.60mAOD (above Ordnance Datum).* *4.2 The Examining Authority will be aware that the Environment Agency released new guidance in respect of Tidal Climate Change Allowances in December 2019, which took account of UKCP18 projections. The submitted FRA makes use of Environment Agency breach modelling that was undertaken using UKCP09 projections. However, we can confirm that the hydraulic modelling outputs (hazard maps) used in the FRA are still considered fit for purpose.* *4.3 We are currently finalising new baseline data in respect of water levels for the Humber Estuary, but this is not yet available for release. We note that Requirement 22 secures the submission of a scheme for the mitigation of flood risk during operation. We recommend that the applicant makes an enquiry to us before drafting this scheme to check if this new data is available for their use at that time.*	The Applicant refers the Examining Authority to the SoCG between the Applicant and the Environment Agency submitted at Deadline 1 (Document Ref. 7.3). The SoCG also covers agreement on various matters including those relevant to flood risk. The Applicant refers the Examining Authority to Section 4.2 (Flood Risk) of the SoCG. It is agreed within the SoCG that the FRA submitted with the DCO Application (Appendix 14A of ES Volume III, Document Ref. 6.4 / APP-135 to 136) has been undertaken using the EA's published Tidal Climate Change Allowances, which at that time, for the Humber Estuary were the UKCP09 projections. Climate Change Allowances have been updated since production of the FRA (to UKCP18) however, it is agreed that hydraulic modelling outputs

4.4 The Environment Agency does not comment on or approve the adequacy of proposed flood emergency response procedures accompanying development proposals. However, we would advised that warning and emergency response is fundamental to managing flood risk for this development. As such, we welcome the inclusion of Requirement 23 for a flood emergency response and contingency plan to be submitted to, and approved by, the relevant planning authority. Our involvement with this development during an emergency will be limited to delivering flood warnings to occupant/user covered by our flood warning network. The Planning Practice Guidance (PPG) (Flood Risk and Coastal Change section, paragraphs 056-058) provides information on producing an evacuation plan for development and the role of the local authority in ensuring these are appropriate. *4.5 Please note that our advice relates to flood risk from fluvial and tidal sources only; we have not considered the risk of flooding from ground water, drainage systems, reservoirs, canals or ordinary watercourses. We recommend that further advice on these issues is sought from the relevant flood risk management authorities.* *4.6 We can confirm that the submitted assessment of flood risk in relation to fluvial and tidal sources is in our view appropriate to the scale, nature and location of the proposed development.*	(hazard maps) used in the FRA are still considered 'best available information' and fit for purpose in the assessment. The wording of draft Requirements 22 (Flood risk mitigation) and 23 (Flood warning and evacuation plan) in the Draft DCO (Document Ref. 2.1 / APP-005) are agreed as noted in Section 4.2 of the SoCG. There are no matters of disagreement between the parties.
5.0 Protection of groundwater and land contamination *5.1 We have reviewed Chapter 12 of the Environmental Statement Vol 1 (Geology, Hydrogeology and Land Contamination) in conjunction with the following reports found in Appendices 12A – 12C; • Phase 1 Geo-Environmental and Geotechnical Desk Study Report by AECOM, dated April 2020; • Ground Investigation Report Volume 1: Factual Report (ref: A9020-19/1) by Socotec, dated December 2019; and • Ground Investigation Report Volume 2: Interpretative Report (ref: A9020-19/2) by Socotec, dated December 2019.*	The Applicant refers the Examining Authority to the SoCG between the Applicant and the Environment Agency submitted at Deadline 1 (Document Ref. 7.3). The SoCG covers the agreement that has been reached in respect of land contamination and groundwater. The Applicant refers the Examining Authority to Section 4.3 (Land

5.2 A full controlled waters risk assessment has not been undertaken as part of the Socotec investigations, with no groundwater sampling having been undertaken. However, it is noted that the intrusive investigations undertaken by Socotec pre-date the AECOM Phase 1 Desk Study report. The AECOM report states that further ground investigation is being undertaken to obtain data on ground conditions and allow refinement of the risk assessment (as outlined in Section 8.2). *5.3 We are satisfied that Requirements 17-21 within Schedule 2 are appropriate to manage the risks posed to controlled waters from potential contamination at the site. Based on the available information at this time, we consider the risk posed to controlled waters from the site appears to be low. We welcome the additional site investigation work secured under these Requirements, to provide assurances that the risks are acceptable, and we look forward to reviewing these in due course. In order to secure consultation by the relevant planning authority on these matters (in accordance with Requirement 34(2)), we request that the Environment Agency is named as a consultee within Requirements 17, 19, 20 and 21.*	Contamination and Water Resources) of the SoCG. The Applicant has notified the Environment Agency that the ground investigations have now concluded (including groundwater monitoring) and have been submitted to NELC to discharge part 2 of condition 13 for the Consented Development, and are available to view on the NELC website. The Environment Agency has received a copy of the final ground investigation reports. It is agreed that the Environment Agency will be named as a consultee in the draft DCO requirements including draft Requirements 14 (Foul water drainage), 17 (Piling) and 19-21 (Investigation and remediation of contamination). These draft requirements will be amended in the next iteration of the draft DCO. The Applicant refers the Examining Authority to Section 4.3 of the SoCG where the revised draft requirement wording is set out. There are no matters of disagreement between the parties.
6.0 Water Quality *6.1 We have reviewed the assessment of impacts on the water environment, which is included in Chapter 14. This has used the Institute of Environmental Management and Assessment (IEMA) (2011) approach and concludes that the*	The Applicant refers the Examining Authority to the SoCG between the Applicant and the Environment Agency submitted at Deadline 1 (Document Ref. 7.3).

development will only cause negligible or minor adverse impacts once all the mitigation measures including maintenance and use of an Environmental Management System are applied.	The SoCG covers the agreement that has been reached in respect of water resources (including surface and foul water drainage). The Applicant refers the Examining Authority to Section 4.3 (Land Contamination and Water Resources) of the SoCG. There are no matters of disagreement between the parties.
7.0 Foul water drainage *7.1 We note the information in respect of foul drainage options in Section 5 of Appendix 14B (Outline Drainage Strategy). Schedule 2, Requirement 14 secures the need to submit details of the permanent foul water drainage system, prior to development commencing. We are satisfied that an appropriate scheme can be approved post consent and we request that we are added as a named consultee for the discharge of Requirement 14(1), in order to secure further consultation with us on this issue.*	The Applicant refers the Examining Authority to the SoCG between the Applicant and the Environment Agency submitted at Deadline 1 (Document Ref. 7.3). The SoCG covers the agreement that has been reached in respect of the water resources (including surface and foul water drainage). The Applicant refers the Examining Authority to Section 4.3 (Land Contamination and Water Resources) of the SoCG. It is agreed that the Environment Agency will be named as a consultee in draft Requirement14 (Foul water drainage). This draft requirement will be amended in the next iteration of the draft DCO. The Applicant refers the Examining Authority to Section 4.3 of the SoCG where the revised draft requirement wording is set out.

	There are no matters of disagreement between the parties.
8.0 Waste management & pollution prevention *8.1 We have reviewed Chapter 16 of the ES in respect of waste management and this highlights relevant legislation, which will be adhered to. The outline Construction Environmental Management Plan (CEMP) also includes proposals for the final CEMP, which are satisfactory. This is adequately secured with the inclusion of Requirement 15 in Schedule 2 of the DCO. We are satisfied that all aspects of waste management and pollution prevention have been adequately addressed in these documents.*	The Applicant refers the Examining Authority to the SoCG between the Applicant and the Environment Agency submitted at Deadline 1 (Document Ref. 7.3). The SoCG covers the agreement that has been reached in respect of the CEMP. The Applicant refers the Examining Authority to Section 4.4 (Construction Environmental Management Plan) of the SoCG.
9.0 Further Representations *9.1 In summary, we can confirm that we have no objection to the proposed development, as submitted. However, we reserve the right to add to or amend these representations, including requests for DCO Requirements and protective provisions should further information be forthcoming during the course of the examination on issues within our remit. If you have any questions regarding these representations, please contact me.*	The Applicant refers the Examining Authority to the SoCG between the Applicant and the Environment Agency submitted at Deadline 1 (Document Ref. 7.3). There are no matters of disagreement between the parties.

10.0 RESPONSE TO NETWORK RAIL INFRASTRUCTURE LIMITED RR

10.1.1 The wording of each section of Network Rail's RR (RR-001) and the Applicant's response is provided within the table below.

10.1.2 The Applicant has engaged, and continues to engage, with Network Rail on these matters, and refers the ExA to the technical note submitted to Network Rail in **Appendix 1**, the timeline of communications in **Appendix 2**, and the draft SoCG between the parties that was submitted at Deadline 1 (Document Ref. 7.7). The SoCG provides the most up to date position on the extent of agreement and disagreement between the two parties.

10.1.3 Whilst the Applicant's response to Network Rail's RR is set out in the following table in the order in which it is set out in the RR, the key points of the Applicant's position are:

- Network Rail did not engage in the Local Plan process, the most appropriate route for seeking to provide for any improvements to level crossings which it considers may be required due to the large scale of development which is allocated in the area and of which the Site is part;
- Network Rail did not object to the designated HGV route nor levels of development traffic in relation to the Consented Development planning application (such route and levels being identical to those for the Proposed Development);
- Network Rail confirmed it had no objection to the application for discharge of the delivery and servicing plan pursuant to condition 18 of the SHBEC planning permission. The delivery and servicing plan specifies the designated HGV route;
- Similarly Network Rail did not object to other recent planning applications for developments which have proposed to use Kiln Lane for a significant number of HGV movements, such as the Velocys energy from waste plant;
- Network Rail has been slow to provide information and data used to inform its assessment of the level crossing risks, which is particularly important given that Network Rail is the only party with access to the relevant model;
- The issues which Network Rail has said the Proposed Development traffic will cause fluctuated a number of times over the course of engagement. Issues raised at different points have included abnormal loads, construction traffic, level crossing condition, road condition, backing up of traffic, the width of the crossing(s), and the principle of using the crossing(s). .
- Network Rail's requested mitigation for the level crossings has fluctuated significantly, with the lowest cost being £50,000 (for works to improve the condition) rising to over £4m (for two new upgraded level crossings). Most costs, including the £4m cost, have been accompanied by significant exclusions and caveats. The latest cost estimate from Network Rail is around £100,000. Network Rail has not provided adequate explanation of how the £4m cost was arrived at or justified, nor why it was pushing the Applicant to enter into an agreement to secure it;

- As well as making the Applicant's engagement with Network Rail significantly more difficult, these changes also undermine the confidence in Network Rail's RR and the objections it has made to the Applicant since then;
- Network Rail has not provided information to justify its latest request for works to Kiln Lane level crossing (cost estimate £100,000), nor its position that those works are required due to the Proposed Development traffic.
- The Site has the benefit of the existing Planning Permission described at 1.1.5 of this document, and the Applicant has taken substantial steps towards delivering the Consented Development. It is expected that a contract will be signed with the preferred Contractor in Q1 2021 and the discharge of planning conditions is already underway. The SHBEC planning permission therefore represents a realistic fallback position. It secures none of the extensive mitigation and controls which Network Rail now seeks in relation to the Proposed Development, since Network Rail when consulted during its determination requested no mitigation and controls other than a pre construction strategy for Abnormal Indivisible Loads..
- The Secretary of State must determine the DCO application in accordance with section 104 of the Planning Act 2008, including section 104(7) which requires the Secretary of State to consider whether the Proposed Development's impacts would outweigh its benefits. The Applicant's position on the benefits are set out in the DCO Application. It considers that there are no impacts on Network Rail's infrastructure or statutory undertaking which the Secretary of State needs to take into account.
- Sections 127 and 138 of the Planning Act 2008 are not relevant since there is no proposed compulsory acquisition of Network Rail's land or apparatus.
- It follows from all of the above that there is no justification for the inclusion of protective provisions in the Draft Order, nor for the Applicant to enter into a 'Framework Agreement' as requested by Network Rail.
- The Applicant's position in relation to Network Rail's requests that it pays all of Network Rail's costs of engaging in the DCO process is reasonable and common practice. It would not have been reasonable for the Applicant to have funded Network Rail's objection, the basis of which has fluctuated significantly.
- The Applicant is committed to continuing discussions with Network Rail with a view to evidencing and understanding the issues and narrowing the matters to be agreed between the parties.

Text from Relevant Representation	***Applicant's Response***
This is the section 56 representation of Network Rail Infrastructure Limited (Network Rail) provided in respect of EP Waste Management Limited's (Applicant's) application for a Development Consent Order (Order) which seeks powers to enable the construction, operation and maintenance of a new energy from waste power station with a capacity of up to 95 megawatts gross output and other associated works (Scheme). Network Rail is a statutory undertaker and owns, operates and maintains the majority of the rail infrastructure of Great Britain.	Acknowledged. The Applicant further acknowledges that Network Rail's goal is to remove risk at level crossings or to reduce risk to as low as reasonably practicable and that this goal is applied with consideration of cost benefit. See page 19 of Enhancing Level Crossing Safety 2019 – 2029 - A long-term strategy targeting improved safety on Great Britain's railway (https://www.networkrail.co.uk/wp-content/uploads/2020/03/Enhancing-Level-Crossing-Safety-2019-2029.pdf).
Compulsory acquisition powers to acquire new rights over Network Rail land are not sought under the Scheme.	The Applicant confirms and agrees that compulsory acquisition powers over Network Rail land, apparatus or assets are not sought. Accordingly sections 127 ("Statutory undertakers' land") and 138 ("Extinguishment of rights, and removal of apparatus, of statutory undertakers etc.") of the PA 2008 are not applicable in relation to Network Rail land or assets.
However, the designated route providing HGV access to the site of the Scheme (HGV Designated Route) includes Kiln Lane level crossing, located on Kiln Lane, Stallingborough (the Crossing). Network Rail objects to the inclusion of the Crossing in the HGV Designated Route.	The Applicant confirms and agrees that the designated HGV route includes Kiln Lane level crossing. The Applicant notes that the RR concerns the Kiln Lane level crossing only, although at EIA Scoping stage Network Rail requested an assessment in relation to the impact on the operational railway and level crossing situated on South Marsh Road in the Transport Assessment accompanying the eventual application. Such an assessment was included in the Transport Assessment for both crossings (see Section 10.3 of the Transport Assessment Main Volume, Appendix 9A of ES Volume III, Document Ref. 6.4 / APP-115). The Applicant assessed the impacts of the Proposed Development on the two level crossings in terms of the potential worst case increase in road traffic flows and also

	considered impacts on traffic queues at nearby junctions and concluded that the designated HGV route (using Kiln Lane level crossing) is appropriate and no level crossing mitigation is considered to be required due to the Proposed Development traffic. The Kiln Lane designated route was chosen following technical appraisal of alternative routes against relevant factors (explained comprehensively in a note submitted to Network Rail at their request, contained at **Appendix 1** and referred also to at item 78 in the timeline at **Appendix 2**), and following a number of engagement processes. Network Rail has been afforded numerous opportunities to comment on the designated route since 2018, as discussed below and shown by the timeline at Appendix 2. **Consented Development** The designated HGV route formed part of the planning application for the Consented Development, having been agreed with North East Lincolnshire Council. Network Rail were formally consulted on the Consented Development planning application (an EIA application accompanied by a TA) on 30 January 2019. Network Rail responded to request an extension of time, which was granted, and subsequently only commented on the routeing of abnormal loads and requested that they are contacted in advance of abnormal load movements (see items 1-3 of Appendix 2, and Appendix 3). Network Rail made no comments on the designated HGV route nor the number of HGV movements. The Consented Development has full planning permission (North East Lincolnshire Council reference DM/1070/18/FUL) ('the Planning Permission', see decision notice in Appendix 2 of the Planning, Design and Access Statement, Document Ref. 5.5 / APP-024). This is capable of being built out It is expected that a contract will be signed with the preferred Contractor in Q1 2021, and the discharge of planning conditions is already underway.. The Applicant will elaborate on this in

	its response to the Examiner's First Written Question on this matter (question 15.0.7) at Deadline 2. The designated HGV route was also shown in the Delivery and Servicing Plan approved pursuant to condition 18 of the Planning Permission (North East Lincolnshire Council reference DM/1117/19/CND). Network Rail was consulted by North East Lincolnshire Council on this application, who responded in January 2020 to confirm that they had "no objection" to the discharge of condition 18. (see item 8 of Appendix 2, and **Appendix 4**). It is noteworthy that this confirmation of no objection, including specifically to the designated HGV route, was submitted just one month after Network Rail had responded to the Applicant's statutory consultation on the Proposed Development (described below). **The Proposed Development** The Proposed Development HGV traffic volume and routeing is exactly the same as the Consented Development. Network Rail requested at the EIA Scoping stage that the Transport Assessment include impacts on the operational railway and level crossing on South Marsh Road (Marsh Lane level crossing). No comments were made on Kiln Lane level crossing. However the Applicant responded by including Section 10.3 of the Transport Assessment which presents information on the impacts of the Proposed Development on the Marsh Lane and Kiln Lane level crossings. The local community was consulted about the designated route as part of the consultation for the Proposed Development. The route is described in paragraph 3.1.4 and Figure 3 of the PEIR Non Technical Summary (available at https://shbenergycentre.co.uk/dco/), in board 3 of the exhibition boards used in the public exhibitions (see Appendix 9.8 of the Consultation Report (Document Ref. 5.1 / APP-020)), and the number of HGV movements is described in the 'Frequently Asked

	Questions' document (see Appendix 9.7 of the Consultation Report, Document Ref. 5.1 / APP-020). Network Rail were consulted by the Applicant formally under Section 42 PA 2008 during its statutory pre application consultation. The Applicant's Section 42 consultation included a comprehensive PEIR akin to an advanced draft Environmental Statement, including a full Transport Assessment with figures and technical appendices provided. These remain available to view at https://shbenergycentre.co.uk/dco/. The engagement at Section 42 stage is described in Table 11.2 of the Consultation Report (Document Ref. 5.1 / APP-020) and in the timeline at **Appendix 2** (items 6, 7, 9). As at EIA Scoping stage no mention was made of Kiln Lane level crossing, only mentioning South Marsh Road (known by Network Rail as Marsh Lane). The Applicant provided a response to the points raised, and Network Rail replied to this acknowledging the lack of compulsory acquisition powers and suggesting that an unspecified form of agreement be drawn up. The Applicant responded to offer a discussion on the need for an agreement due to the distance from operational land. Network Rail did not respond in the six week period leading up to the submission of the DCO application. A range of help was provided to Network Rail in May to identify specific matters in the DCO application documents (items 14-19 and 24-27 in **Appendix 2**). Network Rail's concerns at this stage related to South Marsh Road (Marsh Lane) level crossing, although the Applicant specifically pointed out in correspondence on 23 June 2020 (item 30 in **Appendix 2**) that HGVs would not use this crossing and would use Kiln Lane level crossing. The first time an objection was made by Network Rail specifying Kiln Lane level crossing was the RR of 15 July 2020.

	The Applicant considers that the amount and breadth of consultation carried out to date, which has included the HGV designated route, with consultees including Network Rail, as well as with North East Lincolnshire Council and Highways England, major road users, statutory undertakers, and local communities, is itself strongly indicative of the suitability of the designated route, and limits the scope to designate a different route for all HGV traffic. It is particularly noteworthy that Network Rail specifically responded to two consultations on the Consented Development (the planning application and the discharge of condition 18) and on both occasions raised no concerns about the designated HGV route or the levels of HGV traffic.
The requirements of the Order relating to traffic regulation are insufficient and have been suggested without any meaningful engagement with Network Rail or a proper understanding of the level of impact the HGV vehicles will have on the Crossing and the safety of the railway and its users.	As evidenced by the summary of consultation with Network Rail set out above and in **Appendix 2**, the Applicant has engaged with Network Rail throughout the preparation of the DCO Application (and the preceding planning application for the Consented Development) and disagrees with Network Rail's suggestion that the traffic management proposals have been development "*without meaningful engagement with Network Rail*". These matters are covered to some extent above, and are considered further here. Network Rail requested at the EIA Scoping stage that the Transport Assessment include impacts on the operational railway and level crossing on South Marsh Road (Marsh Lane level crossing). The Applicant responded by including Section 10.3 of the Transport Assessment which presents information on the impacts of the Proposed Development on the Marsh Lane and Kiln Lane level crossings. The Applicant responded to the matters raised by Network Rail during Section 42 consultation by means of a letter (item 9 of **Appendix 2**) explaining the relationship between the Proposed Development and the Consented Development and their identical HGV routing, the limited number of abnormal load movements and the notification procedures

	that would be adhered to; and confirming that no compulsory acquisition or temporary possession powers are to be sought over Network Rail operational land or at all in the DCO. The Applicant has responded promptly and clearly in response to all subsequent requests for information as set out in Appendix 2, including the detailed technical note issued in October (**Appendix 1**) which provides further consideration of impacts on the Marsh Lane and Kiln Lane level crossings, as well as responding to Network Rail's request for consideration of alternative HGV routes. The Applicant has also offered a cost payment to Network Rail to contribute to their internal costs in collating and providing information requested by the Applicant, as a gesture intended to ease and speed up the delivery of information which the Applicant required from Network Rail (and which was not forthcoming). The Applicant has also given a legal undertaking to Network Rail to cover their legal fees in the preparation and negotiation of the SoCG Network Rail expressed concern regarding the Proposed Development traffic's use of the Kiln Lane level crossings in the Relevant Representation in July 2020. The Applicant convened a meeting with Network Rail on 24th July 2020 (item 46 in **Appendix 2**) to discuss the matters raised in the RR and provide clarification. At that meeting the Applicant requested information on the level crossing risk assessment to inform the Applicant's understanding of Network Rail's concerns. Whilst the conclusions of the current and 'with SHBEC' level crossing risk assessments for Marsh Lane and Kiln Lane level crossings were subsequently provided by Network Rail on 21st September 2020 (item 66 in Appendix 2) these were presented to the Applicant as the totality of the information required, with Network Rail then continuing to press the Applicant to immediately enter into discussions on the draft Framework Agreement and Protective Provisions which Network Rail was seeking.

	The conclusions of the level crossing risk assessments provided did not enable the Applicant to understand the basis of the assessment carried out by Network Rail, and meant the Applicant was prevented from understanding for itself whether the requested mitigation was reasonable or justified. That the Applicant insisted on receiving this information (which to date is still awaited for South Marsh Road) is justified in itself, particularly in light of the fact that the risk model used (known as ALCRM) is only available to Network Rail. The need for the Applicant to insist on this information was amply underlined by the fact that when Network Rail did provide the Kiln Lane level crossing (only on 26 November 2020, see **Appendix 7** and also item 96 of **Appendix 2**), that was accompanied by a very significant change in the requested mitigation (a reduction, with the cost estimate reducing to 5% of the previous estimate). The e-mail from Network Rail set out lower 'with SHBEC' risk ratings to those in the previous NR objections and referred to the previous upgrade requests as "not justified". The Applicant is reviewing this information and is still awaiting information on the data inputs used to determine the changes in risk rating at South Marsh Road (Marsh Lane) level crossing. The Applicant has significant concerns about the speed and transparency of the information provided by Network Rail, but is nevertheless content to continue to discuss matters with Network Rail to seek to find a solution.
The Crossing would not currently be able to withstand the significant increase in HGV traffic proposed.	Network Rail express the view in the RR that the Kiln Lane level crossing "*would not currently be able to withstand the significant increase in HGV traffic proposed*", which the Applicant interprets to refer to the *condition* of the Kiln Lane level crossing. However subsequent communications from Network Rail including the objection received on 21st September (see **Appendix 5** and also item 66 of **Appendix 2**) and subsequent Note of Technical Detail received on 6th November 2020 (see **Appendix 6** and

	also item 88 of **Appendix 2**) have focussed on the *suitability of the types* of level crossing currently installed at both Marsh Lane and Kiln Lane level crossings, suggesting that both of these level crossings require an upgrade to MCB-OD (Manually Controlled Barrier - Obstacle Detection) due to the increased level of risk posed by increased road traffic volumes (and associated risks of head on meets between vehicles and vehicles backing up over the crossings) due to the Proposed Development. The latest information received about Kiln Lane level crossing (26 November 2020, see **Appendix 7** and also item 96 of **Appendix 2**), sets out a lower risk rating to that in the previous NR objections and referring to the previous request for MCB-OD as "not justified"). The Applicant welcomes the confirmation that Network Rail is no longer seeking upgrades to the type of level crossing, and is reviewing the new information and need for the mitigation which Network Rail now requests.
Upgrade works to the Crossing at a cost of approximately £50,000 would be required ahead of the commencement of construction of the Scheme, as there are no appropriate alternative routes into the site.	The costs indicated by Network Rail have fluctuated significantly since the RR was submitted in July 2020. The RR suggested a cost of approximately £50,000 for upgrade works to Kiln Lane level crossing, which the Applicant understood related to improvements to the condition of the level crossing (to enable it to "*withstand*" the Proposed Development traffic). The cost indicated in Network Rail's objection dated 21st September (see **Appendix 5** and also item 66 of **Appendix 2**) was for upgrading Marsh Lane and Kiln Lane level crossings to include barrier protection, which Network Rail indicated would cost approximately £290,000 per level crossing (excluding signalling, communications and infrastructure changes). This is a 1060% increase in estimated costs, not accounting for the additional items mentioned in brackets. The Note of Technical Detail received from Network Rail on 6th November 2020 indicated costs of approximately £2 million per level

	crossing (excluding signalling, communications and infrastructure changes). This is a 7900% increase in estimated costs from that in the RR, again not accounting for the additional items. The latest information received about Kiln Lane level crossing (26 November 2020, see **Appendix 7** and also item 96 of **Appendix 2**), refers to the previous request for MCB-OD as "not justified" and contains a cost benefit analysis which identifies that surfacing only, costing £100,000, is required. No new information has been provided on South Marsh Road (Marsh Lane) level crossing. The Applicant is reviewing the most recent Kiln Lane information and is considering further, in respect of Kiln Lane, Network Rail's request to enter in to a legal agreement or include protective provisions in the Draft Order. Whilst the Applicant is considering the latest request, it does have significant concerns about the scale and regularity of the changes in mitigation which Network Rail has requested, within the space of only four months. The Applicant does not have an explanation as to why these changes have occurred, and is particularly concerned that Network Rail asked it to enter into a Framework Agreement which would have provided for the Applicant to have a £4m+ cost liability, and that was seemingly only reduced when the Applicant continued to request the underlying evidence (traffic data) used by Network Rail. Network Rail has repeatedly asked the Applicant to cover all its costs (technical, internal and legal) of participating in the DCO process. The Applicant considered that it was being asked to fund Network Rail's objection to the DCO, and does not consider that that is appropriate, reasonable or common practice. Network Rail's fluctuating position very strongly suggests that the Applicant's evidence led stance on costs is justified.

The Crossing constitutes land owned by Network Rail for the purpose of its statutory undertaking and, accordingly, this representation is made under section 56 of the Planning Act 2008.	Noted. Network Rail were consulted by the Applicant under Section 42 and notified under Section 56.
Network Rail also objects to all other compulsory powers in the Order to the extent that they affect, and may be exercised in relation to, Network Rail's property and interests.	The Applicant confirms that compulsory acquisition powers over Network Rail land, apparatus or assets are not sought. Accordingly, sections 127 ("Statutory undertakers' land") and 138 ("Extinguishment of rights, and removal of apparatus, of statutory undertakers etc.") of the PA 2008 are not applicable in relation to Network Rail land or assets. There are, further, no compulsory powers sought within the draft DCO with the potential to affect Network Rail land, apparatus or assets.
In order for Network Rail to be in a position to withdraw its objection, Network Rail requires: (a) an agreement with the Applicant that regulates the use of the Crossing by HGVs, and the liability of the Applicant for any necessary repairs and upgrades to the Crossing as a result of the HGV Designated Route, including terms which protect Network Rail's statutory undertaking;	Network Rail offered in a meeting of 24 July 2020 to provide level crossing risk assessment information. This was not provided in a comprehensive form (the conclusions were stated in the September objection but with no traffic data to support them) and the Applicant has only recently (26 November 2020, see item 96 of **Appendix 2**) been provided with the basic information on the traffic assumptions and inputs used for the level crossing risk assessment at Kiln Lane level crossing. This was accompanied by a considerable change in the position of Network Rail from its previous request for £2m of upgrades (item 88 of **Appendix 2**) to £100,000 of resurfacing. The Applicant is reviewing this information but notes that the £100,000 resurfacing has not yet been accompanied by a technical justification.

	The Applicant notes that a draft FA and PP were issued to it on 25 August 2020. As explained above, the Applicant considered that the issue of these documents at that time was premature, and confirmed to Network Rail that it would be unable to progress discussions on the need for these documents, until such time as the relevant information and traffic data – which had been requested following the meeting in July – was provided. As explained above, the Applicant's evidence led stance to discussing the FA and PP requested by Network Rail has been correct, given the changing nature of Network Rail's case and the mitigation it asserts is required. The Applicant does not consider that any changes to the Draft Order are required, and nor is an agreement between it and Network Rail necessary. The Applicant considers that regulation of the use of the level crossings by Proposed Development HGVs is not necessary given that there is no proven impact of adding the Proposed Development traffic to the level crossings; the Proposed Development proposes no compulsory acquisition of Network Rail land, assets or apparatus; and its contribution to traffic flows is not significant (and no different to the Consented Development, a realistic fallback position). A 'Framework Agreement' is unjustified given the position above and since liability for a repair or upgrade could never reasonably be apportioned to the Applicant, given the range of other traffic using the level crossing(s) and that the Proposed Development traffic is only a small contributor to the traffic flows utilising the level crossings. The Secretary of State must determine the DCO application in accordance with section 104 of the Planning Act 2008, including section 104(7) which requires the Secretary of State to consider whether the Proposed Development's impacts would outweigh its benefits. The Applicant's position on the benefits are set out in the DCO Application. It considers that there are no impacts on Network Rail's infrastructure or

	statutory undertaking which the Secretary of State needs to take into account.
(b) an agreement with the Applicant that compulsory acquisition powers included in the Order will not be exercised in relation to Network Rail's property and interests; and	There are no compulsory powers proposed or sought within the draft DCO and none could be added during the examination without consultation of Network Rail, therefore no agreement is required.
(c) an amendment of Requirement 16 of Schedule 2 (Construction traffic management and travel planning), Requirement 24 (Delivery and Servicing Plan) an Requirement 25 (Operational Travel Plan) of the Order so as to require Network Rail approval of the construction traffic management plan prior to commencement of authorised development, and the delivery and servicing and operational travel plans prior to authorised development coming into operation, as both directly impact the Crossing.	Network Rail will be consulted regarding abnormal load routes crossing the railway in accordance with Requirement 16 (Construction traffic management and travel planning). The Applicant is considering the information provided by Network Rail on 26 November 2020 and in light of this is considering the request for Network Rail to be consulted on other traffic management plans. However, the Applicant considers that "approval of" the traffic management plans by Network Rail is completely unacceptable, unnecessary, and would impact on the viability and benefits of the Proposed Development. In particular: - There is no proven need, as shown above; - The approach is out of step with the vast majority of other DCOs made; - Alternative conventional and proportionate mechanisms are available such as formally naming Network Rail as a consultation body within the text of a Requirement, if necessary; - Network Rail's treatment of the DCO project has been wholly inconsistent with the non objections to the Consented Development (as recently as January 2020) and of other planning applications in the area for energy and industrial plants and the Link Road, all of which have substantial and comparable increases in traffic over nearby level crossings. The lack of

	objection by Network Rail to various planning applications follows its failure to engage in the Local Plan process which allocated large areas of the South Humber Bank for employment and other commercial development, much of which would generate significant amounts of traffic, including HGVs. Engagement in the Local Plan process and/or consistent engagement across all relevant consent applications in the area are the routes through which Network Rail should have sought to ameliorate any issues it considered could arise in relation to level crossings. - The body of evidence of often poorly substantiated, ambiguous and contradictory positions held by Network Rail over the last few months (as summarised above and evident from the timeline set out in **Appendix 2)**. This has resulted in the Applicant incurring substantial time and costs, including in repeating requests for information. - The Applicant notes that Network Rail and its legal advisors have also made repeated requests to enter in to a FA and PPs, however as a result of the above noted delays and changing position, the Applicant considers it has been hindered from making substantive progress on these issues. The 'target' which the Applicant is being asked to respond to is constantly changing. The hindrance has been communicated clearly to Network Rail consistently over the intervening period (items 61, 70 and 74 of **Appendix 2**) which made clear that legal drafting work is premature. The Applicant is reviewing the most recent Kiln Lane information..
Network Rail is hopeful that an agreement can be reached with the Applicant but until such time, to safeguard Network Rail's interests and the safety and integrity of the operational railway, Network Rail objects to the Order.	The Applicant is engaging with Network Rail on these matters, and refers the Examining Authority to the draft Statement of Common Ground between the parties that was submitted at Deadline 1 (Document Ref. 7.7). This includes the outstanding areas for discussion between the two parties.

Network Rail requests that the Examining Authority treat Network Rail as an Interested Party for the purposes of the Examination, and reserves the right to produce additional and further grounds of concern when further details of the Scheme and its effects on Network Rail's land are available.	In view of the history of assessment, correspondence, practical assistance and consultation opportunities discussed above and shown in **Appendix 2**, and the quality of information provided in the consultation documentation and the Application Documents, the Applicant does not believe that any "further details of the Scheme" are required. necessary.

11.0 RESPONSE TO ANGLIAN WATER SERVICES LTD RR

11.1.1 The RR provided by Anglian Water Services Ltd is as follows:

"Thank for you the opportunity to comment on the South Humber Bank Energy Centre project. Anglian Water is considered to be a statutory consultee for nationally significant infrastructure projects as identified in the Planning Act 2008 and associated regulations. The following representations are submitted on behalf of Anglian Water as water and sewerage undertaker for the above site: Anglian Water is in principle supportive of the above project. Impact on existing assets: There are existing water mains located within the boundary of the above project as shown on statutory asset plans. Currently we are not aware of a need for any requirement for diversion(s) or mitigation to protect existing infrastructure to enable the proposed development. Draft DCO wording: Anglian Water is of the view that article 15 as drafted does not appear to be consistent. Paragraph (3) makes it clear that consent of the owner of the sewerage network is required to discharge water into it (subject to reasonableness); but paragraph (2) states that disputes must be determined in accordance with Section 106 of the Water Industry Act. However consent is not required as part of the Section 106 process nor can the capacity of the received network which is considered to be a planning issue be taken into account. We would therefore suggest at that article 20(2) (Discharge of Water) of the Draft DCO be replaced with the following wording: "(2) Any dispute arising from the making of connections to or the use of a public sewer or drain by the undertaker under paragraph (1) is to be determined in accordance with the arbitration provisions in article 29 (arbitration)" More generally we would query why it is considered necessary to include wording referring to deemed consent to discharge of water to the public sewerage network within a 8 week timescale as proposed. The submitted Outline Drainage Strategy does not refer to a need to make any connections to the public sewerage network as a package treatment plant and a surface water attenuation are to be utilised. Therefore we also ask that reference to deemed consent from Anglian Water is removed from the Draft DCO. Protective provisions for Anglian Water: We have previously requested the inclusion of specific wording for the benefit of Anglian Water. It is noted that specific protective provisions have been included in the current version of the DCO (Schedule 8, Part 1 of the Draft DCO). However these differ somewhat from those proposed by Anglian Water. The majority of the changes which have been made are of a minor nature. However we consider the final provision as proposed it is not valid. It is unlikely to have any effect for two reasons. First, protective provisions cannot impose a substantive obligation – they are intended to be limitations and conditions on the exercise of Order powers by the undertaker. Secondly, failure to mitigate is a grounds for reducing statutory compensation in any event. As such we don't consider it necessary to include the above provision as proposed. Therefore we would ask that the above wording is removed from the wording of Draft DCO or the wording is amended to address the issue set out above, An example of which would that the costs that are recoverable by the protected undertaker could be expressed to be recoverable from the undertaker only to the extent that they do not exceed the amount to which they can reasonably have been mitigated. We are currently in dialogue with the

applicant relating to the wording of the Draft DCO including the protective provisions for Anglian Water but have have yet to reach agreement. Therefore we would wish to make a holding objection to Draft DCO wording for the reasons set out above. We anticipate having further discussions with the applicant relating to the Draft DCO wording. As such this response will be updated to take account of the outcome of the on-going discussions with the applicant. Connections to public sewerage networks: We note that an on-site package treatment plant to be located within the main development site is currently the preferred option for the discharge of foul flows from the proposed development (Appendix 14B Outline Drainage Strategy) with details to be developed and agreed post consent. Similarly it is proposed to develop an attenuation pond to manage surface water which is expected to be discharged into an existing North East Lindsey Internal Drainage Board (IDB) land drainage ditch. As such the foul and surface water drainage strategy for the proposed development does not appear to interact with Anglian Water's operated assets. Therefore we would expect the Environment Agency, North Lincolnshire Council and the North East Lindsey IDB to comment on the suitability of proposed method of foul and surface water drainage. In the event that the method of foul and surface water were to require a connection to the public sewerage network following approval we would wish to be consulted to ensure that any revised strategy is sustainable and that there is no detriment to our customers. Should you have any queries relating to this response please let me know."

11.1.2 The Applicant notes the comments made by Anglian Water ('AW') in its RR and refers the ExA to the SoCG between the parties that has also been submitted for Deadline 1 (Document Ref. 7.8).

11.1.3 The SoCG covers the agreement that has been reached in respect of the potential for impacts upon AW's assets, as well as the drafting of the Protective Provisions and the draft Order. It is agreed between the parties that no amendments are required to the articles in the draft Order, however Requirements 13 (Surface Water Drainage) and 14 (Foul Water Drainage) are to be amended to include AW as a consultee and a new paragraph in the protective provisions will be added in the next iteration of the draft DCO.

11.1.4 There are no matters of disagreement between the parties – all matters raised in AW's RR have been resolved.

12.0 RESPONSE TO NATURAL ENGLAND RR

12.1.1 The wording of each section of Natural England's RR and the Applicant's response is provided within the table below..

12.1.2 The Applicant has engaged, and continues to engage, with Natural England on matters, and refers the ExA to the memos submitted to Natural England in **Appendix 8** and the draft SoCG between the parties submitted at Deadline 1 (Document Ref. 7.4). The SoCG provides the most up to date position on the extent of agreement to date and the small number of matters yet to be agreed between the two parties.

12.1.3 Whilst the Applicant's response to Natural England's RR is set out in the following table, the history of agreement with Natural England on the matters that are recorded in the draft SoCG as 'yet to be agreed' is summarised below for the ExA's benefit:

- as set out in the Environmental Statement (Document Refs. 6.1-6.4 / APP-033-APP-139), the Proposed Development would have the same fuel throughput, emissions to air, construction/ piling methods and associated mitigation as the Consented Development; the differences between the two are limited to the Additional Works (larger ACC, greater installed cooling capacity for generator, increased transformer capacity) which will enable a greater electrical generation capacity (up to 95 MW compared to 49.9 MW);
- the Consented Development planning application and the associated Environmental Permit Variation application were submitted in December 2018; Natural England was consulted by both NELC and the Environment Agency, and no issues were raised by Natural England at that stage;
- the Consented Development planning permission was subsequently granted in April 2019, including planning condition 11 which secures the agreed piling noise mitigation for waterbirds. The same piling noise mitigation is secured by draft DCO Requirement 17;
- work began on the EIA and Habitats Regulations Assessment (HRA) Signposting for the Proposed Development in Summer 2019; as noted above the Consented Development and the Proposed Development have the same fuel throughput, emissions to air, construction/ piling methods and associated mitigation and do not change the environmental effects on any ecological receptors;
- the cumulative assessment prepared for the Consented Development was updated for the Proposed Development EIA and HRA to account for other developments that had entered the planning system since the Consented Development application was prepared, including the Velocys Sustainable Transport Fuels Facility (Ref DM/0664/19/FUL) on a site immediately to the west of South Humber Bank Power Station;
- on the 11th of February 2020 a meeting was held between the Applicant and Natural England to discuss the findings of the revised cumulative air quality assessment and agree the conclusions of the Proposed Development EIA and HRA Signposting. It was also agreed that the

Applicant would advise Velocys of the refinement needed to their environmental assessment. Velocys subsequently updated their assessment accordingly, such that Natural England lifted the objection to the Velocys planning application. The Velocys cumulative environmental assessment included the Consented Development (which as noted above has the same effects on ecological receptors as the Proposed Development);

- Natural England responded to the Environment Agency on 25th February 2020 to confirm Natural England had no concerns and agreed with the conclusions of the HRA in relation to the Consented Development Environmental Permit Variation; the Environment Agency subsequently issued the Environmental Permit Variation in March 2020;
- the Proposed Development DCO application was submitted in April 2020 which included an ecological impact assessment at Chapter 10 of the ES (Document Ref. 6.2 / APP-044) and a HRA Signposting Report (Document Ref. 5.8/ APP-027).
- the Proposed Development Permit Variation application was submitted in September 2020 and is still with the Environment Agency for consideration;
- the Applicant issued technical memos responding to the points of clarification requested in Natural England's RR in October 2020 together with a draft SoCG for review and comment;
- further clarification and discussion between the Applicant and Natural England has continued in November and December 2020 and both parties hope to reach agreement on the small number of outstanding matters soon, as noted in the draft SoCG.

Text from Relevant Representation	Applicant's Response
PART I: Summary of Natural England's advice *Further information required to assess the potential for the project to impact on SAC habitats as well as the passage/ wintering bird assemblage of the Humber Estuary SPA and Ramsar site.* *PART II: Natural England's detailed advice* *1.1 Natural England's advice in these relevant representations is based on information submitted by DWD LLP acting on behalf of EP Waste Management Ltd in support of its application for a Development Consent Order ('DCO') in relation to South Humber Bank Energy Centre Project -proposed application for an energy from waste power station and associated development ('the project').* *1.2. Natural England has been working with Aecom (on behalf of EP UK Investments Limited) to provide advice and guidance since 27 June 2018, for both this application and the planning permission application (DM/1070/18/FUL) for the construction of an energy from waste facility of up to 49.9MWe gross capacity and associated development at the same site. We raised a number of issues that have been recorded in various sections within the Environmental Statement, including 5.1 Consultation Report (dated April 2020).*	All noted – response where required included in section below.

1.3. These relevant representations contain a summary of what Natural England considers the main nature conservation and related issues[4] to be in relation to the DCO application and indicate the principal submissions that it wishes to make at this point. Natural England will develop these points further as appropriate during the examination process. It may have further or additional points to make, particularly if further information about the project becomes available. *1.4. Part I of these representations provides an overview of the issues and a summary of Natural England's advice. Section 2 identifies the natural features relevant to this application.* *1.5. Part II of these representations sets out all the significant issues which remain outstanding, and which Natural England advises should be addressed by EP Waste Management Limited and the Examining Authority as part of the examination process in order to ensure that the project can properly be consented. These are primarily issues on which further information would be required in order to allow the Examining Authority properly to undertake its task or where further work is required to determine the effects of the project and to flesh out mitigation proposals to provide a sufficient degree of confidence as to their efficacy.* *1.6. Natural England will continue discussions with EP Waste Management Limited to seek to resolve these concerns and agree outstanding matters in a statement of common ground. Failing satisfactory agreement, Natural England advises that the matters set out in sections 4 to 6 will require consideration by the Examining Authority as part of the examination process.*	

[4] PINS NSIP Advice Note 11 Annex C sets out Natural England's role in infrastructure planning. https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/10/PINS-Advice-Note-11_AnnexC_20150928.pdf

1.7. The Examining Authority may wish to ensure that the matters set out in these relevant representations are addressed as part of the Examining Authority's first set of questions to ensure the provision of information early in the examination process.	
Part I: OVERVIEW OF THE NATURAL FEATURES AND THE MAIN ISSUES RELEVANT TO THIS APPLICATION ***2. The natural features potentially affected by this application*** *2.1. The designated sites relevant to this application are:* *2.1.1. Humber Estuary Special Protection Area (SPA)* *2.1.2. Humber Estuary Special Area of Conservation (SAC)* *2.1.3. Humber Estuary Ramsar site* *2.1.4. Humber Estuary Site of Special Scientific Interest (SSSI)* *2.2. The following European protected species may be affected by the proposed project:* *2.2.1. Otter* *2.3. The following nationally protected species may be affected by the proposed project:* *2.3.1. Water vole* *2.4. The following areas of non-designated but valuable and sensitive habitat could be affected:* *2.4.1. Healing Cress Beds Stallingborough Local Wildlife Site (LWS)* *2.4.2. Sweedale Croft Drain LWS* *2.4.3. Laporte Road Brownfield Site LWS* *2.4.4. Fish Ponds to the West of Power Station, Stallingborough LWS*	All noted – response where required included in section below.

2.5. The main issues raised by this application are that further information is required to assess the following impact pathways: *2.5.1. Air quality impacts during operation in-combination with other plans and projects on Humber Estuary SAC habitat* *2.5.2. Air quality impacts during operation on Local Wildlife Sites* *2.5.3. Noise disturbance to SPA/Ramsar birds using Humber Estuary foreshore during construction* *2.5.4. Noise and vibratory disturbance to SPA/Ramsar birds using neighbouring functionally linked land (fields to north and south) during construction and operation*	
Part II: NATURAL ENGLAND'S RELEVANT REPRESENTATIONS IN RESPECT OF SOUTH HUMBER BANK ENERGY CENTRE PROJECT ***3. Planning Inspectorate Reference: EN010107*** *3.1. Natural England's advice is that in relation to identified nature conservation issues within its remit there is no fundamental reason of principle why the project should not be permitted but that the applicant has provided insufficient evidence to establish that there will be no adverse impacts on the Humber Estuary European sites in question.*	All noted – response where required included in section below.
3.2. Natural England's headline points are that on the basis of the information submitted: *3.2.1. Natural England is satisfied that there are not likely to be significant water quality impacts from surface water drainage during construction and operation on the Humber Estuary SSSI, SAC, SPA or Ramsar site as a result of the project.*	The Applicant notes the comments made by Natural England within its RR. The Applicant provided clarifications in writing to Natural England in respect of the specific questions raised on air quality and noise effects as set out in Section 4 of the RR (see copy in **Appendix 8**). Following review of the

	We note that the potential impacts from surface water to water quality and drainage into the Humber Estuary have been discussed within the Habitats Regulations Assessment (HRA) Signposting Report (dated April 2020). Natural England welcomes the commitment to maintain the greenfield run off rates through the installation of a surface water attenuation pond and concurs that standard pollution prevention best practice measures should be implemented. These should be secured through the Construction Environmental Management Plan (CEMP). *3.2.2. Natural England is satisfied that there are not likely to be significant water quality impacts from foul water drainage during construction and operation on the Humber Estuary SSSI, SAC, SPA, or Ramsar site as a result of the project.* *The Outline Drainage Strategy (dated April 2020) states that the means of foul drainage disposal has not yet been decided, but that a package treatment plant is preferred. We note that the HRA Signposting Report assesses the package treatment plant option and concludes that "the volume of processed discharge is anticipated to be below the threshold for which a[n environmental] permit is required; and as such is not considered to represent a [likely] significant effect". Based on the information provided, Natural England concurs that a likely significant effect on the Humber Estuary European sites due to foul water drainage can be ruled out. However, we highlight that if an alternative method of foul water drainage is chosen, then this should be appropriately assessed within the HRA.* *3.2.3. Natural England is satisfied that there are not likely to be adverse air quality impacts from the project alone on the Humber Estuary SAC or Ramsar site as a result of the project. The in-combination impacts are discussed below.* *Natural England notes that the detailed air quality assessment has been updated since the previous consultation and includes all relevant plans and projects. Alongside the HRA Signposting Report, the assessment concludes that likely*	information provided by the Applicant further clarification has been sought by Natural England in late November. The Applicant refers the ExA to the draft SoCG between the parties submitted at Deadline 1 (Document Ref. 7.4). The SoCG covers the agreement that has been reached in respect of the adequacy of the ES, the Habitats Regulations Assessment and effects on international and nationally designated sites, effects on non-statutory nature conservation designations, surveys and effects on protected species and their habitats, contributions to the South Humber Gateway Strategic Mitigation site, management of impacts through the use of a Construction Environmental Management Plan (CEMP), biodiversity protection, mitigation and enhancement and landscape.

significant effects alone cannot be ruled out. This is because the assessment demonstrates that critical levels/loads for NOx (both 24 hour and annual mean), NH3 (annual mean) and nutrient Nitrogen deposition rates (annual mean) are exceeded at three locations of Atlantic salt meadow habitat in the Humber Estuary. On the basis of the information provided, Natural England concurs with this view and considers that an appropriate assessment will be required as part of the HRA Process. We note that the HRA Signposting Report states that "it is concluded that air quality impacts will not result in an adverse effect [alone] on the integrity of the Humber Estuary SPA/ Ramsar." Natural England concurs with this conclusion, although notes that this should refer to the SAC. *3.2.4. Natural England is satisfied that there are not likely to be adverse air quality impacts from proposed sulphur dioxide or ammonia concentrations or nutrient Nitrogen deposition rates in-combination with relevant plans/projects on the Humber Estuary SAC or Ramsar site as a result of the project.* *3.2.5. Natural England is satisfied that there are not likely to be adverse impacts due to direct loss of functionally linked land from the project on the Humber Estuary SPA or Ramsar site as a result of the project.* *Natural England has been working with North East Lincolnshire Council and other estuary stakeholders for many years to deliver a strategic approach to mitigation within the South Humber Gateway (for impacts associated with the loss of land functionally linked to the Humber Estuary SPA/Ramsar site). Natural England believes this is the most effective way to mitigate for impacts on functionally linked land. The South Humber Gateway forms a key policy in the local plan (see policy 9 https://www.nelincs.gov.uk/wpcontent/uploads/2018/05/20180518-AdoptedLocalPlan2018-WEB.pdf).* *This development proposal falls within the South Humber Gateway mitigation zone. Natural England welcomed that the applicant had committed to a financial*	

contribution towards the South Humber Gateway strategic mitigation land in accordance with NELC Local Plan Policy 9. This was secured through the Consented Development Section 106 Agreement between the Applicant and NELC. It was agreed that this approach was acceptable to mitigate for the loss of waterbird supporting habitat within the Site. *Natural England welcomes that the applicant has committed to a financial contribution towards the South Humber Gateway strategic mitigation land in accordance with NELC Local Plan Policy 9. This will be secured by a deed of variation to the Consented Development Section 106 Agreement between the Applicant and NELC. It is agreed that this approach is acceptable to mitigate for the loss of waterbird habitat within the Site.* *3.2.6. Natural England is satisfied that there are not likely to be adverse impacts due to visual disturbance to SPA/Ramsar birds using neighbouring functionally linked land during construction and operation from the project on the Humber Estuary SPA or Ramsar site as a result of the project.* *Natural England welcomes the proposed measure to mitigate visual disturbance from vehicle and personnel movements by installing a 2.5m high close-boarded fence along part of the southern boundary of the site during the establishment of the construction site and for it to be retained during the operational lifespan of the proposed development. Natural England recommends that some small holes are included to retain wildlife corridors.* *3.2.7. Natural England is satisfied that there are not likely to be significant impacts due to lighting to SPA/Ramsar birds using neighbouring functionally linked land during construction and operation from the project on the Humber Estuary SPA or Ramsar site as a result of the project.*	

Natural England welcomes that temporary construction lighting will be arranged so that glare is minimised outside the construction site. These measures should be secured in the CEMP. Natural England welcomes that operational lighting impacts will be minimised as far as possible. These measures should be secured through a detailed lighting strategy. *3.2.8. Natural England is satisfied that there are not likely to be impacts on European Protected Species as a result of the project, due to proposed measures put in place.* *Natural England welcomes the proposal that a minimum 5m undeveloped buffer zone along the banks of all perimeter ditches will be provided, as well as the other precautionary measures as outlined in the Biodiversity Protection Plan (dated April 2020).* *3.2.9. Natural England is not satisfied that it can be excluded beyond reasonable scientific doubt that the project would not have an adverse effect on the integrity of the Humber Estuary SPA or Ramsar site.* *3.2.10. Natural England is not satisfied that the proposal is not likely to damage features of interest of the Humber Estuary SSSI.* *Many of the species included in the Humber Estuary SPA/Ramsar waterbird assemblage are also part of the the Humber Estuary SSSI citation, and so the above impacts also have the potential to impact upon the notified features of the Humber Estuary SSSI.* *3.2.11. Natural England advises that, if approved, the project must be subject to all necessary and appropriate requirements, which ensure that unacceptable environmental impacts either do not occur or are sufficiently mitigated.*	

3.3. Natural England's advice is that there are a number of matters which have not been resolved satisfactorily as part of the pre-application process that must be addressed by EP Waste Management Limited and the Examining Authority as part of the examination and consenting process before development consent can be granted. Some of these matters are important enough to mean that, if they are not satisfactorily addressed, it would not be lawful to permit the project due to its impacts on the SAC, SPA, Ramsar and SSSI interests. However, Natural England's advice is that all these matters are capable of being overcome. The specific concerns in relation to each are outlined below.	The Applicant notes the comments made by Natural England within its RR and provided clarifications in writing to Natural England in respect of the specific questions raised on air quality and noise effects as set out in Section 4 of the RR below in October 2020. Following review of the information provided by the Applicant further clarification has been sought by NE in November 2020. The Applicant refers the ExA to the draft SoCG between the parties that was submitted at Deadline 1 (Document Ref. 7.4). The specific matters that are not yet resolved are: • assessment of cumulative (in-combination) NO_x and acid deposition effects on Humber Estuary SAC/ SPA/ Ramsar site/ SSSI; and • proposed mitigation for piling noise effects on waterbirds using Pyewipe mudflats and functionally linked fields to the north and south of the Site. Natural England and the Applicant are both committed to taking forward discussions on the matters above as

	necessary, so whilst they are not yet agreed both parties hope to conclude discussions in the near future.
3.3.1. Impacts on air quality during operation in-combination with other plans and projects – The air quality assessment reports that annual mean NOx environmental thresholds are exceeded in-combination with other plans/projects for a nearby saltmarsh habitat receptor. Therefore, likely significant effects in-combination cannot be ruled out and further justification that the proposed development in-combination will not result in adverse effects on the European sites should be provided within an appropriate assessment. We note that the HRA Signposting Report concludes that there will be no adverse effects on the European sites in question in-combination with other plans and projects, however, we are of the opinion that further justification is required to demonstrate this. We note that the background NOx concentrations already exceed the critical levels and regular inundation and nutrient inputs from estuary water are likely to have a greater influence over the establishment and changes to saltmarsh habitat.	The Applicant refers the ExA to Section 2.2.1 of the Applicant's response to Natural England's RR comments regarding air quality, included in **Appendix 8**. As noted in the draft SoCG submitted at Deadline 1 (Document Ref. 7.4), discussions regarding this matter are ongoing between the Applicant and Natural England and both parties hope to conclude discussions in the near future.
3.3.2. Natural England notes that acid deposition rate environmental thresholds are exceeded in-combination with other plans/projects for acid fixed dune habitat receptors. Therefore, likely significant effects in-combination cannot be ruled out and further justification that the proposed development in-combination will not result in adverse effects on the European sites should be provided within an appropriate assessment. We note that at D3.11 of Appendix 7A it states that "the cumulative effect of acid deposition on the Dune habitat has been considered in detail in the report to inform the HRA Signposting (see Document Ref. 5.8)." However, this does not appear to have been discussed in the report. Therefore we require further information to demonstrate why there will be no adverse effects on the integrity of the European sites in question.	The Applicant refers the ExA to Section 2.2.2 of the Applicant's response to Natural England's RR comments regarding air quality, included in **Appendix 8**. As noted in the draft SoCG submitted at Deadline 1 (Document Ref. 7.4), discussions regarding this matter are ongoing between the Applicant and Natural England and both parties hope to conclude discussions in the near future.

3.3.3. Natural England notes that the air quality assessment suggests that there will be exceedances of environmental thresholds of annual mean NOx at Laporte Road Local Wildlife Site (LWS) in-combination with other plans/projects. Stallingborough Fish Ponds, Healing Cress Beds and Sweedale Croft Drain LWSs all exceed the environmental thresholds both alone and in-combination with other plans/projects for proposed nitrogen deposition rates. Natural England does not hold any detailed information on these sites and they fall out with the Habitats Regulations process, however, we recommend that these impacts are considered further by the relevant authority.	The Applicant refers the ExA to Section 2.2.3 of the Applicant's response to Natural England's RR comments regarding air quality, included in **Appendix 8**. As noted in the RR and in the draft SoCG submitted at Deadline 1 (Document Ref. 7.4), Natural England defers to NELC regarding impacts on Local Wildlife Sites.
3.3.4. Noise disturbance to SPA/Ramsar birds using Humber Estuary foreshore during construction and operation – The proposed development is approximately 175m from the boundary of the Humber Estuary SPA/ Ramsar. This area of the foreshore is known as "Pyewipe mudflats" and it is an extensive area of mudflats that supports large aggregations of birds. In particular, this area is known to be one of the most important areas within the Humber Estuary for black-tailed godwit, and therefore careful consideration of disturbance impacts is required. Natural England concurs that visual disturbance impacts are unlikely to be significant due to the presence of the sea wall and vibratory impacts are unlikely to be significant due to other existing sources of vibration, for example, waves and marine traffic.	The Applicant notes and agrees with Natural England's comments regarding visual and vibration impacts on waterbirds using Pyewipe mudflats.
3.3.5. The noise assessment demonstrates that there will be a potential increase of up to 4 dB from the proposed drop hammer piling activity, compared with the ambient noise levels. However, the peak noise could potentially be even greater than the ambient noise levels. We note that the applicant has used a significance criteria for disturbance to birds based on bird behaviour and noise monitoring studies undertaken by Xodus Group during construction piling for the Grimsby River Terminal. This assessment classifies the peak noise levels of 75dB LAmax as having a minor adverse impact and concludes no likely significant effect. However, Natural England is of the opinion that this increase in noise levels could be significantly different to disturb bird species using the	The Applicant refers the ExA to Sections 2.1, 2.2.1 and 2.2.2 of the Applicant's response to Natural England's RR comments regarding noise, included in **Appendix 8**. As noted in the draft SoCG submitted at Deadline 1 (Document Ref. 7.4), discussions regarding this matter are ongoing between the Applicant and

Pyewipe mudflats. We require further information to demonstrate that a likely significant effect can be ruled out. At 7.2.8 of the HRA Signposting Report it states that "the elevated noise levels would only reach the portion of Pyewipe mudflats closest to the main development area". However, there is no evidence to illustrate how big an area this might be, therefore, we recommend that a noise contour map is provided. The paragraph goes on to state that "this may result in some localised disturbance, which would likely cause displacement of waterbirds within the mudflat area, rather than causing them to leave the mudflats altogether". However, it is not clear how this assessment has been made. It is stated that the piling works will take place over a relatively short period of time (described as "weeks rather than months"), however, passage species, particularly black-tailed godwit, are only present in these areas for very limited periods of time before moving to their wintering/ breeding grounds. Therefore disturbance impacts on foraging efficiency and energy expenditure could still have a significant impact on these species. At 10.6.15 of the Environmental Statement Volume I Chapter 10 Ecology, the use Continued Flight Auger (CFA) piling has been considered. Natural England is of the opinion that if this piling technique is used, it can be concluded that likely significant impacts can be ruled out for bird species using the foreshore.	Natural England and both parties hope to conclude discussions in the near future.
3.3.6. Noise and vibratory disturbance to SPA/Ramsar birds using neighbouring functionally linked land (fields to south) during construction and operation – Natural England concurs with the conclusion that likely significant effects from noise and vibratory disturbance cannot be ruled out. We consider that the proposed mitigation to use CFA piling rather than drop hammer piling could adequately mitigate for these impacts, however, it is not clear if the figures provided at 10.6.23 of the Environmental Statement Volume I Chapter 10 Ecology are for the location of the noise receptor (LT3) or at a central location within the field. We recommend that a noise contour map is provided to illustrate this conclusion. Seasonal piling restrictions could also adequately mitigate for these impacts, however, we advise that further evidence is provided to demonstrate there would be adequate alternative undisturbed habitat available, as the	The Applicant refers the ExA to Sections 2.1 and 2.2.3 of the Applicant's response to Natural England's RR comments on noise, included in **Appendix 8**. As noted in the draft SoCG submitted at Deadline 1 (Document Ref. 7.4), Natural England now agrees that operational noise effects will not be significant and discussions regarding construction noise impacts on waterbirds are ongoing between the

noise assessment indicates that there could also be increased noise levels on the nearby mudflats too.	Applicant and Natural England but both parties hope to conclude discussions in the near future.
3.3.7. During operation, it is predicted that there will be some increase in noise levels above the ambient level. Natural England notes that Figure 8.2 represents how the predicted noise levels will attenuate from the proposed development, from the 62dB LAeq at the edge of the fields to the 50 dB LAeq in the centre of the fields. However, Natural England considers that further information is still required to demonstrate that there will be an adequate area of the field that will remain undisturbed and justification that this can still provide functional supporting habitat for SPA/ Ramsar species.	The Applicant refers the ExA to Section 2.2.5 of the Applicant's response to Natural England's RR comments on noise, included in **Appendix 8**. As noted in the draft SoCG submitted at Deadline 1 (Document Ref. 7.4), Natural England now agrees that operational noise effects will not be significant.
3.3.8. Noise and vibratory disturbance to SPA/Ramsar birds using neighbouring functionally linked land (fields to north) during construction and operation – The noise assessment concludes that there will be a slightly higher predicted noise level in the centre of the fields compared with the ambient noise level. Using the same Xodus Group significance criteria as above, it is concluded that the predicted peak noise levels of 72dB LAmax will have a minor adverse impact and likely significant effects can be ruled out. However, Natural England is of the opinion that this increase in noise levels could be significantly different to disturb bird species using these fields. Natural England requires that a noise contour map is provided to illustrate this conclusion.	The Applicant refers the ExA to Sections 2.1, 2.2.4 and 2.2.5 of the Applicant's response to Natural England's RR comments on noise, included in **Appendix 8**. As noted in the draft SoCG submitted at Deadline 1 (Document Ref. 7.4), Natural England now agrees that operational noise effects will not be significant and discussions regarding construction noise impacts on waterbirds are ongoing between the Applicant and Natural England but both

	parties hope to conclude discussions in the near future.
3.3.9. During operation, it is predicted that there will be some increase in noise levels above the ambient level. Natural England notes that Figure 8.2 demonstrates how the predicted noise levels will attenuate from the proposed development from the 68dB LAeq at the edge of the fields to the 46-48dB(A) in the centre of the fields. However, Natural England considers that further information is still required to demonstrate that there will be an adequate area of the field that will remain undisturbed and justification that this can still provide functional supporting habitat for SPA/ Ramsar species.	The Applicant refers the ExA to Section 2.2.5 of the Applicant's response to Natural England's RR comments on noise, included in **Appendix 8**. As noted in the draft SoCG submitted at Deadline 1 (Document Ref. 7.4), Natural England now agrees that operational noise effects will not be significant.
3.4. Natural England has previously welcomed the creation of a Biodiversity Mitigation and Enhancement Plan and noted that this included mitigation for impacts on water vole, grass snake, breeding birds, and loss of species-rich grassland and ponds. However, we considered that the applicant could have explored additional options to enhance biodiversity as part of the project. These measures described previously were welcomed by Natural England, however we did not believe that given the nature and scale of the development that these enhancements measures were adequate, in terms of creating a net biodiversity gain. We note that the applicant has now provided further enhancement measures including planting a species-rich hedgerow, enhancing ditch habitats within the site for the benefit of water vole and widening and reprofiling a section of ditch to allow a range of aquatic plant species to establish. Natural England welcomes these additional measures and the commitment to the management and maintenance schedule. These measures should be secured through a Biodiversity Mitigation and Enhancement Plan	The Applicant notes the comments made by Natural England and refers the ExA to the Indicative Biodiversity Mitigation and Enhancement Plan provided at Section 8 of the Biodiversity Strategy (Document Ref. 5.11). The submission of a final Biodiversity Mitigation and Enhancement Plan is secured by Requirement 12 of the draft DCO (Document Ref. 2.1).

PART II: OUTSTANDING MATTERS REQUIRING ATTENTION ***4. Further evidence or assessment work required*** *4.1. Further explanation within the appropriate assessment to demonstrate that there will be no adverse impacts on the integrity of the European sites in question despite exceedences in the environmental thresholds for annual mean NOx and advide deposition rates in combination with other plans/projects.* *4.2. We request that noise contour maps are provided (showing dB LAeq and dB LAmax) to illustrate how the proposed piling noise levels (for both impact piling and CFA piling) and operational noise levels will attenuate across the Humber estuary foreshore and associated functionally linked land.* *4.3. Evidence of undisturbed habitat availability should be provided to support the argument that there is plenty of alternative foraging/roosting areas, if birds are displaced through noise and vibration impacts.*	As noted above the Applicant has responded to the requests for clarification in Natural England's RR. The Applicant notes the comments made by Natural England within its RR. A copy of the information provided to Natural England is included in **Appendix 8**. This includes: • further explanation to demonstrate there will be no adverse effects on the integrity of the European sites with regards to NOx and acid deposition; • noise contour maps; and • evidence of undisturbed habitat availability. As noted in the draft SoCG submitted at Deadline 1 (Document Ref. 7.4), discussions regarding this matter are ongoing between the Applicant and Natural England and both parties hope to conclude discussions in the near future.
5. Matters that must be secured by requirements in the DCO *5.1. Natural England considers that the submission and approval of the construction and operational lighting schemes, biodiversity protection plan, biodiversity mitigation and enhancement plan, CEMP and detailed piling specification must all be secured by requirements in the DCO to ensure that the project does not have detrimental impacts on the nearby designated sites.*	The Applicant notes the comments made by Natural England and refers the ExA to draft DCO Requirements 9 (Lighting scheme), 11 (Biodiversity protection), 12 (Biodiversity mitigation and enhancement), 15 (Construction environmental management plan) and

	17 (Piling) which secure these measures.
6. Comments on the draft DCO *6.1. Natural England notes that Requirement 9 involves the approval of lighting schemes both during construction and operation and considers that this is a necessary requirement.* *6.2. Natural England notes that Requirements 11 (Biodiversity Protection) and 12 (Biodiversity mitigation and enhancement) stipulate the submission and implementation of these respective plans and considers that these are necessary requirements.* *6.3. Natural England notes that Requirement 15 requires the submission and approval of a CEMP and considers that this is a necessary requirement.* *6.4. Natural England notes that Requirement 17 requires the submission and approval of a piling methodology specification and considers that this is a necessary requirement. Furthermore, the impacts from vibration may also require mitigation and therefore it may be appropriate to mention this within the requirement.*	The Applicant notes the comments made by Natural England and refers the ExA to the requirements in Schedule 2 of the draft DCO (Document Ref. 2.1). Requirement 17 (Piling) is consistent with the equivalent planning condition for the Consented Development (planning condition 11). The Applicant notes this does not specifically refer to mitigation of piling vibration impacts on waterbirds (only piling noise impacts) because piling vibration impacts would be mitigated in the same way as piling noise impacts.

13.0 RESPONSE TO ROYAL MAIL GROUP LIMITED RR

13.1.1 The RR provided by Royal Mail Group Limited is as follows:

"Under section 35 of the Postal Services Act 2011 (the "Act"), Royal Mail has been designated by Ofcom as a provider of the Universal Postal Service. Royal Mail is the only such provider in the United Kingdom. The Act provides that Ofcom's primary regulatory duty is to secure the provision of the Universal Postal Service. Ofcom discharges this duty by imposing regulatory conditions on Royal Mail, requiring it to provide the Universal Postal Service. The Act includes a set of minimum standards for Universal Service Providers, which Ofcom must secure. The conditions imposed by Ofcom reflect those standards. Royal Mail is under some of the highest specification performance obligations for quality of service in Europe. Its performance of the Universal Service Provider obligations is in the public interest and should not be affected detrimentally by any statutorily authorised project. Royal Mail's postal sorting and delivery operations rely heavily on road communications. Royal Mail's ability to provide efficient mail collection, sorting and delivery to the public is sensitive to changes in the capacity of the highway network. Royal Mail is a major road user nationally. Disruption to the highway network and traffic delays can have direct consequences on Royal Mail's operations, its ability to meet the Universal Service Obligation and comply with the regulatory regime for postal services thereby presenting a significant risk to Royal Mail's business. There are three operational facilities within 9 miles, Grimsby VSC, Immingham DO, and Grimsby DO. Both the construction and operational traffic may present risk of impact / delays to Royal Mail's road based operations on the surrounding road network. Every day, in exercising its statutory duties Royal Mail vehicles use all the main roads that may potentially be affected by additional traffic arising from the construction of the proposed Portishead Branch Line. Any periods of road disruption / closure, night or day, have the potential to impact operations. Royal Mail does not wish to stop or delay South Humber Bank Energy Centre from coming forward for development. However, Royal Mail does wish to ensure the protection of its future ability to provide an efficient mail sorting and delivering service. In order to do this, Royal Mail requests that: 1. the DCO includes specific requirements that during the construction phase Royal Mail is consulted by EP Waste Management Limited or its contractors at least one month in advance on any proposed road closures / diversions / alternative access arrangements, hours of working, and the content of the final CTMP, and 2. the final CTMP includes a mechanism to inform major road users (including Royal Mail) about works affecting the local highways network (with particular regard to Royal Mail's distribution facilities in the vicinity of the DCO application boundary as listed above). Royal Mail reserves its position to object to the DCO application if the above requests are not adequately addressed. Contacts for Royal Mail: Denise Stephenson (denise.stephenson@royalmail.com) of Royal Mail's Legal Services Team Alice Stephens (alice.stephens@realestate.bnpparibas of BNP Paribas Real Estate."

13.1.2 The Applicant notes the RR provided by Royal Mail and has had discussions regarding provision of advance notification in the CTMP (secured by draft

DCO Requirement 16 (Document Ref. 2.1)). It can be seen that the SoCG (Document Ref. 7.9) submitted at Deadline 1 reflects this along with the revised Framework CTMP (Annex 28 of ES, Volume III, Appendix 9A, Document Ref. 6.4.12). A small amendment to the Draft DCO Requirement 16(3)(a) of Schedule 2, to insert 'Royal Mail' after 'local highways authority', will be submitted at a future deadline.

13.1.3 The draft SoCG submitted at Deadline 1 (Document Ref. 7.9) records that there are no matters of disagreement subject to the CTMP and DCO requirement wording changes above.

APPENDIX 1: TECHNICAL NOTE PROVIDED TO NETWORK RAIL

EP UK Investments

AECOM
2 City Walk
Leeds
LS11 9AR

T: +44 (113) 301 8400
aecom.com

Project name:
South Humber Bank Energy Centre DCO

Your Ref:
WB60393

To:
Network Rail

CC:
[redacted] EPUKI Ltd.

From:
AECOM on behalf of EP Waste Management Ltd

Date:
16 October 2020

Memo

Application by EP Waste Management Limited, Proposed Energy Centre Development at South Humber Bank Power Station – Technical Note in Response to Objection from Network Rail Received by Email on 21 September 2020

1.1 Introduction

1.1.1 On behalf of EP Waste Management Limited in relation to the above Application, AECOM acknowledges Network Rail's comments provided within their objection, received by DWD by email on 21 September 2020.

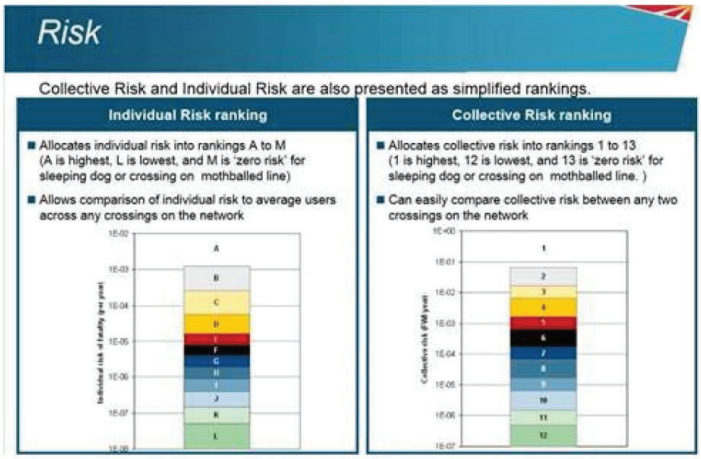
1.1.2 The purpose of this technical memo is to provide the clarification requested on the points raised by Network Rail in the objection, including summarising information previously set out in the Transport Assessment (Document Ref. 6.4.12) that accompanies the DCO application (and which also accompanied the Consented Development planning application, and formed part of the Preliminary Environmental Information Report).

1.2 Response to Points Raised

1.2.1 Network Rail's comments are set out in Table 1 below, which then sign posts where information is provided by the Applicant to address each point.

Table 1: Network Rail Objection and Information Provided by the Applicant

Network Rail comment	Information provided by Applicant in this Technical Note
"*Network Rail objects to the proposed routes from the road infrastructure to the proposed location of the South Humber Bank Energy Centre. This is on the grounds of significant increase to traffic, specifically Heavy Goods Vehicles, as noted in your document 'Annex 23_ES VOL III Appendix 9A - Traffic Volumes over Kiln Lane LC' and 'EN010107-000241-SHBEC DCO - 6.4.12 ES Vol III Appendix 9A Transport Assessment File 1 - Main Document (1)'*"	See Sections 1.3, 1.7 and 1.8 of this technical note for information on Proposed Development traffic and routing, and construction and operational traffic impacts.
"*Whilst we note that a baseline traffic survey has been completed, no references can be found to indicate that a study was also carried out on the 'South marsh Road (East of Hobson Way), Hobson Way (North & Southbound), laporte Road (North & Southbound) via Queens Road (East & Westbound) onward to Kings Road (East & Westbound) to join the A1173 and then the A180.' The aforementioned route is approximately 1.5 miles longer but utilises a road over rail bridge to cross the railway on Queens Bridge Road*."	See Sections 1.4 and 1.6 of this technical note for information on the Transport Assessment study area, traffic counts and alternative HGV routes.
"*As you may be aware, the interface between members of the public and rail traffic at level crossings, also referred to as 'at grade', presents the greatest risk of any rail operations. Therefore, it is Network Rail's goal to remove or minimise the risk of such interactions*."	See Section 1.5 of this technical note for consideration of level crossings in the vicinity of the Site.
"Having added the traffic movements from your projections to the baseline model scores for each level crossing, we can see that the ALCRM modelled risk posed at each stay at previous rail signalling light indicator *Marsh Lane - Double Yellow** *Current ALCRM Score* *RISK – J6 (Z10)* *ALCRM Score with added traffic to SHBEC* *RISK – I8 (Z10)* *and Kiln Lane – Yellow** *Current ALCRM Score* *RISK – I5 (Z13)* *ALCRM Score with added traffic to SHBEC* *RISK – H6 (Z13)* ** We use standard railway signalling aspect colours to denote the relative risk of a crossing. These are, from*	The Applicant has continued to request the narrative risk assessments from Network Rail, to enable consideration of the assertion that upgrading of the Marsh Lane and/ or Kiln Lane level crossings is required as a result of the Proposed Development. See Sections 1.7 and 1.8 of this technical note for information on Proposed Development construction and operational traffic

Network Rail comment	Information provided by Applicant in this Technical Note
preferred to least preferable – Green, Double Yellow, Yellow, Red"	impacts on South Marsh Road (west of Hobson Way) and Kiln Lane.
"*Please find as follows an aid in deciphering the ALCRM scores and what they mean*."  	As above, the Applicant awaits further information from Network Rail.
"*Having discussed this increase with my operational risk experts, the type of mitigation would have to be barrier protection, which goes to fail safe should a barrier be damaged by vehicle incursion."*	As above, the Applicant awaits further information from Network Rail.
"*I have been advised that the infrastructure for these is in the region of £290k per level crossing. This does not include required changes to signalling, communications, nor road infrastructure changes."*	As above, the Applicant awaits further information from Network Rail.
"Given the Marsh Lane has a 'substandard' width (<4m) with minimal passing places and bounded by third party land, I would feel this would push the costs for this route up significantly."	As above, the Applicant awaits further information from Network Rail. See paragraph 1.3.6, paragraphs 1.5.3 to 1.5.4 and Sections 1.7 to 1.8 for consideration of the suitability of South Marsh Road (west of Hobson Way) and Marsh Lane level crossing for Proposed Development traffic, and Proposed Development construction and operational traffic impacts on South Marsh

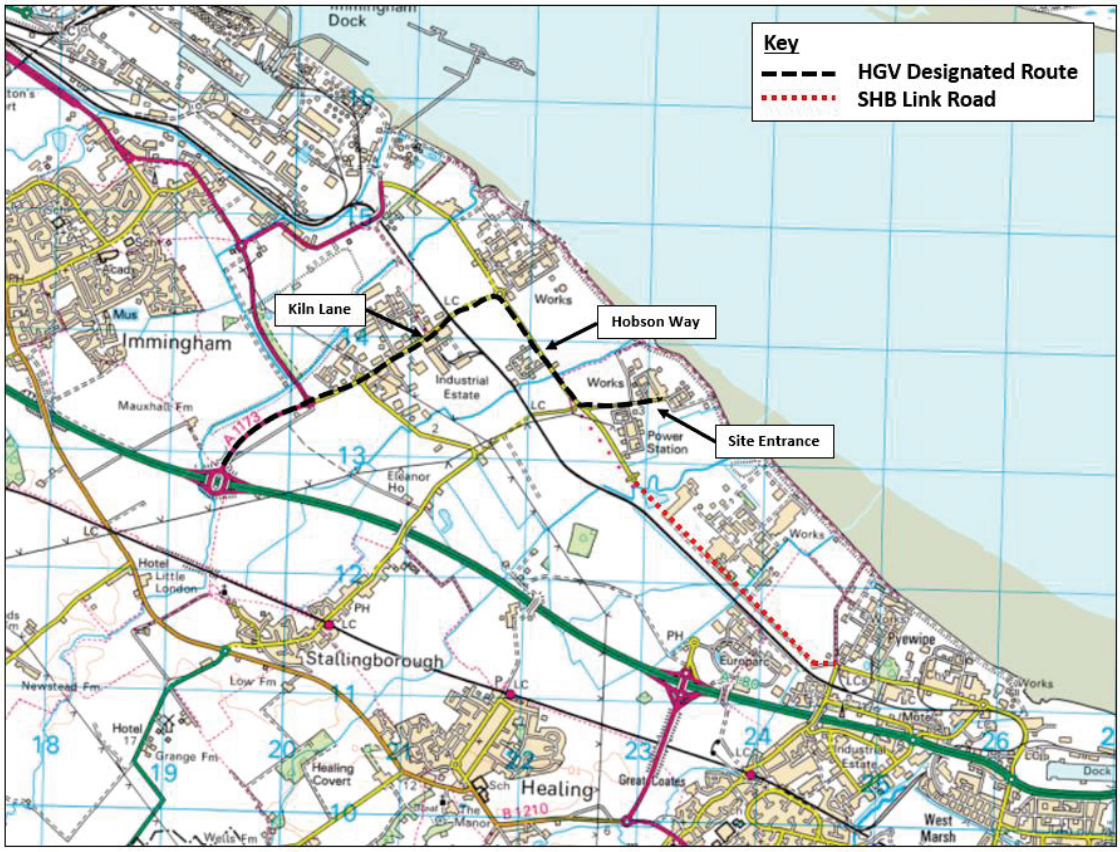
Network Rail comment	**Information provided by Applicant in this Technical Note**
	Road (west of Hobson Way).
"The Kiln Lane level crossing fairs a little better. The Western approach, whilst improved from the east, has its own difficulties. The route is via a large and busy industrial estate. From a brief desktop review, it appears that there are a high proportion of businesses that either service or would require deliveries by LGV/HGV. As you will imagine, this brings in a significant number of LGV/HGVs, and using this as your preferred route, will only exacerbate traffic volumes. Your traffic modelling also shows projected movements of 17 HGV's per hour in each direction, or one every 1¾ minutes. This significantly increases the chance of head on meets between vehicles and the potential for vehicles to 'back up' over the crossing.	As above, the Applicant awaits further information from Network Rail. See paragraph 1.3.6, paragraphs 1.5.5 to 1.5.6, and Sections 1.7 to 1.8 for consideration of the suitability of Kiln Lane and Kiln Lane level crossing for Proposed Development traffic, and Proposed Development construction and operational traffic impacts on Kiln Lane.
Your vehicle modelling states 'PCU' Passenger Car Units, however HGV are two to three times the length of PCUs, therefore I argue that your Max Queue output is skewed and does not accurately represent the scenario with HGVs."	See paragraphs 1.7.5 and 1.8.1 for explanation of how PCUs are used in the Transport Assessment.
"Given as noted in the first paragraph, please can you provide evidence that you have reviewed the route via the north and submit robust reasoning behind your evaluation and decision."	See Section 1.6 for information on alternative HGV routes.
"Lastly, I notice that your report identifies a southern access via the A180, Westgate roundabout and Moody Lane, where no mitigation is proposed due to the 'small percentage that development flows are adding to the junction'. I would like to understand further why this could not be a preferred route. It appears to provide a suitable route that needs no upgrade to proposed figures, whilst not requiring the use of a level crossing and more of the access via A Class roads."	See Section 1.6 for information on the alternative HGV route via Moody Lane.
"I look forward to receiving your report and findings on the areas noted above."	The information is provided in this Technical Note.

1.3 Proposed Development Traffic and Routing

1.3.1 The Applicant understands that Network Rail objects to the proposed routes from the Strategic Road Network (SRN) to the Site due to the increase in traffic, particularly HGV traffic, on these routes.

1.3.2 With regards HGV traffic routing (which we understand to be Network Rail's principal concern), the Transport Assessment (Appendix 9A, ES Volume III, Document Ref. 6.4.12) states at paragraphs 6.4.1 and 11.5.3 that all construction and operational HGV traffic will be routed to/ from the A180 Stallingborough Interchange via the A1173, Kiln Lane, Hobson Way and South Marsh Road, as agreed with NELC for the Consented Development. The route is shown on Figure 1 below.

Figure 1: Designated HGV Route



1.3.3 The operational HGV traffic assessment assumes the maximum annual fuel throughput (753,500 tonnes per annum at the minimum calorific value of 9MJ/kg) will be delivered to the Site in 16 tonne HGV payloads. This is conservative because deliveries would likely be in larger payloads of up to 26 tonnes, and would not all be at this lowest calorific value, both reducing the number of HGV movements. The forecast hourly HGV movements also conservatively assume that all HGV deliveries take place Monday-Friday 6am-6pm (but in fact deliveries may be 24 hours per day, seven days per week (excluding Christmas Day, Boxing Day and New Years Day)). The Transport Assessment thereby predicts a total of 312 HGVs visiting the Site per day, equating to 624 two-way HGV movements per day. This is set out in Sections 7.1 and 7.2 of the Transport Assessment.

1.3.4 The Consented Development has full planning permission (ref DM/1070/18/FUL) and is capable of being built out. The Proposed Development would use the same

HGV route and would have no greater HGV movements than the Consented Development.

1.3.5 With regards non-HGV traffic routing, no designated route has been identified for non-HGV traffic (i.e. staff cars/ vans). The Transport Assessment uses assumptions about where staff are likely to be travelling from based on the 2011 Journey to Work Census data (www.nomisweb.co.uk), and assumes they will take the quickest/ shortest route to the Site (see Transport Assessment paragraphs 7.5.3 and 11.5.1).

1.3.6 The operational staff traffic assessment conservatively assumes the 56 operational staff travel to and from the Site by car with a car occupancy of one person per vehicle, as set out in Section 7.3 of the Transport Assessment. Of these 112 two-way car movements, 24% (27 car movements) are assigned to South Marsh Road (west of Hobson Way) and 19% (21 car movements) are assigned to Kiln Lane, as shown in Annex 10 of the Transport Assessment.

1.3.7 A greater proportion of the Consented Development operational staff traffic was assigned to South Marsh Road (west of Hobson Way) in the Consented Development Transport Assessment (46% or 52 car movements), because the new Link Road was not assumed to be present.

1.4 Transport Assessment Study Area and Traffic Counts

1.4.1 The Applicant consulted with NELC and Highways England to agree the scope and methodology of the Transport Assessment. The Study Area was defined and agreed as part of this consultation, and is shown in Figure 3.2 of the Transport Assessment.

1.4.2 Manual classified traffic counts were taken at the following junctions:

- South Marsh Road/ Hobson Way;
- Hobson Way/ Laporte Road/ Kiln Lane;
- Kiln Lane/ North Moss Lane/ Trondheim Way;
- A1173/ Kiln Lane;
- A1173/ A180 Stallingborough Interchange;
- A180/ Moody Lane/ Pyewipe Road (Westgate Roundabout); and
- A180/ Estate Road/ Gilbey Road (Pyewipe Roundabout).

1.4.3 Automatic traffic counts were taken at the following locations:

- South Marsh Road (east of Hobson Way);
- South Marsh Road (west of Hobson Way);
- Hobson Way (north of South Marsh Road);
- Kiln Lane (west of Hobson Way);
- A1173 (west of North Moss Lane);
- A1173 (north of A180); and
- A180 Westgate (east of Westgate roundabout).

1.4.4 The baseline junction capacity and traffic flows are set out in Section 3.3 of the Transport Assessment. The key points relevant to consideration of impacts on Marsh Lane and Kiln Lane level crossings are summarised below.

Kiln Lane Baseline Traffic

1.4.5 Kiln Lane approach to roundabout junction with Hobson Way and Laporte Road queue length (Tables 3.4 and 10.18 of the Transport Assessment):

- 2018 Base (AM peak) = 0.2 PCUs;
- 2018 Base (PM peak) = 0.1 PCUs;
- 2030 Base + Committed Development (AM Peak) = 0.6 PCUs; and
- 2030 Base + Committed Development (PM Peak) = 0.1 PCUs.

1.4.6 Kiln Lane approach to roundabout junction with North Moss Lane and Trondheim Way queue length (Tables 3.5 and 10.24 of the Transport Assessment):

- 2018 Base (AM peak) = 0.2 PCUs;
- 2018 Base (PM peak) = 0.8 PCUs;
- 2030 Base + Committed Development (AM Peak) = 0.3 PCUs; and
- 2030 Base + Committed Development (PM Peak) = 0.5 PCUs (note this is less than the 2018 Base scenario due to reassignment of traffic in 2030 to the new Link Road).

1.4.7 Kiln Lane annual average weekday traffic (two way) (paragraph 3.3.21 and Table 10.58 of the Transport Assessment):

- 2018 Base = 3,635 vehicles; and
- 2030 Base + Committed Development = 7,487 vehicles.

South Marsh Road (West of Hobson Way) Baseline Traffic

1.4.8 South Marsh Road (west of Hobson Way) approach to T-junction with Hobson Way queue length (Tables 3.3 and 10.12 of the Transport Assessment):

- 2018 Base (AM Peak) = 0.1 PCUs;
- 2018 Base (PM Peak) = 0.0 PCUs;
- 2030 Base + Committed Development (AM Peak) = 0.2 PCUs; and
- 2030 Base + Committed Development (PM Peak) = 0.0 PCUs.

1.4.9 South Marsh Road (west of Hobson Way) annual average weekday traffic (two way) (paragraph 3.3.21 and Table 10.58 of the Transport Assessment):

- 2018 Base = 970 vehicles; and
- 2030 Base + Committed Development = 1,101 vehicles.

1.5 Railway Crossings in the Vicinity of the Site

1.5.1 The two level crossings in the vicinity of the Site, referenced in Network Rail's objection, are 'Marsh Lane' level crossing on South Marsh Road (west of Hobson Way) and 'Kiln Lane' level crossing on Kiln Lane. It is understood that the railway line is used by up to one freight train per day.

1.5.2 The Applicant acknowledges that Network Rail's goal is to remove risk at level crossings or to reduce risk to as low as reasonably practicable. This goal applies to the operation of Network Rail's railway infrastructure, irrespective of third party development, and is applied with consideration of cost benefit.

Marsh Lane Level Crossing

1.5.3 Marsh Lane level crossing comprises an automatic half barrier crossing (AHBC) (with two half-barriers that close the entrance lanes to the crossing, lights and audible alarms). The level crossing crosses one railway line the maximum line speed is understood to be 20 mph.

1.5.4 As stated in paragraph 3.2.2 of the Transport Assessment, South Marsh Road (west of Hobson Way) is a 4.0 m wide single carriageway road with passing places, and the level crossing on South Marsh Road is located approximately 400 m west of the junction with Hobson Way. Approach signage requests drivers of large vehicles to park up and use the level crossing telephone to obtain permission to pass over the Marsh Lane level crossing. South Marsh Road (west of Hobson Way) is considered to be suitable for car and van traffic but not suitable for HGV traffic. Assessment of road traffic queues at the closest road junctions (see Section 1.7 below) confirms that the queue at peak times during construction and operation of the Proposed Development will end over 398 m away from the level crossing.

1.5.5 The Office of Rail Regulation (ORR) 'Level crossings: a guide for managers, designers and operators' (December 2011) (Table 1) states the following features of AHBC level crossings:

- "*The speed of trains over the crossing should not exceed 100 mph.*
- *There should not be more than two running lines.*
- *Appropriate means to stop any train approaching the crossing in an emergency situation are required where reasonably practicable and before a train has passed the last protecting signal.*
- *Trains should not normally arrive at the crossing in less than 27 seconds after the amber lights of the road traffic light signals first show. At least 95% of trains should arrive within 75 seconds and 50% within 50 seconds.*
- *The carriageway on the approaches to the crossing should be sufficiently wide to enable vehicles to pass safely.*
- *There is no limit to the amount of road traffic, but the road layout, profile and traffic conditions should be such that road vehicles are not likely to become grounded or block back obstructing the railway. Good road profile is particularly important at this type of crossing. Not suitable where pedestrian usage is high*."

1.5.6 South Marsh Road (west of Hobson Way) is proposed to be used by a small number of staff cars only (see Sections 1.7 and 1.8 below); it is not located on the designated HGV route. With reference to the ORR level crossing guidance, the road has suitable passing places at regular intervals to allow cars to pass safely and "*road vehicles are not likely to become grounded or block back obstructing the railway*" (see details at Sections 1.7 and 1.8 below regarding junction queueing).

Kiln Lane Level Crossing

1.5.7 Kiln Lane level crossing comprises an automatic open crossing locally monitored (AOCL) (an open crossing with lights and audible alarms, but no barriers). The level crossing crosses one railway line the maximum line speed is understood to be 20 mph.

1.5.8 As stated in paragraph 3.2.4 of the Transport Assessment, Kiln Lane is a 7.3 m wide single carriageway road subject to a 40 mph speed limit. The level crossing on Kiln Lane is located approximately 400 m west of the junction with Hobson Way. (We

have noted that there is a typographical error at paragraph 3.2.4 of the Transport Assessment which erroneously suggests that the Kiln Lane level crossing is to the east of Hobson Way, but the correct location of the level crossing is clearly visible in the preceding Figure 3.1 of the Transport Assessment). Assessment of road traffic queues at the closest road junctions (see Section 1.7 below) confirms that the queue at peak times during construction and operation of the Proposed Development will end approximately 395 m away from the level crossing.

1.5.9 The ORR level crossing guidance (December 2011) (Table 1) states the following features of AOCL level crossings:

- "*The speed of the trains over the crossings will be determined by the traffic moment but should not exceed 56 mph at any time.*
- *There should not be more than two running lines.*
- *The carriageway on the approaches to the crossing should be sufficiently wide to enable vehicles to pass safely.*
- *The road layout, profile and traffic conditions should be such that road vehicles are not likely to ground or regularly to block back obstructing the railway*."

1.5.10 Kiln Lane is considered to be suitable for HGV traffic in highways terms, and the level crossing appears to be suitable based on the ORR level crossing guidance (including its Appendix B) given the line speed, road traffic flows, presence of a single railway line, and as the road is "*sufficiently wide to enable vehicles to pass safely*" and vehicles are not likely to "*ground or regularly to block back obstructing the railway"* (see details at Sections 1.7 and 1.8 below regarding junction queueing).

Other Railway Crossings

1.5.11 We identified the location and nature of railway crossings using mapping and the London North Eastern Route Sectional Appendix which we understand is the official record of the railway infrastructure. Should new information be available that alters this then we would be pleased to receive this.

1.5.12 An overbridge is present over the railway at Queens Road to the north of the Site.

1.5.13 Level crossings are present to the south of the Site at:

- Woad Lane;
- Gilbey Road (known as 'Pyewipe Road' level crossing);
- Moody Lane near the former Tioxide site (known as 'Tioxide UK GF' level crossing); and
- Moody Lane near Westside Road.

1.6 Alternative HGV Routes

1.6.1 In determining the suitability of the proposed designated HGV route, a range of factors were evaluated. The suitability and sensitivity of roads between the Site and the SRN was determined in accordance with the Institute of Environmental Assessment 'Guidelines for the Environmental Assessment of Road Traffic' (1993), including consideration of road width, street lighting, speed limit, presence of level crossings and any restrictions on use, the nature of any development fronting the road, pedestrian and cycle facilities alongside and crossing the road, and the types of user groups who may use it with particular consideration of the elderly and children.

1.6.2 It is important that the designated route for HGVs maximises the use of the strategic and principal road network and avoids the use of minor local roads. It should also avoid passing any residential, school, or other sensitive receptors such as recreational or community facilities.

1.6.3 The designated HGV route was determined based on the shortest distance to the SRN using suitable roads (with reference to the factors described above), in order to minimise travel distance for environmental and financial reasons. The designated HGV route does not pass any residential properties, schools or recreational facilities.

1.6.4 A summary of the evaluation of alternative routes is provided below.

a) Site to A180 via South Marsh Road (west of Hobson Way), North Moss Lane, Kiln Lane and A1173 to A180 Stallingborough Interchange:
   - South Marsh Road (west of Hobson Way) not suitable for HGVs (4.0 m wide and level crossing signage requires 'drivers of large or slow vehicles' to telephone for permission to cross) so route not considered further.

b) Site to A180 via Hobson Way (northbound), Laporte Road, Queens Road, Kings Road and A1173 (southbound) to A180 Stallingborough Interchange:
   - roads suitable for HGVs;
   - avoids level crossings;
   - sensitive receptors comprise residential receptors on Queens Road;
   - longer distance of circa 4.5 km and travel time of circa 3 minutes to reach A180 Stallingborough Interchange compared to the designated HGV route.

c) Site to A180 via Hobson Way (northbound), Laporte Road, Queens Road, Kings Road, A1173 (northbound), A160 to A180 Brocklesby Interchange
   - roads suitable for HGVs;
   - sensitive receptors comprise residential receptors on Queens Road, residential areas of Immingham and South Killingholme;
   - longer overall distance of circa 12.6 km and travel time of circa 14 minutes for north/ westbound traffic to reach A180 Brocklesby Interchange compared to designated HGV route of circa 10.8 km and travel time of circa 10 minutes;
   - longer overall distance of circa 18.5 km and travel time of circa 19 minutes for south/ eastbound traffic to reach A180 Stallingborough Interchange compared to designated HGV route of circa 4.7 km and travel time of circa 7 minutes.

d) Site to A180 via Hobson Way (southbound), Link Road, Woad Lane and Estate Road No 1 to A180 Pyewipe Roundabout:
   - roads suitable for HGVs;
   - sensitive receptors comprise Public Right of Way crossing the route on the Link Road, recreational playing field on Moody Lane, level crossing on Woad Lane, and school off Woad Lane;

- shorter overall distance of circa 4.8 km and travel time of circa 7 minutes for south/ eastbound traffic to reach A180 Pyewipe Roundabout compared to designated HGV route of circa 10.9 km and travel time of circa 10 minutes;
- longer overall distance of circa 11.2 km and travel time of circa 12 minutes for north/ westbound traffic to reach A180 Stallingborough Interchange compared to designated HGV route of circa 4.7 km and travel time of circa 7 minutes.

e) Site to A180 via Hobson Way (southbound), Link Road and Moody Lane to A180 Westgate Roundabout:

- roads suitable for HGVs;
- sensitive receptors comprise Public Right of Way crossing the route on the Link Road, recreational playing field on Moody Lane, and level crossing on Moody Lane;
- shorter overall distance of circa 5.9 km and travel time of circa 8 minutes for south/ eastbound traffic to reach A180 Westgate Roundabout compared to designated HGV route of circa 11.8 km and travel time of circa 11 minutes;
- longer overall distance of circa 13.1 km and travel time of circa 14 minutes for north/ westbound traffic to reach A180 Stallingborough Interchange compared to designated HGV route of circa 4.7 km and travel time of circa 7 minutes.

1.6.5 Of these alternative routes, only b) and c) avoid level crossings, by reference to the London North Eastern Route Sectional Appendix**.** Even the shorter of these (b) would result in an additional 2,808 km travelled per day (based on 624 HGV movements) and passes some residential receptors so against the factors set out above in 1.6.3does not perform as well as the designated HGV route.

1.7 Proposed Development Construction Traffic Impacts

1.7.1 Construction of the Proposed Development is anticipated to take approximately three years.

1.7.2 Section 11 of the Transport Assessment assesses impacts at the overall peak of construction when 116 two way HGV movements and 750 two way non-HGV movements are anticipated per day.

Increase in Traffic Volume

1.7.3 Table 11.5 of the Transport Assessment sets out the increase in construction traffic flows at the peak of construction. This is summarised in Table 2 below.

Table 2: Construction Link Impact Assessment

South Marsh Road (West of Hobson Way)

2021 PEAK OF CONSTRUCTION	DEV TRIPS	BASELINE FLOWS	BASELINE + DEV FLOWS	% INCREASE
07:00 – 08:00 AM Peak	8	160	168	5.0%
16:00 – 17:00 PM Peak	5	167	172	3.0%
24 Hour	45	813	858	5.5%
2022 PEAK OF CONSTRUCTION	**DEV TRIPS**	**BASELINE FLOWS**	**BASELINE + DEV FLOWS**	**% INCREASE**
07:00 – 08:00 AM Peak	8	161	169	5.0%
16:00 – 17:00 PM Peak	5	169	174	3.0%
24 Hour	45	824	869	5.5%
2027 PEAK OF CONSTRUCTION	**DEV TRIPS**	**BASELINE FLOWS**	**BASELINE + DEV FLOWS**	**% INCREASE**
07:00 – 08:00 AM Peak	8	170	178	4.7%
16:00 – 17:00 PM Peak	5	177	182	2.8%
24 Hour	45	869	914	5.2%

Kiln Lane (West of Hobson Way)

2021 PEAK OF CONSTRUCTION	DEV TRIPS	BASELINE FLOWS	BASELINE + DEV FLOWS	% INCREASE
07:00 – 08:00 AM Peak	115	712	827	16.2%
16:00 – 17:00 PM Peak	72	676	748	10.7%
24 Hour	686	5,793	6,479	11.8%
2022 Peak of Construction	**DEV TRIPS**	**BASELINE FLOWS**	**BASELINE + DEV FLOWS**	**% INCREASE**
07:00 – 08:00 AM Peak	115	730	845	15.8%
16:00 – 17:00 PM Peak	72	679	751	10.6%
24 Hour	686	6,098	6,784	11.2%

2027 Peak of Construction	DEV TRIPS	BASELINE FLOWS	BASELINE + DEV FLOWS	% INCREASE
07:00 – 08:00 AM Peak	115	750	865	15.3%
16:00 – 17:00 PM Peak	72	696	768	10.3%
24 Hour	686	6,046	6,732	11.3%

1.7.4 Section 11.6 (Table 11.5) of the Transport Assessment concludes that the 24 hour increase in traffic at the peak of construction will be:

- up to 5.5% on South Marsh Road (west of Hobson Way) (comprising staff cars only); and
- up to 11.8% on Kiln Lane (west of Hobson Way).

1.7.5 These increases in traffic on South Marsh Road and Kiln Lane will be temporary, and reflect the 'worst case' during the peak three months of construction.

Impacts on Junction Queues

1.7.6 Paragraph 3.3.8 of the Transport Assessment describes how junction modelling has been undertaken based on Passenger Car Units (PCUs), whereby a car has a value of 1 PCU, smaller vehicles (e.g. motorcycles) have smaller PCU values and larger vehicles (e.g. HGVs) have larger PCU values. A rigid HGV has a value of 1.5 and an articulated HGV has a value of 2.3. 1 PCU is equal to 5.75 m. Network Rail's statement "*the maximum queue output is skewed and does not accurately represent the scenario with HGVs*" is therefore not correct.

1.7.7 Section 11.7 of the Transport Assessment provides information on junction impacts on Hobson Way/ South Marsh Road (west of Hobson Way) T-junction, Laporte Road/ Kiln Lane/ Hobson Way Roundabout, and Kiln Lane/ North Moss Lane/ Trondheim Way Roundabout during construction of the Proposed Development. These junctions are the closest junctions to the Kiln Lane and Marsh Lane level crossings to be impacted by the Proposed Development's construction traffic.

1.7.8 Section 11.7 presents the findings for three different potential construction timing scenarios. The 'worst case' impacts identified are as follows:

- Kiln Lane approach to roundabout junction with Hobson Way and Laporte Road (Tables 11.18 to 11.23 of the Transport Assessment), located 400 m from the Kiln Lane level crossing -
  - Base + Committed Development (AM Peak) = 0.6 PCUs (depending on construction which equates to 3.5 m,
  - Base + Committed Development + Proposed Development (AM Peak) = 0.8 PCUs which equates to 4.6 m,
  - Base + Committed Development (PM Peak) = 0.1 PCUs which equates to less than 1 m, and
  - Base + Committed Development + Proposed Development (PM Peak) = 0.2 PCUs which equates to 1.2 m;

- Kiln Lane approach to roundabout junction with North Moss Lane and Trondheim Way (Tables 10.24 and 10.25 of the Transport Assessment), located 900 m from the Kiln Lane level crossing -
  - Base + Committed Development (AM Peak) = 0.3 PCUs which equates to 1.7 m,
  - Base + Committed Development + Proposed Development (AM Peak) = 0.3 PCUs which equates to 1.7 m,
  - Base + Committed Development (PM Peak) = 0.4 PCUs which equates to 2.3 m, and
  - Base + Committed Development + Proposed Development (PM Peak) = 0.5 PCUs which equates to 2.9 m; and
- South Marsh Road approach to T-junction with Hobson Way (Tables 11.12 to 11.17 of the Transport Assessment), located 400 m from Marsh Lane level crossing -
  - Base + Committed Development (AM Peak) = 0.2 PCUs which equates to 1.2 m,
  - Base + Committed Development + Proposed Development (AM Peak) = 0.2 PCUs which equates to 1.2 m,
  - Base + Committed Development (PM Peak) = 0.0 PCUs which equates to 0 m, and
  - Base + Committed Development + Proposed Development (PM Peak) = 0.0 PCUs which equates to 0 m.

1.7.9 This confirms that queueing at the junctions closest to the Kiln Lane and Marsh Lane level crossings will not cause backing up on the level crossings during construction, with the distance between the level crossings and the relevant junctions being many times the worst case peak queue length.

Abnormal Indivisible Loads

1.7.10 With regards to abnormal load delivery to the Site, paragraph 11.4.2 of the Transport Assessment states "*The contractor will work with the relevant authorities and stakeholders to secure appropriate approvals for the transportation of abnormal loads on the strategic and local road network*." The Applicant has already committed to consult with Network Rail if the proposed abnormal delivery route crosses any level crossings in the vicinity of the Site, in draft DCO requirement 16 (Document Ref. 2.1), addressing the response by Network Rail dated 8 March 2019 in relation to the planning application for the Consented Development. Abnormal Indivisible Loads were also referenced in the consultation response dated 13 December 2019 for the Proposed Development.

1.8 Proposed Development Operational Traffic Impacts

1.8.1 Section 10 of the Transport Assessment assesses the impacts of operational traffic from the Proposed Development.

Increase in Traffic Volume

1.8.2 Section 10.3 of the Transport Assessment provides information on the road traffic impacts on South Marsh Road and Kiln Lane level crossings during operation of the

Proposed Development, stating at paragraph 10.3.3 "*The analysis below suggests the Proposed Development will increase traffic flows by circa 9% on Kiln Lane and circa 2.6% on South Marsh Road. The Consented Development impact would be the same."* This confirms that the increases in traffic on South Marsh Road and Kiln Lane are not significant compared to the baseline.

1.8.3 Paragraph 12.1.5 of the Transport Assessment states "*It is noted that the construction and operational traffic flows associated with the Proposed Development are the same as the construction and operational traffic flows associated with the Consented Development"* although as noted at paragraph 1.3.7 above, as staff traffic will now be able to use the Link Road fewer staff vehicles are expected to use South Marsh Road (west of Hobson Way) than previously assumed in the Consented Development Transport Assessment.

Impact on Junction Queues

1.8.4 As noted at paragraph 1.7.5 above, paragraph 3.3.8 of the Transport Assessment describes how junction modelling has been undertaken based on PCUs, whereby a car has a value of 1 PCU, smaller vehicles (e.g. motorcycles) have smaller PCU values and larger vehicles (e.g. HGVs) have larger PCU values. A rigid HGV has a value of 1.5, an articulated HGV has a value of 2.3, and 1 PCU is equal to 5.75 m.

1.8.5 Section 10.2 of the Transport Assessment provides information on junction impacts on Hobson Way/ South Marsh Road (West of Hobson Way) T-junction, Laporte Road/ Kiln Lane/ Hobson Way Roundabout, and Kiln Lane/ North Moss Lane/ Trondheim Way Roundabout during operation of the Proposed Development. These junctions are the closest junctions to the Kiln Lane and Marsh Lane level crossings to be impacted by the Proposed Development's operational traffic.

1.8.6 Section 10.2 concludes the following:

- Kiln Lane approach to roundabout junction with Hobson Way and Laporte Road (Tables 10.18 and 10.19 of the Transport Assessment), located 400 m from the Kiln Lane level crossing -
  - 2030 Base + Committed Development (AM Peak) = 0.6 PCUs which equates to 3.5 m,
  - 2030 Base + Committed Development + Proposed Development (AM Peak) = 0.7 PCUs which equates to 4.0 m,
  - 2030 Base + Committed Development (PM Peak) = 0.1 PCUs which equates to less than 1 m, and
  - 2030 Base + Committed Development + Proposed Development (PM Peak) = 0.1 PCUs which equates to less than 1 m;
- Kiln Lane approach to roundabout junction with North Moss Lane and Trondheim Way (Tables 10.24 and 10.25 of the Transport Assessment), located 900 m from the Kiln Lane level crossing -
  - 2030 Base + Committed Development (AM Peak) = 0.3 PCUs which equates to 1.7 m,
  - 2030 Base + Committed Development + Proposed Development (AM Peak) = 0.4 PCUs which equates to 2.3 m,

  - 2030 Base + Committed Development (PM Peak) = 0.5 PCUs which equates to 2.9 m, and

  2030 Base + Committed Development + Proposed Development (PM Peak) = 0.5 PCUs which equates to 2.9 m; and

- South Marsh Road approach to T-junction with Hobson Way (Tables 10.12 and 10.13 of the Transport Assessment), located 400 m from Marsh Lane level crossing -
  - 2030 Base + Committed Development (AM Peak) = 0.2 PCUs which equates to 1.2 m,
  - 2030 Base + Committed Development + Proposed Development (AM Peak) = 0.2 PCUs which equates to 1.2 m,
  - 2030 Base + Committed Development (PM Peak) = 0.0 PCUs which equates to 0 m, and
  - 2030 Base + Committed Development + Proposed Development (PM Peak) = 0.0 PCUs which equates to 0 m.

1.8.7 This confirms that queueing at the junctions closest to the Kiln Lane and Marsh Lane level crossings will not cause backing up on the level crossings during operation, with the distance between the level crossings and the relevant junctions being many times the worst case peak queue length.

1.9 Conclusions

1.9.1 The Applicant acknowledges that Network Rail's goal is to remove risk at level crossings or to reduce risk to as low as reasonably practicable. This goal applies to the operation of Network Rail's railway infrastructure, irrespective of third party development, and is applied with consideration of cost benefit.

1.9.2 The Applicant has assessed the impacts of the Proposed Development on the level crossings on South Marsh Road (west of Hobson Way) and Kiln Lane, in terms of the potential worst case increase in road traffic flows on these roads and impacts on traffic queues at the junctions closest to the level crossings.

1.9.3 South Marsh Road would be used by a very small number of staff cars/ vans. Given the very small number of movements added to South Marsh Road (west of Hobson Way) during the peak of construction and operation of the Proposed Development (45 and 27 car movements per day respectively), no level crossing mitigation is considered to be required at Marsh Lane due to the Proposed Development.

1.9.4 Kiln Lane forms part of the designated HGV route for the Proposed Development. Given the small % increases in traffic on Kiln Lane compared to the baseline scenario and the very short predicted queues at junctions located 400 and 900 m from the Kiln Lane level crossing (less than 5 m in length during peak hours), the Applicant concludes that the Proposed Development will not cause a significant change in traffic flows over Kiln Lane level crossing or cause backing up across the level crossing. The designated HGV route is therefore concluded to be acceptable and no level crossing mitigation is considered to be required at Kiln Lane level crossing due to the Proposed Development.

APPENDIX 2: TIMELINE OF CORRESPONDENCE AND ENGAGEMENT PERTINENT TO NETWORK RAIL

Abbreviation	Description
AG	Addleshaw Goddard – Network Rail's solicitors
AIL	Abnormal Indivisible Load
DCO	Development Consent Order
DWD	DWD LLP – The Applicant's Planning Consultants
EPWM	EP Waste Management – The Applicant
NELC	North East Lincolnshire Council
NR	Network Rail
PINS	Planning Inspectorate
PM	Pinsent Masons LLP – The Applicant's solicitors
SoCG	Statement of Common Ground

Note: Rows in *italics* did not directly involve the Applicant.

Number	Date	Company	To	Summary
1(not publicly available)	*30.01.19*	*NELC*	*NR*	*Letter sent providing Network Rail (NR) with an opportunity to comment on the Consented Development application following submission.*
2	*21.02.19*	*NR*	*NELC*	*Extension requested until 8th March to provide comments on the Consented Development.*
3	*08.03.19*	*NR*	*NELC*	*Confirmed that NR has no objection in principle to the development, but identified requirements linked to being contacted about Abnormal Indivisible Loads (AIL).*
4 (not publicly available)	*22.08.19*	*PINS*	*NR*	*EIA scoping consultation sent to Network Rail by the Planning Inspectorate (PINS).*
5	*18.09.19*	*NR*	*PINS*	*NR requested that the EIA contains a Transport Assessment, providing an assessment in relation to the impact on the operational railway and Level*

Number	Date	Company	To	Summary
				Crossing situated on South Marsh Road to the west of the site location, along with a Flood Assessment.
6	19.10.19	DWD	NR	Section 42 Consultation Letter sent with a copy of the Preliminary Environmental Information Report and other consultation documents.
7	13.12.19	NR	DWD	Identified a concern relating to site access via the Marsh Lane level crossing over the railway [location not described]. During construction of the proposed development, access will be required for heavy goods vehicles (HGVs), abnormal loads for certain items and for construction work traffic. This may lead to a significant increase in vehicular and pedestrian movements across this level crossing during the construction phase and subsequent operation of the site. Stated the position that there should be no increase or change in usage to the level crossings in the area. Any increase in movement across level crossings increases risk. Confirmed NR will be seeking protection from the exercise of compulsory purchase powers. Standard protective provisions will need to be included and contact should be made with NR's counsel. Confirmed willing to discuss the inclusion of NR land or rights over land subject to there being no impact on the operational railway. Stated that insufficient detail was available on the potential impacts of the scheme on the railway and further information will be required to properly respond on the likely impacts of the proposed scheme.
8	*21.01.20*	*NR*	*NELC*	*NR confirmed there was no objection to the discharge of Consented Development Condition 18 (Delivery and Servicing Plan).*
9	18.02.20	DWD	NR	Response letter sent to explain the relationship between the Proposed Development and the Consented Development and their identical HGV routing; the limited number of AILs and the notification procedures that would be adhered to in respect of NR; and confirmed that no compulsory acquisition or temporary possession powers are to be sought over Network Rail operational land or at all in the DCO and therefore protective provisions are not proposed.

Number	Date	Company	To	Summary
10	27.02.20	NR	DWD	Noted that there was no compulsory acquisition or temporary possession powers to be used over NR operational land. Confirmed they seek this is formally documented and is in the process of instructing solicitors to draft an agreement. Identified that it is possible that NR has existing rights over the Order land and if so, NR would wish to retain these rights. Requested details of Applicant's solicitors.
11	28.02.20	DWD	NR	Responded to say that due to the distance from NR operational land it would be helpful for the respective solicitors to discuss and to ensure the proposed agreement format is one which both parties consider is appropriate. Provided details of solicitors.
12	15.04.20	DWD	NR	Email sent requesting email address to provide S56 letter to.
	04.05.20			*Acceptance of the DCO Application by the Secretary of State*
13	27.05.20	DWD	NR	Original S56 email sent (with letter attachment)
14	27.05.20	NR	DWD	Request for GIS Shapefiles of the areas that the proposal will impact on.
15	28.05.20	DWD	NR	Shapefile sent
16	28.05.20	NR	DWD	Request to send a schedule and plans showing how the works will impact on NR and the nearest railway stations.
17	28.05.20	DWD	NR	Email sent with 3 options for download links and document plan references (PINS, SHBEC and DWD fileshare)
18	28.05.20	DWD/ NR		Call with NR who advised issues with download links. DWD offered to send plans via email.
19	28.05.20	DWD	NR	Email sent signposting and attaching relevant application documents (various plans, Application Doc Ref. 4.2-4.8 and 4.12)
20	28.05.20	NR	DWD	Email acknowledging application documents.
21	04.06.20	NR	DWD	Advised AG instructed who will need a costs undertaking from solicitors and requested contact details. Confirmed awaiting manager comments on level crossing impacts and checking if NR have any rights over DCO land.
22	04.06.20	DWD	NR	Provided Applicant's solicitors details (PM).

Number	Date	Company	To	Summary
23	08.06.20	AG	PM	Confirmed AG instructed to act and requested fee undertaking, and requested information on level crossing as well as traffic management information.
24	08.06.20	NR	DWD	Confirmation sought on whether the project will be accessing this crossing with HGV and if so, how frequently. Provide NR with a traffic management plan. Stated that if Network Rail has to carry out any upgrade works to accommodate the Project than this will have to be at the project's cost. Requested to enter into some sort of Agreement to protect NR's position and asked NR solicitors to obtain the appropriate costs undertaking.
25	08.06.20	NR	DWD	Sought confirmation that Grimsby is the nearest train station to this project.
26	08.06.20	DWD	NR	Confirmed DWD will respond on level crossings in due course and that Healing was the nearest station. Identified the Transport Assessment, Framework Operational Travel Plan, Delivery and Servicing Plan, Framework Construction Worker Travel Plan and Framework Construction Traffic Management Plan as relevant documents in the interim.
27	09.06.20	PM	AG	Acknowledgement of email of 08.06.20.
28	11.06.20	AG	PM	Requested update on costs undertaking
29	22.06.20	NR	DWD	Update requested as NR's solicitors are still awaiting a costs undertaking from Applicant's solicitors.
30	23.06.20	DWD	NR	Confirmed HGV movement numbers and route using Kiln Lane and its level crossing, of metal panel construction, and the lack of HGVs on South Marsh Road level crossing, of concrete panel construction. Identified that given movement numbers, Applicant does not consider that there is a need for a legal agreement.
31	23.06.20	PM	AG	Provided information to AG as sent to NR on 23.06.20.

Number	Date	Company	To	Summary
32	06.07.20	AG	PM	Further request as to costs, and confirmation AG is reviewing impact on Level Crossings.
33	15.07.20	NR	DWD	Requested to send full details of proposal in particular on the impact on the Level crossings to Asset Protection so that they can assess the impacts on NR.
34	15.07.20	NR	DWD	Queried if Applicant had been in contact with the local highways authority and has a traffic management plan been prepared. Queried if any assessment been made on the impact on Marsh Lane Bridleway. Restated request for Applicants to submit full details of the proposal to NR Asset Protection Engineers.
35	15.07.20	DWD	NR	Confirmed seeking instructions on NR requests and advised on Relevant Representations dates.
36	15.07.20	NR	DWD	Confirmed that NR's solicitors will be submitting representations as an interested party.
37	*15.07.20*	*AG*	*PINS*	*Submission of Relevant Representation*
38	16.07.20	AG	PM	Confirmation that AG has submitted a relevant representation as an interested party
39	20.07.20	NR	DWD	Sought confirmation as to when solicitors will be in touch so that matters can be progressed. Also asked if client could contact NR Asset Protection team to brief on the scheme.
40	21.07.20	NR	DWD	Sent questionnaire relating to asset protection to progress discussions.
41	21.07.20	NR	DWD	Advised if this is an existing job with Asset Protection please correspond directly with the appropriate Scheme Interface Manager/Construction Manager quoting your Asset Protection reference number.
42	22.07.20	DWD	NR	Sought a meeting to discuss the project and expectations.
43	22.07.20	NR	DWD	Sought conformation that the promoter will pay NR's cost and if clients wish solicitors to attend the meeting?
44	23.07.20	NR / DWD		Exchange of various emails seeking to agree date and time for initial meeting (24.07.20).

Number	Date	Company	To	Summary
				Agenda provided included; introductions, a summary of existing 49.9MW consent from April 2019 (Ref. DM/1070/18/FUL), a summary of DCO scheme and technical work undertaken, Network Rail technical requirements and expectations, and the next steps for both parties. For discussion documents also sent to NR were the Consented Development Decision Notice, a Site Location Plan, the Application Guide, and an email from Matt Leighton at Network Rail to NELC (from March 2019) confirming no objection to the original application, but at the same time identifying the need to contact Asset Management regarding Abnormal Loads.
45	23.07.20	PM	AG	Acknowledgement of email dated 16.07.20 and confirmation to AG that NR and DWD were arranging a meeting to discuss technical matters.
46	24.07.20	NR / DWD		Technical engagement call held over Microsoft Teams reflecting Agenda sent on 23.07.20.
47	04.08.20	NR	DWD	Chaser email for Framework Agreement sent. Second email sent as original recipient was on leave.
48	04.08.20	DWD	NR	Provided meeting minutes from 24.07.20 and requested Level Crossing Risk Assessment (promised by NR at meeting on 24.07.20).
49	04.08.20	NR	DWD	Confirmed 'looking in to' the Risk Assessment and advised that as no Framework Agreement being engaged upon, Protective Provisions will be sought.
50	04.08.20	DWD	NR	Reiterated request for Level Crossing Risk Assessment.
51	05.08.20	NR	DWD	Request for Framework Agreement in the meantime while NR look in to the Risk Assessment.
52	05.08.20	DWD	NR	Confirmed considering the request for a framework agreement and a costs agreement. Requested description of what proposed framework agreement would contain.
53	11.08.20	PM/AG		Telephone call to discuss the nature and content of a Framework Agreement and Protective Provisions as sought by NR, to enable Applicant to understand general scope of the requested Framework Agreement.

Number	Date	Company	To	Summary
54	11.08.20	NR	DWD	Identified that solicitors have had a meeting. Advised solicitors have been provided with the relevant information and are now seeking the relevant costs undertaking so that they can then draft Framework Agreement.
55	12.08.20	DWD	NR	Advised of internal Applicant meeting to discuss call between solicitors.
56	17.08.20	DWD	NR	Sought update on provision of Risk Assessment and advised on expected date of pre-examination.
57	17.08.20	NR	DWD	Confirmed Risk Assessment being looked in to. Requested to know when AG can expect the costs undertaking so that they can progress the Framework Agreement.
58	19.08.20	DWD/ NR		Call held on the general scope of the requested Framework Agreement and Protective Provisions, to assist Applicant's understanding of what is sought.
59	20.08.20	AG/PM		Call held on the general scope of the requested Framework Agreement and Protective Provisions, to assist Applicant's understanding of what is sought.
60	25.08.20	AG	PM	Provision of draft Framework Agreement and Protective Provisions
61	28.08.20	DWD	NR	Identified NR have provided draft Framework Agreement and set of Protective Provisions. Stated that engaging on the legal drafting of either the FA or the PPs is premature – as EPWM has not conceded the need for these documents. Noted that EPWM is currently prevented from making further progress without the Level Crossing Risk Assessment.
62	28.08.20	DWD	NR	Applicant offered a contribution towards NR's costs of engagement, without prejudice to its substantive position.
63	01.09/20	PM	AG	Acknowledgement of receipt of Framework Agreement and Protective Provisions, and forwarding email sent on 28.08.20 from DWD to NR for reference.
64	15.09.20	DWD	NR	Freedom of Information Request sent requesting latest Level Crossing Risk Assessment for Kiln Lane.

Number	Date	Company	To	Summary
65	17.09.20	DWD	NR	Sought update on 28.08.20 email on Risk Assessment request.
66	21.09.20	NR	DWD	Provided attachment comprising 'official' marked document setting out NR objections and request for route appraisal. Covering e-mail sought to progress Framework Agreement and Costs Undertaking.
67	21.09.20	AG	PM	Sought update on Framework Agreement and Protective Provisions and provision of technical information provided by NR to DWD.
68	23.09.20	PM	AG	Acknowledged email and confirmation that PM had not been instructed to review the Framework Agreement or Protective Provisions.
69	23.09.20	DWD	NR	Acknowledged email.
70	30.09.20	DWD	NR	Identified Applicant remains of the view that it cannot yet consider whether a Framework Agreement is required, and identified a SoCG will be progressed.
71	30.09.20	DWD	NR	Reconfirmed without prejudice offer towards costs of engagement.
72	*05.10.20*	*AG*	*PINS*	*Submission ahead of Deadline A requesting an Issue Specific Hearing, reserving rights to appear at any other Issue Specific Hearings, and confirming NR only wishes to comment on procedural arrangements and does not wish to speak at the Preliminary Meeting.*
73	06.10.20	AG	PM	Sought update on Framework Agreement and Protective Provisions. Confirmed position re without prejudice offer as to costs. Confirmation AG advised NR to speak to DWD on technical matters.
74	09.10.20	DWD	NR	Conformation of being unable to consider the need for a Framework Agreement or Protective Provisions without seeing full risk assessments.
75	09.10.20	DWD	NR	Offered call to discuss without prejudice offer towards costs of NR engagement.
76	13.10.20	NR	DWD	Freedom of Information Request response received with Level Crossing Risk Assessment for Kiln Lane.
77	16.10.20	DWD/NR		Call relating to technical note to be sent to NR. NR queried why lawyers could not yet engage. DWD advised that Applicant cannot yet consider a cost agreement for framework agreement but could consider a cost agreement for legal input to SoCG.

Number	Date	Company	To	Summary
78	16.10.20	DWD	NR	Following a call, email sent with technical note responding to NR's 21.09.20 request for a robust route appraisal (item 66 above) and providing other relevant information. SoCG identified to be provided shortly. Requested the 'with SHBEC' scenario narrative risk assessment for this crossing.
79	19.10.20	AG	PM	Sought update on Framework Agreement and Protective Provisions and requested sight of draft SoCG
80	19.10.20	DWD	NR	Provided first draft of SoCG. Confirmed the timescale set in the letter for return of SoCGs in the provisional timetable is Deadline 1 (8 December 2020), however identified that Applicant has at deadline A submitted an alternative timetable which requests some changes to the provisional timetable, including the bringing forward of Deadline 1 to 24November 2020.
81	20.10.20	AG	PM	Confirmation that AG has received the draft SoCG
82	*20.10.20*	*AG*	*PINS*	*Submission ahead of Deadline B objecting to proposed amended timetable*
83	22.10.20	DWD	NR	Advised legal advisors provided the requested undertaking relating to SoCG review. Also requested NR's latest submission which was expected to be published at deadline B.
84	22.10.20	PM	AG	Confirmation that Technical Note has been issued to NR and EPWM's view remains that neither a Framework Agreement nor Protective Provisions are required. Requested sight of NR's submission re examination deadlines. Provision of undertaking for review of draft SoCG.
85	29.10.20	DWD	NR	Sought update on SoCG Review and if NR's submission to PINS could be made available directly to EPWM as PINS confirmed will only publish at Deadline B.
86	29.10.20	PM	AG	Repeated request for copy of NR's Deadline A submission.

Number	Date	Company	To	Summary
87	04.11.20	AG	PM	Confirmation NR's submission had been published. Confirmation that NR was working to provide traffic data and other requested technical information.
88	06.11.20	NR	DWD	Provided Note of Technical Detail, in substance very similar to the September objection and not responding directly to the Applicant's Techncial Note. In covering e-mail a partial response to the technical information requested by the Applicant.
89	09.11.20	AG	PM	Provided Note of Technical Detail already provided directly to DWD. Confirmed receipt of undertaking for SoCG.
90	09.11.20	NR	DWD	Asked if solicitors can now engage on the PPs and Framework Agreement. Requested costs undertaking to cover all NRs costs in dealing with this matter.
91	10.11.20	PM	AG	Acknowledgement of email of 9.11.20
92	10.11.20	DWD	NR	Noted emails and advised will come back with response soon.
93	18.11.20	DWD	NR	Noted that the 6 November note made similar/same points as previous objection which we issued a comprehensive memo in response to. Attached same memo and queried if regard had been had to it. Re-stated request for data on inputs to ALCRM noting that model is only available to NR so we and other IPs and ExA need to be able to understand its inputs. Explained attached 'information requested' table and asked for NR to complete the second column to allow progress to be made. Reminded as to ExA deadline for SoCG of 8 December.
94	23.11.20	NR	DWD	Identified that the person from Network Rail who has been providing the technical analysis of the data provided in the DCO documents is currently off sick. Put together the table outlining the numbers of proposed vehicle movements that would cross the level crossings and requested Applicant confirm whether these figures are correct, provide corrections and confirm where information is TBC.

Number	Date	Company	To	Summary
				Confirmed NR lawyers have been reviewing the Statement of Common Ground and it is with their technical team for comments. Target return of early next week.
95	24.11.20	DWD	NR	Noted that the information sought is the data that had already been used by Network Rail to generate the current ALCRM risk scores and the 'with SHBEC' ALCRM risk scores that are reported in Network Rail's objection dated 21st September 2020 and again in the Note of Technical Detail dated 6th November 2020. Identified 7 questions where answers were sought to help the applicant understand the data requested.
96	26.11.20	NR	DWD	Provided data requested, in respect of Kiln Lane, and revised risk rating compared to the risk rating provided in the objection dated 21st September 2020 and the Note of Technical Detail dated 6th November 2020. Confirmed that that the upgrade to ABCL at an estimated cost of £1.5m, is not justified by the additional risk introduced by the HGV movements and also the originally proposed upgrade to MCB-OD is not justified. Confirmed that whilst no upgrade to the fundamental level crossing type is required, the additional movements will increase wear on the crossing deck and approach roads. Advised that the cost of upgrades to these elements, along with improved signage and road markings, would not exceed £100k.
97	27.11.20	DWD	NR	Acknowledged information received. Confirmed will review and revert next week.
98	30.11.20	DWD	NR	Identified that technical colleagues are reviewing the information provided and expect there will be some further discussions needed. Highlighted that the examiner's deadline of 8 December for the SoCG is considered the priority.

Number	Date	Company	To	Summary
				Confirmed DWD will start updating the SoCG, and offered to combine in any NR review comments so that we are working off the same version.
99	30.11.20	NR	DWD	NR will discuss matters (SoCG and Level Crossings) with lawyers and operational colleagues. Requested solicitors provide a costs undertaking to cover all of NRs costs.
100	01.12.20	AG	PM	Clean and comparison versions of SoCG with NR review comments provided to Applicant's solicitors.
101	01.12.20	NR	DWD	Stating that NR emails (30.11.20 and 26.11.20) only relate to the Kiln Lane Crossing. Stating Marsh Lane level crossing is a little more complicated as it may be on a private road and/or only have bridleway rights and not vehicle rights.
102	01.12.20	DWD	NR	Acknowledgement email [to items 100 and 101] confirming Applicant will revert as soon as possible.

Subsequent correspondence held on SoCG. Not catalogued above.

APPENDIX 3 RESPONSE BY NETWORK RAIL TO NORTH EAST LINCOLNSHIRE COUNCIL CONSULTATION BEFORE GRANT OF PLANNING PERMISSION FOR THE CONSENTED DEVELOPMENT (LOCAL AUTHORITY REFERENCE DM/1070/18/FUL)

[redacted] (Engie)

From: [redacted] on behalf of Town Planning LNE <TownPlanningLNE@networkrail.co.uk>
Sent: 08 March 2019 14:56
To: Planning - IGE (ENGIE)
Subject: Ref DM/1070/18/FUL - energy from waste facility, rear of Power Station, Hobson Way, Stallingborough

FAO – [redacted]
Ref – DM/1070/18/FUL
Proposal – Construction of energy from waste facility
Location – Land rear of Power Station Hobson Way Stallingborough North East Lincolnshire

Thank you for your letter of 30 January 2019 providing Network Rail with an opportunity to comment on the abovementioned application.

With reference to the protection of the railway, Network Rail has no objection in principle to the development, but below are some requirements which must be met,
expense.

We note from the Transport Assessment that it is proposed to route HGV traffic to the site over the railway level crossing on Kiln Lane and we therefore have the following requirement regarding HGV traffic/abnormal loads and the potential impact on the level crossing surface and infrastructure;

Abnormal Loads
We would have serious reservations if during the construction or operation of the site, abnormal loads will use routes that include Network Rail assets. Network Rail would request that the applicant contact our Asset Protection Project Manager (details below) to confirm that any proposed route is viable and to agree a strategy to protect our asset(s) from any potential damage caused by abnormal loads. I would also like to advise that where any damage, injury or delay to the rail network is caused by an abnormal load (related to the application site), the applicant or developer will incur full liability.

Network Rail is required to recover all reasonable costs associated with facilitating these works.

I would advise that the **abnormal loads** should be the subject of conditions, the reasons for which can include the safety, operational needs and integrity of the railway.

I trust full cognisance will be taken in respect of these comments. If you have any further queries or require clarification of any aspects, please do not hesitate to contact myself I would also be grateful if you could inform me of the outcome of this application, forwarding a copy of the Decision Notice to me in due course.

Our Asset Protection Team can be contacted as follows:

Asset Protection Project Manager
Network Rail (London North Eastern)
Floor 3B
George Stephenson House
Toft Green
York
Y01 6JT

Email: assetprotectionlneem@networkrail.co.uk

Kind regards

[redacted]
Town Planning Technician | Property
Network Rail

George Stephenson House | Toft Green |York |YO1 6JT
www.networkrail.co.uk/property

APPENDIX 4 - RESPONSE BY NETWORK RAIL TO NORTH EAST LINCOLNSHIRE COUNCIL CONSULTATION BEFORE CONFIRMATION OF COMPLIANCE WITH CONDITION 18 (DELIVERY AND SERVICING PLAN) (LOCAL AUTHORITY REFERENCE DM/1117/19/CND)

Planning - IGE (ENGIE)

From: [redacted] on behalf of Town Planning LNE
Sent: 21 January 2020 14:47
To: Planning - IGE (ENGIE)
Subject: Ref DM/1117/19/CND - discharge of conditions, South Humber Bank Power Station, South Marsh Road, Stallingborough

FAO – [redacted]
Ref – DM/1117/19/CND
Proposal – Details in charge of condition 18 (Delivery and Servicing) pursuant to DM/1070/18/FUL
Location – South Humber Bank Power Station South Marsh Road Stallingborough Grimsby

Thank you for your letter of 9 December 2019 providing Network Rail with an opportunity to comment on the abovementioned application.

In relation to the above application I can confirm that Network Rail have no objection to the discharge of this condition.

Kind regards

[redacted]
Town Planning Technician | Property
Network Rail
George Stephenson House | Toft Green |York |YO1 6JT
www.networkrail.co.uk/property

APPENDIX 5 NETWORK RAIL OBJECTION AND RISK RATINGS RECEIVED 21.09.20

From: [redacted]
To:
Cc: [redacted]
Subject: RE: South Humber Bank Energy Centre DCO
Date: 21 September 2020 15:18:17
Attachments: WR60393 South Humber Bank Energy Centre - NR Objection FINAL.pdf

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Dear [redacted]

I am well thank you.

I hope you are well.

My apologise the delay but I have now received some information a copy of which I have attached.

NR reserves the right to make further comments in addition to the above comments.

I sincerely hope that progress can now made on the FA and that your client's solicitors can provide AG with the appropriate costs undertaking

We would also wish our standard Protective Provisions to be included on the face of the Order

I look forward to hearing from you

Kind regards and best wishes

[redacted]

From: [redacted]
Sent: 17 September 2020 12:01
To: [redacted]
Subject: RE: South Humber Bank Energy Centre DCO

Dear [redacted]

I hope this finds you well. Is there any update on the matters identified below?

Kind regards

[redacted]

From: [redacted]
Sent: 28 August 2020 15:41
To: [redacted]
Subject: South Humber Bank Energy Centre DCO [Filed 28 Aug 2020 15:41]

[redacted]

Since our call on Wednesday I understand that Addleshaw Goddard has prepared a draft Framework Agreement and set of Protective Provisions, and that these have now been sent to Pinsent Masons. Whilst we appreciate the continued engagement, we remain of the view that engaging on the legal drafting of either the FA or the PPs is premature – as you know we have not conceded the need for these documents.

We are keen to continue discussions but until we have received a copy of the risk assessment for the level crossing we cannot consider the assertions made in the relevant representation nor the reasonableness of Network Rail's requests. Our client is currently prevented from making further progress. The assessment was discussed in the meeting on 24 July and was promised to follow soon after. We have made several requests over these last weeks, however have still not received a copy.

Kind regards

[redacted]

Chartered Surveyors & Town Planners
6 New Bridge Street
London
EC4V 6AB

D: [redacted]
M:
T: [redacted]

www.dwdllp.com
LinkedIn

Date: Monday 21 September 2020

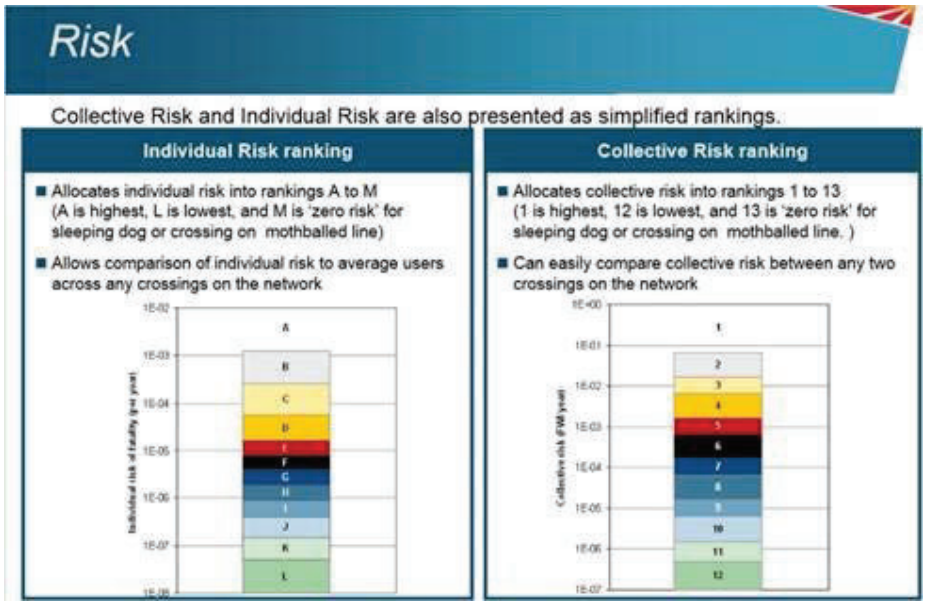
Network Rail objects to the proposed routes from the road infrastructure to the proposed location of the South Humber Bank Energy Centre. This is on the grounds of significant increase to traffic, specifically Heavy Goods Vehicles, as noted in your document 'Annex 23_ES VOL III Appendix 9A - Traffic Volumes over Kiln Lane LC' and 'EN010107-000241-SHBEC DCO - 6.4.12 ES Vol III Appendix 9A Transport Assessment File 1 - Main Document (1)'. Whilst we note that a baseline traffic survey has been completed, no references can be found to indicate that a study was also carried out on the 'South marsh Road (East of Hobson Way), Hobson Way (North & Southbound), laporte Road (North & Southbound) via Queens Road (East & Westbound) onward to Kings Road (East & Westbound) to join the A1173 and then the A180.' The aforementioned route is approximately 1.5 miles longer but utilises a road over rail bridge to cross the railway on Queens Bridge Road. As you may be aware, the interface between members of the public and rail traffic at level crossings, also referred to as 'at grade', presents the greatest risk of any rail operations. Therefore, it is Network Rail's goal to remove or minimise the risk of such interactions.

Having added the traffic movements from your projections to the baseline model scores for each level crossing, we can see that the ALCRM modelled risk posed at each stay at previous rail signalling light indicator Marsh Lane - Double Yellow*
Current ALCRM Score
RISK – J6 (Z10)
ALCRM Score with added traffic to SHBEC
RISK – I8 (Z10)

and Kiln Lane – Yellow*
Current ALCRM Score
RISK – I5 (Z13)
ALCRM Score with added traffic to SHBEC
RISK – H6 (Z13)

* We use standard railway signalling aspect colours to denote the relative risk of a crossing. These are, from preferred to least preferable – Green, Double Yellow, Yellow, Red

Please find as follows an aid in deciphering the ALCRM scores and what they mean.



Having discussed this increase with my operational risk experts, the type of mitigation would have to be barrier protection, which goes to fail safe should a barrier be damaged by vehicle incursion. I have been advised that the infrastructure for these is in the region of £290k per level crossing. This does not include required changes to signalling, communications, nor road infrastructure changes. Given the Marsh Lane has a 'substandard' width (<4m) with minimal passing places and bounded by third party land, I would feel this would push the costs for this route up significantly. The Kiln Lane level crossing fairs a little better. The Western approach, whilst improved from the east, has its own difficulties. The route is via a large and busy

industrial estate. From a brief desktop review, it appears that there are a high proportion of businesses that either service or would require deliveries by LGV/HGV. As you will imagine, this brings in a significant number of LGV/HGVs, and using this as your preferred route, will only exacerbate traffic volumes. Your traffic modelling also shows projected movements of 17 HGV's per hour in each direction, or one every 1¾ minutes. This significantly increases the chance of head on meets between vehicles and the potential for vehicles to 'back up' over the crossing. Your vehicle modelling states 'PCU' Passenger Car Units, however HGV are two to three times the length of PCUs, therefore I argue that your Max Queue output is skewed and does not accurately represent the scenario with HGVs.

Given as noted in the first paragraph, please can you provide evidence that you have reviewed the route via the north and submit robust reasoning behind your evaluation and decision.

Lastly, I notice that your report identifies a southern access via the A180, Westgate roundabout and Moody Lane, where no mitigation is proposed due to the 'small percentage that development flows are adding to the junction'. I would like to understand further why this could not be a preferred route. It appears to provide a suitable route that needs no upgrade to proposed figures, whilst not requiring the use of a level crossing and more of the access via A Class roads.

I look forward to receiving your report and findings on the areas noted above.

From: [redacted] Scheme Interface Manager, Asset Protection and Optimisation (ASPRO)

APPENDIX 6 – NETWORK RAIL OBJECTION AND RISK RATINGS RECEIVED 06.11.20

Subject: RE: WB60393 South Humber Bank Energy Centre - Network Rail Note of Technical Detail

From: [redacted](Asset Protection) <[redacted]
Sent: 06 November 2020 16:43
To: [redacted]
Cc: [redacted]
Subject: WB60393 South Humber Bank Energy Centre - Network Rail Note of Technical Detail

OFFICIAL

Good afternoon [redacted]

Please find attached our Note of Technical Detail in respect of the abovementioned energy centre DCO.

There were also a number of additional questions as noted below. I trust that the document and responses to the questions posed, provide the information you require.

1. **Request for a full narrative risk assessment for Kiln Lane and Marsh Lane level crossings which would include the following information:**
    a) **The traffic baseline and other inputs;**
    b) **The traffic added in the "with SHBEC" scenario;**
    c) **The train movement assumptions used and the nature of risks identified at each level crossing;**
    d) **Information on the usage of the level crossing by all users;**
    e) **Observations and comments on the condition of the crossings;**
    f) **Site-specific hazards; and**
    g) **Mitigation options.**

a) and b) have been provided for in the technical note. The ALCRM modelled risk values for each level crossing have been determined by adding the baseline model scores for each level crossing to the traffic movements from the Promoter's projections. These also include the train movement assumptions referred to in c) (see in particular Note 3 of the technical note).

The nature of the risks (if you want that information then can give them) identified at the level crossing are multi-faceted and if it helpful we can provide guidance on the factors utilised in the ALCRM, however the technical note sets out the broad nature of the risks. It also sets out how the traffic survey data is collected, compiled and used in the ALCRM system to support our objection. Similarly the information referred to in d) to f) are discussed in the technical note but further detail of what is used in the ALCRM model can be provided if necessary. The mitigation options g) are based on further data and are driven by a combination of the ACLRM score and policy, which require the upgrades requested as a minimum standard.

A further full risk assessment would require significant additional analysis and Network Rail believes that the information provided in the technical note is sufficient justification as to why the upgrades are required. Should the Promoter require further information in the form of a full risk assessment report as previously forwarded, Network Rail will require an undertaking as to its costs for carrying out this additional work which goes beyond that which is necessary to provide.

2. **Request for an explanation of the reasons for the changes in risk ratings at each level crossing as reported in NR's objection for the 'with SHBEC' scenario.**

The technical note sets out the justifications for the changes in risk ratings at each level crossing as well as the basis of the ALCRM scoring and colour system. NR would be happy to have discussions between the technical teams to

provide any further explanation of how the system works if required. The upgrades required are the deemed minimum requirement for upgrades to level crossings.

3. **Query whether the changes are solely due to SHBEC traffic, or if they also relate to other additional future road traffic that is identified and allowed for in the Promoter's Transport Assessment.**

The risk values were determined using the traffic volumes noted in documents 'Annex 23_ES VOL III Appendix 9A - Traffic Volumes over Kiln Lane LC' and 'EN010107-000241-SHBEC DCO - 6.4.12 ES Vol III Appendix 9A Transport Assessment File 1 - Main Document (1)'.

Kind regards,

[redacted]
Scheme Interface Manager
Asset Protection & Optimisation

Mobile: [redacted]
E-Mail: [redacted]
George Stephenson House | Floor 3B | Toft Green | York | YO1 6JT

Network Rail
Asset Protection & Optimisation
Floor 3B
George Stephenson House
Toft Green
York
YO1 6JT

Dear Sirs,

Re: Proposed vehicular route to South Humber Bank Energy Centre, utilising Network Rail level crossings Kiln Lane (PYE2/2A 0m 1188yds) and Marsh Lane (PYE2/3A 1m 0594yds).

Network Rail objects to the proposed routes to the location of the South Humber Bank Energy Centre. This is on the grounds of significant increase to traffic, specifically Heavy Goods Vehicles as noted in your documents 'Annex 23_ES VOL III Appendix 9A - Traffic Volumes over Kiln Lane LC' and 'EN010107-000241-SHBEC DCO - 6.4.12 ES Vol III Appendix 9A Transport Assessment File 1 - Main Document (1)'. This document provides technical information outlining why the proposed routes are unsafe, what is required to make the proposed routes safe and justifications as to costs.

ALCRM modelled risk values for level crossings

The traffic movements from your projections have been added to the baseline model scores for each level crossing. These are the ALCRM[3] modelled risk values for each crossing:

Marsh Lane - Double Yellow[1]
Current ALCRM Score
RISK – J6 (Z10)
ALCRM Score with added traffic to SHBEC
RISK – I8 (Z10)

Kiln Lane – Yellow[1]
Current ALCRM Score
RISK – I5 (Z13)
ALCRM Score with added traffic to SHBEC
RISK – H6 (Z13)

Having discussed this with my operational risk experts, the type of mitigation required would be an upgrade to a Manually Controlled Barrier with Obstacle Detection (MCB-OD) barrier protection[4], which defaults to fail safe should a barrier be damaged by vehicle incursion, or other blocking of the level crossing.

Both types of level crossing are automatic, Marsh Lane being Automatic Half Barrier (AHBC) and Kiln Lane being Automatic Operator Controlled (AOCL). In both locations, when the crossings are to be upgraded to meet the demands of increased road and / or rail traffic, or end of life replacement, they would be upgraded to a MCB-OD. This is based on national operational risk minimisation. As further information for the differential in risk ranking, the AHBC is, as its name suggests is only a half barrier. This can increase the likelihood for people to run the crossing to 'save time' on their journey.

The upgrades make the crossing safer by providing a full, cross road visual deterrent to road users who previously may have tried to slalom the existing half barriers. They also protects trains and vehicle occupants by utilising

LIDAR and RADAR systems to detect that the crossing is clear; if it is not, the sequence is disrupted and any approaching train would come to a stand at the protecting signal and the signaller would be required to check the crossing. Without these upgrades, there is greater likelihood of vehicle to vehicle head on interface, particularly given the significant increase in traffic due to the proposed development.

I have been advised that the infrastructure for these is in the region of c.£2M[(2)] per level crossing. This does not include required changes to signalling, communications, nor road infrastructure changes. The specific justifications for these upgrades for each level crossing are outlined below:

Marsh Lane Level Crossing (Also referred to as South Marsh Road)

A UK road is usually 5.5 metres wide, which provides a minimum width for a rigid HGV to pass another rigid HGV. Given the Marsh Lane has a width of less than 4 metres, this is substandard for both the passing of HGVs and for normal cars to pass (which would require a road with of 4.1 metres). The minimal passing places and being bounded by third party land, would increase the costs for this route significantly due to works required to minimize the risk of accident, collision etc that the highway currently presents.

I have also been advised that our Liability Team is investigating the status of Marsh Lane LC. There is a potential that it is a private level crossing and does not have permission for general vehicular use. We are currently investigating the status of the level crossing.

Kiln Lane Level Crossing

The Kiln Lane level crossing fairs a little better. The Western Approach, whilst improved from the east, has its own difficulties. The route is via a large and busy industrial estate. From a brief desktop review, it appears that there are a high proportion of businesses that either service or would require deliveries by LGV/HGV. As you can imagine, this brings in a significant number of LGV/HGVs, and using this as your preferred route, will only exacerbate traffic volumes.

Your traffic modelling also shows projected movements of 17 HGV's per hour in each direction, or one every 1¾ minutes. This significantly increases the chance of head on interfaces between vehicles and the potential for vehicles to 'back up' over the crossing. Your vehicle modelling states 'PCU' Passenger Car Units, however HGV are two to three times the length of PCUs, therefore I suggest that your Max Queue output is skewed and does not accurately represent the scenario with the volumes of HGVs you propose.

It bears mentioning, that once activated, the crossings would be in the down position for some time. A 'crossing barrier cycle' in this location and given the nature of the freight traffic using the line, may mean the crossing is down (closed) to road users for around 4 minutes. Given that the you note a HGV is to use the Kiln Lane crossing every 1¾ minutes, this could have significant blocking back issues for the road and potentially the junction to the east and most definitely to the western approach and access to / from the industrial estate and surface roads.

Alternative Routes

Whilst we note that a baseline traffic survey has been completed, no references can be found to indicate that a study was also carried out on the 'Marsh Lane (East of Hobson Way), Hobson Way (North & Southbound), laporte Road (North & Southbound) via Queens Road (East & Westbound) onward to Kings Road (East & Westbound) to join the A1173 and then the A180' (The Northern Route). The aforementioned route is approximately 1.5 miles longer but utilises a road over rail bridge to cross the railway on Queens Bridge Road. As you may be aware, the

interface between members of the public and rail traffic at level crossings, also referred to as 'at grade', presents the greatest risk of any rail operations. Therefore, it is Network Rail's goal to remove or minimise the risk of such interactions.

I would therefore suggest that as per my previous comments, the Northern Route is thoroughly investigated, as this would potentially not only alleviate any cost borne impact at the level crossings, but also, given the blocking back issue noted and subsequent clearance of the ensuing tailback, provide a much smoother and consistently reliable route to and from the energy centre. As part of the Northern Route investigation, I would also expect to see the inclusion of routing signs, to ensure that HGVs accessing and egressing the site are directed via the Northern Route, so as to minimise the chance of the level crossings being used.

I also notice that your report identifies a southern access via the A180, Westgate roundabout and Moody Lane, where no mitigation is proposed due to the 'small percentage that development flows are adding to the junction'. I would like to understand further why this could not be a preferred route. It appears to provide a suitable route that needs no upgrade to proposed figures, whilst not requiring the use of a level crossing and more of the access via A Class roads.

Costs recovery

Lastly to recover costs already accrued[5], and to enable continued support and advice from Asset Protection and the other Network Rail specialists required, I will need you to enter into a Basic Asset Protection Agreement (BAPA). This document sets out the nature and estimated costs involved for the support of your project. We work on a cost arising basis and always strive to offer the best value for our clients. Please can you advise me of the contact name, email address etc of the person best placed to liaise with.

I look forward to receiving your report and findings on the areas noted above.

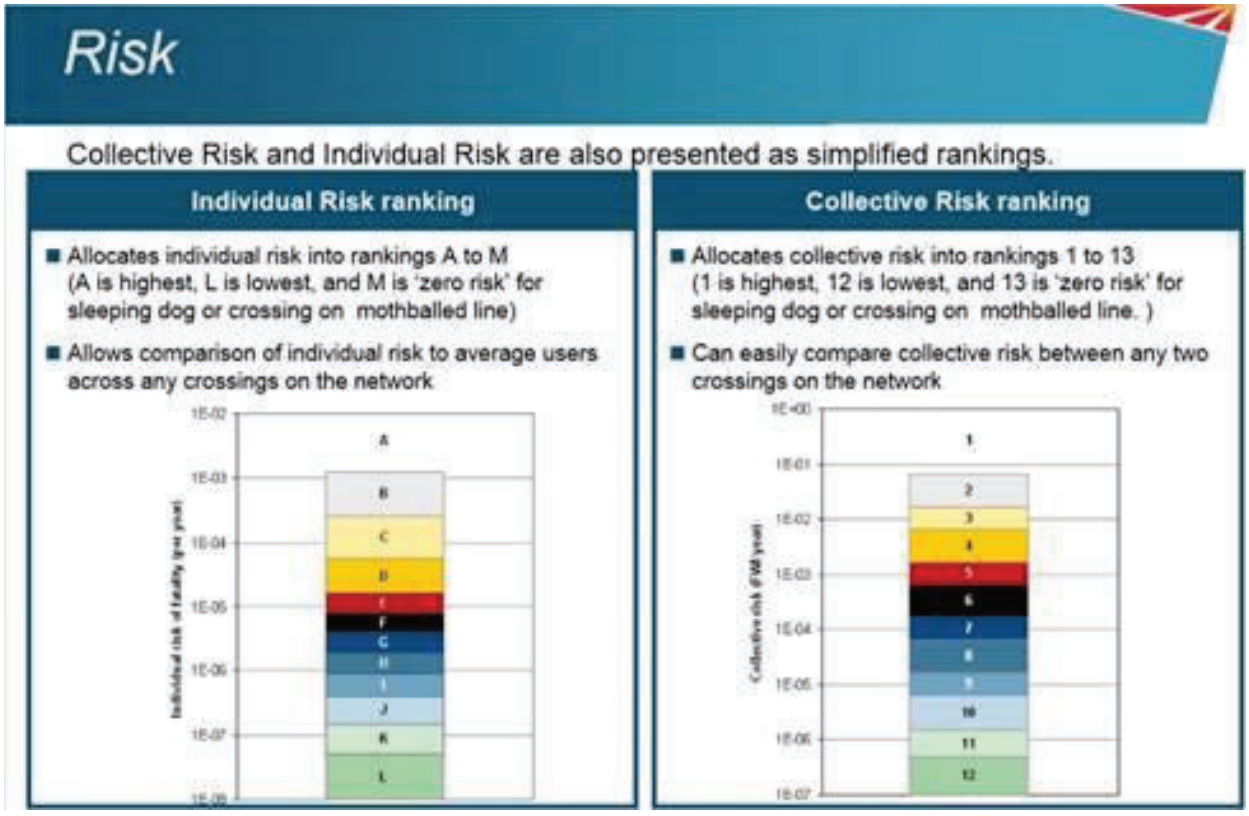
Yours sincerely,

[redacted]
Scheme Interface Manager
Asset Protection & Optimisation

Notes

[1] We use standard railway signalling aspect colours to denote the relative risk of a crossing. These are, from preferred to least preferable – Green, Double Yellow, Yellow, Red

Please find as follows an aid to understanding the ALCRM scores and what they mean.



[2] **Breakdown of costs (approx.) for barrier protection. MCB-OD type crossing**

Category	Cost £k	Description
Feasibility Works	£83	Initial optioneering and feasibility study.
Surveys	£80	Asset condition, correlation, power, topo, lighting etc.
Site set-up and road/rail access	£84	Welfare, road closures, site compound and possessions etc.
Design	£338	Development of selected option and detailed design.
Implementation	£1,448	Materials, installation, testing and commissioning.
TOTAL	**£2,033**	

(3) Notes for ALCRM (All Level Crossing Risk Model)

ALCRM uses baseline traffic survey data as part of its analysis. If there is no baseline traffic data in the system (usually a 9-day traffic survey), the Level Crossing manager (LCM) will undertake a 1-hour survey. This is carried out between the hours of 0930 and 1530 to avoid peak traffic flows and thus minimises the skewing of any data. The collected survey data is then input into ALCRM, along with information such as time gathered etc. ALCRM then uses algorithms to extrapolate this into the wider parameters required to assess the risk. The baseline data, as referred to previously, has the proposed traffic data added to it. This includes vehicle type and volume. As you would imagine, an increase in HGV traffic would have a greater effect on the risk ranking, and the ALCRM algorithms take this into account when calculating the new levels.

ALCRM Risk Ranking - The risk ranking is based upon train and vehicular traffic. In a similar method to that noted above, the LCM will carry out an assessment of rail traffic, usually over a range of weeks to obtain a more reliable figure. The number of tracks, line speed etc will also be factored into the calculations. The reason that we cannot rely solely on booked services for this number and need to undertake a physical survey, is that there may be companies that have network access agreements that can call up to path their train at relatively short notice. These therefore are not included in any regularly scheduled movements, however, must be included for fullness of information and risk assessment.

(4) Barrier Protection

Both types of level crossing are automatic, Marsh Lane being Automatic Half Barrier (AHBC) and Kiln Lane being Automatic Operator Controlled (AOCL). In both locations, when the crossings are to be upgraded to meet the demands of increased road and / or rail traffic, or end of life replacement, they would be upgraded to a Manually Controlled Barrier with Obstacle Detection (MCB-OD). This is based on national operational risk minimisation. As further information for the differential in risk ranking, the AHBC is, as its name suggests is only a half barrier. This can increase the likelihood for people to run the crossing to ‘save time’ on their journey.

(5) Accrued and potential costs

These have been incurred in the review, internal discussions and response to the DCO application. It has been recommended that myself and other NR staff (TBC) also attend a site visit with the Inspector. These costs would also be added to this phase of the project.

APPENDIX 7 – KILN LANE DATA AND REVISED RISK RATINGS PROVIDED BY NETWORK RAIL 26.11.20

From: [redacted]
To: [redacted]
Cc: [redacted]
Subject: RE: WB60393 South Humber Bank Energy Centre - Network Rail Note of Technical Detail
Date: 26 November 2020 17:35:15
Attachments: image001.jpg
image002.jpg
image003.png
image004.png
image005.jpg
live kiln laneDetailedResults.xls.xlsx
extra HGVs and cars kiln lane DetailedResults.xls.xlsx
Option of barriers fitted to kiln lane DetailedResults.xls.xlsx

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[redacted]

Thanks for this. In light of it and previous correspondence, I have asked one of our Route Level Crossing Managers to reassess the risk increase posed by the additional vehicle movements which the SHBEC development proposes.

His response to that request is in italics below. I have attached the files that he attached to his email.

The crux of his response is that the upgrade to ABCL (adding barriers to the existing open crossing, along with associated signalling system upgrades), at an estimated cost of £1.5m, is not justified by the additional risk introduced by the HGV movements. Certainly the originally proposed upgrade to MCB-OD is not justified.

Whilst no upgrade to the fundamental level crossing type is required, the additional movements will increase wear on the crossing deck and approach roads. I have consulted the Off Track Section Manager as suggested below, and he is confident that the cost of upgrades to these elements, along with improved signage and road markings, would not exceed £100k.

To confirm the answers to your questions:

1. Yes, the existing figures used are 5184 and 81 as per the attached baseline assessment
2. I failed to write down what the RLCM said to me on the phone on the existing split of HGVs and other vehicles, but it was a significant number of HGVs due to the nearby industrial estate
3. The additional daily movements used for SHBEC traffic were 624 HGVs and 112 other vehicles as per the Transport Assessment in the operational phase
4. 1 train a day has been used as the assumption, and there is a reasonable level of confidence that this is unlikely to increase significantly
5. No other factors have changed other than the increased vehicle movements to and from SHBEC
6. The risks are shown in the detailed results files and they are similar to those in the narrative risk assessment – large number of HGVs and general vehicle movements is the main one
7. See detailed response below – none of the identified mitigation options (ABCL, MCB-OD or any other intermediate upgrades) are considered proportionate given the high cost of implementing them against the low risk at the crossing (notwithstanding mitigation to wear by lorries to the crossing deck and road surface)

Regards

[redacted]

Afternoon [redacted]

After looking at the information again and adjusting the calculation in ALCRM I have attached the results and will try to explain.

The first sheet detailed live details for Kiln Lane is the current situation at the crossing.
The second sheet details the information with the projected extra vehicle use of the crossing.
The third sheet details the option of fitting barriers at the location.

To explain further the current risk score is I5 with a FWI (fatality weighted index) of 7.63E-04.

The projected risk score for the introduction of the extra vehicles means the risk score remains at I5 though the FWI increases to 8.25E-04 and so increases the risk.

The fitting of barriers to the existing crossing, which would be the minimum work required at the crossing to upgrade from Automatic open crossing locally monitored (AOCL) to AOCL+B gives a risk score of J5 and FWI of 2.65E-04 and hence mitigates the imported risk.

This work though has been discounted after discussions with the signalling RAM have determined that full upgrade to an ABCL would be required as the current equipment may be unsuitable to just fit barriers, this work I have been informed would be 1.5 million.

So upon conclusion the imported risk due to the increase in vehicles would mean no works to the upgrading of the current mitigations…..that said there are other factors to consider, the crossing when replaced some years ago would have a life span for the current level of use.

This life span will considerably reduce due to these added vehicles that is down to the proposed development. It should be noted that the road approaches to the crossing and surrounding roads would be impacted. I presume the council will have been consulted around the impact of roadway routes that the HGVs shall take?

The upgrade of the current crossing deck as well as other options such as renewal of approach signage should be undertaken. The line markings should be re-newed and the crossing approaches re-surfaced.

May I suggest that the Track maintenance engineer and the Off track section manager are contacted so as to input there requirements with regards the above, they should also be able to provide any costs associated with the works.

Combined Risk Results

Crossing Details

Crossing Name:	KILN LANE (IMMINGHAM)
Crossing Type:	AOCL
Location Rail:	PYE2

Usage

Vehicles	5184 per day
Pedestrians/Cyclists	81 per day
Trains	1 per day

Census 1 Type	quick
Census 1 Date	23-Jan-2019 at 14:15

Safety Risk

Individual Risk	I
Collective Risk	5

User Type	Ind Risk (Fraction)	Ind Risk (Numeric)	Collective Risk	Derailment
Car	1 in 3205128	3.12E-07	3.03E-04	
Van / Small Lorries	1 in 1862197	5.37E-07	2.20E-04	
HGV	1 in 4608294	2.17E-07	5.93E-05	
Bus	0	0	0	
Tractor / Farm Vehicle	1 in 47123	2.12E-05	6.05E-07	
Cyclist / Motorcyclist	1 in 990099	1.01E-06	5.97E-05	
Pedestrian	0	0	0	
Passengers			0	0
Staff			1.20E-04	0
Total			**7.63E-04**	0

Collision Frequencies

	Train / User	User Equipment	Other
Vehicle:	0.004149405	0.13705038	0
Pedestrian:	3.28E-05	0	0.001504682

Collision Risk

	Train / User	User Equipment	Other
Vehicle:	5.83E-04	0	0
Pedestrian:	2.66E-05	0	3.31E-05

Key Risk Drivers

Infrequent Trains
Sun Glare
RD Visibility
Large Numbers of users
Crossing Approach
Large Numbers of HGVs

Operational Risk

£ per year	12

Safety Spend

25 year	£9,165.28
50 year	£11,064.01

Combined Risk Results

Crossing Details

Crossing Name:	KILN LANE (IMMINGHAM)
Crossing Type:	AOCL
Location Rail:	PYE2

Usage

Vehicles	5927 per day
Pedestrians/Cyclists	81 per day
Trains	1 per day

Census 1 Type	quick
Census 1 Date	04-Aug-2020 at 14:30

Safety Risk

Individual Risk	I
Collective Risk	5

User Type	Ind Risk (Fraction)	Ind Risk (Numeric)	Collective Risk	Derailment
Car	1 in 2873563	3.48E-07	3.25E-04	
Van / Small Lorries	1 in 1594896	6.27E-07	2.25E-04	
HGV	1 in 5847953	1.71E-07	8.96E-05	
Bus	0	0	0	
Tractor / Farm Vehicle	1 in 40350	2.48E-05	6.18E-07	
Cyclist / Motorcyclist	1 in 990099	1.01E-06	5.97E-05	
Pedestrian	0	0	0	
Passengers			0	0
Staff			1.26E-04	0
Total			**8.25E-04**	0

Collision Frequencies

	Train / User	User Equipment	Other
Vehicle:	0.004845899	0.192697829	0
Pedestrian:	3.28E-05	0	0.001504682

Collision Risk

	Train / User	User Equipment	Other
Vehicle:	6.40E-04	0	0
Pedestrian:	2.66E-05	0	3.31E-05

Key Risk Drivers

Infrequent Trains
Large Numbers of users
Large Numbers of HGVs
RD Visibility
Crossing Approach
Sun Glare

Operational Risk

£ per year	14

Safety Spend

25 year	£9,917.82
50 year	£11,972.44

Combined Risk Results

Crossing Details

Crossing Name:	KILN LANE (IMMINGHAM)
Crossing Type:	AOCL+B
Location Rail:	PYE2

Usage

Vehicles	5927 per day
Pedestrians/Cyclists	81 per day
Trains	1 per day

Census 1 Type	quick
Census 1 Date	04-Aug-2020 at 14:30

Safety Risk

Individual Risk	J
Collective Risk	6

User Type	Ind Risk (Fraction)	Ind Risk (Numeric)	Collective Risk	Derailment
Car	1 in 11111111	9.00E-08	8.43E-05	
Van / Small Lorries	1 in 6134969	1.63E-07	5.85E-05	
HGV	1 in 22727272	4.40E-08	2.33E-05	
Bus	0	0	0	
Tractor / Farm Vehicle	1 in 155327	6.44E-06	1.61E-07	
Cyclist / Motorcyclist	1 in 900900	1.11E-06	6.56E-05	
Pedestrian	0	0	0	
Passengers			0	0
Staff			3.28E-05	0
Total			**2.65E-04**	0

Collision Frequencies

	Train / User	User Equipment	Other
Vehicle:	0.001258777	0.020815634	0
Pedestrian:	3.22E-05	0	0.001794265

Collision Risk

	Train / User	User Equipment	Other
Vehicle:	1.66E-04	0	0
Pedestrian:	2.62E-05	0	3.95E-05

Key Risk Drivers

RD Visibility
Infrequent Trains
Large Numbers of HGVs
Large Numbers of users
Sun Glare
Crossing Approach

Operational Risk

£ per year	2

Safety Spend

25 year	£3,179.98
50 year	£3,838.76

APPENDIX 8: CLARIFICATIONS PROVIDED TO NATURAL ENGLAND

EP UK Investments

AECOM Infrastructure &
Environment UK Limited
Royal Court, Basil Close
Chesterfield
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United Kingdom

T: +44 (1246) 209221
aecom.com

To:
Natural England
Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

CC: [redacted] Natural England
[redacted] EP UKI Ltd.

Project name:
South Humber Bank Energy Centre DCO

Your Ref:
318064

From:
AECOM on behalf of EP Waste Management Ltd

Date:
5th October 2020

Memo

Application by EP Waste Management Limited, Proposed Energy Centre Development at South Humber Bank Power Station – Response to Relevant Representation by Natural England (PINs Reference: EN010107)

1. Introduction

On behalf of EP Waste Management Limited in relation to the above Application, AECOM acknowledges Natural England comments provided within their Relevant Representation received by DWD on behalf of EP Waste Management Ltd dated 11 July 2020.

The purpose of this technical memo is to provide the clarification requested on the points raised by Natural England within the Relevant Representation. Paragraph 4.1, in relation to air quality, is addressed within this memo; paragraphs 4.2 and 4.3, in relation to noise disturbance, are addressed in a separate memo. We agree with Natural England's view (paragraph 1.6 of the Relevant Representation) that these matters can be resolved and agreement documented within the Statement of Common Ground between both parties.

2. Response to points raised

Natural England's comments in paragraphs 3.3.1 to 3.3.3, and its request at paragraph 4.1 for information in relation to air quality impacts on ecological receptors, are noted. AECOM's response is given below, to assist Natural England in providing advice to the competent authority and to the latter in completing its Habitats Regulations Assessment.

A summary table (Table 1) has been provided to set out Natural England's comments, and signposting to the relevant sections in this memo where discussion/ justification has been provided to address the information requests in paragraph 4.1 of the Relevant Representation.

Table 1: Natural England Responses and Signposting to Information

Natural England Relevant Representation Paragraph Reference	Topic	Natural England Response	Signposting to Information Provided by Applicant
3.3.1	Impacts on air quality during operation in-combination with other plans and projects	"*The air quality assessment reports that annual mean NOx environmental thresholds are exceeded in-combination with other plans/ projects for a nearby saltmarsh habitat receptor. Therefore, likely significant effects in-combination cannot be ruled out and further justification that the proposed development in-combination will not result in adverse effects on the European sites should be provided within an appropriate assessment. We note that the HRA Signposting Report concludes that there will be no adverse effects on European sites in question in-combination with other plans and projects, however, we are of the opinion that further justification is required to demonstrate this. We note that the background NOx concentrations already exceed the critical levels and regular inundation and nutrient inputs from estuary water are likely to have a greater influence over the establishment and changes to saltmarsh*."	See Section 2.2.1 of this memo. Clarification has been provided on how the 1% threshold is correctly applied based on relevant guidance.
3.3.2		"*Natural England notes that acid deposition rate environmental thresholds are exceeded in-combination with other plans/ projects for acid fixed dune habitat receptors. Therefore, likely significant effects in-combination cannot be ruled out and further justification that the proposed development in-combination will not result in adverse effects on the European sites should be provided within an appropriate assessment. We note that at D3.11 of Appendix 7A it states that "the cumulative effect of acid deposition on the Dune habitat has been considered in detail in the report to*	See Section 2.2.2 of this memo. Clarification has been provided on how the 1% threshold is correctly applied based on relevant guidance. Clarification has been provided in respect of the assessment of cumulative effects of acid deposition on

		inform the HRA Signposting (see Document Ref 5.8)". However, this does not appear to have been discussed in the report. Therefore we require further information to demonstrate why there will be no adverse effects on the integrity of the European sites in question."	dune habitat, which is contained in Environmental Statement (ES) Chapter 17: Cumulative and Combined Effects (Document Ref. 6.2), and not in the HRA signposting document (Document Ref. 5.8) itself.
3.3.3		"*Natural England notes that the air quality assessment suggests that there will be exceedances of environmental thresholds of annual mean NOx at Laporte Road LWS in-combination with other plans/ projects. Stallingborough Fish Ponds, Healing Cress Beds and Sweedale Croft Drain LWSs all exceed the environmental thresholds both alone and in-combination with other plans/ projects for proposed nitrogen deposition rates. Natural England does not hold any detailed information on these sites and they fall out with the Habitats Regulations process, however, we recommend that these impacts are considered further by the relevant authority*. "	See Section 2.2.3 of this memo. Clarification has been provided on how the 1% threshold is correctly applied based on relevant guidance. Discussion is provided to support conclusions made in ES.

2.1 Air Quality

Natural England states in paragraph 4.1 of the Relevant Representation, "*Further explanation within the appropriate assessment to demonstrate that there will be no adverse impacts on the integrity of the European sites in question despite exceedances in the environmental thresholds for annual mean NOx and advide* [sic – assume this means acid] *deposition rates in combination with other plans/ projects*".

In response to the request for explanation, we have undertaken a review of both the NOx and acid deposition Process Contributions (PC) and Predicted Environmental Concentrations (PECs) to assist the competent authority in undertaking its Appropriate Assessment. The response is provided in the Sections below.

2.2.1 In-combination Assessment - NOx

The air quality modelling has identified several locations within the Humber Estuary SPA/ SAC/ Ramsar where the PC for mean NOx is between 1.2 and 1.3% of the Critical Load (CL). The 1% threshold is commonly applied as a screening threshold beyond which further assessment is required; it does not signify that a significant effect will arise. Paragraph 5.26 of Natural England's guidance on air quality impact assessments states that "*An exceedance alone is insufficient to determine the acceptability (or otherwise) of a project*"[1]. In this case, Paragraph 5.5.2.6 of the IAQM guidance[2], provides the following clarification: "..*the 1% and 10% screening criteria should not be used rigidly and not to a numerical precision greater than the expression of the criteria*

[1] Natural England (2018) Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations. Version: June 2018 http://publications.naturalengland.org.uk/publication/4720542048845824
[2] IAQM (2020) A guide to the assessment of air quality impacts on designated nature conservation sites 2020: https://iaqm.co.uk/text/guidance/air-quality-impacts-on-nature-sites-2020.pdf

themselves", and an example is given of 1.1% being effectively 1%. In this respect, it is correct for the assessment to take the values as whole percentages using rounding of the first decimal place, which in this case results in them all being rounded down to 1%, and to conclude that the PC threshold for screening out in-combination effects is not exceeded.

In addition, the APIS database states that "*It is likely that the strongest effect of emissions of nitrogen oxides across the UK is through their contribution to total nitrogen deposition*". While direct effects of NOx may arise in certain circumstances, APIS states that: "There is substantial evidence to suggest that the effects of NO_2 are much more likely to be negative in the presence of equivalent levels of SO_2". Across the UK, and locally to this site, SO_2 levels are generally low (i.e. well below 10 µg/m^3 and well below the Critical Level) and therefore no synergistic effect with NOx is expected[3].

Paragraph 4.25 of NE guidance air quality assessments states "…*1% of critical load/level are considered by Natural England's air quality specialists (and by industry, regulators and other statutory nature conservation bodies) to be suitably precautionary, as any emissions below this level are widely considered to be imperceptible…There can therefore be a high degree of confidence in its application to screen for risks of an effect*". The conclusion of no likely significant in-combination effects as a result of changes in NOx emissions is therefore valid, and Appropriate Assessment of this pathway is not required.

2.2.2 In-combination Assessment - Acid Deposition

In response to the specific comment regarding the consideration of acid deposition in the HRA Signposting document (Document Ref. 5.8), we can clarify that this topic is included within the HRA Signposting document; however as with all other topics considered in the screening text, the detailed assessment is included within the main chapters of the ES (which is 'signposted' from paragraphs 7.5.1-7.5.2 of the HRA document). In this case the assessment of cumulative effects of acid deposition on the European site is contained within paragraph 17.8.13 of ES Chapter 17: Cumulative and Combined Effects (Volume I, Document Ref. 6.2).

For acid deposition (keq/ha/year), at six locations within the Humber Estuary SPA/ SAC/ Ramsar (sand dune habitats), the cumulative PC would be between 1.1 and 1.2% of the Critical Level. As discussed above for NOx, the stated application of the IAQM guidance results in no exceedance of the 1% screening thresholds for acid deposition at the designated site receptors modelled for the in-combination assessment. The conclusion of no likely significant in-combination effects as a result of changes in acid deposition is therefore considered to be valid, and Appropriate Assessment of this pathway is not required.

2.2.3 In-combination Assessment - Local Wildlife Sites

Laporte Road Local Wildlife Site (LWS)

The cumulative impact on annual mean NOx means that the site is predicted to exceed the environmental standard at E6_1 and E6_2 (Laporte Road LWS). The background at these sites is 26.4µg/m^3, and the predicted cumulative PC is 5.5 and 5.2 µg/m^3 respectively, leading to a PEC of 31.9 and 31.6 µg/m^3. As the Environment Agency screening criteria for sites of local importance is a long term PC of less than 100% of the environmental standard, this criterion is met in the assessment since the PC of 5.5 µg/m^3 is only 18% of the standard of 30 µg/m^3, with the conclusion that significant in-combination effects would not be likely. It is therefore reasonable to conclude that there are no significant in-combination air quality effects on the LWS.

[3] From the APIS database, the baseline SO2 level at this location is 2.63 µg/m3, which is well below the Critical Leval of 20 µg/m3.

Stallingborough Fish Ponds, Healing Cress Beds and Sweedale Croft Drain LWSs

These are all freshwater sites and can therefore reasonably be assumed to be phosphate-limited (i.e. phosphorous is the principal nutrient limiting eutrophication) rather than nitrogen-limited. This is the case for most lowland freshwater sites[4][5]. On this basis, the habitats present would not be sensitive to additional nitrogen inputs from the stack emissions, and no significant in-combination effects as a result of changes in air quality would be predicted.

[4] Schindler, D.W., Hecky, R.E., Findlay, D.L., Stainton, M.P., Parker, B.R., Paterson, M.J., Beaty, G., Lyng, M. and Kasian, S.E.M. (2008) Eutrophication of lakes cannot be controlled by reducing nitrogen input: Results of a 37-year whole-ecosystem experiment. Proceedings of the National Academy of Sciences of the United States of America 105 (32) 11254-11258 https://www.pnas.org/content/105/32/11254

[5] Lee, G.F. (1973) Role of phosphorus in eutrophication and diffuse source control. Water Research Volume 7, Issues 102: 111-128 https://www.sciencedirect.com/science/article/abs/pii/0043135473901565