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

7.7 - Statement of Common Ground with Network Rail

Applicant: EP Waste Management Ltd
Date: December 2020

DOCUMENT HISTORY

Document Ref	Statement of Common Ground with Network Rail		
Revision	Draft for Comment		
Author	Kirsty Cobb		
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Document Owner	AECOM		

GLOSSARY

Abbreviation	Description
ACC	Air-cooled condenser.
ALCRM	All Level Crossing Risk Model
CCGT	Combined Cycle Gas Turbine.
CTMP	Construction Traffic Management Plan.
CWTP	Construction Worker Travel 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.
EPUKI	EP UK Investments Ltd.
EPWM	EP Waste Management Limited ('The Applicant').
ES	Environmental Statement.
HE	Highways England.
HGV	Heavy Goods Vehicle.
mAOD	Metres Above Ordnance Datum.
MW	Megawatt: the measure of power produced.
NELC	North East Lincolnshire Council.
NSIP	Nationally Significant Infrastructure Project: for which a DCO is required.
OWTP	Operational Worker Travel Plan.
PA 2008	Planning Act 2008.
PEI	Preliminary Environmental Information.
PINS	Planning Inspectorate.
Q2	Quarter 2.
RDF	Refuse derived fuel.
SHBEC	South Humber Bank Energy Centre.
SHBPS	South Humber Bank Power Station.
SoS	Secretary of State.
SRN	Strategic Road Network.

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TABLES

1.0 INTRODUCTION

1.1 Overview

1.1.1 This Statement of Common Ground ('SoCG') with Network Rail (Document Ref. 7.7) 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').

1.1.1 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').

1.1.2 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.

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

1.1.4 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).

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) 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). Three representative construction scenarios (timescales) are described within Chapter 5: Construction Programme and Management in the ES Volume I (Document Ref. 6.2) and assessed in the Environmental Impact Assessment ('EIA').

1.5 Purpose of this Document

1.5.1 This document is intended to summarise clearly the agreements reached between the parties on matters relevant to the examination of the Application and areas that have not yet been agreed, and to assist the Examining Authority. It has been prepared with regard to the guidance in 'Planning Act 2008: examination of applications for development consent' (Department for Communities and Local Government, March 2015). This document also summarises the engagement between the parties in respect of the Proposed Development and the Consented Development.

1.5.2 This version of the document summarises the agreements regarding matters such as the locations and types of level crossings in the vicinity of the Site, baseline road and traffic conditions, Proposed Development traffic routing, consultation regarding abnormal indivisible loads, Proposed Development traffic impacts, and controls contained in the draft DCO (Document Ref. 2.1). It is based on the information available at this time, which principally comprises the Draft DCO (Document Ref. 2.1) and accompanying ES Volumes I to III (Document Refs. 6.2 to 6.4), which includes the Transport Assessment at Volume III, Appendix 9A (Document Ref. 6.4.12).

1.6 Status of this Version

1.6.1 The SoCG was prepared in October 2020 and subsequently was agreed on [TBC] between the parties as suitable. This version of the SoCG demonstrates what the parties have been able to agree to date, and summarises the remaining issues between them as at 8 December 2020.It will be submitted to the Examining Authority to assist the examination of the Application. It is hoped that as more matters are agreed an updated SoCG will be prepared and submitted to the Examining Authority. Therefore, for the avoidance of doubt, this is the position of the parties as at the date of this statement and may be subject to change..

1.6.2 Section 2 of this document summarises the role of Network Rail, Section 3 sets out details of consultation with Network Rail to date and discussion on agreement of the relevant matters for consideration. Section 4 sets out areas of disagreement/ matters to be agreed.

2.0 THE ROLE OF NETWORK RAIL

2.1.1 Network Rail owns, operates and develops Britain's railway infrastructure.

2.1.2 Network Rail's role in relation to the DCO process derives from the PA 2008 and secondary legislation made under the same.

2.1.3 Network Rail is a consultee under sections 42 and 56 of the PA 2008, meaning applicants must consult with Network Rail before submitting a DCO application and once an application has been accepted for examination.

2.1.4 Network Rail has registered as an interested party in the DCO examination process by submitting a Relevant Representation to the Planning Inspectorate ('PINS'). Network Rail summarises its objection to the Order as comprising concerns relating primarily to the increase in HGV use of the Kiln Lane Level Crossing, as well as, to the use of the South Marsh Road Level Crossing.

3.0 SUMMARY OF CONSULTATION

3.1.1 The consultation that has taken place with Network Rail in relation to the issues raised within this SoCG is summarised in Table 3.1 below.

3.1.2 Consultation has been ongoing with Network Rail since the planning application for the Consented Development. Consultation comments received for the Consented Development are considered to be relevant to the Proposed Development and therefore a summary of all consultation comments received to date for the Consented Development and Proposed Development is presented in Table 3.1 below.

Table 3.1: Consultation Summary

Date	Details
February 2019 (consultation on Consented Development planning application)	Network Rail consulted by NELC in respect of the Consented Development planning application. Network Rail responded to NELC as follows: ***"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. [sic]* *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***

Date	Details
	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*”The planning permission issued by NELC subsequently included an informative requesting that abnormal loads are notified to NELC and

Date	Details
	highways and bridge authorities, and stating "*Network Rail (London North Eastern) office (assetprotectionlneem@networkrail.co.uk) should also be contacted in advance to confirm that any proposed abnormal load route is viable and to agree a strategy to protect Network Rail asset(s) from any potential damage caused by abnormal loads*".
September 2019 (consultation on EIA Scoping Opinion for Proposed Development)	Network Rail consulted by PINS in respect of a request made by the Applicant for an EIA Scoping Opinion for the Proposed Development. Network Rail responded to advise "*With reference to the safety and protection of the railway, the EIA for the proposed development should contain a Transport Assessment, providing an assessment in relation to the impact on the operational railway and Level Crossing situated on South Marsh Road to the West of the site location, along with a Flood Assessment*."
December 2019 (consultation on Preliminary Environmental Information (PEI) Report for Proposed Development)	Network Rail consulted by the Applicant in October 2019 (s42 consultation). Network Rail responded in December 2019 as follows: *"Network Rail has been reviewing the information to date and at this stage it is not sufficiently detailed to fully assess 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.* *Our initial point of concern relates to site access which we believe will be via the Marsh Lane level crossing over the railway. 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.* *Network Rail's position is that there shouldn't be any increase or change in usage to the level crossings in the area. Any increase in movement across level crossings increase risk. Accordingly, we will need further and better particulars from you to understand the position and we reserve the right to comment further on this aspect of the development when further details are available.*

Date	Details
	Network Rail reserve the right to produce additional and further grounds of concern when further details of the application and its effect on Network Rail's land are available. *Network Rail will be seeking protection from the exercise of compulsory purchase powers over operational land either for permanent or temporary purposes. In addition, Network Rail will wish to agree protection for the railway during the course of the construction works and otherwise to protect our undertaking and land interests. Network Rail reserves the right to produce additional and further grounds of concern when further details of the application and its effect on Network Rail's land are available. In addition, any rights for power or other lines under, over or alongside the railway line will require appropriate asset protection measures deemed necessary by Network Rail to protect the operational railway and stations. We have standard protective provisions which will need to be included in the DCO as a minimum therefore contact should be made to Emily Christelow, email: to obtain a copy of the relevant wording. In addition, a number of legal and commercial agreements will need to be entered into, for example, asset protection agreements, method statements, connection agreements, property agreements and all other relevant legal and commercial agreements. This list is not exhaustive and will need to be reviewed once more details of the scheme are discussed between the parties.* *Network Rail is prepared to discuss the inclusion of Network Rail land or rights over land subject to there being no impact on the operational railway, all regulatory and other required consents being in place and appropriate commercial and other terms having been agreed between the parties and approved by Network Rail's board.* *Network Rail also reserves the right to make additional comments once we have evaluated the proposals in more detail."* The Applicant responded directly to Network Rail in writing on 18 February 2020 as follows: "*The designated operational HGV route was agreed for the Consented Development as part of pre application and determination stage discussions with the local highways authority, NE Lincolnshire Council. This 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 across the two level crossings than the Consented Development. A limited number of Abnormal*

Date	Details
	Indivisible Loads (AILs) may be required during construction or at later stages but the details of these are not known at this stage. AILs would be subject to the standard notification procedures, and therefore Network Rail would be afforded the opportunity to discuss its requirements as part of this procedure. No compulsory acquisition or temporary possession powers are to be sought over Network Rail operational land (or at all in the DCO) and therefore no protective provisions are proposed for Network Rail."
21 January 2020	Network Rail was consulted by NELC on the Delivery and Servicing Plan for the Consented Development, which was submitted by the Applicant to discharge planning condition 18. Network Rail responded as follows: "*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*."
July 2020 (Network Rail's Relevant Representation on the DCO Application)	Network Rail submitted a Relevant Representation to PINS summarised as follows: "*Compulsory acquisition powers to acquire new rights over Network Rail land are not sought under the Scheme. 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 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.* *The Crossing would not currently be able to withstand the significant increase in HGV traffic proposed. Upgrade works to the Crossing at a cost of approximately £50,000 would be required ahead of the*

Date	Details
	commencement of construction of the Scheme, as there are no appropriate alternative routes into the site. *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.* *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.* *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;* *(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* *(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 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.* *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."* Prior to the submission of Network Rail's Relevant Representation a number of emails were exchanged in which the Applicant outlined the Proposed Development and highlighted some of the relevant technical documents submitted to Network Rail.

Date	Details
24 July 2020 (Introductory meeting between Applicant and Network Rail)	An introductory meeting was held between Network Rail and the Applicant in order to introduce the Proposed Development further and gain a better understanding of Network Rail's expectations identified in their Relevant Representations.
August 2020	A number of emails and calls between Network Rail and the Applicant were held discussing further matters associated with the Relevant Representation. Key discussion points in emails focused on the Applicant requesting the Level Crossing Risk Assessment, Network Rail requesting a Costs Undertaking for a Framework Agreement ('FA') and Network Rail outlining provisions it said were required to protect the railway. Notable calls made are as set out below: A call was held between the Applicant and Network Rail on 19 August 2020 further discussing Network Rail's expectations set out in the submitted Relevant Representations. No agreements were made on this call. A call was held between the Applicant and Network Rail on 26 August 2020. This call confirmed Network Rail had begun drafting a FA and bespoke Protective Provisions ('PPs'). The Applicant confirmed it had not conceded the need for either. No agreements were made on this call. The above list is a summary of the main exchanges and does not represent all calls and emails exchanged in August between the Applicant and Network Rail.
21 September 2020	Network Rail provided a written objection to the Applicant by email as follows: "*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*

Date	Details
	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.*

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	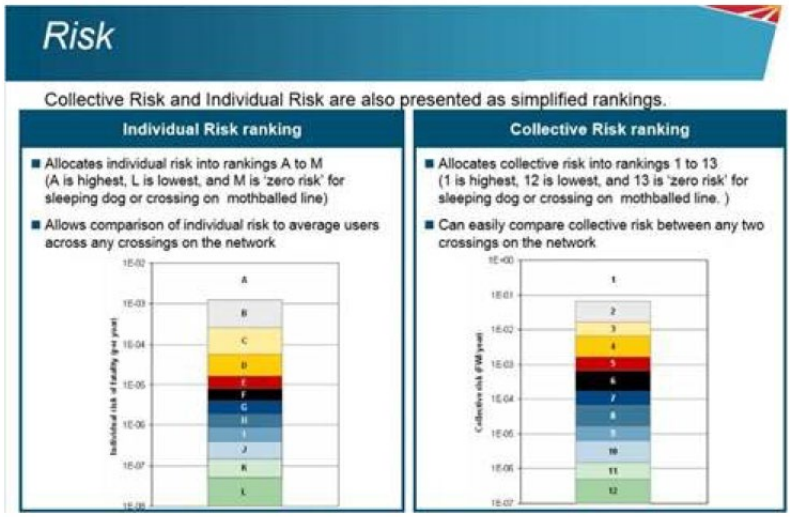 *Having discussed this increase with my operational risk experts, the type of mitigation would have to be barrier protection, which goes to fail safe should a barrier be damaged by vehicle incursion. I have been advised that the infrastructure for these is in the region of £290k per level crossing. This 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*

Date	Details
	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.*" A report from the Applicant was submitted to Network Rail on 16 October 2020.
16 October 2020	The Applicant submitted a technical response to Network Rail's objection (see copy in Appendix A).
6 November 2020	Network Rail submitted an updated note of technical detail to the Applicant on 6 November 2020 and responded as follows: *"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)*

Date	Details
	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.*

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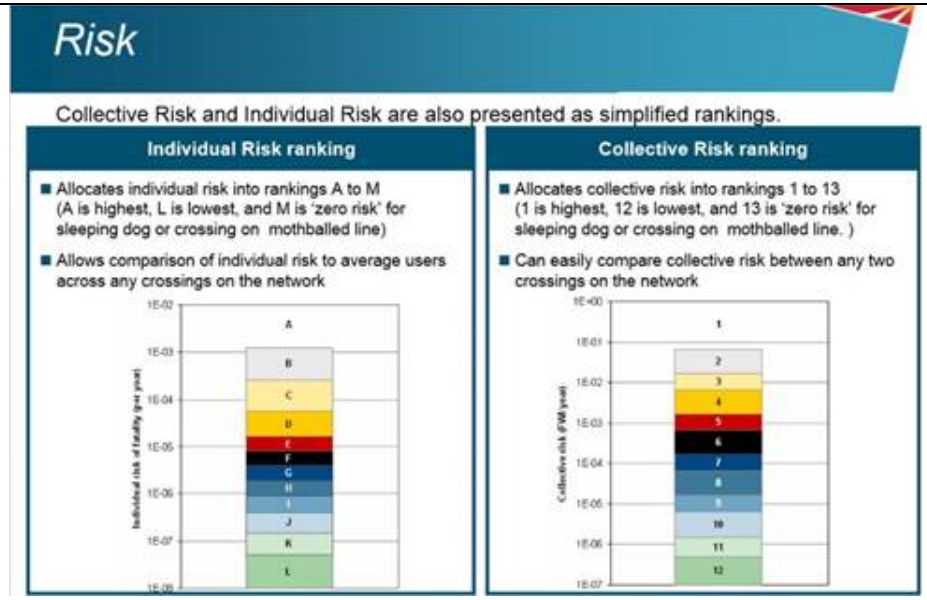
	I have been advised that the infrastructure for these is in the region of c.£2M(2) per level crossing. This does not include required changes to signalling, communications, nor road infrastructure changes. The specific justifications for these upgrades for each level crossing are outlined below: ***Marsh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

Date	Details
	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*

Date	Details
	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,* *Roland Brown MAPM* *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.*

Date	Details



(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.*

Date	Details

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

Date	Details
	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. "* **Responses to queries from Applicant:** 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*

Date	Details
	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)'."*

Date	Details
November 2020	A number of emails between Network Rail and the Applicant were exchanged discussing further matters associated with the Statement of Common Ground. Key discussion points in emails focused on the Applicant maintaining the importance of its requests for the Narrative Level Crossing Risk Assessments and relevant data inputs to the ALCRM and Network Rail requesting figures used from the Transport Assessment for a new ALCRM risk assessment. This table is a summary of the main exchanges and does not represent all calls and emails exchanged in November between the Applicant and Network Rail.
26 November 2020	Network Rail responded to the Applicant by email as follows: "*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*

Date	Details
	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* *Roland* *Afternoon Roland,* *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.*

Date	Details
	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."* Network Rail provided three Excel spreadsheets attached to the email showing the risk assessment inputs and results for the current baseline, with the Proposed Development operational traffic, and with barrier mitigation.
Solicitor engagement	Network Rail's solicitors (Addleshaw Goddard LLP) ('AG') contacted the Applicant's solicitors (Pinsent Masons LLP) ('PM') on 8 June 2020 to outline Network Rail's concerns with increases in traffic resulting from the Proposed Development. AG proposed that the parties enter into legal agreements and/or amendments to the Order to mitigate Network Rail's concerns and to allow them to remove its objection to the Proposed Development. AG

Date	Details
	requested an undertaking for legal costs and for Network Rail internal costs. PM did not confirm that the Applicant considered a legal agreement or amendments to the Order were required. AG provided a draft FA and PPs for inclusion in the Order to PM on 25 August 2020 and repeated its request for an undertaking for legal costs. On 23 September 2020 PM noted that it was instructed not to review the FA or PPs until additional technical information was provided by Network Rail, and the Applicant was unable to assess the basis of Network Rail's requested terms, and the need for the FA and PPs was not agreed. PM confirmed on 2 October that the Applicant was willing to contribute up to £3,000 towards Network Rail's technical costs, which was subsequently confirmed as insufficient by AG. Network Rail accepted the Applicant's offer on 4 December but noted that this was insufficient to cover all of Network Rail's technical costs but is willing to accept this level of contribution for now. AG also noted its position that even without further technical details which had been requested by the Applicant, it was possible to move forward with the FA and PPs and requested that PM engage with these documents. PM reiterated its position that without having sight of that technical detail, entering in to discussions on the need for PP and FA would be premature. Following provision of technical information from Network Rail detailing the impacts on the Kiln Lane Level Crossing and South Marsh Road level crossing, PM confirmed on 22 October that the Applicant did not consider it necessary to enter into a FA or PPs and that an undertaking for legal costs was therefore not necessary. On 1 December AG confirmed to PM that based on the extra 624 HGV movements, only upgrades to the approach road, deck and signage would be required rather than significant upgrades to the Kiln Lane Level Crossing that were previously requested by Network Rail between July and November inclusive. However, AG noted that Network Rail needed to maintain control with regards to the final level of vehicle movements to ensure that the numbers do not reach levels that could cause an unacceptable risk increase to users of the railway and the Kiln Lane Level Crossing and South Marsh Road level crossings, and on that basis, AG considers that the FA and PPs, and the requested amendment to the Order are still required.

Date	Details
	PM is considering the latest information sent on 1 December 2020 with the Applicant. Discussions are ongoing.

4.0 MATTERS AGREED

4.1 Network Rail Assets

4.1.1 It is agreed that there are two level crossings in the vicinity of the Site – 'Marsh Lane' level crossing on South Marsh Road (west of Hobson Way) and 'Kiln Lane' level crossing on Kiln Lane. It is agreed that Kiln Lane is a public adopted highway. It is agreed that vehicles use South Marsh Road (west of Hobson Way). The level crossings cross a single railway line which is currently used by up to one freight train per day.

4.1.2 It is agreed that Marsh Lane level crossing comprises an automatic half barrier crossing (AHBC). This crossing type has two half-barriers that close the entrance lanes to the crossing, signage, lights and audible alarms. The current risk rating is J6, where J refers to the individual risk ranking, and 6 refers to the collective risk ranking.

4.1.3 It is agreed that Kiln Lane level crossing comprises an automatic open crossing locally monitored (AOCL). This crossing type comprises an open crossing with lights, signage and audible alarms, but no barriers. The current risk rating is I5, where I refers to the individual risk ranking, and 5 refers to the collective risk ranking.

4.1.4 It is agreed that an alternative highway crossing of the railway line that avoids level crossings is available at Queens Road, to the north of Kiln Lane, via Queens Road bridge.

4.1.5 It is agreed that four other 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.

4.1.6 It is agreed that there are no Network Rail assets or operational land located within the Order limits.

4.1.7 It is agreed that the Draft DCO (Document Ref. 2.1) does not seek any compulsory acquisition or temporary use powers over Network Rail operational land or assets.

4.1.8 It is agreed that the Draft DCO (Document Ref. 2.1) does not include any protective provisions for the benefit of Network Rail, or allow Network Rail any control over how many HGVs will be permitted to use the Kiln Lane level crossing and/or the South Marsh Road level crossing. The draft DCO includes a requirement to consult with Network Rail in relation to draft Requirement 16 in relation to abnormal loads, which is consistent with the requirement of the planning conditions on the Consented Development Planning Permission.

4.2 Consented Development

4.2.1 It is agreed that Network Rail did not object to the planning application for the Consented Development and did not specify that level crossing upgrades were required as a condition of the Consented Development. It is agreed that Network Rail did however communicate its serious reservations about the use of the Kiln Lane Level Crossing and South Marsh Road level crossing by abnormal loads in an email dated 8 March 2019 to Planning – IGE (ENGIE) and requested that the Applicant contact its asset protection project manager to confirm that any proposed route is viable and agree a strategy to protect assets from any potential damage caused by abnormal loads. This requirement was included by NELC as an informative number 5 in the decision notice for the Planning Permission for the Consented Development (see Document Ref. 5.5 Planning Design and Access Statement, Appendix 2/ Examination Library Ref APP-024).

4.2.2 It is agreed that Network Rail noted that it would need to recover all reasonable costs associated with the works of the Proposed Development and that where any damage, injury or delay to the rail network was caused by an abnormal load (related to the application site) the Applicant or developer would incur full liability.

4.2.3 It is agreed that the Planning Permission conditions require a construction traffic management plan and a construction worker travel plan to be submitted and approved by the local planning authority prior to commencement of development, and an operational travel plan to be submitted and approved by the local planning authority prior to the Consented Development coming into operation. There is no formal requirement for Network Rail to be consulted on these plans.

4.2.4 It is agreed that the Planning Permission conditions also require a Delivery and Servicing Plan (condition 18) which defines the operational HGV management and routing. NELC have consulted Network Rail on the Delivery and Servicing Plan and it is agreed that Network Rail responded to NELC in January 2020 to confirm no objection.

4.3 Proposed Development Construction and Operational HGV Routing

4.3.1 The Transport Assessment 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.

4.3.2 It is agreed that the designated HGV route for the Consented Development and the Proposed Development are the same, and that based on the Transport Assessments, traffic generated by the Consented Development and Proposed Development is the same.

4.4 Construction and Operational Light Vehicle Routing

4.4.1 With regards to non-HGV traffic routing, no designated route has been identified for non-HGV traffic (i.e. staff cars). The Transport Assessment uses assumptions about where staff are likely to be travelling from/ to, based on the 2011 Journey to Work Census.

4.5 Baseline Road Conditions

4.5.1 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 that 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.

4.5.2 It is agreed that South Marsh Road (west of Hobson Way) is suitable for car and van traffic but not suitable for HGV traffic.

4.5.3 Paragraph 3.2.4 of the Transport Assessment states that Kiln Lane is a 7.3 m wide single carriageway road subject to a 40 mph speed limit. It is agreed that the level crossing on Kiln Lane is located approximately 400 m west of the junction with Hobson Way. (It is agreed that there is a typographical error in paragraph 3.2.4 of the Transport Assessment which erroneously suggests that the level crossing is approximately 200 m 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.)

4.6 Baseline Traffic Conditions

4.6.1 The Study Area for the Transport Assessment was defined and agreed with NELC and Highways England, and is shown in Figure 3.2 of the Transport Assessment.

4.6.2 The baseline highway junction capacity and road traffic flows within the Study Area 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 relating to road capacity and road traffic flows set out in the Transport Assessment are summarised below.

<u>Kiln Lane Baseline Traffic</u>

4.6.3 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.

4.6.4 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.

4.6.5 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

4.6.6 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.

4.6.7 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.

4.7 Proposed Development Construction Traffic Impacts

4.7.1 The Applicant has stated that construction of the Proposed Development is anticipated to take approximately three years.

4.7.2 Section 11 of the Transport Assessment assesses the impacts of the Proposed Development construction traffic.

4.7.3 HGV movements are expected to be spread evenly over the day between 07:00 and 19:00 and, as noted at Section 4.3 above, all HGVs will use the designated HGV route (passing over Kiln Lane level crossing). Non-HGV traffic will generally travel to Site in the morning and travel away from the Site in the evening, and will not be required to follow a designated route (as noted at Section 4.,4 above).

Maximum HGV Movements – Start of Construction Phase

4.7.3.1. The Transport Assessment identifies that the maximum (worst case) volume of construction HGVs will be around 412 two way movements per day during the first three months of construction in the event that an extensive cut and fill exercise is required. For the twelve hour work day period Network Rail has calculated that this would equate to:

- 34.3 two way HGV movements (i.e. approximately 17 HGVs in and 17 HGVs out) per hour; and
- approximately one HGV movement every 1¾ minutes.

Peak Construction Phase Traffic Generation

4.7.4 In accordance with Institute of Environmental Assessment Guidelines for the Environmental Assessment of Road Traffic (1993) the Transport

Assessment assesses the overall peak of construction when 116 two way HGV movements and 750 two way non-HGV movements are anticipated per day. For the twelve hour work day period Network Rail has calculated that this equates to:

- 9.7 two way HGV movements (i.e. approximately 5 HGVs in and 5 HGVs out) per hour; and
- approximately one HGV movement every 6¼ minutes.

Increase in Traffic Volume at Peak of Construction Phase

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

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

4.7.6 It is agreed that construction traffic flows on South Marsh Road and Kiln Lane will be relatively short term during the three year construction period.

Impacts on Junction Queues at Peak of Construction

4.7.7 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. 1 PCU is equal to 5.75 m.

4.7.8 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.

4.7.9 Section 11.7 presents the findings for three different potential construction timing scenarios. The 'worst case' impacts identified in the Transport Assessment 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.

4.7.10 It is agreed that the assessment of increased traffic volume and junction queues was also included in the PEI Report (Appendix 9A: Transport Assessment).

4.7.11 It is agreed that based on paragraph 4.7.6 above that queuing at the junctions closest to the Kiln Lane and Marsh Lane level crossings is not likely to cause backing up on the level crossings during construction.

4.7.12 It is also agreed that the Transport Assessment has not considered the impact of closing the Kiln Lane level crossing barrier on traffic flows and queuing.

4.8 Abnormal Indivisible Loads

4.8.1 With regards to abnormal load delivery to the Site during construction, 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*." It is agreed that the Applicant will be required to consult with Network Rail if the proposed abnormal delivery route crosses any level crossings in the vicinity of the Site, in accordance with draft DCO requirement 16 (Document Ref. 2.1).

4.8.2 Network Rail has set out at Section 5.2 the amendments it considers are required to requirements in the DCO..

4.9 Proposed Development Operational Traffic Impacts

4.9.1 Section 7 of the Transport Assessment provides information on the traffic generated during the operational phase of the Proposed Development, based on worst case assumptions regarding annual fuel throughput, HGV payloads, and assuming all deliveries take place Monday to Friday between 06:00 and 18:00 (when in fact deliveries could be 7 days per week, 24 hours per day).

4.9.2 Table 7.1 provides the anticipated hourly profile of HGV movements at the Proposed Development, identifying that the greatest number of hourly HGV movements is anticipated to be between 06:00 and 07:00 when 87 two way HGV movements are predicted, and the total number of HGV movements per day will be 624 two way movements (312 in and 312 out). Network Rail has calculated that for the twelve hour work day period between 06:00 and 18:00 this equates to an average of:

- 52 two way HGV movements (i.e. 26 HGVs in and 26 HGVs out) per hour; and
- approximately one HGV movement every 1¼ minutes.

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

Increase in Traffic Volume During Operation

4.9.4 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.*"

4.9.5 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.*"

Impact on Junction Queues During Operation

4.9.6 As noted at paragraph 4.7.7 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. 1 PCU is equal to 5.75 m.

4.9.7 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.

4.9.8 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.

4.9.9 It is agreed that based on paragraph 4.9.7 queuing at the junctions closest to the Marsh Lane and South Marsh Road level crossings is not likely to cause backing up on the level crossings during operation.

4.9.10 It is also agreed that the Transport Assessment has not considered the impact of closing the Kiln Lane level crossing barrier on traffic flows and queuing. However NELC has not provided any objection on this highways matter and have approved the designated HGV route for the Consented Development.

4.10 Level Crossing Risk Assessments and Mitigation

4.10.1 It is agreed that the current ALCRM risk ratings reported by Network Rail for the relevant level crossings are:

- Kiln Lane I5; and
- Marsh Lane J6.

4.10.2 It is agreed that the Proposed Development does not alter the ALCRM risk rating for Kiln Lane level crossing but Network Rail has stated that the fatality weighted index increased from 7.63E-04 to 8.25E-04. Network Rail considers that no level crossing upgrade is required due to the Proposed Development. Network Rail considers that the additional vehicle movements will increase wear on the crossing deck and roads approaching the Kiln Lane level crossing and as such Network Rail has advised that upgrades will be required to the deck and road, along with improvements to signage and road markings, prior to the commencement of construction works, to ensure that the lifespan of the Kiln Lane level crossing is not unduly shortened by the impact of the increased vehicle movements (as per Network Rail's email dated 26 November 2020).

5.0 MATTERS NOT YET AGREED

5.1.1 The matters that are not yet agreed between the parties are summarised in Table 5.1 below.

Table 5.1: Summary of Matters Not Yet Agreed

Matter	Network Rail Position	Applicant Position
The key risk drivers for Marsh Lane level crossing	Network Rail has stated that the key risk drivers for Marsh Lane level crossing are infrequent trains (passenger and freight).	The Applicant has not received the current narrative risk assessment for Marsh Lane level crossing so cannot verify this information.
The key risk drivers for Kiln Lane level crossing	Network Rail has stated that the key risk drivers for Kiln Lane level crossing are poor visibility for approach road vehicles, the crossing is near a station, the gates are open, frequent trains (passenger and freight), opportunities for deliberate misuse or user error, the large number of HGVs and the potential for vehicle blocking back.	The Applicant has obtained a copy of the current narrative risk assessment for Kiln Lane level crossing, which states different key risk drivers as follows: "*Key risk drivers:* *ALCRM calculates that the following key risk drivers influence the risk at this crossing:* • *Crossing approach* • *Frequent trains* • *Infrequent trains* • *Large number users* • *Sun glare* • *Reduced visibility* *Assessor's key risk drivers notes* *ALCRM is generating a key risk driver for Frequent trains however as there are currently*

Matter	Network Rail Position	Applicant Position
		no trains booked for this line this is not an issue. Infrequent trains are a possible risk as regular users will not expect there to be any trains on this line. *There isn't any evidence of sun glare being an issue at this location.* *There haven't been any reported incidents of user misuse/human error, also currently there aren't any booked train services operating on the line* *The road is one of the main through roads within a busy industrial area so will always have large number of users."*
The inputs used for the 'with SHBEC' level crossing risk assessment rating for Marsh Lane level crossing as reported in Network Rail's objection and note of technical detail.	Network Rail has advised of the change in risk ratings having added "*the traffic movements from your projections to the baseline model scores*." (Network Rail objection, September 2020). Network Rail is still assessing the impacts on Marsh Lane level crossing.	Network Rail provided Excel spreadsheets showing the risk assessment inputs and results for the 'with SHBEC' Kiln Lane level crossing risk assessment, but the risk assessment inputs for the 'with SHBEC' Marsh Lane level crossing risk assessment are still awaited. This information is required by the Applicant in order to identify whether the change in risk rating for Marsh Lane level crossing is entirely due to the Proposed Development.
Whether the Proposed Development traffic causes an increase in risk over the Marsh	Network Rail has advised that it is inevitable that an increased risk will occur as any increase in traffic on a level crossing increases the risk.	As above, the Applicant is awaiting further information, as requested from Network Rail to demonstrate whether the reported change in risk rating at Marsh Lane is entirely due to the

Matter	Network Rail Position	Applicant Position
Lane level crossing compared to the existing situation (which includes the Consented Development).	Network Rail's objection and note of technical detail reported that the ALCRM risk rating for Marsh Lane level crossing would change from J6 (current) to I8 (with SHBEC). Network Rail is still assessing the impacts on Marsh Lane level crossing.	Proposed Development. The Applicant considers the increase in traffic on South Marsh Road is not significant compared to the baseline.
Whether the Proposed Development construction traffic causes an increase in risk over the Kiln Lane level crossing compared to the existing situation (which includes the Consented Development).	Network Rail has advised that it is inevitable that an increased risk will occur as any increase in traffic on a level crossing increases the risk. Network Rail initially (Network Rail objection, September 2020) advised that the Proposed Development results in the risk ratings to change from J6 (Z10) to I8 (Z10) at Marsh Lane level crossing and from I5 (Z13) to H6 (Z13) at Kiln Lane level crossing. Network Rail re-assessed the Kiln Lane level crossing risk assessment and determined that the additional vehicle movements during the operational period of the Proposed Development result in the risk rating for Kiln Lane level crossing remaining at I5 (Z13). However, the fatality weighted index (FWI) increased from 7.63E-04 to 8.25E-04. Network Rail has concluded that there is therefore an increase in risk. While Network Rail is content that a major upgrade to the Kiln Lane Level Crossing is not	As noted at Section 4.10, it is agreed that the Proposed Development operational traffic does not cause change to the ALCRM risk rating at the Kiln Lane level crossing compared to the current situation. As the Proposed Development construction traffic is less than the operational traffic, the Applicant assumes the same conclusion will apply to the construction traffic. Network Rail has not provided any detailed or technical 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.

Matter	Network Rail Position	Applicant Position
	required to mitigate the increase in the FWI score, the additional movements during the operational phase will nevertheless cause increased wear to the crossing deck and to the roads approaching the Kiln Lane level crossing. Network Rail considers that improved signage and new road markings are required to improve the safety of users of the Crossing. Network Rail requires a contribution from the Applicant to cover the cost of strengthening the Crossing deck and the costs of new signage and road markings. Network Rail is still assessing the impacts of the increase in vehicle movements during the construction phase.	
The need for alternative designated HGV routes to be used for Proposed Development HGV traffic.	Network Rail's objection states: "*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.*" "*please can you provide evidence that you*	The designated HGV route was identified, consulted upon and agreed with NELC for the Consented Development. Network Rail was consulted by NELC on the Delivery and Servicing Plan for the Consented Development submitted to satisfy planning condition 18, and confirmed no objection, around the same time that it was responding to the Applicant's statutory consultation on the Proposed Development. The Proposed Development traffic generation and routing is the same as the Consented Development.

Matter	Network Rail Position	Applicant Position
	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."*	The designated HGV route provides the most suitable route for Proposed Development HGVs to travel between the Site and the SRN.The Applicant has set out consideration of alternative routes in the response to Network Rail's request dated 16 October 2020 (see Appendix A).
The need for an ongoing role for Network Rail in relation to traffic management and access to the Proposed Development Site, via controls in the DCO.	Network Rail's Relevant Representation states *"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;…and (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*	The Applicant considers that draft DCO requirements 16 (construction traffic management and travel planning), 24 (delivery and servicing plan) and 25 (operational travel plan) in Schedule 2 of the draft DCO (Document Ref. 2.1) secure the appropriate management of construction and operational traffic and that approvals appropriately sit solely with the local planning authority.

Matter	Network Rail Position	Applicant Position
	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 considers that the requirements in the draft DCO are not suitable as they do not require Network Rail approval to the travel and traffic plans. Network Rail consider that approval of these plans by Network Rail is vital to secure a level of control on the maximum number of movements over the Kiln Lane and South Marsh crossings to ensure risk is not increased to an unacceptable level and is kept as low as reasonably possible. Network Rail also requests amendments of Requirement 29 of Schedule 2 of the draft DCO, meaning it would receive a copy of the traffic survey report and insofar as a required scheme of improvement works impacts on railway property, such improvement works should not commence without the written approval of the Network Rail. Further details of the requested amendments are provided in Section 5.2 below.	
The need for protective provisions for Network	Network Rail considers that the Proposed Development will have an impact on the safety	The Applicant considers the Proposed Development to have no impacts on Network

Matter	Network Rail Position	Applicant Position
Rail assets.	of those using the Kiln Lane Level Crossing (being one of Network Rail assets), and needs to ensure risk levels do not increase to an unacceptable level and therefore does not agree that PPs are not required. Network Rail's solicitors provided bespoke PPs to the Applicant's solicitors on 25 August 2020, as it is acknowledged by Network Rail, that it is not necessary in this case for its standard full PPs to be included in the Order but believes inclusion of the bespoke PPs is necessary to protect the safety of members of the public and Network Rail staff members using/ operating the crossing. Further details of the requested amendments are provided in Section 5.2 below.	Rail assets, and therefore does not agree that protective provisions are required.
The nature of any potential level crossing upgrades due to the Proposed Development.	Network Rail ran a further ALCRM assessment in November 2020 which determined that a major upgrade to Kiln Lane Level Crossing will not be necessary. However, Network Rail has concluded that improvement works will be required to the crossing deck and roads approaching Kiln Lane Level Crossing as a result of the increased wear caused by the additional vehicle movements to ensure that the Kiln Lane Crossing remains fit for purpose for the lifetime of the Proposed Development and	Network Rail has not provided any detailed or technical 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. However, the Applicant is considering the request from Network Rail for a contribution towards upgrading the Kiln Lane level crossing surface , which was received on 26 November 2020. The Applicant accepts that South Marsh Road (west of Hobson Way) is not suitable for HGV

Matter	Network Rail Position	Applicant Position
	beyond. Network Rail also considers that improved signage and road markings will be required to ensure the safety of the users of the level crossing. The cost of the improvement works is currently estimated to be approximately £100,000. Network Rail is still assessing the impacts of the increase in vehicle movements during the construction phase as well as the impacts on Marsh Lane level crossing.	traffic due to the width of the road and restrictions on the use of the level crossing by HGVs. Given the very small number of Proposed Development cars that the TA assumes would use South Marsh Road (west of Hobson Way) (45 car movements per day at the peak of construction and 27 car movements per day during operation), the Applicant does not consider that any upgrade to the level crossing type or condition is required due to the Proposed Development.
The costs and liability of the Applicant to pay for any upgrade, and any maintenance and monitoring/ staffing of these, of Network Rail level crossings.	Network Rail's Relevant Representation states: "*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.*" Following Network Rail's reassessment of the risk increase posed by the additional vehicle movements of the Proposed Development in November 2020, it estimates that the cost of upgrade works to the deck and approach roads will be approximately £100,000. Network Rail have provided the Applicant with the ALCRM results for Kiln Lane level crossing to demonstrate the change in risk due to the	The Applicant notes that no costs or liabilities in relation to Network Rail level crossings are required for the Consented Development. The Applicant has made clear since the provision of the draft FA and PPs that it is premature to consider those when Network Rail has not provided the traffic data used in the ALCRM modelling (which the Applicant cannot access), and when it is not agreed that there is a substantive issue to be resolved. As above, the Applicant is considering the request from Network Rail for a contribution towards upgrading the Kiln Lane level crossing surface and is awaiting details of the data used to determine the 'with SHBEC' risk rating for Marsh Lane level crossing as requested from Network Rail to demonstrate whether the

Matter	Network Rail Position	Applicant Position
	Proposed Development, and it is not therefore equitable that Network Rail should be liable for the costs of the works required to allow for the additional traffic caused by the Proposed Development.	change in risk ratings is entirely due to the Proposed Development.
Relevance of Consented Development	The Consented Development is relevant insofar as it provides a baseline against which the ExA will assess the built development for which the DCO application seeks powers. However, the application for the Proposed Development is a new application and the DCO seeks powers, including powers in respect of land, which were not included in the planning permission for the Consented Development. Accordingly, the Applicant has to overcome a higher hurdle to make the case for the making of the DCO. It is entirely proper that Network Rail has considered the new application afresh; and the more rigorous consultation process associated with a DCO compared to a planning application has meant that the Proposed Development has received additional scrutiny by the Network Rail team. Network Rail has provided in this Statement of Common Ground a summary of its concerns, the mitigation measures it seeks and the protective provisions it wishes to have included in the DCO. Full details will be provided in its Written Representation which	The Site has the benefit of the Consented Development planning permission, and the Applicant has taken substantial steps towards delivering the Consented Development, including through progressing with the procurement of a contractor and discharge of planning conditions. The Consented Development planning permission is an extant consent, and 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. Network Rail engaged with the Consented Development planning application, and commented only on the potential for abnormal loads to use roads which cross the railway. The Applicant agrees with Network Rail that the Consented Development provides a baseline against which the Secretary of State will assess the Proposed Development. The Applicant in particular notes that the level of HGVs and the designated HGV route for the Proposed Development are exactly the same

Matter	Network Rail Position	Applicant Position
	will be provided at Deadline 2.	as for the Consented Development. The Applicant considers that the most appropriate route for Network Rail to seek 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 (of which the Site is part) is via the Local Plan. Network Rail did not engage in the Local Plan process when large tracts of land along the South Humber Bank were allocated for development, much of which would generate significant levels of traffic and HGVs and could use Kiln Lane or other roads which cross the railway. Similarly Network Rail did not object to the Consented Development planning application, nor other major developments in the area which also proposed to use Kiln Lane. The Examining Authority is referred to the Statement of Common Ground with NELC (Document Ref. 7.1) in this regard, and further comments in the Applicant's Comments on Relevant Representations (Document Ref. 9.1). The Applicant has not sought any "powers in respect of land" in the Draft Order outside the Order Limits (which is distant from the railway), and has not sought any compulsory acquisition powers in relation to any land. The relevant tests for the determination of the

Matter	Network Rail Position	Applicant Position
		DCO Application are set out in Section 104 of the Planning Act 2008. The Applicant considers that if the Proposed Development is considered against Section 104 then the clear conclusion is that the application should be granted and the DCO made. The Applicant's position on the need for and benefits of the Proposed Development are set out in the DCO Application, and it does not consider that there are impacts on Network Rail's infrastructure or statutory undertaking which the Secretary of State needs to take into account.
Delivery and Servicing Plan	The Delivery and Servicing Plan does not limit the number of HGVs using the route and does not provide a mechanism for the re-evaluation of the safety of Kiln Lane level crossing should there be an increase in vehicle numbers beyond the 624 daily HGV movements described in the Delivery and Servicing Plan.	The Applicant agrees that the Development Delivery and Servicing Plan does not include those aspects, as there is no justification for doing so. Kiln Lane is suitable for HGV traffic in highway terms and the designated HGV route has been approved by NELC. The DCO, requirements and relevant plans are considered to provide adequate control in relation to the traffic movements relating to the Proposed Development.
Costs	The Applicant has provided a limited costs undertaking to Network Rail in respect of legal fees for the review of this SoCG and has offered a contribution towards Network Rail's technical costs but the sum offered is insufficient to cover the costs already incurred in analysing the impacts of the additional traffic	Network Rail is effectively asking the Applicant to fund Network Rail's objection to the DCO Application. The Applicant has provided a legal costs undertaking for review of this Draft SoCG and offered a £3,000 contribution for Network Rail's internal technical costs. The latter was offered in order to seek to assist

Matter	Network Rail Position	Applicant Position
	movements on Kiln Lane Level Crossing. No further costs undertaking has been offered in respect of Network Rail's analysis of the proposed movements over Marsh Lane Level Crossing.	Network Rail and to seek to expedite the provision of information (which the Applicant had requested a number of times). Network Rail has very recently (4 December) accepted the offer of a £3,000 contribution which the Applicant first made (via its planning consultants) on 28 August 2020. The Applicant's position in relation to costs is entirely reasonable and common practice.

5.2 Network Rail's Requested Amendments to Requirements in the Order

5.2.1 In this section Network Rail sets out in outline its position as at the date of this SoCG notwithstanding that further detail will be included in its Written Representation that will be submitted at Deadline 2.

5.2.2 Network Rail will request amendments to the requirements in the draft DCO (Document Ref. 2.1) as well as the inclusion of bespoke PPs. Network Rail will also seek to protect its position by entering into a FA with the Applicant. The draft PPs and FA were first were sent by AG to PM on 25 August 2020.

5.2.3 The Applicant notes that Network Rail issued an updated version of the PPs to it on 8 December 2020, including a new paragraph (48) concerning South Marsh Road and an amended paragraph 50.

5.2.4 The relevant requirements of the draft DCO are set out below in full with the Network Rail amendments included in red.

5.2.5 Network Rail considers the following amendments necessary in order to protect railway property against the impact of the increase in traffic resulting from the Proposed Development, and to prevent the Applicant from increasing traffic movements to a level which would cause risk levels to increase to an unacceptable level.

5.2.6 The Applicant considers that there is no justification for Network Rail having control or approval over the matters covered in the requirements or the PPs which are propoed by Network Rail. Such a role should sit solely with the local planning authority.

5.2.7 Specifically regarding requirement 29 the Applicant notes that this only applies to "South Marsh Road (east of Hobson Way)" (emphasis added). There is no railway property in that part of South Marsh Road.

5.2.8 Specifically regarding requirement 37 (below), the Applicant considers there would also be practical obstacles to enforcing and measuring this.

Construction traffic management and travel planning

16.—(1) No part of the authorised development may commence until a construction traffic management plan for that part has been submitted to and approved by the relevant planning authority and by Network Rail in accordance with paragraph 44 of Schedule 1.

(2) The plan submitted and approved under sub-paragraph (1) must be in accordance with the framework construction traffic management plan included as annex 28 of appendix 9A of the environmental statement.

(3) The plan submitted and approved under sub-paragraph (1) for Work No. 1 must include—

(a) details of the routes to be used for the delivery of abnormal indivisible loads and procedures for the notification of these to the local highway authority and, if the route includes railway assets, Network Rail; and

(b) a construction worker travel plan (which must be in accordance with the framework construction worker travel plan included as annex 27 of appendix 9A of the environmental statement).

(4) The plan must be implemented as approved unless otherwise agreed with the relevant planning authority.

(5) In this requirement, "Network Rail" means Network Rail Infrastructure Limited (Company No. 02904587) whose registered office is at 1 Eversholt Street, London NW1 2DN.

Delivery and servicing plan

24.—(1) The authorised development must not come into operation until an operational delivery and servicing plan for all operational HGVs entering and leaving the site has been submitted to and approved in writing by the relevant planning authority and by Network Rail in accordance with paragraph 45 of Schedule 1.

(2) The plan submitted and approved under sub-paragraph (1) must be in accordance with the operational delivery and servicing plan within annex 26 of appendix 9A of the environmental statement unless otherwise agreed by the relevant planning authority.

(3) The plan approved under sub-paragraph (1) must be implemented as approved throughout the operation of the authorised development unless otherwise agreed by the relevant planning authority.

(4) In this requirement, "Network Rail" means Network Rail Infrastructure Limited (Company No. 02904587) whose registered office is at 1 Eversholt Street, London NW1 2DN.

Operational travel plan

25.—(1) The authorised development must not come into operation until an operational travel plan has been submitted to and approved in writing by the relevant planning authority and by Network Rail in accordance with paragraph 46 of Schedule 1.

(2) The plan submitted and approved under sub-paragraph (1) must be in accordance with business travel plan guidance published by the local highway authority and in accordance with the framework operational travel plan within annex 7 of appendix 9A of the environmental statement unless otherwise agreed in writing by the relevant planning authority.

(3) The plan approved under sub-paragraph (1) must be implemented as approved throughout the operation of the authorised development unless otherwise agreed by the relevant planning authority.

(4) In this requirement, "Network Rail" means Network Rail Infrastructure Limited (Company No. 02904587) whose registered office is at 1 Eversholt Street, London NW1 2DN.

Road condition survey

29.—(1) No development may take place, save for the permitted preliminary works, until a survey of the condition of the adopted section of South Marsh Road (east of Hobson Way) has been carried out and details submitted to and approved by the relevant planning authority and Network Rail in accordance with paragraph 47 of Schedule 1.

(2) The details submitted to and approved under sub-paragraph (1) must include the results of a survey comprising SCANNER, deflectograph equipment, and supporting road core data with cores taken every 100m, contained in a report detailing the survey methodology and the findings as to the theoretical capacity of the structure of the road based on a million standard axle calculation.

(3) Within six months of the authorised development coming into operation a report must be submitted to the relevant planning authority and Network Rail in accordance with paragraph 47 of Schedule 1 for approval.

(4) The report submitted and approved under sub-paragraph (3) must contain the results of traffic surveys along South Marsh Road (east of Hobson Way) conducted after the coming into operation of the authorised development and must include information on actual HGV tonnage and volumes and a comparison against the theoretical capacity of the structure of the road contained in the details approved under sub-paragraph (1).

(5) In the event that the report shows the actual HGV tonnage and volumes using the road is in exceedance of the theoretical capacity, and the exceedance can reasonably be attributed to the authorised development, the undertaker must within three months of an approval under sub-paragraph (3), submit details of a scheme of improvement for South Marsh Road (east of Hobson Way) and a programme for implementation to the local highways authority for its approval.

(6) Insofar as the scheme of works required under sub-paragraph (5) impact on railway property, the undertaker shall not commence improvement works without having first obtained the written approval of Network Rail in accordance with paragraph 47 of Schedule 1.

(7) In this requirement, "Network Rail" means Network Rail Infrastructure Limited (Company No. 02904587) whose registered office is at 1 Eversholt Street, London NW1 2DN.

Maximum vehicle movements

37.—The number of heavy goods vehicles using the Kiln Lane level crossing for access to or egress from the authorised development shall not exceed [TBC] without the undertaker having first obtained the written approval of Network Rail.

5.2.9 Network Rail has also inserted provisions into the draft FA requiring that the Applicant shall not use or permit the use of South Marsh Road (between

North Moss Lane and Hobson Way) by HGVs travelling to or egressing from the Proposed Development.

5.2.10 In addition to these amendments, Network Rail will request in written representations to be submitted to the Examiner that the bespoke PPs (appended to this report at Appendix B) be included in the Order. Without the PPs Network Rail has no control over the safe use of the level crossings and the impacts on the deck and roads cannot be made good by Network Rail without it allocating funds (the majority of which it receives through Government grants supported by tax payers) to carry out the upgrades. This is a cost that should equitably be met by the Applicant. The PPs are summarised as follows:

5.2.10.1. Proposed paragraphs 44 to 46 of Part 5 of Schedule 1 to the DCO require that the travel plans required under the DCO (Construction Traffic Management and Travel Planning Plan, Delivery and Servicing Plan and Operational Travel Plan) must be approved by Network Rail before being submitted to the relevant planning authorities. This is to ensure that Network Rail is aware of and agrees to the routes and levels of traffic that would utilise the Kiln Lane level crossing and are comfortable that the appropriate mitigation measures against the risks resulting from the increase in traffic have been put in place.

5.2.10.2. Proposed paragraph 47 of Part 5 of Schedule 1 to the DCO requires that Network Rail is provided with a report on the results of traffic surveys along South Marsh Road (east of Hobson Way) and the Applicant shall not commence any required improvement works without Network Rail approval, insofar as such works would impact on railway property. This would ensure that Network Rail is aware of and has mitigated against any additional risks posed to the South Marsh Road Level Crossing and its users by the improvement works.

5.2.10.3. Proposed paragraph 48 of Part 5 of Schedule 1 to the DCO requires that the Applicant will not use or permit the use of South Marsh Road (between North Moss Lane and Hobson Way) by HGVs travelling to or egressing from the Proposed Development. This provision is to ensure South Marsh Road is not used by HGVs (as it is acknowledged by the Applicant in the Transport Assessment that this road is not suitable for HGVs) and to protect the South Marsh Road Level Crossing against damage by HGVs.

5.2.11 Proposed paragraphs 49 and 50 of Part 5 of Schedule 1 to the DCO require that the Applicant repays all Network Rail's reasonable costs accrued as a result of the provision of engineers to approve the travel plans, the provision of services required to ensure the safety of railway property and its users, and as a result of specified works or damages caused to railway property as a result of the Proposed Development. They also require that the Applicant indemnifies Network Rail against claims arising out of or in connection with specified works. This is to ensure that Network Rail and the tax payer are not unduly financially burdened as a result of the Proposed Development taking place.

Signed:

On behalf of: Network Rail

Date:

Signed:

On behalf of: EP Waste Management Ltd

Date:

APPENDIX A: COPY OF THE APPLICANT'S TECHNICAL RESPONSE TO NETWORK RAIL'S OBJECTION (OCTOBER 2020)

EP UK Investments

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To:
Network Rail

CC:
[redacted] EPUKI Ltd.

Project name:
South Humber Bank Energy Centre DCO

Your Ref:
WB60393

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.

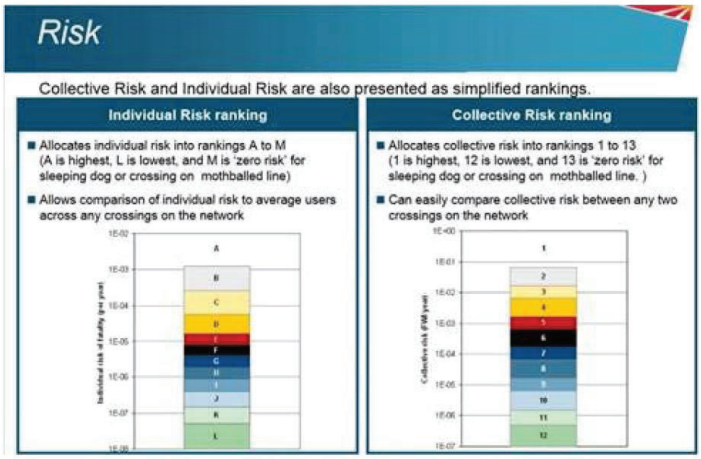
1.1.2 The purpose of this technical memo is to provide the clarification requested on the points raised by Network Rail in the objection, including summarising information previously set out in the Transport Assessment (Document Ref. 6.4.12) that accompanies the DCO application (and which also accompanied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

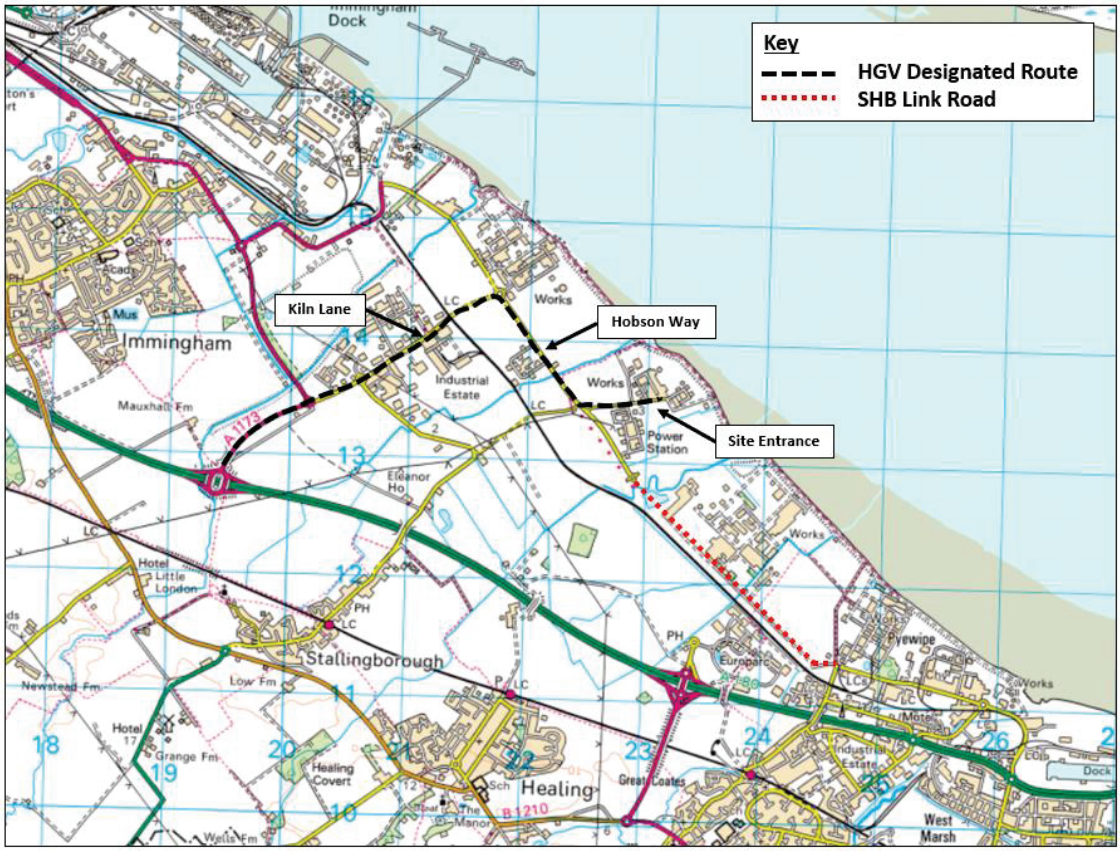
Network Rail comment	**Information provided by Applicant in this Technical Note**
	Road (west of Hobson Way).
"The Kiln Lane level crossing fairs a little better. The Western approach, whilst improved from the east, has its own difficulties. The route is via a large and busy industrial estate. From a 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 B: NETWORK RAIL'S BESPOKE PROTECTIVE PROVISIONS

SCHEDULE 1

PROTECTIVE PROVISIONS

PART 5

FOR THE PROTECTION OF NETWORK RAIL

41. For the protection of Network Rail as defined in this part of this Schedule the following provisions have effect, unless otherwise agreed in writing between the undertaker and Network Rail.

42. In this part of this Schedule—

"Network Rail" means Network Rail Infrastructure Limited (Company registration number 02904587) whose registered office is at 1 Eversholt Street, London, NW1 2DN and any associated company of Network Rail which holds property for railway purposes, and for the purpose of this definition "associated company" means any company which is (within the meaning of section 1159 (meaning of "subsidiary" etc.) of the Companies Act 2006) the holding company of Network Rail Infrastructure Limited, a subsidiary of Network Rail Infrastructure Limited or another subsidiary of the holding company of Network Rail Infrastructure Limited;

"railway operational procedures" means procedures specified under any access agreement (as defined in the Railways Act 1993) or station lease;

43. —(1) Where under this Part Network Rail is required to give its consent, agreement or approval in respect of any matter, that consent, agreement or approval is subject to the condition that Network Rail complies with any relevant railway operational procedures and any obligations under its network licence or under statute.

(2) Subject to subparagraph (1) where Network Rail is asked to give its consent, agreement or approval pursuant to this Part, such consent, agreement or approval must not be unreasonably withheld but may be given subject to reasonable conditions.

44. —(1) The undertaker shall not submit the construction traffic management plan to the relevant planning authorities in accordance with requirement 16 of Schedule 2 (Construction traffic management and travel planning) without having first obtained the written approval of Network Rail in accordance with subparagraph (2).

(2) The undertaker shall provide Network Rail with a draft of the construction traffic management plan for approval and Network Rail shall within a period of 28 days beginning with the date on which the draft construction traffic management plan is received by Network Rail serve written notice on the undertaker confirming that:

(a) the draft construction traffic management plan is approved; or

(b) the draft construction traffic management plan is approved subject to reasonable amendments as required by Network Rail; or

(c) the draft construction traffic management plan is not approved and the reason for the non-approval; or

(d) that further information is required in order for Network Rail to make its determination (in which case this paragraph 44(2) shall apply to such further information from the date of its receipt by Network Rail).

(3) In the event that Network Rail fails to serve written notice in accordance with paragraph 44(2) within 28 days of receipt Network Rail shall be deemed to have served a notice pursuant to paragraph 44(2)(a).

(4) The undertaker must include any amendments which are required by Network Rail and notified to the undertaker by Network Rail in the notice given pursuant to paragraph 44(2)(b) in the draft construction traffic management plan it submits to the relevant planning authorities and finalises in accordance with requirement 16 of Schedule 2 (Construction traffic management and travel planning) and the undertaker shall not submit any such written details to the relevant planning authorities or finalise a construction traffic management plan which has not been approved by Network Rail in accordance with paragraphs 44(2) or (3).

(5) In deciding whether to approve the draft construction traffic management plan or request any amendments Network Rail shall take into account any funding received from any other third party in respect of upgrade works to the Kiln Lane level crossing and/or the South Marsh Lane level crossing (even if such upgrade works have not yet been completed by Network Rail). Any approval must not be conditional on the undertaker contributing funding towards a full barrier at Kiln Lane level crossing and/or South Marsh Lane level crossing. However, approval may be denied if Network Rail confirms that upgrade works will be required to Kiln Lane level crossing and/or South Marsh Lane level crossing due to the additional traffic proposed within the construction traffic management plan and Network Rail do not have sufficient funding to complete the required upgrades.

(6) Each notice and all other information required to be sent to Network Rail under the terms of this paragraph 44 shall:

(a) be sent to the Company Secretary and General Counsel at Network Rail Infrastructure Limited, 1 Eversholt Street, London, NW1 2DN via Royal Mail plc's special delivery service (or if this service is no longer being provided an appropriate recorded delivery postal service) and marked for the attention of the London North Western Route Level Crossing Manager; and

(b) contain a clear statement on its front page that the matter is urgent and Network Rail must respond within 28 days of receipt.

(7) In the event that any subsequent changes are made to the construction traffic management plan following its approval by Network Rail, in so far as such changes impact on railway property, the undertaker shall not submit any such written details to the relevant planning authorities or finalise any updates to the construction traffic management plan which have not been approved by Network Rail in accordance with paragraphs 44(2) or (3).

45. —(1) The undertaker shall not submit the delivery and servicing plan to the relevant planning authorities in accordance with requirement 24 of Schedule 2

(Delivery and servicing plan) without having first obtained the written approval of Network Rail in accordance with subparagraph (2).

(2) The undertaker shall provide Network Rail with a draft of the delivery and servicing plan for approval and Network Rail shall within a period of 28 days beginning with the date on which the draft delivery and servicing plan is received by Network Rail serve written notice on the undertaker confirming that:

(a) the draft delivery and servicing plan is approved; or

(b) the draft delivery and servicing plan is approved subject to reasonable amendments as required by Network Rail; or

(c) the draft delivery and servicing plan is not approved and the reason for the non-approval; or

(d) that further information is required in order for Network Rail to make its determination (in which case this paragraph 45(2) shall apply to such further information from the date of its receipt by Network Rail).

(3) In the event that Network Rail fails to serve written notice in accordance with paragraph 45(2) within 28 days of receipt Network Rail shall be deemed to have served a notice pursuant to paragraph 45(2)(a).

(4) The undertaker must include any amendments which are required by Network Rail and notified to the undertaker by Network Rail in the notice given pursuant to paragraph 45(2)(b) in the draft delivery and servicing plan it submits to the relevant planning authorities and finalises in accordance with requirement 24 of Schedule 2 (Delivery and servicing plan) and the undertaker shall not submit any such written details to the relevant planning authorities or finalise a delivery and servicing plan which has not been approved by Network Rail in accordance with paragraphs 45(2) or (3).

(5) In deciding whether to approve the draft delivery and servicing plan or request any amendments Network Rail shall take into account any funding received from any other third party in respect of upgrade works to the Kiln Lane level crossing and/or the South Marsh Lane level crossing (even if such upgrade works have not yet been completed by Network Rail). Any approval must not be conditional on the undertaker contributing funding towards a full barrier at Kiln Lane level crossing and/or South Marsh Lane level crossing. However, approval may be denied if Network Rail confirms that upgrade works will be required to Kiln Lane level crossing and/or South Marsh Lane level crossing due to the additional traffic proposed within the delivery and servicing plan and Network Rail do not have sufficient funding to complete the required upgrades.

(6) Each notice and all other information required to be sent to Network Rail under the terms of this paragraph 45 shall:

(e) be sent to the Company Secretary and General Counsel at Network Rail Infrastructure Limited, 1 Eversholt Street, London, NW1 2DN via Royal Mail plc's special delivery service (or if this service is no longer being provided an appropriate recorded delivery postal service) and marked for the attention of the London North Western Route Level Crossing Manager; and

(f) contain a clear statement on its front page that the matter is urgent and Network Rail must respond within 28 days of receipt.

(7) In the event that any subsequent changes are made to the delivery and servicing plan following its approval by Network Rail, in so far as such changes impact on railway property, the undertaker shall not submit any such written details to the relevant planning authorities or finalise any updates to the delivery and servicing plan which have not been approved by Network Rail in accordance with paragraphs 44(2) or (3).

46. —(1) The undertaker shall not submit the operational travel plan to the relevant planning authorities in accordance with requirement 25 of Schedule 2

(Operational travel plan) without having first obtained the written approval of Network Rail in accordance with subparagraph (2).

(2) The undertaker shall provide Network Rail with a draft of the operational travel plan for approval and Network Rail shall within a period of 28 days beginning with the date on which the draft operational travel plan is received by Network Rail serve written notice on the undertaker confirming that:

(a) the draft operational travel plan is approved; or

(b) the draft operational travel plan is approved subject to reasonable amendments as required by Network Rail; or

(c) the draft operational travel plan is not approved and the reason for the non-approval; or

(d) that further information is required in order for Network Rail to make its determination (in which case this paragraph 46(2) shall apply to such further information from the date of its receipt by Network Rail).

(3) In the event that Network Rail fails to serve written notice in accordance with paragraph 46(2) within 28 days of receipt Network Rail shall be deemed to have served a notice pursuant to paragraph 46(2)(a).

(4) The undertaker must include any amendments which are required by Network Rail and notified to the undertaker by Network Rail in the notice given pursuant to paragraph 46(2)(b) in the draft operational travel plan it submits to the relevant planning authorities and finalises in accordance with requirement 25 of Schedule 2 (Operational travel plan) and the undertaker shall not submit any such written details to the relevant planning authorities or finalise an operational travel plan which has not been approved by Network Rail in accordance with paragraphs 46(2) or (3).

(5) In deciding whether to approve the draft operational travel plan or request any amendments Network Rail shall take into account any funding received from any

other third party in respect of upgrade works to the Kiln Lane level crossing and/or the South Marsh Lane level crossing (even if such upgrade works have not yet been completed by Network Rail). Any approval must not be conditional on the undertaker contributing funding towards a full barrier at Kiln Lane level crossing and/or South Marsh Lane level crossing. However, approval may be denied if Network Rail confirms that upgrade works will be required to Kiln Lane level crossing and/or South Marsh Lane level crossing due to the additional traffic proposed within the operational travel plan and Network Rail do not have sufficient funding to complete the required upgrades.

(6) Each notice and all other information required to be sent to Network Rail under the terms of this paragraph 46 shall:

(a) be sent to the Company Secretary and General Counsel at Network Rail Infrastructure Limited, 1 Eversholt Street, London, NW1 2DN via Royal Mail plc's special delivery service (or if this service is no longer being provided an appropriate recorded delivery postal service) and marked for the attention of the London North Western Route Level Crossing Manager; and

(b) contain a clear statement on its front page that the matter is urgent and Network Rail must respond within 28 days of receipt.

(7) In the event that any subsequent changes are made to the operational travel plan following its approval by Network Rail, in so far as such changes impact on railway property, the undertaker shall not submit any such written details to the relevant planning authorities or finalise any updates to the operational travel plan which have not been approved by Network Rail in accordance with paragraphs 44(2) or (3).

47. (1) Following completion by the undertaker of the report containing the results of traffic surveys along South Marsh Road (east of Hobson Way) in accordance with requirements 29(3) and (4) of Schedule 2 the undertaker shall promptly provide a copy of the report to Network Rail.

(2) In the event that the report shows that a scheme of improvement works are required in accordance with requirement 29(5) of Schedule 2, in so far as such

improvement works impact on railway property, the undertaker shall not commence improvement works without having first obtained the written approval of Network Rail in accordance with subparagraph (3).

(3) The undertaker shall provide Network Rail with details of the scheme of improvement works for approval and Network Rail shall within a period of 28 days beginning with the date on which the details of the scheme of improvement works are received by Network Rail serve written notice on the undertaker confirming that:

(a) the scheme of improvement works are approved; or

(b) the scheme of improvement works are approved subject to reasonable amendments as required by Network Rail; or

(c) the scheme of improvement works are not approved and the reason for the non-approval; or

(d) that further information is required in order for Network Rail to make its determination (in which case this paragraph 47(2) shall apply to such further information from the date of its receipt by Network Rail).

(4) In the event that Network Rail fails to serve written notice in accordance with paragraph 47(3) within 28 days of receipt Network Rail shall be deemed to have served a notice pursuant to paragraph 47(2)(a).

(5) The undertaker must include any amendments which are required by Network Rail and notified to the undertaker by Network Rail in the notice given pursuant to paragraph 47(3)(b) in the details of a scheme of improvement works it submits to the local highways authority and finalises in accordance with requirement 29 of Schedule 2 (Road condition survey) and the undertaker shall not submit any such written details to the relevant highways authority or finalise a scheme of improvement works which has not been approved by Network Rail in accordance with paragraphs 47(3) or (4).

(6) In deciding whether to approve the scheme of improvement works or request any amendments Network Rail shall take into account any funding received from any other third party in respect of upgrade works to the Kiln Lane level crossing and/or the South Marsh Lane level crossing (even if such upgrade works have not yet been completed by Network Rail). Any approval must not be conditional on the undertaker contributing funding towards a full barrier at Kiln Lane level crossing and/or South Marsh Lane level crossing. However, approval may be denied if Network Rail confirms that upgrade works will be required to Kiln Lane level crossing and/or South Marsh Lane level crossing due to the additional traffic proposed within the scheme of improvement works and Network Rail do not have sufficient funding to complete the required upgrades.

(7) Each notice and all other information required to be sent to Network Rail under the terms of this paragraph 47 shall:

(e) be sent to the Company Secretary and General Counsel at Network Rail Infrastructure Limited, 1 Eversholt Street, London, NW1 2DN via Royal Mail plc's special delivery service (or if this service is no longer being provided an appropriate recorded delivery postal service) and marked for the attention of the London North Western Route Level Crossing Manager; and

(f) contain a clear statement on its front page that the matter is urgent and Network Rail must respond within 28 days of receipt.

(8) In the event that any subsequent changes are made to the scheme of improvement works following their approval by Network Rail, in so far as such changes impact on railway property, the undertaker shall not submit any such written details to the relevant planning authorities or finalise any updates to the scheme of improvement works which have not been approved by Network Rail in accordance with paragraphs 44(2) or (3).

48. The undertaker shall not use or permit the use of South Marsh Road (between North Moss Lane and Hobson Way) by HGVs travelling to or egressing from the authorised development.

49. The undertaker must repay to Network Rail all reasonable fees, costs, charges and expenses reasonably incurred by Network Rail—

(a) in respect of the approval by the engineer of the construction traffic management plan, the delivery and servicing plan, the operational travel plan and the scheme of improvement works submitted by the undertaker;

(b) in respect of the employment or procurement of the services of any inspectors, signalmen, watchmen and other persons whom it shall he reasonably necessary to appoint for inspecting, signalling, watching and lighting railway property and for preventing, so far as may be reasonably practicable, interference, obstruction, danger or accident arising from access to or egress from the authorised development by the undertaker or any person in its employ or of its contractors or others;

(c) in respect of any special traffic working resulting from any speed restrictions which may in the opinion of the engineer, require to be imposed by reason or in consequence of access to or egress from the authorised development by the undertaker or any person in its employ or of its contractors or others or from the substitution of diversion of services which may be reasonable necessary for the same reason; and

(d) in respect of any additional temporary lighting of railway property, being lighting made reasonably necessary by reason or in consequence of damage to railway property as a result of access to or egress from the authorised development by the undertaker or any person in its employ or of its contractors or others.

50. —(1)The undertaker must pay to Network Rail all reasonable costs, charges, damages and expenses not otherwise provided for in this Part of this Schedule which may be occasioned to or reasonably incurred by Network Rail—

(a) by reason of the construction or maintenance of a specified works or the failure thereof or

(b) by reason of any act or omission of the undertaker or of any person in its employ or of its contractors or others whilst engaged upon a specified works or

(c) by reason of any act or omission of the undertaker or any person in its employ or of its contractors or others whilst accessing to or egressing from the authorised development or

(d) in respect of any damage caused to or additional maintenance required to, railway property or any such interference or obstruction or delay

to the operation of the railway as a result of access to or egress from the authorised development by the undertaker or any person in its employ or of its contractors or others;

and the undertaker must indemnify and keep indemnified Network Rail from and against all claims and demands arising out of or in connection with a specified works or any such failure, act or omission: and the fact that any act or thing may have been done by Network Rail on behalf of the undertaker or in accordance with plans approved by the engineer or in accordance with any requirement of the engineer or under his supervision shall not (if it was done without negligence on the part of Network Rail or of any person in its employ or of its contractors or agents) excuse the undertaker from any liability under the provisions of this sub-paragraph.

(2) Network Rail must give the undertaker reasonable written notice of any such claim or demand and no settlement or compromise of such a claim or demand shall be made without the prior consent of the undertaker.

(3) The sums payable by the undertaker under sub-paragraph (1) shall if relevant include a sum equivalent to the relevant costs.

(4) Subject to the terms of any agreement between Network Rail and a train operator regarding the timing or method of payment of the relevant costs in respect of that train operator, Network Rail must promptly pay to each train operator the amount of any sums which Network Rail receives under sub-paragraph (3) which relates to the relevant costs of that train operator.

(5) The obligation under sub-paragraph (3) to pay Network Rail the relevant costs shall, in the event of default, be enforceable directly by any train operator concerned to the extent that such sums would be payable to that operator pursuant to sub-paragraph (4).

(6) In this paragraph—

"the relevant costs" means the costs, direct losses and expenses (including loss of revenue) reasonably incurred by each train operator as a consequence of any specified work including but not limited to any restriction of the use of Network Rail's railway network as a result of the construction, maintenance or failure of a specified works or any such act or omission as mentioned in subparagraph (1); and

"train operator" means any person who is authorised to act as the operator of a train by a licence under section 8 of the Railways Act 1993.

51. Nothing in this Order, or in any enactment incorporated with or applied by this Order, prejudices or affects the operation of Part I of the Railways Act 1993.