

Immingham Green Energy Terminal

Environmental Impact Assessment

Preliminary Environmental Information Report

Volume II – Main Report

Chapter 11: Traffic and Transport

Associated British Ports



Document History

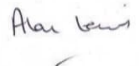
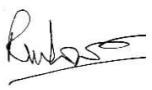
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11 Traffic and Transport

11.1 Introduction

11.1.1 This chapter presents the preliminary findings of the assessment of the likely effects of the construction of the Project on local and wider transport links within the Immingham area, and is based on the results of baseline assessments and studies of potential future impacts.

11.1.2 There may be interrelationships related to the potential effects on traffic and transport and other disciplines. Therefore, also refer to the following chapters

- a. **Chapter 6: Air Quality.**
- b. **Chapter 7: Noise and Vibration.**

11.1.3 This chapter is supported by the following figures and appendices:

- a. **Figure 11.1: Study Location** (PEI Report, Volume III).
- b. **Figure 11.2: Local Highway Network** (PEI Report, Volume III).
- c. **Figure 11.3: Public Right of Way (PRoW) Network** (PEI Report, Volume III).
- d. **Figure 11.4: Collision Locations** (PEI Report, Volume III).
- e. **Appendix 11.A: Collision Data** (PEI Report, Volume IV).
- f. **Appendix 11.B: Baseline Traffic Data** (PEI Report, Volume IV).
- g. **Appendix 11.C: Trip Generation** (PEI Report, Volume IV).
- h. **Appendix 11.D: Trip Assignment** (PEI Report, Volume IV).

11.2 Approach to Assessment

11.2.1 The assessment scenario considered in PEI Report chapter relates solely to the Construction phase - assuming a worst case that construction commences in 2024 with a peak of construction in 2025.

Scope and Methods

11.2.2 A scoping exercise was undertaken in August 2022 to establish the form and nature of the traffic and transport assessment, and the approach and methods to be followed.

11.2.3 The Scoping Report (**Appendix 1.A** of the PEI Report, Volume IV) records the findings of the scoping exercise and details the technical guidance, standards, best practice and criteria being applied in the assessment to identify and evaluate the likely significant effects of the Project on traffic and transport.

11.2.4 Following receipt of the Scoping Opinion (**Appendix 1.B** of the PEI Report, Volume IV) regarding the information to be provided in the Environmental Statement (ES), the following requirements set out in **Table 11.1** have been identified by the Planning Inspectorate which will be taken into account as part of the ongoing traffic and transport assessment.

Table 11.1 Scoping Opinion comments on traffic and transport

Consultee	Summary of Response	How comments have been addressed in this chapter
Planning Inspectorate	<p>The Scoping Report proposes that no assessment of the decommissioning aspect of the Proposed Development be undertaken because the number of vehicles and the future baseline cannot be predicted at this time, and any assessment would not be accurate. Subject to the provision of the Outline Decommissioning Plan secured within the DCO, the Inspectorate agrees to scope out this matter from the ES.</p>	Noted.
	<p>The ES should provide robust justification for the study area, supported with figures where necessary to show the extent of the affected road network (ARN) considered and any agreement regarding the approach with relevant consultation bodies.</p>	Noted. The study area is set out within Section 11.2 and shows the affected road network.
	<p>The Automated Traffic Counts (ATCs) and Manual Classified Counts (MCCs) surveys should be clearly explained and justified as part of the methodology used to determine likely effects. The proposed ATC/ MCC locations should be included in the ES, supported by figures which clearly identify these and the locations should be agreed on with the relevant consultation bodies, where possible.</p>	Noted. The details of the baseline traffic data is included within Section 11.3 .
Royal Mail	<p>Every day in exercising its statutory duties Royal Mail vehicles use all of the main roads that may potentially be affected by the proposed Immingham Green Terminal (“IGT”). Any periods of road disruption / closure, night or day, on or to the roads immediately connected to the IGT or the surrounding highway network will have the potential to impact operations and may consequently disrupt Royal Mail’s ability to meet its Universal Obligation service delivery targets.</p>	<p>The timings and the routes construction vehicles will use will be managed through a construction traffic management plan in which vehicles will be required to use specific routes to access the site and at certain times with little to no traffic during the night. Minimal impact is anticipated within the town of Immingham itself. This is included within the mitigation section.</p>

Consultee	Summary of Response	How comments have been addressed in this chapter
North East Lincolnshire Council (Highways)	Content with the scope of the traffic and transport assessment.	No response required.
East Lindsey District Council	No comments on the Scoping Report.	No response required.

- 11.2.5 During operation of the Terminal, minimal site traffic will be generated. For the hydrogen production facility, there will be Heavy Goods Vehicles (HGVs) accessing the Site for loading and distribution of the green hydrogen that will be produced. An operational access route to the Jetty will be required to the east of the East Site, and this route would run from Laporte Road to the Jetty via roadway of 4.5m width with passing places to allow two way vehicle movement and it might be possible, in part, to use the proposed maintenance track for the pipeline which would run between the Jetty and the East Site.
- 11.2.6 Conservatively the number of HGVs expected to access the Site during the operational phase is 49 per day in and out (98 two way). Based on this volume of traffic, the levels are below the screening threshold of including highway links where traffic flows will increase by more than 30% as outlined in the Guidelines for the Environmental Assessment of Road Traffic 1993 (Ref 11-1). Therefore, as set out in the Scoping Report (**Appendix 1.A** of PEI Report Volume IV), the levels of operational traffic have now been confirmed, and an operational assessment of the Project is therefore not being undertaken.
- 11.2.7 Having regard to the information presented within the Scoping Report (**Appendix 1.A** of PEI Report, Volume IV), the Planning Inspectorate’s Scoping Opinion (**Appendix 1.B** of the PEI Report, Volume IV) has confirmed the Applicant’s view that significant traffic and transportation effects during Project decommissioning are unlikely. Accordingly, this matter will remain scoped out of consideration in the ES.
- 11.2.8 This assessment therefore focusses on potential construction traffic effects, both from construction workers accessing the Site and HGV deliveries required during the construction phase.

Legislation, Policy and Guidance

- 11.2.9 **Table 11.2** presents the legislation, policy and guidance relevant to the traffic and transport assessment and details how their requirements will be met by the Project.

Table 11.2: Relevant Legislation, Policy and Guidance Regarding Traffic and Transport

Legislation/ Policy/ Guidance	Consideration within the PEI Report
Guidelines for the Environmental Assessment of Road Traffic 1993 (Ref 11-1)	
Sets out the assessment methodology for road traffic assessments. The main consideration being the two rule approach would be used to assess the extent of any assessment: <ul style="list-style-type: none"> • Rule 1 – include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%). 	The thresholds set out within the guidelines have been used as the basis for the traffic and transportation impact assessment as reported herein and to be applied in the ES.

Legislation/ Policy/ Guidance	Consideration within the PEI Report
<ul style="list-style-type: none"> Rule 2 – include any other specific sensitive areas where traffic flows have increased by 10% or more. 	
National Policy Statement for Ports (NPSfP) 2012 (Ref 11-7)	
<p>The NPSfP is a framework to address proposals for port development in the UK and associated development (rail and road). This describes the UK Government's conclusions on new port infrastructure in the context of future demand, needs and the current economy. The Project is considered to be a Nationally Significant Infrastructure Project (NSIP) within the ports industry.</p> <p>Section 5.4.4 states that the assessment should distinguish between the construction, operation and decommissioning project stages as appropriate.</p> <p>Section 5.4.5 states that where appropriate, a travel plan including demand measurement measures to mitigate transport impacts should be prepared.</p>	<p>The NPSfP requirements have been considered within this traffic and transport assessment, which indicates that the impact is not considered to be severe</p>
National Planning Policy Framework (NPPF) 2021 (Ref 11-3)	
<p>NPPF paragraph 32 states <i>“developments should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe”</i>.</p> <p>This policy sets out the guidance in relation to the impact of developments and when they should be refused.</p>	<p>The NPPF requirements have been considered within this traffic and transport assessment, which indicates that the impact is not considered to be severe.</p>
Planning Practice Guidance (2016) (Ref 11-4)	
<p>Travel Plans, Transport Assessments and Statements. This provides general guidelines for travel plans, transport assessments and statements.</p>	<p>The guidance has been taken into account when defining the traffic and transportation assessment methodology applied.</p>
Standards for Highways (Ref 11-5)	
<p>Design Manual for Road and Bridges (DMRB) CD 123 - Geometric design of at-grade priority and signal-controlled junctions. Outlines the geometric parameters in relation to the design of new junctions.</p>	<p>These design standards are being taken into account by the design of new junction arrangements as required by the Project.</p>

Study Area

- 11.2.10 The Project is located in the vicinity of the Port, which is owned and operated by Associated British Ports (ABP), in an area that has significant industrial presence.
- 11.2.11 The area of study is defined by roads where there may be potential for significant effect(s) due to the additional traffic associated with the Project.
- 11.2.12 As part of the preliminary assessment, the following links have been included which define the traffic and transport study area as comprising the immediate network and the route to the Strategic Road Network.:
- a. A180 East - Between East of A180/ A1173 Junction.
 - b. A1173 - Between A1173/ Kiln Lane and A1173/ Kings Road.
 - c. Queens Road - between A1173/ Kings Road and Queens Road/ Laporte Road.
 - d. Kings Road - between A1173/ Kings Road and Kings Road/ Pelham Road.
 - e. Manby Road - between A160/ Manby Road and Kings Road/ Pelham Road.
 - f. A160 - Between Manby Road/ A160 and A160/ A1077 Roundabout.
 - g. A160 - Between A160/ A1077 Roundabout and A160/A180.
 - h. A180 West - Between A180/ A1173 and A180/ A160.
- 11.2.13 The traffic and transport study area is illustrated in **Figure 11.1** (PEI Report, Volume III).

Assessment of Significance

- 11.2.14 The Institute of Environmental Management and Assessment (IEMA) Guidelines document includes guidance on how the sensitivity of receptors should be assessed. Based on the nature of the land use and the routes currently within the study area, the sensitivity of all traffic and transport links is considered to be low, as whilst there are a small number of properties along Queens Road, it is considered that these are few in number and there are no sensitive locations such as schools or hospitals. It is therefore considered that Queens Road would fall into the low sensitivity category and, **Table 11.3** provides an overview of how the link sensitivity has been established.

Table 11.3 Link Sensitivity Categorisation

Receptors	Built Environment Indicator along Highway Link	Highway Link Sensitivity to Changes in Traffic Flow
People at home	Residential Properties	Medium: Where there are a number of properties with direct frontage to the highway link being used as a construction route.

Receptors	Built Environment Indicator along Highway Link	Highway Link Sensitivity to Changes in Traffic Flow
		Low: Where there are few properties with direct frontage to the highway link being used as a construction traffic route.
People in workplaces	Offices, industrial units, employment uses	Low: Employment users therefore no residential impact, could already have HGV traffic.
Sensitive groups (children, elderly and disabled)	Schools, play areas, care/retirement homes, disabled parking bays	High: Where there are multiple indicators of sensitive groups with direct frontage onto the highway link being used as a construction traffic route
		Medium: Where one indicator of sensitive groups is present with direct frontage onto the highway link being used as a construction traffic route
		Low: Where no indicator of sensitive groups are present
Sensitive locations (Hospitals, places of worship, schools historic buildings)	Hospitals, places of worship, schools, historic buildings	High: Where there are multiple indicators of sensitive locations
		Medium: Where one indicator of a sensitive location is present
		Low: Where no indicator of sensitive locations are present
People walking	Footways, PRow, crossings	Medium: Indicators present on highway link

Receptors	Built Environment Indicator along Highway Link	Highway Link Sensitivity to Changes in Traffic Flow
		Low: Indicators not present on highway link
People cycling	On/off-road designated cycle routes	Medium: On-road designated cycle routes present along highway link
		Low: Off-road designated cycle routes present along highway link
Open spaces, recreational sites, shopping areas	Parks, play areas, shops, community centers	High: Where there are multiple instances or indicators likely to be used by sensitive groups (i.e. children)
		Medium: Where one indicator is present that is likely to be used by sensitive groups (i.e. children)
		Low: Indicators that are unlikely to be used by sensitive groups
Road users	Roads, junctions, road classification, baseline traffic volumes, signage.	Determined by the presence of other affected parties in this table

11.2.15 The following environmental effects are susceptible to changes as a result of the Project, with residential and business amenity being included within **Chapter 7: Noise and Vibration**.

- a. **Severance:** Severance occurs in a community when a major traffic artery separates people from places and other people. Severance occurs from difficulty of crossing a road or where the road itself creates a physical barrier. Severance can be caused to pedestrians or motorists. The Guidelines for the Environmental Assessment of Road Traffic (Ref 11-1) suggest that changes in total traffic flow of 30%, 60% and 90% result in slight, moderate and substantial changes in severance respectively.
- b. **Pedestrian Amenity:** Pedestrian amenity is broadly defined as the relative pleasantness of a journey, and is considered to be affected by factors such as traffic flow, traffic composition, pavement width and separation between

vehicles and pedestrians. The impact manifests itself in fear and intimidation, exposure to noise and vehicle emissions. The Guidelines for the Environmental Assessment of Road Traffic (Ref 11-1) suggest that a doubling or halving of total traffic flow or the HGV composition could lead to perceptible negative or positive impacts upon pedestrian amenity.

- c. **Fear and Intimidation:** The volume of traffic and its HGV composition are the factors that contribute to fear and intimidation. In the absence of thresholds set out in the Guidelines for the Environmental Assessment of Road Traffic (Ref 11-1) this PEI Report considers that changes in total traffic flow of 30%, 60% and 90% are considered to result in slight, moderate or substantial impacts.
- d. **Highway Safety:** Highway safety is assessed by the frequency and severity of injury accidents that are attended by the police and recorded in official accident statistics. Intensification of use or changes in the composition of traffic has the potential to have an effect on collision rates. The examination of recent collision statistics on routes within the Study Area will highlight any hotspots that need further examination.
- e. **Driver Delay:** The use of industry standard junction capacity modelling programs provides a methodology to quantify junction delay. Driver delay is only likely to be significant where the existing Study Area highway network is at or close to capacity.
- f. **Hazardous Loads:** Assessed based on the estimated number and composition of such loads. Where the number of movements is considered to be significant, a risk analysis should be undertaken to illustrate the potential for an accident to happen and the likely effect of such an event.

Table 11.4 ES Magnitude Criteria

Impact	Very Low	Low	Medium	High
Construction Traffic	Occasional construction vehicles using roads over a short period of time. Less than 5% Increase for more than 6 months; Between 6-30% increase for 3- 6 months; or Between 31-40% for less than 3 months.	Small number of construction vehicles using roads over a short period of time. 6-15% increase for more than 6 months; 16-39% for 3-6 months; or 40% increase for less than 3 months.	Moderate number of construction vehicles using roads over a protracted time period. 16-39% increase for more than 6 months; or More than 40% increase for 3-6 months.	High number of construction vehicles using roads over a protracted period of time. More than a 40% increase for more than 6 months.
Severance	Increase in total traffic flows of 29%	Increase in total traffic flows of 30-	Increase in total traffic flows of 60%-	Increase in total traffic flows or HGV

Impact	Very Low	Low	Medium	High
	or under (or increase in HGV flows under 10%).	59% (or increase in HGV flows of between 20%-39%).	89% (or increase in HGV flows between 40%-89%).	flows of 90% and above.
Pedestrian Delay	Total traffic flows under 1,400 per hour.	Where traffic flows exceed 1,400 vehicles per hour the severity of the impact will be determined on a case-by-case basis based on receptor sensitivity.		
Pedestrian Amenity	Increase in total traffic flows of 49% or under.	Increase in total traffic flows of 50-69%.	Increase in total traffic flows of 70%-99%.	Increase in total traffic flows of 100% or above.
Fear and Intimidation	Increase in total traffic flows or HGV flows of 29% or under (or increase in HGV flows under 10%).	Increase in total traffic flows of 30-59% (or increase in HGV flows of between 10%-39%).	Increase in total traffic flows of 60%-89% (or increase in HGV flows between 40%-89%).	Increase in total traffic flows or HGV flows of 90% and above.
Driver Delay	Increase in total traffic flow of less than 29%.	Increase in total traffic flow of between 30% and 59%.	Increase in total traffic flow of between 60% and 89%.	Increase in traffic flow of 90% and above.
Highway Safety	Increase in total traffic flows of 30% or under (or increase in HGV flows under 10%).	All links estimated to experience increases in total traffic flows above 30% or increases in HGV flows above 10% are analysed further on a case by case basis.		
PRoW	<p>Increase in total traffic flows or HGV flows of 29% or under (or increase in HGV flows under 10%) on a link intersecting a PRoW.</p> <p>Or</p> <p>Where there would be a temporary increase in pedestrian journey length along a road or other PRoW of one to five days due to short term</p>	<p>Increase in total traffic flows of 30-59% (or increase in HGV flows of between 10%-39%) on a link intersecting a PRoW.</p> <p>Or</p> <p>Where there would be a temporary increase in pedestrian journey length along a road or other PRoW of one to four weeks due to short term</p>	<p>Increase in total traffic flows of 60%-89% (or increase in HGV flows between 40%-89%) on a link intersecting a PRoW</p> <p>Or</p> <p>Where there would be a temporary increase in pedestrian journey length along a road or other PRoW for more than four weeks due to short term closure</p>	<p>Increase in total traffic flows or HGV flows of 90% and above on a link intersecting a PRoW.</p> <p>Or</p> <p>Where there would be a short term closure of the PRoW without a diversion route for more than four weeks in any 12 month period</p>

Impact	Very Low	Low	Medium	High
	closure (managed) of the PRow	closure (managed) of the PRow	(managed) of the PRow	

Table 11.5. Significance of Effects Matrix

Sensitivity of receptor	Magnitude			
	High	Medium	Low	Very Low
High	Major– Significant	Major– Significant	Moderate– Significant	Minor– Not Significant
Medium	Major– Significant	Moderate– Significant	Minor– Not Significant	Negligible – Not Significant
Low	Moderate– Significant	Minor– Not Significant	Negligible – Not Significant	Negligible – Not Significant
Very Low	Minor– Not Significant	Negligible – Not Significant	Negligible – Not Significant	Negligible – Not Significant

Limitations and Assumptions

- 11.2.16 The information presented in this preliminary assessment reflects that obtained and evaluated at the time of reporting and is based on an emerging design for the Project and the maximum likely extents of land required for its construction and operation.
- 11.2.17 The baseline traffic data used to form the basis for the assessment are based on secondary data from surveys undertaken on behalf of ABP as part of the Immingham Eastern Ro-Ro Terminal (IERRT) proposed development. The data used was recorded in 2021 from the David Tucker Associates Preliminary Transport Assessment, although it should be noted that no data was available for Laporte Road - as such, this link has not been included within this preliminary assessment. An Automated Traffic Count (ATC) will be undertaken on Laporte Road so that it can be included within the assessment to be reported in the ES.
- 11.2.18 The findings of this preliminary assessment may be subject to change as the design of the Project is developed and refined further through the assessment and consultation processes, and as further research and investigative surveys are completed to fully understand its potential effects. However, the assessment is based on conservative assumptions in accordance with the use of the Rochdale Envelope approach and is therefore considered to represent the worst case.
- 11.2.19 This assessment does not include the opening year of the Project due to the worst case year being assessed. The assessment also does not include the decommissioning stage, as traffic volumes are currently not known at present for a 25 year horizon, and this has been scoped out by the Planning Inspectorate.

11.3 Baseline Conditions

Highway Network

- 11.3.1 The existing baseline highway network comprises an area that is largely industrial in nature, with very few residential properties other than in the north as the A1173 travels through the northern edge of Immingham. The only major residential area is the town of Immingham located to the south of the Dock.
- 11.3.2 Queens Road is a single carriageway road providing a link from the Port areas towards the A1173, where it becomes Kings Road. Queens Road has a footway along the northern side and is street lit with right turn ghost islands into major side roads. Whilst the road is considered to be industrial in character there are several dwellings and light industrial activities located along the Queens Road adjacent to and opposite the northern boundary of the western site
- 11.3.3 Kings Road is a single carriageway and connects with Queens Road to then form a three arm roundabout junction with the A1173, where Kings Road then continues to the north to form a link into Immingham. The A1173 Manby Road then continues through the edge of Immingham to provide a link to the A160 in the north. It has street lighting and a footway heading northbound along one side of the road, and in the vicinity of the Site is considered to be industrial in character, although this does change to residential to the north as it enters Immingham.
- 11.3.4 The A1173, which is formed in part by Kings Road in the north, continues south as a single carriageway to form a three arm roundabout with Kiln Lane before continuing south to form a grade separated junction with the A180. It is rural/ industrial in nature and between Kings Road and Kiln Lane does not have any footway or street lighting.
- 11.3.5 Approximately mid-way between the Kiln Lane roundabout and the junction with the A180 there is a roundabout on the A1173 which provides access into adjacent land, and there is a footway along the section leading to Kiln Lane, but no facility on the section leading to the A180.
- 11.3.6 Kiln Lane is a single carriageway and connects to the A1173 at a four-armed roundabout (A1173 heading both north and west). At this roundabout it also connects to several roads serving industrial estates (Stallingborough Industrial Estate, Industrial Estate South).
- 11.3.7 The A160 heads west from the A1173 and connects to the A180. Both of these links are part of the strategic road network (SRN) and are maintained by National Highways. The A180 heads east to Grimsby and west towards the closest motorway (M180) and provides the link from the local area to the wider highway network within the region.
- 11.3.8 **Figure 11.2** (PEI Report, Volume III) shows the local highway network in relation to the Project.

Cycle Networks and PRow baseline

- 11.3.9 In terms of National Cycle Networks (NCN) and Public Rights of Way (ProW), there are no routes within this area that would likely be affected by traffic associated with the Project based on the proposed traffic routing (outlined in the trip distribution section below), and as such no disruption to the NCN is anticipated.
- 11.3.10 The locations of the PRow within the vicinity of the Site are shown in **Figure 11.3** (PEI Report, Volume III). There would be no additional impact on users of Public Footpath 32, but there would be temporary disruption to users on Public Bridleway 36 between Immingham and Grimsby. Part of Public Bridleway 36 would be closed during construction period, with no temporary diversion in place, as a worst case.
- 11.3.11 Pedestrian facilities are limited on the local road network in the vicinity of the Project, with a footway along one side of Queens Road and along the northern side of the A1173 Kings Road providing a link into Immingham.

Road Safety

- 11.3.12 An analysis of traffic collision data, using data provided by NELC for a period of five years (2017-2022), has been undertaken, with the full set of data included within **Appendix 11.A** (PEI Report, Volume IV) and shown by location on **Figure 11.4** (PEI Report, Volume III). Collision data includes a cordon that stretches around Immingham, including the A180 and A1173.
- 11.3.13 Traffic collision data by year and severity are shown in **Table 11.6**.

Table 11.6 Traffic Collision Data Analysis

Severity	Year					
	2017	2018	2019	2020	2021	2022
Slight	9	11	11	10	17	4
Serious	4	7	5	9	0	3
Fatal	0	0	0	0	0	0

- 11.3.14 **Table 11.3** shows that there was a total of 90 collisions between 2017 and 2022 in this area. Of these, 62 were classified as slight, 28 were serious, with no fatal accidents being identified.
- 11.3.15 In terms of collisions there has only been one collision within the vicinity of the Project access roundabout and as such this is not considered to be an accident hotspot.
- 11.3.16 As illustrated on **Figure 11.4** (PEI Report, Volume III), the majority of the accidents have occurred within the built up area of Immingham, and whilst any incident is clearly undesirable, no construction HGV traffic associated with the Project would be routed through this residential area. In relation to the

operational phases, it is likely some vehicles (cars) will travel through Immingham however given the anticipated traffic generation associated with this phase no increased safety risk is predicted.

- 11.3.17 At the A1173/ A180 junction there has been a total of four accidents (three slight and one serious) and again whilst any incident is undesirable, this is not considered to constitute an existing road safety issue at this location.
- 11.3.18 Overall, it is concluded that there are no existing highway safety issues that would need to be addressed as part of this Project.

Existing Traffic Flows

- 11.3.19 The highway links detailed in **Paragraph 11.2.13** form the highway network of interest for this assessment (the study area).
- 11.3.20 Baseline 24 hour annual average daily traffic (AADT) two-way link flows for the study area are presented in **Table 11.7**, including the percentage of HGVs. Such data have been obtained from the Transport Assessment that supports of the IERRT proposed development. Baseline data have been included as part of **Appendix 11.B** (PEI Report, Volume IV).

Table 11.7 2021 Baseline AADT Traffic Flows

Link	Link Description	Link Sensitivity	2021		
			All Vehicles	HGV	HGV %age
1	A180 E - Between East of A180/ A1173 Junction	Low	34,246	3,253	9%
2	A1173 - Between A1173/ Kiln Lane and A1173/ Kings Road	Low	7,384	795	11%
3	Queens Road - between A1173/ Kings Road and Queens Road/ Laporte Road	Low	3,883	566	15%
4	Kings Road - between A1173/ Kings Road and Kings Road/ Pelham Road	Low	7,722	568	7%
5	Manby Road - between A160/ Manby Road and Kings Road/ Pelham Road	Low	3,713	570.5	15%
6	A160 - Between Manby Road/ A160 and A160/ A1077 Roundabout	Low	10,536	5,048	48%
7	A160 - Between A160/ A1077 Roundabout and A160/A180	Low	12,102	5,328	44%

Link	Link Description	Link Sensitivity	2021		
			All Vehicles	HGV	HGV %age
8	A180 W - Between A180/ A1173 and A180/ A160	Low	25,546	3,837	15%

Source – David Tucker Associates (2021)

Future Baseline

- 11.3.21 Subject to consent being granted for the Project, there would be a phased approach to construction, with the construction of the jetty, and first phase of the processing facility, being expected to start in Quarter (Q) 2 of 2025 and completed in 2026. The remaining phases would be completed incrementally, completing in 2035.
- 11.3.22 Based on the information in relation to the construction traffic flows, the peak level of construction traffic is expected to be in 2025, and as such this year has been used as the future assessment year.
- 11.3.23 Future year baseline traffic flows for the assessment year of 2025 for the peak of construction have been derived by applying the national standard programme Trip End Model Presentation Program (TEMPRO) to derive traffic growth factors, as indicated in **Table 11.8**. These growth factors have been taken into account when comparing the baseline and future traffic scenarios.

Table 11.8 Traffic Growth Factors

Year	Growth Factor
2021 - 2025	1.0613

- 11.3.24 The peak of construction 2025 baseline traffic flows have been calculated as illustrated in **Table 11.9**.

Table 11.9 2025 Baseline AADT Traffic Flows

Link	Link Description	2025		
		All Vehicles	HGV	HGV %age
1	A180 E - Between East of A180/ A1173 Junction	36,345	3,452	9%
2	A1173 - Between A1173/ Kiln Lane and A1173/ Kings Road	7,837	844	11%
3	Queens Road - between A1173/ Kings Road and Queens Road/Laporte Road	4,121	601	15%
4	Kings Road - between A1173/ Kings Road and Kings Road/ Pelham Road	8,195	603	7%

Link	Link Description	2025		
		All Vehicles	HGV	HGV %age
5	Manby Road - between A160/ Manby Road and Kings Road/ Pelham Road	3,941	605	15%
6	A160 - Between Manby Road/ A160 and A160/ A1077 Roundabout	11,182	5,357	48%
7	A160 - Between A160/ A1077 Roundabout and A160/ A180	12,844	5,655	44%
8	A180 W - Between A180/ A1173 and A180/ A160	27,112	4,072	15%

11.3.25 With reference to **Paragraph 11.2.6**, future year baseline traffic flows for the Project opening year have not been generated given that a quantitative assessment of operational traffic is not considered necessary as the levels are below the screening threshold for assessment outlined in the Guidelines for the Environmental Assessment of Road Traffic 1993, as set out in **Paragraph 11.2.4**.

11.3.26 The trip generation section below provides an overview of the anticipated flows associated with the operation at the Site.

11.4 Design, Mitigation and Enhancement Measures

Embedded Mitigation Measures

11.4.1 The Project has been designed, as far as possible, to avoid and minimise environmental impacts and effects through the process of design development, and by embedding mitigation measures into the design.

11.4.2 In terms of design mitigation, the Project construction phase would be designed to minimise waste and materials as far as is possible in order to minimise the need for traffic trips to the Site, and this could be achieved through the pre-fabrication of elements as far as is possible.

11.4.3 All access points that require the creation of a junction bellmouth would be designed based on the relevant standard from Design Manual for Road and Bridges (DMRB) CD 123 Geometric Design of at Grade Priority and Signal-Controlled Junctions (Ref 11-5) and in consultation with the local highway authority, thereby negating any potential safety impact associated with construction activity.

Standard Mitigation Measures

11.4.4 The main approach to mitigating potential traffic impacts would be the use of management measures to reduce as far as is possible the number of vehicle trips on the local highway network.

11.4.5 Prior to the start of the construction phase, the contractor would prepare a Construction Traffic Management Plan (CTMP) to control HGV movements, as well as a Construction Worker Travel Plan (CWTP) to control the trips made by

the construction workers (including encouraging car sharing) and thus reduce the impact of the workforce upon the highway network. The CTMP and CWTP would be based on, and incorporate, the contents and requirements of the Outline CTMP (OCTMP) and Outline CWTP (OCWTP) which will be submitted with the DCO application.

- 11.4.6 These plans would set out measures and controls to limit the number of trips on the network in the peak hours, and as such would aim to limit the traffic impact of the construction phase as far as possible. Such plans would be implemented for the duration of the Project construction phase.

11.5 Trip Distribution, Generation and Assignment and Potential Impacts

- 11.5.1 This section provides an overview of the trip distribution, generation and assignment associated with traffic at the Site, and the knock-on potential impacts.

Trip Distribution

- 11.5.2 Construction worker trip distribution to the Project has been based on 2011 census data using WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level) for North East Lincolnshire 001 (Ref 11-6). This is considered reasonable as it covers the residential area of Immingham, as well as the Port area where the Project would be located.
- 11.5.3 In relation to the HGV distribution, it is assumed that all construction vehicles would travel to and from the site via the A1173 towards the A180 where they have been distributed based upon the existing pattern of movements. This is considered to be an acceptable methodology as the exact location of construction material required for the Project is not known at this preliminary stage, with no HGVs being distributed through the residential area of Immingham to the north.

Trip Generation

- 11.5.4 The trip generation flows have been supplied by Air Products which provides an overview of the daily HGV numbers and daily workforce associated for each phase of Project construction – data are included within **Appendix 11.C** (PEI Report, Volume IV). The trip generation includes all vehicles associated with the construction including all waste removal along with the associated workforce and will be reviewed as part of the studies associated with the ES Chapter to ensure that it is still valid.
- 11.5.5 As stated earlier, the first phase of construction works (2025) is predicted to generate the largest numbers of HGVs and daily workforce trips. As such, this is the only scenario that has been assessed as part of this preliminary assessment. The other stages of Project construction would generate 50% less traffic, whilst operational traffic flows would be significantly less than those occurring during construction. As noted by the information below the total daily two-way construction flows is 1,666 compared to 292 during the operation of the site.
- 11.5.6 The daily trip generation during the peak Project construction works is shown in **Table 11.10**.

Table 11.10 Total Daily Development Traffic – Peak of Construction

Type	To	From	Two-Way
HGVS	97	97	194
Workers	736	736	1472
All Vehicles	833	833	1,666

- 11.5.7 **Table 11.10** shows there would be a total of approximately 1,666 two-way trips generated at the peak of construction, with the majority of the trips associated with workers commuting to and from the Site.
- 11.5.8 It should be noted that the above provides a robust level of assessment in that all workers have been assumed to travel in a private car, whereas in reality there would be an element of car sharing or use of public transport
- 11.5.9 In terms of public transport there are bus stops located on Kings Road as well as one bus stop on Laporte Road. These provide access to Grimsby as well as Stallingborough to the south. This therefore potentially provides an alternative for workers and this will be expanded within the full ES Chapter.
- 11.5.10 **Table 11.11** sets out the total daily development traffic associated with the operational phase.

Table 11.11 Total Daily Operational Traffic

Type	To	From	Two-Way
Workers	104	104	208
HGVs	49	49	98
Total	146	146	292

- 11.5.11 Based on this volume of traffic, and as set out in **Paragraph 11.2.6**, with staff working on shifts and only around 3 HGVs per hour, the levels are below the screening threshold for assessment outlined in the Guidelines for the Environmental Assessment of Road Traffic 1993. An operational assessment of the Site has therefore not been undertaken.

Trip Assignment

- 11.5.12 Based on the trip distribution exercise and the proposed trip generation, **Table 11.12** outlines the number of trips on each of the links within the defined study area during the peak construction year (2025), with traffic flow diagrams provided in **Appendix 11.D** (PEI Report Volume IV).

Table 11.12 Trip Assignment – Peak of Project Construction

Link	Link Description	Peak Construction Traffic		
		All Vehicles	Workers	HGVs
1	A180 E - Between East of A180/ A1173 Junction	782	694	88
2	A1173 - Between A1173/ Kiln Lane and A1173/ Kings Road	1255	1060	195
3	Queens Road - between A1173/ Kings Road and Queens Road/ Laporte Road	1666	1471	195
4	Kings Road - between A1173/ Kings Road and Kings Road/ Pelham Road	122	122	0
5	Manby Road - between A160/ Manby Road and Kings Road/ Pelham Road	122	122	0
6	A160 - Between Manby Road/ A160 and A160/ A1077 Roundabout	122	122	0
7	A160 - Between A160/ A1077 Roundabout and A160/ A180	0	0	0
8	A180 W - Between A180/ A1173 and A180/ A160	245	139	106

11.5.13 The trip assignment data has then been used to form the basis for the preliminary assessment.

11.5.14 **Table 11.13** provides an overview of the total percentage increase for total vehicles and HGVs on each of the links within the study area during the peak construction year, 2025.

Table 11.13 2025 Base + Peak of Construction Daily Two-Way Flows

Link No.	Link Description	Sensitivity	2025 Baseline Flow		Construction Traffic		Percentage Increase	
			Total vehicles	Total HGV	Total vehicles	Total HGV	Total vehicles	Total HGV
1	A180 E - Between East of A180/ A1173 Junction	Low	36,345	3,452	782	88	2%	3%
2	A1173 - Between A1173/ Kiln Lane and A1173/ Kings Road	Low	7,837	844	1255	195	16%	23%
3	Queens Road - between A1173/ Kings	Low	4,121	601	1666	195	40%	32%

Link No.	Link Description	Sensitivity	2025 Baseline Flow		Construction Traffic		Percentage Increase	
			Total vehicles	Total HGV	Total vehicles	Total HGV	Total vehicles	Total HGV
	Road and Queens Road/ Laporte Road							
4	Kings Road - between A1173/ Kings Road and Kings Road/ Pelham Road	Low	8,195	603	122	0	1%	0%
5	Manby Road - between A160/ Manby Road and Kings Road/ Pelham Road	Low	3,941	605	122	0	3%	0%
6	A160 - Between Manby Road/ A160 and A160/ A1077 Roundabout	Low	11,182	5,357	122	0	1%	0%
7	A160 - Between A160/ A1077 Roundabout and A160/ A180	Low	12,844	5,655	0	0	0%	0%
8	A180 W - Between A180/ A1173 and A180/ A160	Low	27,112	4,072	245	106	1%	3%

11.5.15 **Table 11.13** indicates that for most of the links within the study area the impact is below 30% for both the total vehicle number and total HGVs, with the increase in HGVs being below 30% on all links, except Queens Road where it is 32%.

11.5.16 With reference to the Guidelines for the Environmental Assessment of Road Traffic (1993) (the GEART Guidelines) (Ref 11-1) a two rule approach can be used to assess the extent of any traffic assessment as follows:

- a. Rule 1: include highway links where traffic flows will increase by more than 30% (or the number of HGVs will increase by more than 30%).
- b. Rule 2: include any other specific sensitive areas where traffic flows have increased by 10% or more.

11.5.17 Therefore, with reference to **Paragraph 11.2.13**, as the local highway network is deemed to have a low sensitivity, the only link identified to experience a potential impact is along Queens Road. However, this is to be expected as Queens Road provides the main access to the Site. All other road links are therefore not considered to experience an adverse impact and no further assessment is considered to be required.

11.5.18 Given that operational traffic flows would be significantly less than those occurring during Project construction, it is predicted that all road links during

operation would not experience an adverse impact, including on Queens Road and thus no further assessment is considered to be required. During the construction phase the impact would be temporary and would be managed through a Construction Traffic Management Plan and the above impact represents the very peak of the activity on site.

11.6 Assessment of Effects

Construction

- 11.6.1 **Section 11.5** indicates that the preliminary assessment has identified that Project construction would only potentially result in an adverse traffic and transport impact at one location – namely on Queens Road which is the access road to the Site. This impact is associated with the increase of the total traffic flow on Queens Road as with reference to **Table 11.13**, this is predicted to be increased by 40%, whilst the HGV impact is predicted to be 32%.
- 11.6.2 The following sections summarise the likely effects on receptors in terms of severance, pedestrian amenity, fear and intimidation and highway safety.
- 11.6.3 In terms of severance the GEART guidelines (Ref 11-1) state that changes in traffic flow of 30%, 60% and 90% are registered as producing slight, moderate and substantial changes respectively. The magnitude of impact is therefore assumed to be negligible for all receptors apart from Queens Road where it is assessed as being low due to the increase of between 30% and 60%.
- 11.6.4 For pedestrian amenity, the GEART guidelines (Ref 11-1) state that an indicative threshold would be where the traffic flow (or its lorry component) is halved or doubled. The magnitude of impact is therefore assumed to be very low.
- 11.6.5 In terms of fear and intimidation, this relates to the impact traffic may have on pedestrians with no commonly agreed threshold for estimating levels of danger or fear and intimidation, although it should be noted that the numbers of pedestrians on the HGV route to the A180 along the A1173 is considered to be very low. The impact is therefore considered to be negligible apart from on Queens Road and the A1173 between Kiln land and Kings Road where it is considered to be low and medium respectively.
- 11.6.6 For road safety as there is not considered to be an existing accident issue on the local highway, all impacts have been set as negligible.
- 11.6.7 **Table 11.14** provides an overview of the magnitude of impact of proposed peak construction traffic on each of these metrics, based upon the magnitude of change in **Table 11.13** above, and does not take into account any measures to reduce the impact of construction traffic through the adoption of a CTMP.

Table 11.14 Magnitude of Impact

Link No.	Link Description	Sensitivity	Percentage Increase		Traffic and Transport	Severance	Pedestrian Amenity	Fear and Intimidation	Highway Safety
			Total vehs.	Total HGV					
1	A180 E - Between East of A180/ A1173 Junction	Low	2%	3%	Negligible	Negligible	Negligible	Negligible	Negligible
2	A1173 - Between A1173/ Kiln Lane and A1173/ Kings Road	Low	16%	23%	Low	Negligible	Low	Low	Negligible
3	Queens Road - between A1173/ Kings Road and Queens Road/ Laporte Road	Low	40%	32%	High	Low	Medium	Medium	Negligible
4	Kings Road - between A1173/ Kings Road and Kings Road/ Pelham Road	Low	1%	0%	Negligible	Negligible	Negligible	Negligible	Negligible
5	Manby Road - between A160/ Manby Road and Kings Road/ Pelham Road	Low	3%	0%	Negligible	Negligible	Negligible	Negligible	Negligible
6	A160 - Between Manby Road/ A160 and A160/ A1077 Roundabout	Low	1%	0%	Negligible	Negligible	Negligible	Negligible	Negligible
7	A160 - Between A160/ A1077 Roundabout and A160/ A180	Low	0%	0%	Negligible	Negligible	Negligible	Negligible	Negligible
8	A180 W - Between A180/ A1173 and A180/ A160	Low	1%	3%	Negligible	Negligible	Negligible	Negligible	Negligible

11.6.8 As indicated in **Table 11.14**, the majority of the links included within the assessment would experience either a negligible or low magnitude of impact. The exception being Link 3, Queens Road - between A1173/ Kings Road and Queens Road/ Laporte Road, which would experience a medium impact for some of the assessment criteria because it would provide access to the Site.

11.6.9 With reference to **Table 11.5**, and based upon the above impact magnitudes and the low sensitivity of the transportation links, Project traffic and transportation-related effects are detailed in **Table 11.15** during the peak construction year (2025), and as mentioned previously this is based upon the pre adoption of the CTMP.

Table 11.15 Classification of Traffic and Transportation Effects (during Peak Construction year 2025)

Link No.	Link Description	Traffic and Transport	Severance	Pedestrian Amenity	Fear and Intimidation	Highway Safety
1	A180 E - Between East of A180/ A1173 Junction	Negligible	Negligible	Negligible	Negligible	Negligible
2	A1173 - Between A1173/ Kiln Lane and A1173/ Kings Road	Negligible	Negligible	Negligible	Negligible	Negligible
3	Queens Road - between A1173/ Kings Road and Queens Road/ Laporte Road	Moderate	Negligible	Minor	Minor	Negligible
4	Kings Road - between A1173/ Kings Road and Kings Road/ Pelham Road	Negligible	Negligible	Negligible	Negligible	Negligible
5	Manby Road - between A160/ Manby Road and Kings Road/ Pelham Road	Negligible	Negligible	Negligible	Negligible	Negligible
6	A160 - Between Manby Road/ A160 and A160/ A1077 Roundabout	Negligible	Negligible	Negligible	Negligible	Negligible
7	A160 - Between A160/ A1077	Negligible	Negligible	Negligible	Negligible	Negligible

Link No.	Link Description	Traffic and Transport	Severance	Pedestrian Amenity	Fear and Intimidation	Highway Safety
	Roundabout and A160/ A180					
8	A180 W - Between A180/ A1173 and A180/ A160	Negligible	Negligible	Negligible	Negligible	Negligible

11.6.10 With the implementation of the embedded and standard mitigation measures as detailed in **Section 11.4**, this preliminary assessment of the traffic and transport effects for the Project has concluded that the impact within the defined study area would be either negligible or low, with the exception being Link 3 Queens Road (between A1173/ Kings Road and Queens Road/ Laporte Road) where the impact would be minor. As explained in **Table 22.2** in **Chapter 22: Major Accidents and Disasters**, further assessment is required of the consequences of the operation of the hydrogen production facility on surrounding land uses in terms of major hazard planning. It is currently anticipated that the continued residential use of seven properties on the west side of Queens Road will need to cease, as residential use is unlikely to be compatible with the operation of the hydrogen production facility on the West Site. The Applicant is currently in discussions with the landowners / occupiers of the seven residential properties with a view to negotiating their acquisition. Where it is not possible to acquire those properties through negotiation, acquisition powers for these properties will be sought through the DCO. In the event of acquisition of the properties for the Project ahead of the construction works commencing, an adverse effect on those properties (as assessed in this chapter) would not arise.

11.6.11 Therefore, taking these impact magnitudes into account and the low sensitivity of the transportation links, no significant effects have been identified. In addition, this level of effect is prior to the adoption of the CTMP which will help reduce the impacts of the construction phase as far as is possible.

Operation

11.6.12 During the operational phase, there would be a total of 98 HGVs two way per day and 104 employees, of which only 24 are predicted to work a “normal” eight-hour day and would therefore travel during the network peak hours.

11.6.13 Therefore, based on this volume of traffic, the levels are below the screening threshold for assessment outlined in the Guidelines for the Environmental Assessment of Road Traffic 1993. An operational assessment of the Site has therefore not been undertaken.

11.7 Summary of Preliminary Assessment

11.7.1 **Table 11.16** provides a summary of the preliminary assessment of Project effects on traffic and transport as related to peak traffic flows in construction year 2025.

11.7.2 The preliminary assessment indicates that traffic and transport effects associated with the peak construction phase for the Project within the study area would be

negligible or minor, and therefore not significant through the application of embedded mitigation measures including use of a CTMP and CWTP.

- 11.7.3 Operational traffic flows would be significantly less than those occurring during the peak of Project construction. As such, traffic and transportation effects during Project operation would also be not significant. Traffic effects during Project decommissioning have been scope out of the assessment.

Table 11.16 Summary of Preliminary Assessment – Likely Significant Effects

Receptor	Impact Pathway	Impact Magnitude	Mitigation Measure	Residual Effect
A180 E - Between East of A180/ A1173 Junction	Traffic flows	Negligible	CTMP/ CWTP	Negligible
A1173 - Between A1173/ Kiln Lane and A1173/ Kings Road	Traffic flows	Low	CTMP/ CWTP	Negligible
Queens Road - between A1173/ Kings Road and Queens Road/ Laporte Road	Traffic flow	Moderate	CTMP/ CWTP	Minor
Kings Road - between A1173/ Kings Road and Kings Road/ Pelham Road	Traffic flows	Negligible	CTMP/ CWTP	Negligible
Manby Road - between A160/ Manby Road and Kings Road/ Pelham Road	Traffic flows	Negligible	CTMP/ CWTP	Negligible
A160 - Between Manby Road/ A160 and A160/ A1077 Roundabout	Traffic flows	Negligible	CTMP/ CWTP	Negligible
A160 - Between A160/ A1077 Roundabout and A160/ A180	Traffic flows	Negligible	CTMP/ CWTP	Negligible

Receptor	Impact Pathway	Impact Magnitude	Mitigation Measure	Residual Effect
A180 W - Between A180/ A1173 and A180/ A160	Traffic flows	Negligible	CTMP/ CWTP	Negligible

11.8 Cumulative Effects

- 11.8.1 In relation to the cumulative effects of other nearby developments the only site that will be considered as part of the full ES is the adjacent IEERT site. See **Chapter 25: Cumulative and In-combination Effects** for further details of the assessment.

11.9 References

- Ref 11-1 Institute of Environmental Assessment 'Guidelines for the Environmental Assessment of Road Traffic'. London: Institute of Environmental Assessment, 1993.
- Ref 11-2 National Planning Policy Framework - Publications - GOV.UK, July 2021
- Ref 11-3 National Planning Policy Framework - Publications - GOV.UK, February 2012
- Ref 11-4 Travel Plans, Transport Assessments and Statements – Planning Practice Guidance (Department for Communities and Local Government, March 2014).
- Ref 11-5 Standards for Highways, Design Manual for Road and Bridges (DMRB), CD 123 - Geometric design of at-grade priority and signal-controlled junctions, November 2021
- Ref 11-6 NOMIS, Census to Work Data WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level).
- Ref 11-7 Department for Transport (2016). National Planning Statement for Ports (HMSO).

11.10 Abbreviations and Glossary of Terms

Table 11.17: Glossary and Abbreviations

Term	Acronym	Meaning
ATC	Automatic Traffic Count	Method of undertaking traffic surveys.
Affected Road Network	ARN	All roads that trigger the traffic screening criteria and adjoining roads within a certain distance.
Associated British Ports	ABP	One of the UK's leading and best-connected ports groups, owning and operating 21 ports across England, Wales and Scotland.
Automated Traffic Count	ATC	Automated Traffic Counts are a quick and inexpensive way of collecting, traffic volume, speed and classification.
AADT	Average Annual Daily Traffic	Amount of traffic that could be expected on a road during an average day throughout the year.
Construction Traffic Management Plan	CTMP	A plan which identifies clear controls on routes, vehicle types, vehicle frequency, vehicle quality and hours of site operation.
Construction Worker Travel Plan	CWTP	A plan to control the trips made by the construction workers (including encouraging car sharing) and thus reduce the impact of the workforce upon the highway network.
Design Manual for Roads and Bridges	DMRB	The Design Manual for Roads and Bridges contains information about current standards relating to the design, assessment and operation of motorway and all-purpose trunk roads in the United Kingdom.
Development Consent Order	DCO	The consent for a Nationally Significant Infrastructure Project required under the Planning Act 2008.
Environmental Statement	ES	A statutory document which reports the EIA process, produced in accordance with the EIA Directive as transposed into UK law by the EIA Regulations.
Guidelines for the Environmental Assessment of Road Traffic 1993	GEART	Guidance in relation to the impact thresholds related to development traffic.

Term	Acronym	Meaning
Heavy Goods Vehicle	HGV	A large truck for transporting goods.
Immingham Eastern Ro-Ro Terminal	IERRT	The proposed ro-ro facility.
Immingham GreenTerminal	IGT	A multi-user liquid bulk jetty, located on the eastern side of the Port of Immingham,
Institute of Environmental Management and Assessment	IEMA	A professional body for practitioners working in the fields of environmental management and assessment.
Manual Classified Count	MCC	Manual Classified Counts are used to conduct traffic flow surveys when it is not possible to use automatic methods. Enumerators will conduct these surveys. This can include but not be limited to junction counts, car park monitoring and origin and destination surveys.
Middle Layer Super Output Area	MSOA	Middle Layer Super Output Areas are a geographic hierarchy designed to improve the reporting of small area statistics in England and Wales.
National Cycle Network	NCN	The National Cycle Network is a UK-wide network of signed paths and routes for walking, cycling, wheeling and exploring the outdoors.
NH	National Highways	Highway Authority for the Strategic Road network, which in this location comprises the A160 and A180.
National Planning Policy Framework	NPPF	A planning framework which sets out the Government's planning policies for England and how these are expected to be applied.
National Policy Statement for Ports	NPSfP	The National Policy Statement for Ports provides the framework for decisions on proposals for new port development.
North East Lincolnshire Council	NELC	The site falls within the administrative boundary of the North East Lincolnshire Council.
Outline Construction Worker Travel Plan	OCWTP	An outline plan to control the trips made by the construction workers (including encouraging car sharing) and thus reduce the impact of the workforce upon the highway network and which the CWTP will be based upon.

Term	Acronym	Meaning
Preliminary Environmental Information	PEI	The information referred to in Part 1 of Schedule 4 of the EIA Regulations that has been reasonably compiled by the applicant and is reasonably required to assess the environmental effects of a project.
Public Rights of Way	PRoW	A highway where the public has the right to pass. It can be a footpath (used for walking), a bridleway (used for walking, riding a horse and cycling), or a byway that is open to all traffic (including motor vehicles).
Roll on-roll off	Ro-ro	A design to allow vehicles to drive on and drive off ships.
Trip End Model Presentation Program	TEMPro	TEMPro is the industry standard tool for estimating traffic growth, which is required when assessing the traffic impact of a development on the local highway network. The model forecasts the growth in trip origin to destination up to 2051 for use in transport modelling taking into account: - Population; Employment;; Housing; Car Ownership; and Trip Rate