



Immingham Green Energy Terminal

TR030008

Volume 6

6.7 Outline Construction Traffic Management Plan (Tracked)

Planning Act 2008

Regulation 5(2)(a)

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended)

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Immingham Green Energy Terminal

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6.7 Outline Construction Traffic Management Plan

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Executive Summary

This Outline Construction Traffic Management Plan ("OCTMP") has been prepared to outline the controls intended to be used for the management and routing of Heavy Goods Vehicle ("HGV") traffic associated with the construction, operation and maintenance of a multi-user green energy terminal by Associated British Ports ("the Applicant") which would be located on the eastern side of the Port of Immingham ("the Port"), as well as associated development (collectively termed "the Project"). A part of the associated development is the construction and operation of a green hydrogen production facility for the production of green hydrogen onsite by Air Products BR Ltd ("Air Products").

The construction of the Project would generate a volume of HGV movements involved in site preparation and delivery plant and machinery, concrete and aggregates, steelwork, bricks and block work and other general construction materials. A small number of abnormal indivisible loads ("AIL") will also be generated by the construction of the Project which will need appropriate management.

This Outline CTMP sets out how the appointed contractor will manage traffic impacts associated with the Project. The appointed contractor will be required to use this as a starting point for the detailed CTMP to be prepared in accordance with a requirement of the **draft Development Consent Order ("DCO")** [REP3-004] to demonstrate how the traffic generation as set out in the accompanying Environmental Statement ("ES") Chapter (**Chapter 11: Traffic and Transport** [APP-053]) will be achieved. This OCTMP also describes the issues that have been identified during the application process and the measures necessary to address these issues.

This Outline CTMP is structured as follows:

- a. **Section 0** describes the Project including the construction programme, the profile of car and light van generation and HGV generation.
- b. Section 0 describes the proposed measures to control HGV routing and impact.
- c. Section 0 describes the construction accesses.
- d. Section 0 describes the proposed AIL route and routing strategy.
- e. Section 0 provides the monitoring strategy.
- f. Section 0 describes the planned liaison with key stakeholders.

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Introduction

- 1.1.1 This OCTMP forms part of the application (the "Application") for a DCO that has been submitted to the Secretary of State for Transport ("the SoS"), under Section 37 of the Planning Act 2008 ("the 2008 Act") (Ref 1-1).
- 1.1.2 The Applicant is seeking a DCO for the construction, operation and maintenance of a multi-user green energy Terminal which would be located on the eastern side of the Port, as well as associated development (collectively termed the Project). A part of the associated development is the construction and operation of a green hydrogen production facility for the production of green hydrogen onsite by Air Products.
- 1.1.3 The Project falls under the definition of a Nationally Significant Infrastructure Project ("NSIP") under s14(1)(j) and s24(3)(c) of the 2008 Act. The new jetty and topside infrastructure (including the associated pipework on the jetty) would comprise the NSIP. The pipeline and development of the site areas for the transfer and storage of the ammonia and the hydrogen production, storage and distribution would comprise 'associated development' for the purpose of s115 of the 2008 Act.

The Applicant

1.1.4 Associated British Ports ("ABP") was established in 1981 following the privatisation of the British Transport Docks Board. ABP is the largest ports group in the United Kingdom ("UK"), owning and operating 21 ports and other transport-related businesses across England, Wales and Scotland. On the Humber, ABP owns and operates four ports, namely the Port and the ports of Hull, Grimsby and Goole, which together constitute the largest ports complex in the UK. The Port is the largest and busiest of ABP's four Humber ports.

Air Products BR Ltd

1.1.5 Air Products is a world-leading industrial gases company that has been in operation for nearly 80 years, and more than 60 years in the UK and Ireland. Air Products has over 1,000 UK and Ireland employees working across 35 production facilities, in addition to a number of hydrogen refuelling stations and hydrogen, nitrogen and oxygen plants. The company develops, engineers, builds, owns and operates some of the world's largest industrial gas projects.

The Project

- 1.1.6 The Project would comprise the alteration of a harbour facility for the construction, operation and maintenance of a multi-user green energy terminal to facilitate the import and export of liquid bulks associated with the energy sector, together with associated development. The terminal consists of a jetty and associated loading/unloading infrastructure and pipelines. The Project is described in **ES** Chapter 2: The Project **[REP3-022]**.
- 1.1.7 Initially, the terminal would be used for the import and export of green ammonia to be converted to green hydrogen. To facilitate this, a hydrogen production

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facility, comprising associated ammonia handling equipment, storage and processing units, would be constructed as part of the Project. Other proposed users of the green energy terminal will come forward in due course and separate applications submitted as required. It is anticipated that future users of the terminal are likely to include customers in the carbon capture sector.

- 1.1.8 The Project includes the following elements (references to 'Work No.' are to the corresponding Work Numbers in Schedule 1 of the **draft DCO** [REP3-004] whilst the location of each Work No. within the Site is shown on the **Works Plans** [REP3-012]):
 - a. On the marine side (the NSIP) (Work No. 1):
 - i A jetty (defined by **Work No. 1a**) including a loading platform, associated dolphins, fenders and walkways, topside infrastructure but not limited to control rooms, marine loading arms, pipe-racks, pipelines and other infrastructure.
 - ii A single berth, with a berthing pocket with a depth of up to 14.5m below chart datum.
 - b. On the land side (the associated development):
 - i A corridor between the new jetty and Laporte Road which would support a private road (the 'jetty access road'), pipe-racks, pipelines to enable the ammonia import to the East Site, as well as security gates, a security building, a power distribution building and associated utilities – (Work No. 2).
 - ii 'East Site Ammonia Storage' (Work No. 3) on which an ammonia storage tank and related plant including an ammonia tank flare would be constructed (Work No. 3a) as well as additional buildings (including welfare building, power distribution building and a process instrumentation building), pipe-racks, pipelines, pipes, cable-racks, utilities and other infrastructure.
 - iii Construction of a culvert (**Work No. 4**) under Laporte Road for pipelines, pipes and cables and other conducting media linking the two parts of the East Site.
 - iv 'East Site Hydrogen Production Facility' (Work No. 5) on which up to three hydrogen production units and associated plant including flue gas stacks and flare stacks would be constructed (Work No. 5a) together with additional buildings (including process control building, power distribution buildings, process instrumentation buildings, analyser shelters), pipe-racks, pipelines, pipes, utilities and other infrastructure.
 - Underground pipelines, pipes, cables and other conducting media (Work No. 6), between the East and West Sites, for the transfer of ammonia, hydrogen, nitrogen and utilities, with cathodic protection against saline corrosion.
 - vi 'West Site' (**Work No. 7**) involving the construction of up to three hydrogen production units with associated flue gas stacks and flare

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stacks and up to four liquefier units (**Work No. 7a** and **Work No. 7b** combined); hydrogen storage tanks, hydrogen trailer filling stations, a hydrogen vent stack and associated process equipment (**Work No. 7c**); and hydrogen vehicle and trailer filling stations, hydrogen compressors and associated process equipment (**Work No. 7d**). Also additional buildings (including but not limited to control room and workshop building, security and visitor building, contractor building, warehouse, driver administration building, safe haven building, process instrumentation buildings, analyser buildings and additional temporary buildings during construction), process and utility plant including cooling towers and pumps, fire water tank, pipe-racks, pipelines, pipes, cable-racks, utilities and other infrastructure.

- vii Formation of temporary construction and laydown areas on Queens Road (Work No. 8) and off Laporte Road (Work No. 9).
- viii Temporary removal of street furniture and modification of overhead cables on Kings Road (**Work No. 10**) associated with the transport of large construction components from the Port to the Site.

The Project Site

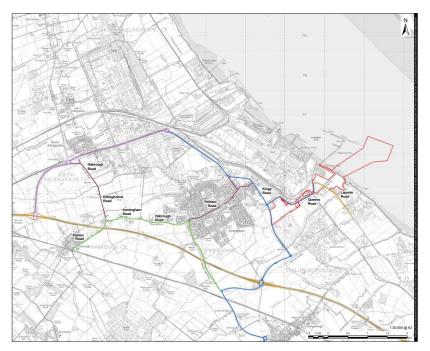
- 1.1.9 The Site is located in North East Lincolnshire on the south bank of the Humber Estuary to the east of the Port and is centred on National Grid Reference E: 520783 N: 415271.
- 1.1.10 The land-side works fall within the administrative boundary of North East Lincolnshire Council ("NELC"), The marine-side works, which extend seaward and fall beyond the local authority's boundary, would take place in the bed of the Humber Estuary, which is owned by the Crown Estate and over which the Applicant has the benefit of a long lease. The Project in its entirety covers an area of approximately 121.13ha.

Highway Network Context

1.1.11 The Site is situated to the south of the Port and is accessed from Queens Road and Laporte Road with the A1173 providing a link to the wider road network, which in this case is represented by the A180, which is managed by National Highways. The boundary of the Site is shown below in **Plate 1**.



Plate 1: Site Plan



- 1.1.12 The existing highway network serves 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 Port.
- 1.1.13 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 a small number of residential dwellings and light industrial activities located along Queens Road adjacent to and opposite the northern boundary of the West Site.
- 1.1.14 Laporte Road is a single carriageway road located to the east of Queens Road, with which it forms a priority T-junction and continues south towards the Kiln Lane/Hobson Way/Laporte Road roundabout. The road has an existing 40mph limit on the approaches to both Queens Road and the Kiln Lane roundabout, with these being linked by a section of 60mph within the centre of the road link. There are no footways in place along Laporte Road
- 1.1.15 Kings Road is a single carriageway road 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

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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 industrial in character, although this does change to residential to the north as it enters Immingham.

- 1.1.16 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, with the Grimsby to Immingham Cycle Superhighway running between Kings Road and Kiln Lane providing a link southwards into Grimsby.
- 1.1.17 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 footway on the section leading to the A180.
- 1.1.18 Kiln Lane is a single carriageway and connects to the A1173 at a four-arm 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).
- 1.1.19 The A160 heads west from the A1173 and connects to the A180. Both of these links are part of the strategic road network 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.

The Purpose and Structure of this Document

1.1.20 This OCTMP draws upon the assessment of impacts on transport receptors presented in **Chapter 11: Traffic and Transport** [<u>APP-053</u>] and will be provided to the appointed contractor who will be required to prepare a Construction Traffic Management Plan and accompanying Construction Workers Travel Plan (Appendix A of this CTMP), which is secured within the **draft DCO** [<u>REP3-004</u>] and will be based on this OCTMP. This OCTMP also identifies measures to control the routing and impact of HGVs on the local road network during construction. The identified measures will form contractual obligations through normal contractual means. An Outline Construction Workers Travel Plan ("CWTP") is included as Appendix A to this management plan, this presents construction worker traffic generation from the construction of the Project and the measures to be implemented to encourage sustainable travel modes.

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Construction Phase

Indicative Construction Programme

- 2.1.1 Subject to the DCO being granted, there would be a phased approach to the construction of the Project, with the construction of the terminal and first phase of the green hydrogen production comprising the first phase of development, which, subject to securing the relevant consents, is likely to start in early 2025 and last for between two and a half to three years, with a peak in <u>overall</u> construction activity (HGVs and workers) predicted in February 2026,
- 2.1.2 Following completion of the first phase of the construction, a further five phases of the hydrogen production facility will be constructed incrementally to increase the processing capacity as the market for green hydrogen increases. There will therefore be six phases of development in total, with each phase adding a hydrogen production unit.
- 2.1.3 For the purposes of this OCTMP, the development scenario for the Project is based on a six-phase construction timeline, with completion of all phases over an indicative 11-year period. This programme duration is likely to be a worst case as market demand could accelerate the programme, although Phase 1 would always represent the peak of construction, irrespective of the subsequent programme.
- 2.1.4 This phasing is illustrated in Table 1 and assumes that each phase of the associated development will become operational following its construction.

Phase	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Phase 1											
Phase 2											
Phase 3											
Phase 4											
Phase 5											
Phase 6											

Table 1: Indicative Construction Phasing Timeline for the Project

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- 2.1.5 The start of construction of Phase 2 (here shown in Year 4) will depend on a number of factors including market demands for hydrogen at that point in time, whilst the timing of subsequent phases would be subject to the same tests. It is assumed that construction of Phases 2 to 6 may take up to eight years.
- 2.1.6 This OCTMP therefore focuses on Phase 1 of the construction, with the aim that it would be a 'live' document that would be regularly updated and reviewed as the construction on the site continues.
- 2.1.7 Phase 1 of the construction will comprise the following elements as presented in Table 2.

Phase	Terminal (Work No. 1)	Pipeline Corridors	East Site	West Site	Temporary Construction Areas (Work No. 8, 9 and temporary use of other sites, under Work No 11b)
Phase 1 Construction: Y 1 – Y3	Jetty structure and Jetty topside infrastructure, including pipework for ammonia and other liquid bulks Jetty access ramp Flood defence access ramp and flood defence replacement	Piperack and NH3 pipeline from the jetty Jetty access road H2, NH3 and Natural Gas pipelines and utilities between East and West Site Culvert including pipework, utilities and cabling linking the two parts of the East Site	NH ₃ tank Internal access roads, drainage and utilities Temporary construction area	Two hydrogen production units One liquefier Tanker loading bays Trailer filling station Control room and workshop building Other supporting building and facilities, Internal access roads, drainage and utilities	Queens Road Temporary Construction Area for Air Products and contractor offices (Work No 8) Laporte Road Temporary Construction Area for material laydown and storage (Work No. 9) East Site – Hydrogen Production Facility for contractor offices, car parking, laydown storage in addition to a possible concrete batching plant and pile welding

Table 2: Anticipated Buildings and Infrastructure Within the Site in Phase 1



Phase	Terminal (Work No. 1)	Pipeline Corridors	East Site	West Site	Temporary Construction Areas (Work No. 8, 9 and temporary use of other sites, under Work No 11b)
					facility (Work No. 11b) West Site – for contractor and subcontractor cabins, laydown and warehouse storage and car parking (Work No. 11b)

Construction Phase Site Worker Traffic Generation

2.1.8 For construction worker traffic generation and the measures to be implemented to encourage sustainable travel modes, please refer to **Appendix A**, Outline Construction Worker Travel Plan.

Construction Phase HGV Traffic Generation

Landside Construction – HGVs

- 2.1.9 The number of Jandside construction HGVs will vary depending on the activities taking place during the construction phase. Therefore the overall profile of movements throughout the construction process has been forecast on a month by month basis as set out in **Appendix B**.
- 2.1.10 It should be noted that during the landside peak months of March to October 2025 a 24 day working month has been assumed, with a 20 day working month assumed outside of this period.
- 2.1.11 With reference to **Appendix B**, at the peaks of HGV activity between March and October 2025 and March to June 2026, there will be a maximum of 94 HGV movements per day associated with the construction of the landside facilities, which equates to <u>188</u> average movements per day two way (<u>94</u> in and <u>94</u> out) associated with the landside construction.

Jetty Construction – HGVs

2.1.12 Similarly the profile of HGV traffic generation for the jetty construction has been considered on a month by month basis and the profile of HGVs associated with the jetty construction has been set out in **Appendix C**.

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	Way)¶ Critical Items	

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- 2.1.13 With reference to **Appendix C**, at the peak month in June 2025, there is a total of 281 HGVs required for the jetty construction, which equates to 12 HGVs per day based upon a 24 day working month during the peak months.
- 2.1.14 Therefore, for the jetty construction activity there is a total of 24 HGVs per day on average (12 in and 12 out).

Landside and Jetty Construction – HGVs

2.1.15 The overall combined HGV generation relating to the landside and jetty HGV movements across the construction period is summarised in **Table 3**. Deleted: Trip Generation

2.1.16 Table 4,

2.1.17 Table 5, and Table 6 with a profile of construction HGV movements shown on Plate 2 below.

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Table 3: Landside and Jetty Construction HGVs - 2025

Activity	<u>2025</u>								▼	
	March	April	May	Aune	VINC	August	Septembe r	October	November	December
Landside Total Monthly HGVS	2 <u>,195</u>	<u>2,195</u>	<u>2,244</u>	<u>2,244</u>	<u>2,244</u>	<u>2,244</u>	<u>2,244</u>	<u>2,245</u>	<u>,1,867</u>	<u>,1,457</u>
<u>Landside Daily</u> HGVs <u>)</u>	<u>91</u>	<u>91</u>	<u>93</u>	<u>93</u>	<u>93</u>	<u>94</u>	<u>94</u>	<u>94</u>	<u>78</u>	<u>73</u>
Jetty Total Monthly HGVS	<u>40</u>	<u>40</u>	<u>178</u>	<u>281</u>	<u>143</u>	<u>43</u>	<u>124</u>	<u>124</u>	<u>121</u>	<u>121</u>
Jetty Daily HGVs	2	2	<u>7</u>	<u>12</u>	<u>6</u>	2	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>
<u>Landside and</u> Jetty TOTAL Daily HGVS (One Way)	<u>93</u>	<u>93</u>	<u>101</u>	<u>105</u>	<u>99</u>	<u>95</u>	<u>100</u>	100	84	<u>79</u>
Landside and Jetty TOTAL Daily HGVS (Two Way)	<u>186</u>	<u>186</u>	202	210	<u>199</u>	<u>191</u>	<u>199</u>	<u>199</u>	<u>168</u>	<u>158</u>

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Table 4: Landside and Jetty Construction HGVs - 2026

Activity	<u>2026</u>											
	January	February	March	April	Мау	June	<u>July</u>	August	<u>Septemb</u> er	October	Novembe <u>r</u>	<u>Decembe</u>
Landside Total Monthly HGVS	<u>1,763</u>	<u>1,763</u>	<u>1,846</u>	<u>1,846</u>	<u>1,846</u>	<u>1,846</u>	<u>857</u>	<u>857</u>	<u>857</u>	<u>932</u>	<u>216</u>	<u>216</u>
<u>Landside Daily</u> <u>HGVs)</u>	<u>88</u>	<u>88</u>	<u>92</u>	<u>92</u>	<u>92</u>	<u>92</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>47</u>	<u>11</u>	<u>11</u>
Jetty Total Monthly HGVS	<u>258</u>	<u>258</u>	<u>258</u>	<u>252</u>	<u>135</u>	<u>135</u>	<u>135</u>	<u>115</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Jetty Daily HGVs	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>7</u>	<u>7</u>	<u>7</u>	<u>6</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>Landside and</u> Jetty TOTAL Daily HGVS (One Way)	<u>101</u>	<u>101</u>	<u>105</u>	<u>105</u>	<u>99</u>	<u>99</u>	<u>50</u>	<u>49</u>	<u>43</u>	<u>47</u>	<u>11</u>	<u>11</u>
<u>Landside and</u> Jetty TOTAL Daily HGVS (Two Way)	<u>202</u>	<u>202</u>	210	<u>210</u>	<u>198</u>	<u>198</u>	<u>99</u>	<u>97</u>	<u>86</u>	<u>93</u>	<u>22</u>	<u>22</u>



Table 5: Landside and Jetty Construction HGVs - 2027

Activity	2027											
	January	February	<u>March</u>	April	May	June	<u>July</u>	August	<u>Septemb</u> er	October	Novembe Ľ	<u>Decembe</u>
Landside Total Monthly HGVS	<u>176</u>	<u>120</u>	<u>155</u>	<u>95</u>	<u>95</u>	<u>232</u>	<u>232</u>	<u>232</u>	<u>280</u>	<u>264</u>	<u>264</u>	<u>260</u>
<u>Landside Daily</u> <u>HGVs)</u>	<u>9</u>	<u>6</u>	<u>8</u>	<u>5</u>	<u>5</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>14</u>	<u>13</u>	<u>13</u>	<u>13</u>
<u>Jetty Total</u> Monthly HGVS	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Jetty Daily HGVs	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>Landside and</u> <u>Jetty TOTAL</u> <u>Daily HGVS</u> (One Way)	<u>9</u>	<u>6</u>	<u>8</u>	<u>5</u>	<u>5</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>14</u>	<u>13</u>	<u>13</u>	<u>13</u>
Landside and Jetty TOTAL Daily HGVS (Two Way)	<u>18</u>	<u>12</u>	<u>16</u>	<u>10</u>	<u>10</u>	<u>23</u>	<u>23</u>	<u>23</u>	<u>28</u>	<u>26</u>	<u>26</u>	<u>26</u>



Table 6: Landside and Jetty Construction HGVs - 2028

Activity	<u>2028</u>		
	January	February	March
Landside Total Monthly HGVS	<u>1,080</u>	<u>670</u>	<u>177</u>
<u>Landside Daily</u> <u>HGVs)</u>	<u>54</u>	<u>34</u>	<u>9</u>
Jetty Total Monthly HGVS	<u>0</u>	<u>0</u>	<u>0</u>
Jetty Daily HGVs	<u>0</u>	<u>0</u>	<u>0</u>
<u>Landside and</u> Jetty TOTAL Daily HGVS (One Way)	<u>54</u>	<u>34</u>	<u>9</u>
Landside and Jetty TOTAL Daily HGVS (Two Way)	<u>108</u>	<u>67</u>	<u>18</u>

2.1.18 The above monthly tables can then be shown on the following Plate for ease of reference.

ASSOCIATED BRITISH PORTS

Immingham Green Energy Terminal 6.7 Outline Construction Traffic Management Plan

Plate 2: Combined Landside and Jetty HGV profile





- 2.1.19 From the above, during the peak months for the combined peak for landside and jetty construction, in June 2025 and March to April 2026, there is a daily total of 210 HGVs per day two way (105 in and 105 out).
- 2.1.20 The above construction activity will occur across both the western and eastern sites, with the western site located adjacent to the A1173/Kings Road and the eastern site located adjacent to Queens Road/Laporte Road, and therefore not all construction traffic will use the full length of Kings Road/Queens Road; the split can be seen in **Table 7**, with the majority only using Kings Road in the north.

Table 7: Construction Site Traffic Split Between the West and East Sites

Construction Site	Construction HGVs
West Site (A1173/Kings Road)	70%
East Site (Queens Road/Laporte Road)	30%

2.1.21 The above total construction HGV flows can then be divided between the West and East Sites based upon the percentage splits in Table 7, as shown in Table 8.

Table 8: Construction HGV Traffic by Site (Two-Way)

Construction Site	Two-Way Construction HGVs		
West Site (A1173/Kings Road)	147		 Deleted: 139
East Site (Queens Road/Laporte Road)	63	_	 Deleted: 59
Total	210		 Deleted: 199

HGV Distribution

2.1.22 HGVs delivering construction materials will all access the Site from the wider highway network beyond the immediate Project boundary from the A180 and A1173 and have been distributed onto the A180 in line with the existing vehicle proportions as presented in **Table 9**.

Table 9: HGV Distribution

Route	Distribution
A180 (W)	55%
A180 (E)	45%
TOTAL	100%

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2.1.23 Based on the expected daily movements to the Site during the peak month of construction, the distribution of traffic is presented in **Table 10**.

Table 10: Daily Number of HGV Trips (One Way)

Route	Assumed Daily Number of HGV Trips (One Way)
A180 (W)	57
A180 (E)	48
TOTAL	<u>105</u>

2.1.24 The daily profile of HGV movement at the peak of construction, <u>June 2025</u>, is shown in **Table 11**, and is based on experience from construction sites and shows that the arrival and departure of HGVs from the site is anticipated to be spread evenly over the day, and has been used previously within Environmental Assessments, with any minor discrepancies in the numbers being due to rounding and do not affect any of the assessments.

Table 11: HGV Traffic Daily Profile

Hour Beginning	Percentage of Daily inbound trips	Percentage of daily outbound trips	Arrivals	Departures	Two Way	
600	0%	0%	0	0	0	
700	4%	4%	<u>10</u>	<u>9</u>	<u>_18</u>	
800	10%	9%	10	9	<u>,18</u>	_
900	10%	9%	10	9	<u>,18</u>	
1000	10%	9%	10	9	<u>,18</u>	
1100	10%	9%	10	9	<u>,18</u>	
1200	10%	9%	10	9	<u>,18</u>	
1300	10%	9%	10	9	<u>,18</u>	
1400	9%	9%	<u>10</u>	9	18	
1500	9%	9%	<u>10</u>	9	18	
1600	9%	10%	<u>10</u>	<u>9</u>	<u>_18</u>	
1700	9%	10%	<u>_10</u>	<u>9</u>	<u>,18</u>	

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Hour Beginning	Daily inbound	Percentage of daily outbound trips	Arrivals	Departures	Two Way		
1800	0%	4%	0	<u>9</u>	<u>9</u>		Deleted: 4
1900	0%	0%	0	0	0		Deleted: 4
2000	0%	0%	0	0	0		
2100	0%	0%	0	0	0		
-	100%	100%	<u>,105</u>	<u>,105</u>	<u>210</u>		Deleted: 99
						\sim	Deleted: 99

Precondition Survey

- 2.1.25 Prior to a start on site the contractor will undertake a survey of the existing highway network in liaison with the Local Highway Authority so that a baseline can be agreed prior to the works commencing.
- 2.1.26 The condition of the highway network against this agreed baseline will be reviewed as required both throughout the construction phase and the end of the works and any defects agreed to be as a result of the works will be rectified by the contractor.

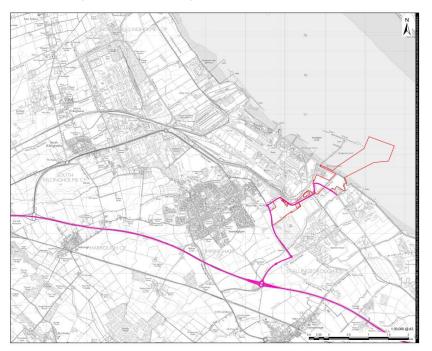
Designated Routing to the Site

2.1.27 It is proposed that all construction HGVs associated with the construction phase will arrive and depart from the Site via Queens Road/Laporte Road to then access the wider highway network via the A1173 and A180. The designated HGV routing plan is shown indicatively in **Plate 3**.

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Plate 3: Designated HGV Routing Plan



2.1.28 The HGV routing plan would be distributed to all drivers during their induction by the contractor. It would be a condition of contract between the Applicant and the appointed contractor to ensure that all HGV deliveries to the Site are instructed to use the designated route to access and egress the construction site. Sanctions would be put in place to deal with non-compliance, as set out below in **Section 0**.

Working Hours

Marine Construction Working Hours

2.1.29 In months where percussive piling is permitted within the water body, spatial diurnal and duration restrictions apply for certain periods as set out in the Deemed marine Licence. For example, it is anticipated that night time restrictions will apply to percussive piling works within the water body for Work No. 1, seaward of the mean highwater mark outside the hours of sunrise and sunset in certain summer months (June and August) and 19:00 and 07:00 in certain winter months (March, September and October), seven days a week. Other marine construction activities for Work No. 1 including dredging, are assumed to be undertaken on a 24-hour basis and continue until completion for safety or quality reasons. The marine construction working hours would be secured further through the Deemed Marine Licence.



- Immingham Green Energy Terminal 6.7 Outline Construction Traffic Management Plan
- 2.1.30 In addition, some landside construction activities to support marine working may be required during the marine construction working hours. This landside working would be restricted to the work areas defined for **Work No. 1**, 2 and 9. The landside activities are expected to include material supply, plant maintenance and vehicle movements to support the construction of **Work No. 1**.

Landside Construction Working Hours

- 2.1.31 Core landside construction working hours would be between 07:00 and 19:00 Monday to Saturday.
- 2.1.32 However, it is likely that some construction activities may need to be undertaken outside of these core working hours. This is partly because certain construction activities cannot be stopped, such as concrete pouring, but also to manage the construction programme. Where onsite works are to be conducted outside these core hours, they would comply with any restrictions agreed with NELC, in particular regarding control of noise and traffic in accordance with the relevant requirements which would be secured by the DCO. The need for any such works would be minimised where possible and will be carefully managed to reduce effects on local people.

Dealing with Non-Compliance

- 2.1.33 To provide compliance with the measures set out above, the contractor must enforce a disciplinary procedure, such as for example a 'yellow/red card system' or equivalent.
- 2.1.34 This would then work as follows, In the first event of non-compliance, a warning would be issued to the HGV driver (a 'yellow card'). In the event of any repeat of the contravention, that driver will be prohibited from making further HGV deliveries to the Site (a 'red card'). However, this is only an example and the final contractor must set out the details of a disciplinary system within the final CTMP to be prepared prior to construction starting onsite, and agreed with the local authority.

Wheel Cleaning Facility

2.1.35 In the interests of highway safety, wheel cleaning facilities would be installed on Site from the start of the construction phase, and all HGVs leaving the construction site would be required to wheel wash when exiting the Site. The need for this measure and the location of the wheel cleaning facilities would be periodically reviewed throughout the construction phase.

Advance Warning Signage

2.1.36 Advance warning signage will be erected on the public highway prior to the temporary construction compound site entrances. The erection of signage will warn drivers of the construction access ahead and the potential for slow turning vehicles. An example of the proposed signage is shown in Plate **4**.



Plate 4: Example of Proposed Signage



2.1.37 The appointed contractor will be required to maintain all signage.

Contact Details

2.1.38 Twenty-four-hour contact details will be provided on the Applicant's website as well as on any site information boards so that residents can get in touch to find out further information. This will be a name and number established by the contractor once appointed. It is anticipated that the Project liaison manager will act as the initial point of contact for members of the community to find out further information.

Network Rail

- 2.1.39 Prior to any work adjacent to the railway the contractor will assess and identify if any additional barrier protection is required at the Queens Road Railway bridge to minimise risk of vehicle incursion onto the railway with any works being agreed with Network Rail. Any works that may then be required will be kept fully maintained to the required standard for the duration of works.
- 2.1.40 The contractor will consult with Network Rail prior to any proposed use of Kiln Lane Level Crossing by construction traffic and will comply with any reasonable requirements of Network Rail as to the use of Kiln Lane Level Crossing to ensure the safety, security, operation and maintenance of the operational railway.
- 2.1.41 The contractor shall not include South Marsh Road (between North Moss Lane and Hobson Way) and South Marsh Road Level Crossing in any construction traffic route (including in the event that Queens Road Bridge is unavailable for access) and shall specify that South Marsh Road is not suitable for use by vehicles over 7.5 tonnes.

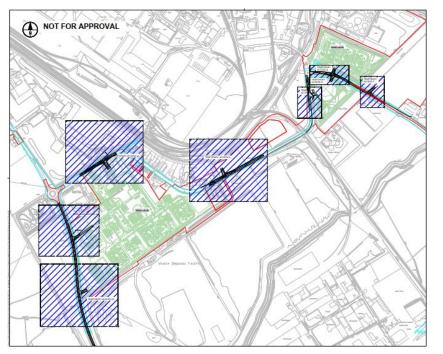


Construction Access

Access Points

- 3.1.1 There are a total of eight temporary construction access points into the Site as follows:
 - a. Temporary Access AA from Kings Road (Plate 6)
 - b. Temporary Access AB from the A1173 (Plate 7)
 - c. Temporary Access AC from the A1173 at the southern boundary of the Project (**Plate 8**)
 - d. Temporary Access M from Queens Road (Plate 9)
 - e. Temporary Access N and O a crossroads at the western end of Laporte Road (**Plate 10**)
 - f. Temporary Access P at the eastern end of the Project on Laporte Road (Plate 11)
 - g. Temporary Access U from Kings Road (Plate 12)
- 3.1.2 The access points are shown in **Plate 5**.

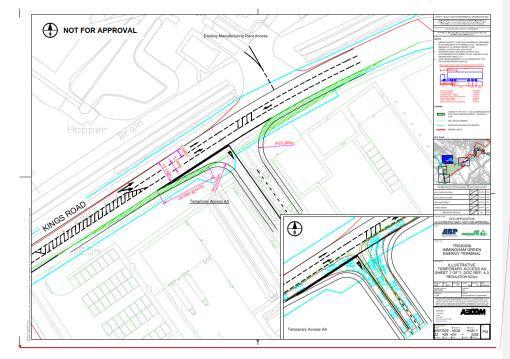
Plate 5: Construction Accesses





3.1.3 The temporary access drawings are shown below.

Plate 6: Temporary Access AA

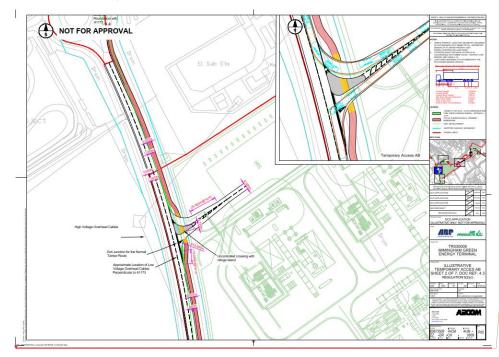


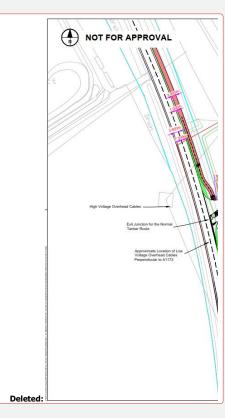
3.1.4 As can be seen in Plate **6**, Temporary Access AA is a right turn ghost island from Kings Road and has been designed to accommodate max legal HGV movements.





Plate 7: Temporary Access AB

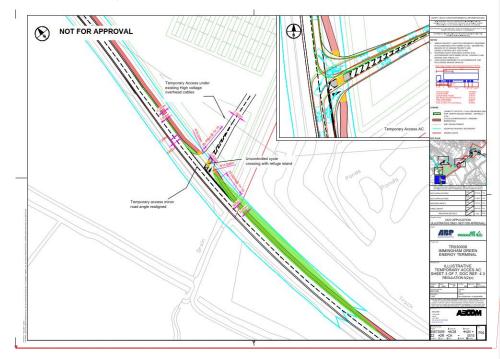


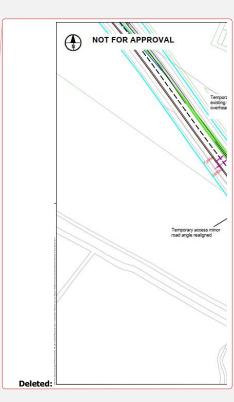


3.1.5 As can be seen in Plate **7**, Temporary Access AB is a simple priority junction from the A1173 and has been designed to accommodate max legal HGV movements.



Plate 8: Temporary Access AC

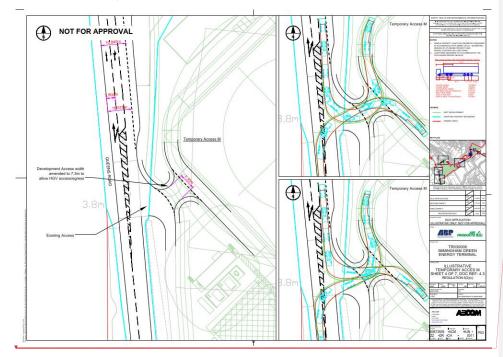


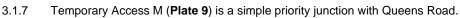


3.1.6 As can be seen in **Plate 8**, Temporary Access AC is a simple priority junction from the A1173 and has been designed to accommodate max legal HGV movements.



Plate 9: Temporary Access M





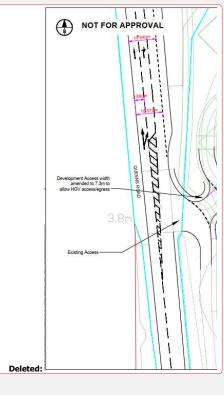
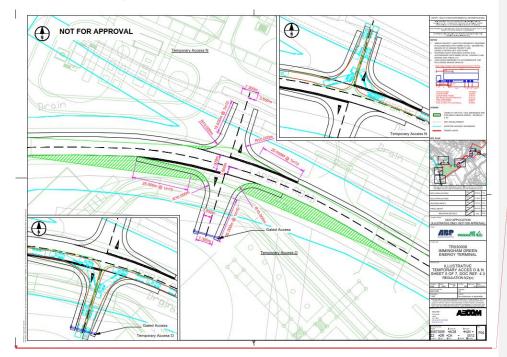
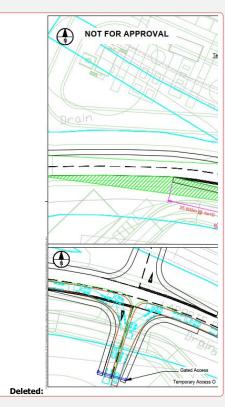




Plate 10: Temporary Accesses O and N

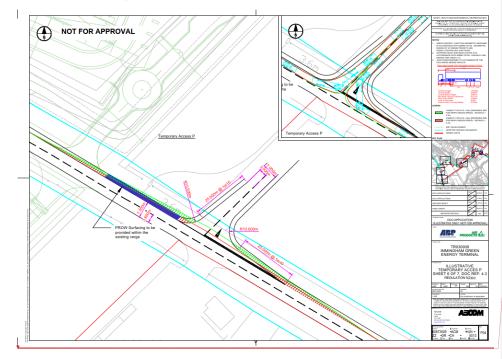


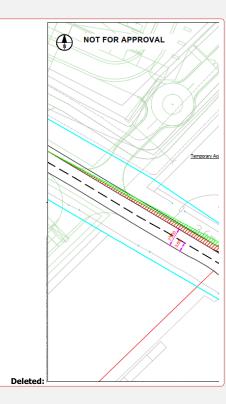


- 3.1.8 As can be seen in **Plate 10**, Temporary Accesses O and N form a crossroads junction from Laporte Road and have been designed to accommodate max legal HGV movements.
- 3.1.9 At this location it is envisaged that, in order to allow safe movement between Accesses O and N across Laporte Road, temporary traffic signals will be required, with suitable advance warning signage being required as set out in **Section 0**, and the contractor will liaise with NELC to agree working hours as there may be a requirement to avoid peak times on the local road network which are typically 8-9 in the AM and 17-18 in the PM.



Plate 11: Temporary Access P





3.1.10 As can be seen in **Plate 11**, Temporary Access P is a simple priority junction from Laporte Road and has been designed to accommodate max legal HGV movements.



Plate 12: Temporary Access U

3.1.11 As can be seen in **Plate 12**, Temporary Access U is a right turn ghost island from Kings Road and has been designed to accommodate max legal HGV movements.

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Abnormal Indivisible Loads

Strategy and Routing

- 4.1.1 It is proposed that the largest AILs will be received at the Port where they will be offloaded onto suitable haulage vehicles and transported into the Site using the A1173 and Kings Road. In order to facilitate this, the temporary removal of some specific items of street furniture and overhead cables in four locations (which comprise Work No.10 on the **Works Plans** [REP3-012]) would be required to allow the passage of these AILs along Kings Road to the Site. This would take place up to 30 times during Phase 1, and the frequency is expected to be for subsequent phases.
- 4.1.2 The contractor will liaise fully with the Police, Local Highway Authority and if required National Highways regarding any AIL movement to ensure that all required measures and approvals are in place.

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Monitoring

General Measures

5.1.1 Monitoring will be undertaken by the appointed contractor to assess the effectiveness of the measures included in the final CTMP to control the routing and impact of construction HGVs. Monitoring will also provide a firm basis upon which to answer queries and complaints regarding the HGV traffic impact during construction. A 24-hour contact name and number will be established by the contractor and displayed at the Site.

HGV Monitoring Surveys

- 5.1.2 The appointed contractor will maintain gatehouse records of construction HGVs entering and leaving the Site and they will be available to NELC on request.
- 5.1.3 Should any complaints be raised by members of the public with regards to construction HGVs not using the dedicated HGV route to the Site, gatehouse records will be used to identify the offending HGV involved and appropriate sanctions put in place to ensure no repeat events, as set out above in **Section 0**.



Consultation

Planned Liaison

- 1.1.1 A formal process of liaison between all relevant parties (contractors, NELC and National Highways) via a Local Liaison Committee, would:
 - a. Establish a channel of communication between the contractor and the regulating authorities.
 - b. Make all parties aware of the results of monitoring of the final CTMP.
 - c. Provide an additional route by which any complaints can be communicated and dealt with.
 - d. Provide a route through which transport related issues can be identified and dealt with.
 - e. Provide prior notice of significant events, e.g. delivery of abnormal loads, in accordance with standard protocols.
- 1.1.2 In order to keep the CTMP 'live', it is proposed that a short-written report is prepared by the contractors on a six-monthly (or frequency as agreed between the contractor and local authority once construction commences) basis and circulated to all key stakeholders. Any comments generated by the report will be circulated to all key stakeholders and a meeting may be held if required.
- 1.1.3 Following the report and any meeting, the CTMP could then be reviewed and updated if required to reflect current operating conditions and measures.
- 1.1.4 Some other parties may need to be consulted from time to time. Where required (depending on the works and location) a copy of the CTMP approved pursuant to this OCTMP, along with information on working hours and proposals for traffic management or works on the highways network (including any road closures, diversions or alternative access arrangements) that have potential to affect these parties will be provided at least one month before the relevant works are anticipated to commence.

PD Ports

- 1.1.5 A process of liaison with PD Ports would be established prior to construction commencing on site and would remain in place throughout the construction period, or as long as is required in agreement with both parties. PD Ports to provide a single point of contact for this process.
- 1.1.6 PD Ports will be kept informed of any relevant construction activities including road closures, diversions and works to the highway, with at least one month's notice being given of any such activity that has the potential to impact its operations.

Royal Mail

1.1.7 A process of liaison with Royal Mail would be established prior to construction commencing on site and would remain in place throughout the construction



period, or as long as is required in agreement with both parties. Royal Mail to provide a single point of contact for this process.

1.1.8 Royal Mail will be kept informed of any relevant construction activities including road closures, diversions and works to the highway, with at least one month's notice being given of any such activity that has the potential to impact its operations.



References

Ref 1-1 HM Government (2008). Planning Act 2008 (c.29).



Abbreviations and Glossary of Terms

Table 12: Glossary and Abbreviations

Term	Acronym	Meaning
Abnormal Indivisible Load	AIL	Abnormal Indivisible loads are loads which cannot, without undue expense or risk or damage, be divided into two or more loads for the purpose of carriage on the road.
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.
Construction Traffic Management Plan	СТМР	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.
Development Consent Order	DCO	The consent for a Nationally Significant Infrastructure Project required under the Planning Act 2008.
Heavy Goods Vehicle	HGV	A large truck for transporting goods.
North East Lincolnshire Council	NELC	The site falls within the administrative boundary of the North East Lincolnshire Council.
Nationally Significant Infrastructure Project	NSIP	large scale developments (relating to energy, transport, water, or waste) which require a type of consent known as "development consent"
Outline Construction Traffic Management Plan	OCTMP	An outline plan which identifies clear controls on routes, vehicle types, vehicle frequency, vehicle quality and hours of site operation and which the CTMP will be based upon.
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.



Appendix A: Construction Worker Travel Plan

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Immingham Green Energy Terminal

TR030008

Volume 6

Appendix A: Outline Construction Worker Travel Plan

Planning Act 2008 Regulation 5(2)(a) Infrastructure Planning (Applications: Prescribed

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

September 2023

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

Immingham Green Energy Terminal

Development Consent Order 2023

Appendix A: Outline Construction Worker Travel Plan

Regulation Reference	APFP Regulation 5(2)(a)	
Planning Inspectorate Case Reference	TR030008	
Application Document Reference	TR030008/APP/6.7	
Author	Associated British Ports	
	Air Products BR	

Version	Date	Status of Version
Revision 1	21 September 2023	DCO Application
Revision 2	<u>4 June 2024</u>	Deadline 4





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Executive Summary

This Construction Worker Travel Plan ("OCWTP") has been prepared to support a Development Consent Order ("DCO") application for the construction, operation and maintenance of a multi-user green energy Terminal which would be located on the eastern side of the Port of Immingham ("the Port"), as well as associated development (collectively termed "the Project"). A part of the associated development is the construction and operation of a green hydrogen production facility for the production of green hydrogen onsite by Air Products BR Ltd ("Air Products").

This OCWTP is designed to promote and encourage the use of sustainable transport modes and encourage shared transport modes during the construction phase of the Project. Subject to the necessary consents being granted, construction of the Project would follow a phased approach with the first phase likely to start in early 2025 and last for between two and a half to three years. Following construction of the first phase, a further five phases would be constructed incrementally giving a total build out period for all phases of around 11-years.

This OCWTP sets out the measures and overall approach required considered necessary to achieve the traffic inputs associated with the Project. The appointed contractor will be required to use this as a framework for them to prepare the final Construction Worker Travel Plan prior to the commencement of construction.

This OCWTP also describes the measures considered necessary to minimise the impact of construction worker vehicles on the local highway network. The contractor will need to confirm that these measures will be implemented.

This OCWTP is structured as follows:

- a. **Section 1** provides background information including the proposed Project site location and accessibility.
- b. Section 2 describes the accessibility of the Site.
- c. Section 3 presents the construction phase details of the Project.
- d. Section 4 presents the CWTP objectives.
- e. Section 5 sets out the roles and responsibilities.
- f. Section 6 describes the proposed measures.
- g. Section 7 describes the process for setting targets.
- h. Section 8 outlines the proposed monitoring of the final CWTP.





1 Introduction

- 1.1 Overview
- 1.1.1 This Outline Construction Worker Travel Plan ("OCWTP") forms part of the DCO application that has been submitted to the Secretary of State for Transport, under s37 of the Planning Act 2008 ("the 2008 Act") (Ref 1-1).
- 1.2 The Purpose and Structure of this Document
- 1.2.1 This OCWTP has been prepared in support of **Chapter 11: Traffic and Transport [TR030008/APP/6.2]** and draws upon the Environmental Statement ("ES") assessment of the impacts on transport related receptors. This OCWTP outlines how workers would travel to the Site during the construction phase. It would be used by the appointed contractor to inform the CWTP.





2 Site Accessibility

2.1 Walking

- 2.1.1 The accessibility of the Site for pedestrians is considered to be limited, with only the eastern side of Immingham being within the 2km walking distance of the Site.
- 2.1.2 In terms of local access adjacent to the Project there is a footway along the A1173, Kings Road and Queens Road, which will allow some local workers to safely walk to the construction site.

2.2 Cycling

- 2.2.1 Cycling is considered to be a viable alternative to private car use for journeys up to 5km, providing a healthy and environmentally friendly form of transport.
- 2.2.2 In respect of acceptable cycle distances, Local Transport Note 1/20: Cycle Infrastructure Design (Ref 1-2) published by the Department for Transport, states that many utility cycle trips are less than 3 miles (approximately 5km), but for commuter journeys a distance of 5 miles (approximately 8km) is not uncommon. An 8km catchment area includes Immingham, South Killinghome, Healing, Great Coates and the western edges of Grimsby.
- 2.2.3 The Grimsby to Immingham Cycle Superhighway runs on the A1173 between-Kings Road and Kiln Lane providing a link southwards into Grimsby. This therefore provides a strong cycle link within the area.

2.3 Public Transport

- 2.3.1 The Chartered Institution of Highways and Transportation's Guidelines for Planning for Public Transport in Development (Ref 1-3) recommends a maximum walking distance of 400m to a bus stop.
- 2.3.2 The nearest bus stops to the Site are located on Queens Road, within 400m of the West Site. Both stops have a layby, with the westbound stop also including a shelter, with bus service 5M providing a limited service with only four buses per day Monday to Friday, between Immingham and Grimsby.
- 2.3.3 It is therefore acknowledged given the limited number of buses that run along Queens Road past the site that the local bus service would not provide a suitable alternative for use by construction workers.





3 Construction Phase Site Worker Traffic Generation

3.1 Landside Construction – Workers

3.1.1 The profile of construction workers has been set out across the 36-month construction programme for Phase 1 of the Project as shown in **Plate A-1**, with a peak at Month 23 of 919 workers onsite daily.





Plate A-1: Phase 1 Construction Workforce Profile by Month

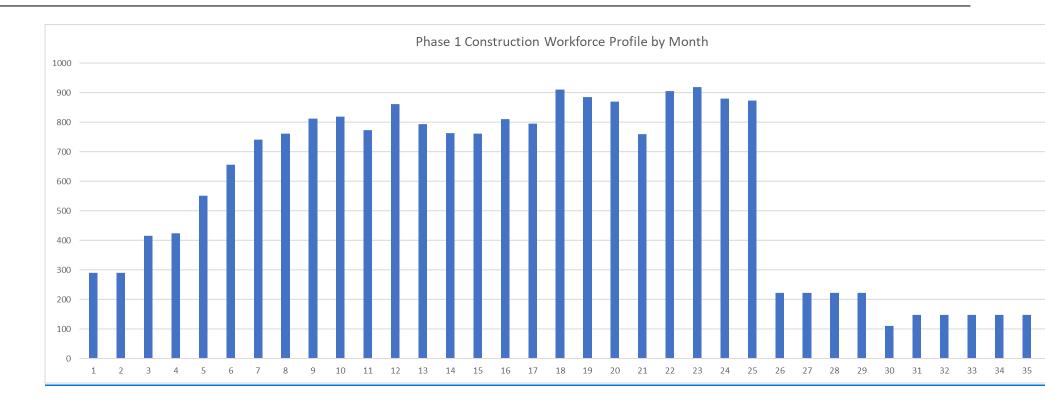
















- 3.1.2 It has been assumed that on average there would be 1.5 workers per car, although through the measures (**Section 6**) set out in this OCWTP, it would be expected that in reality a higher proportion of workers would travel using more sustainable modes of travel.
- 3.2 Landside Construction Marine
- 3.2.1 There would be a total of 220 workers associated with the marine element, and again it has been assumed that there would be 1.5 workers per car.
- 3.3 Worker Distribution

Eastern Site (Queens Road/

Laporte Road)

- 3.3.1 The total number of vehicle trips associated with 1,139 workers (919 landside and 220 marine) is, based upon an average of 1.5 workers per car, 759 vehicles arriving and 759 vehicles departing each day, giving a two-way flow of 1,518 vehicles per day (1,224 associated with the landside and 294 associated with the marine).
- 3.3.2 The above construction activity will occur across both the western and eastern sites, with the western site located adjacent to the A1173/Kings Road and the eastern site located adjacent to Queens Road/Laporte Road. Therefore, not all construction traffic will use the full length of Kings Road/Queens Road; and the split is shown in **Table A-1**, with the majority only using Kings Road in the north.

Construction Site	Landside Construction Workers	Marine Construction Workers
Western Site (A1173/Kings Road)	80%	

Table A-1: Construction Site Traffic Split between the Western and Eastern Sites

3.3.3 The above total construction worker flows can then be shown by the western and eastern sites based upon the percentage splits from **Table A-1**, as shown in **Table A-2**.

100%

Table A-2: Construction Traffic by Site (Two-Way)

20%

	Construction Workers	Two-Way Marine Construction Workers (Assuming an Average Car Occupancy of 1.5)
Western Site (A1173/Kings Road)	979	
Eastern Site (Queens Road/ Laporte Road)	245	232





	Construction Workers	Two-Way Marine Construction Workers (Assuming an Average Car Occupancy of 1.5)
Total	1,224	232

- 3.3.4 It should also be noted that the marine worker traffic total is 232 and not the total of 294 as from **Table A-2** 21% will travel from Laporte Road and 79% will travel along Kings Road/Queens Road to access other routes. Therefore only 79% (232 vehicles) will travel along Kings Road/Queens Road/Queens Road with 21% (62 vehicles travelling along Laporte Road.
- 3.3.5 The construction workforce is anticipated to travel to the Site via the existing trunk road and local road networks via private cars, with a distribution based upon Census Journey To Work data for the local area, which gives the distribution set out in **Table A-3**.

Table A-3: Construction Worker Distribution

Route	Distribution
Laporte Road	21%
Manby Road	8%
Pelham Road	20%
A180 (W)	9%
A180 (E)	26%
A1173 (S)	16%
TOTAL	100%

3.3.6 This distribution pattern is then applied to the assumed number worker vehicle trips as set out in **Table A-4**.

Table A-4: Worker Distribution during the Peak Month (One-Way)

Route	Assumed Daily Number of Workers during the Peak Month (Month 23)	Assumed Number of Worker Car Trips (Based Upon an Average of 1.5 Workers per Car)
Laporte Road	239	159
Manby Road	91	61
Pelham Road	228	152





Route	Assumed Daily Number of Workers during the Peak Month (Month 23)	Assumed Number of Worker Car Trips (Based Upon an Average of 1.5 Workers per Car)
A180 (W)	103	68
A180 (E)	296	197
A1173 (S)	182	121
TOTAL	1139	759

3.3.7 **Table A-5** below sets out the percentage of daily inbound and outbound trips on an hour-by-hour basis and calculates the totals for the peak month of construction (Month 23). This profile is based on a count undertaken at the construction site entrance to Ferrybridge Multifuel 2 in 2017 and has been accepted on previous Environmental Assessments.

Table A-5: Construction Worker Traffic Daily Profile

Hour Beginning	Percentage split based working day between 0		Arrivals	Departures	Two Way
	Percentage of Daily inbound trips	Percentage of daily outbound trips	_		
0600	34%	2%	258	15	273
0700	25%	2%	190	15	205
0800	5%	2%	38	15	53
0900	4%	2%	30	15	46
1000	4%	3%	30	23	53
1100	4%	3%	30	23	53
1200	5%	4%	38	30	68
1300	4%	4%	30	30	61
1400	3%	3%	23	23	46
1500	2%	3%	15	23	38
1600	2%	5%	15	38	53
1700	3%	15%	23	114	137





Immingham Green Energy Terminal Appendix A: Outline Construction Worker Travel Plan

Hour Beginning	Percentage split based working day between		Arrivals	Departures	Two Way
	Percentage of Daily inbound trips	Percentage of daily outbound trips			
1800	3%	35%	23	266	288
1900	2%	16%	15	121	137
2000	0%	1%	0	8	8
2100	0%	0%	0	0	0
Total	100%	100%	759	759	1518

- 3.4 Construction Phase HGV Traffic Generation
- 3.4.1 The OCTMP provides details on how the HGVs generated by the construction phase will be managed.





4 Objectives

- 4.1.1 The CWTP, would help reduce environmental impacts by reducing the number of trips made to and from the Site by private car during the construction phase. As set out in **Section 5**, all construction staff would be made aware of the measures included in the CWTP, so that benefits can be delivered and the number of car trips reduced by promoting car sharing, minibus and public transport use.
- 4.1.2 The CWTP would aim to ensure all construction staff are aware of the advantages and availability of travel by more sustainable and environmentally friendly modes of transport through raising awareness and the provision of information identifying travel options and the necessary contact information.
- 4.1.3 The primary objectives which are of most relevance during the construction phase of the Project are to:
 - Ensure that an appropriate package of measures is employed to encourage sustainable travel behaviour.
 - Reduce car usage (particularly single occupancy car journeys).
 - Raise awareness of the sustainable transport measures serving the Site.
 - Minimise the impact of traffic on sensitive locations.





5 Roles and Responsibilities

5.1 The Applicant

- 5.1.1 the Applicant will ensure that contracts entered into with all contractors working on the Project contain a requirement to develop and comply with a final CWTP, informed by and prepared in accordance with this Outline CWTP The Travel Plan Co-ordinator
- 5.1.2 The Travel Plan Co-ordinator has a key role to play in managing, monitoring and implementing the individual measures within the CWTP, and they would be. appointed by the contractor to manage and deliver the CWTP.
- 5.1.3 The Travel Plan Co-ordinator's details would be supplied to NELC and National Highways.
- 5.1.4 The responsibilities of the Travel Plan Co-ordinator will include:
 - Liaising with the overall Site manger to ensure that all workers are aware of the CWTP.
 - Setting up a formal process of liaison between all relevant parties (contractors, North East Lincolnshire Council ("NELC") and National Highways) via a Local Liaison Committee.
 - Encouraging adherence to the contractual obligations of contractors/subcontractors related to the CWTP.
 - Ensuring the CWTP notice board is located in a prominent position and that the information is kept up to date.
 - Being based on the Site.
 - Acting as the key point of contact for issues related to construction traffic.
 - Undertaking a snap-shot construction worker travel survey on a regular basis.
 - Reviewing cycle parking provision on a monthly basis.
 - Engaging with local stakeholders.
 - Monitoring performance against the targets of the CWTP, including a review of the number of car parking spaces on the site, as set out in **Section 6**.
 - Implementing additional measures if not delivering on targets set.

5.2 The Contractor

- 5.2.1 The contractor will be responsible for managing how its workers travel to and from the Site, and the main responsibilities will include:
 - a. Appointing a Travel Plan Co-ordinator to oversee the management and delivery of the CWTP.
 - b. Encouraging and promoting the use of sustainable transport measures included within the CWTP.





c. Organising crew minibuses to transport workers to and from the Site, where appropriate.





6 Travel Plan Measures

6.1 General

- 6.1.1 To encourage sustainable travel behaviour by construction staff throughout the period of construction, it is important that an appropriate package of measures is introduced. The package of measures would primarily aim to minimise the level of construction worker traffic, and wherever possible, minimise the impact and disruption of the remaining traffic on the local road network.
- 6.1.2 Where practical, and in co-ordination with NELC, measures would be coordinated with other construction projects in the vicinity where the Project and the neighbouring construction project overlap' Proposed Measures to Reduce the Level of Traffic.

Car Parking

- 6.1.3 The availability of car parking has a major influence on the means of transport people choose for their journeys and is therefore an important CWTP measure in promoting sustainable travel to and from the Site.
- 6.1.4 It is proposed that sections of the car park will gradually be opened up as construction develops, with a defined number of construction worker car parking spaces to be provided during construction. Managing the number of parking spaces available onsite would help ensure that the number of vehicles is controlled, and that sustainable transport options are promoted. It would be the responsibility of the Travel Plan Co-ordinator, working closely with the Site Manager, to determine the number of spaces to be provided.
- 6.1.5 Car parking at the Site would be monitored by the Travel Plan Co-ordinator, with restricted access. The Site Manager and the Travel Plan Co-ordinator will set the appropriate criteria for construction workers to receive a pre-allocated parking space.

Minibus

- 6.1.6 Contractors would provide minibuses for transporting their workers from the key points of construction worker origin to the Site. This would have the benefit of reducing the number of vehicle trips on the local road network. For example, many of the construction workers would find local accommodation at hotels and bed and breakfasts ("B&Bs"). They would be keen to minimise their daily travel costs and a minibus service would be an attractive means of transport to them. The locations of accommodation chosen by these workers could provide suitable pick up locations for the minibus. Minibus routes would also be set up to collect workers that live locally from central pick up points.
- 6.1.7 The contractor would encourage the use of common hotels and B&Bs by workers that are not from the local area, to encourage the use of shared transport modes such as minibus.





Car Sharing

- 6.1.8 The contractor will set up and manage a car share scheme for their workers. In construction projects, car sharing is already popular amongst workers due to the financial and social benefits it provides. It is expected that some of the workers, if not based locally, would be away from home for a specific length of time, welcoming the companionship of other colleagues.
- 6.1.9 In emergencies, the Travel Plan Co-ordinator would provide a guaranteed lift home for car sharers, e.g. by use of taxi. The provision would be extended for emergency situations for staff that cycle to the Site.

Cycling

- 6.1.10 Although cycling to the Site is likely to have limited appeal, due to, for example, carrying personal protective equipment ("PPE") and the distance to the Site from larger conurbations, secure parking for bicycles would be provided. Construction staff that cycle to work would also have access to shower and changing facilities and lockers to store clothing, cycle helmets, etc.
- 6.1.11 The Travel Plan Co-ordinator will liaise with local stakeholders such as NELC and provide information on the local Grimsby to Immingham cycle network.

Public Transport Information

6.1.12 Whilst not necessarily a realistic option due to the limited number of services per day past the Project, information about all available forms of public passenger transport, including routes and destinations, service frequencies and locations of nearest bus stops, shall be provided in an information pack and sent to construction workers prior to them starting work at the Site. Public transport information would also be displayed on the travel information boards. It will be the responsibility of the Travel Plan Co-ordinator to ensure that this information is kept up to date.

Onsite Storage

6.1.13 An onsite storage facility would be provided by the contractors. This facility would encourage construction workers to store their tools and PPE onsite. This would reduce the number of tools they would need to carry each day and would assist those workers who are considering cycling or car sharing as a potential travel mode.

6.2 Minimising the Impact on the Local Road Network

Staggered Working Hours

6.2.1 Working hours on major construction sites tend to be long, due to pressures of timescales and available light. Therefore, the arrival and departure of workers' vehicles tend to be spread over the peak periods, rather than all falling in the traditional weekday AM and PM peak hours, thereby minimising the impact on any particular time period.





Travel Plan Communication

- 6.2.2 Details of the sustainable transport options available for accessing the Site would be provided in an information pack and sent to construction workers, prior to them starting work at the Site. This will raise awareness of the initiatives being implemented and also allow staff to register an interest in the schemes. The Travel Plan Co-ordinator will be responsible for ensuring all construction workers receive the information pack prior to starting work on Site.
- 6.2.3 All construction workers will receive an introductory meeting on the CWTP when they commence work as part of overall Site safety induction training. It will include the provision of the following information:
 - a. Designated access and exit route to the Project site.
 - b. Details of sustainable transport measures available for accessing the Site.
 - c. Parking arrangements.
- 6.2.4 This would ensure that each construction worker is fully aware of the CWTP and the measures contained within it.





Immingham Green Energy Terminal Appendix A: Outline Construction Worker Travel Plan

7 Targets

7.1 Parking

- 7.1.1 The Contractor will ensure that construction workers will achieve an average car occupancy of 1.5 workers per car, which would result in 759 vehicles arriving and departing the Project per day at the peak of construction in Month 23.
- 7.1.2 One of the prime objectives of a CWTP is to set clear and realistic targets. The main target during construction is therefore:
 - a. To achieve a car occupancy of 1.5 workers per vehicle over the duration of the construction phase of the project
 - b. For no more cars/vans to be parked onsite per day during the construction phase than is required based on the expected number of construction workers on Site, based upon the above car occupancy.
- 7.1.3 The Travel Plan Co-ordinator will monitor parking utilisation at the Site, reviewing the split of vehicles between cars, vans and minibuses, ensuring that the contractor encourages its workers to travel to and from the Site by the sustainable options. If the monitoring (see **Section 8**) finds that the target is not being met, this will result in the implementation of additional measures to help the CWTP get back on course to meet its overall target objectives.
- 7.2 Single Occupancy Car Use
- 7.2.1 The Travel Plan Co-ordinator would monitor the measures to ensure an average car occupancy of 1.5 workers per car was achieved, and this would be monitored throughout the construction phases.





8 Monitoring and Review

8.1 General Measures

- 8.1.1 Monitoring the CWTP will be central to ensuring its aims are delivered in practice. Monitoring guarantees that failures or changing conditions are identified at the earliest point and that remedial action (i.e. identifying additional measures, providing incentives, marketing campaign to promote the CWTP) can be taken, to ensure that it stays on course to meet its overall objectives.
- 8.1.2 The Travel Plan Co-ordinator will be responsible for monitoring the implementation of the CWTP, to ensure an efficient and effective execution of the measures, and to refine the measures, where necessary, to cope with the changes in demand over the phases of construction.
- 8.1.3 An important part of the monitoring strategy would be the liaison meetings as set out in **Section 8.2** as well as obtaining feedback from construction workers, local residents and businesses regarding any issues with construction worker traffic. The appointment of a Travel Plan Co-ordinator will ensure that an appropriate point of contact is available and can react to such feedback.
- 8.1.4 Furthermore, construction workers will be given the chance to offer their suggestions and ideas via a suggestion box/and informal discussion with the Travel Plan Co-ordinator, while the liaison meetings set out in **Section 8.2**, should ensure any issues are dealt with effectively.

8.2 Planned Liaison

- 8.2.1 A formal process of liaison between all relevant parties (contractors, NELC and National Highways) via a Local Liaison Committee, would:
 - a. Formalise the contact between the Site manager and the Travel Plan Coordinator.
 - b. Establish a channel of communication between the contractor and the regulating authorities.
 - c. Make all parties aware of the results of monitoring of the final CWTP.
 - d. Provide an additional route by which any complaints can be communicated and dealt with.
 - e. Provide a route through which transport related issues can be identified and dealt with.
 - f. Provide prior notice of significant events, e.g. significant changes in workers on site
- 8.2.2 In order to keep the CWTP 'live', it is proposed that a short-written report is prepared by the Travel Plan Co-ordinator on a six-monthly (or other frequency to be agreed by all parties during the construction period) basis and circulated to all key stakeholders. Any comments generated by the report will be circulated to all key stakeholders and a meeting may be held if required.





8.2.3 Following the report and any meeting, the CWTP could then be reviewed and updated if required to reflect current operating conditions and measures.

8.3 Parking

- 8.3.1 Car parking facilities will be provided within the Temporary Construction Areas, including on the West Site and part of the East Site temporarily during construction, with the overall number of spaces being limited to the number of construction workers onsite, which as shown on **Plate A-1** will vary across the construction phase, and from the peak workforce in Month 23, this should then not exceed 759 car parking spaces.
- 8.3.2 The Travel Plan Co-ordinator will monitor the total number of construction workers onsite and the number of parking spaces provided to ensure limits on vehicle numbers are being implemented effectively and that car occupancy targets are being met. It is anticipated that monitoring will be undertaken on one day per month throughout construction, with the results reported back to National Highways and NELC through the liaison meetings as set out in **Section 8.28**.





9 References

- Ref 1-1 HM Government (2008). Planning Act 2008 (c.29).
- Ref 1-2 Department for Transport (2020). Cycle Infrastructure Design. Local Transport Note 1/20.
- Ref 1-3 Institution of Highways and Transportation (1999). Guidelines for Planning for Public Transport in Developments.





10 Abbreviations and Glossary of Terms

Term	Acronym	Meaning
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.
Construction Traffic Management Plan	СТМР	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.
Development Consent Order	DCO	The consent for a Nationally Significant Infrastructure Project required under the Planning Act 2008.
Heavy Goods Vehicle	HGV	A large truck for transporting goods.
North East Lincolnshire Council	NELC	The site falls within the administrative boundary of the North East Lincolnshire Council.
Nationally Significant Infrastructure Project	NSIP	large scale developments (relating to energy, transport, water, or waste) which require a type of consent known as "development consent"
Outline Construction Traffic Management Plan	OCTMP	An outline plan which identifies clear controls on routes, vehicle types, vehicle frequency, vehicle quality and hours of site operation and which the CTMP will be based upon.
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.
Personal Protective Equipment	PPE	equipment worn to minimize exposure to a variety of hazards. Examples of PPE include such items as gloves, foot and eye protection, protective hearing devices (earplugs, muffs) hard hats, respirators and full body suit



Appendix B: Construction Landside HGV Traffic Flows



Table 13: Landside HGV Trip Generation (One Way) – 2025

Activity	<u>2025</u>									
	<u>March</u>	April	Мау	June	AINC	August	<u>September</u>	October	November	December
<u>Misc</u>										
Concrete										
<u>Rebar</u>										
Struct. Steel										
Pipe Erection										
<u>Pipe Supports –</u> <u>CS</u>										
<u>Pipe Supports –</u> <u>SS</u>										
<u>Cable Supply –</u> <u>Electrical</u>										
<u>Cable Trays –</u> <u>Elec.</u>										



<u>Activity</u>	<u>2025</u>									
	March	April	May	June	<u>July</u>	August	September	October	November	December
<u>Cables –</u> Instrument										
<u>Cable Trays –</u> Inst.										
<u>Equipment</u>										
Asphalt										
<u>Piles</u>									<u>1,045</u>	<u>1,045</u>
Gravel										
Fill Material	<u>2,195</u>									
Cut Volume										
<u>Vegetation</u> <u>Removal</u>										
Work 9 fill									<u>820</u>	<u>410</u>
Waste (worker)			1	1	1	<u>1</u>	1	2	<u>2</u>	2



Activity	<u>2025</u>									
	<u>March</u>	April	May	June	July	August	September	October	November	December
<u>Waste</u> (excavation)			<u>48</u>	<u>48</u>	<u>48</u>	<u>48</u>	<u>48</u>	<u>48</u>		
TOTAL Monthly HGVS	<u>2,195</u>	<u>2,195</u>	<u>2,244</u>	<u>2,244</u>	<u>2,244</u>	<u>2,244</u>	<u>2,244</u>	<u>2,245</u>	<u>1,867</u>	<u>1,457</u>
<u>TOTAL Daily</u> <u>HGVs</u>	<u>91</u>	<u>91</u>	<u>93</u>	<u>93</u>	<u>93</u>	<u>94</u>	<u>94</u>	<u>94</u>	<u>78</u>	<u>73</u>

Table 14: Landside HGV Trip Generation (One Way) – 2026

Activity	<u>2026</u>	<u>26</u>											
	January	February	March	April	Мау	June	<u>Vuly</u>	August	September	October	November	December	
Misc			<u>43</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>43</u>	
Concrete	<u>667</u>	<u>667</u>	<u>667</u>	<u>667</u>	<u>667</u>	<u>667</u>	<u>667</u>	<u>667</u>	<u>667</u>	<u>667</u>			
<u>Rebar</u>	<u>49</u>	<u>49</u>	<u>49</u>	<u>49</u>	<u>49</u>	<u>49</u>	<u>49</u>	<u>49</u>	<u>49</u>	<u>49</u>			



Activity	<u>2026</u>											
	January	February	March	April	May	June	<u>ylut</u>	August	September	October	November	December
Struct. Steel							<u>56</u>	<u>56</u>	<u>56</u>	<u>56</u>	<u>56</u>	<u>56</u>
Pipe Erection										<u>13</u>	<u>13</u>	<u>13</u>
<u>Pipe Supports –</u> <u>CS</u>										2	2	2
<u>Pipe Supports –</u> <u>SS</u>										<u>0</u>	<u>0</u>	<u>0</u>
<u>Cable Supply –</u> <u>Electrical</u>												
<u>Cable Trays –</u> <u>Elec.</u>												
<u>Cables –</u> Instrument												
<u>Cable Trays –</u> Inst.												
Equipment										<u>60</u>	<u>60</u>	<u>60</u>
<u>Asphalt</u>												
<u>Piles</u>	<u>1,045</u>	<u>1,045</u>	<u>1,045</u>	<u>1,045</u>	<u>1,045</u>	<u>1,045</u>						



Activity	<u>2026</u>											
	January	February	March	April	May	June	<u>YINL</u>	August	September	October	November	December
<u>Gravel</u>												
Fill Material												
Cut Volume												
<u>Vegetation</u> <u>Removal</u>												
Work 9 fill												
Waste (worker)	2	<u>2</u>	2	2	2	2	<u>2</u>	2	<u>2</u>	2	<u>2</u>	2
<u>Waste</u> (excavation)			<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>
TOTAL Monthly HGVS	<u>1,763</u>	<u>1,763</u>	<u>1,846</u>	<u>1,846</u>	<u>1,846</u>	<u>1,846</u>	<u>857</u>	<u>857</u>	<u>857</u>	<u>932</u>	<u>216</u>	<u>216</u>
<u>TOTAL Daily</u> <u>HGVs</u>	<u>88</u>	<u>88</u>	<u>92</u>	<u>92</u>	<u>92</u>	<u>92</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>47</u>	<u>11</u>	<u>11</u>

Table 15: Landside HGV Trip Generation (One Way) – 2027



Activity	<u>2027</u>												
	January	February	<u>March</u>	April	May	June	<u>ylıy</u>	August	September	October	November	December	
<u>Misc</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>43</u>	<u>43</u>	
Concrete													
Rebar													
Struct. Steel	<u>56</u>												
Pipe Erection	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>				
<u>Pipe Supports –</u> <u>CS</u>	2	2	2	2	2	2	2	2	2				
<u>Pipe Supports –</u> <u>SS</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>							
<u>Cable Supply –</u> <u>Electrical</u>						2	2	2	2	2	2		
<u>Cable Trays –</u> <u>Elec.</u>			<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>					
<u>Cables –</u> Instrument						2	2	2	2	2	2		



Activity	2027											
	January	February	March	April	May	June	<u>July</u>	August	September	October	November	December
<u>Cable Trays –</u> Inst.			<u>29</u>	<u>29</u>	<u>29</u>	<u>29</u>	<u>29</u>	<u>29</u>				
Equipment	<u>60</u>	<u>60</u>	<u>60</u>									
<u>Asphalt</u>						<u>134</u>	<u>134</u>	<u>134</u>	<u>134</u>	<u>134</u>	<u>134</u>	<u>134</u>
Piles												
Gravel									<u>83</u>	<u>83</u>	<u>83</u>	<u>83</u>
Fill Material												
Cut Volume												
<u>Vegetation</u> <u>Removal</u>												
Work 9 fill												
Waste (worker)	2	2	2	2	2	1	<u>1</u>	1	1	<u>0</u>	<u>0</u>	<u>0</u>
<u>Waste</u> (excavation)												



Activity	<u>2027</u>	27												
	January	February	March	April	May	June	July	August	September	October	November	December		
TOTAL Monthly HGVS	<u>176</u>	<u>120</u>	<u>155</u>	<u>95</u>	<u>95</u>	<u>232</u>	<u>232</u>	<u>232</u>	<u>280</u>	<u>264</u>	<u>264</u>	<u>260</u>		
<u>TOTAL Daily</u> <u>HGVs</u>	<u>9</u>	<u>6</u>	<u>8</u>	<u>5</u>	<u>5</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>14</u>	<u>13</u>	<u>13</u>	<u>13</u>		

Table 16: Landside HGV Trip Generation (One Way) – 2028

Activity	<u>2028</u>		
	January	February	<u>March</u>
<u>Misc</u>	<u>43</u>	<u>43</u>	<u>43</u>
Concrete			
<u>Rebar</u>			
Struct. Steel			



Activity	<u>2028</u>		
	January	February	<u>March</u>
Pipe Erection			
<u>Pipe Supports –</u> <u>CS</u>			
<u>Pipe Supports –</u> <u>SS</u>			
<u>Cable Supply –</u> <u>Electrical</u>			
<u>Cable Trays –</u> <u>Elec.</u>			
<u>Cables –</u> Instrument			
<u>Cable Trays –</u> Inst.			
Equipment			
Asphalt	<u>134</u>	<u>134</u>	<u>134</u>
<u>Piles</u>			



<u>Activity</u>	<u>2028</u>		
	January	February	March
<u>Gravel</u>	<u>83</u>	<u>83</u>	
Fill Material			
Cut Volume			
<u>Vegetation</u> <u>Removal</u>			
Work 9 fill	<u>820</u>	<u>410</u>	
Waste (worker)	<u>0</u>	<u>0</u>	<u>0</u>
<u>Waste</u> (excavation)	<u>43</u>	<u>43</u>	<u>43</u>
TOTAL Monthly HGVS	<u>1,080</u>	<u>670</u>	<u>177</u>
<u>TOTAL Daily</u> <u>HGVs</u>	<u>54</u>	<u>34</u>	<u>9</u>



Appendix C: Jetty HGV Traffic Flows

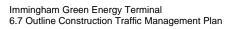




Table 17: Jetty HGV Trip Generation (One Way) - 2025

Activity	<u>2025</u>	025										
	March	April	May	annc	July	August	September	October	November	December		
<u>Concrete</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>		
Rebar							<u>69</u>	<u>69</u>	<u>69</u>	<u>69</u>		
Struct. Steel							<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>		
<u>Asphalt</u>							<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>		
<u>Piles</u>												
Fill Material												
Cut Volume				<u>100</u>	<u>100</u>							
PCC crossheads (5.1m)			<u>138</u>	<u>138</u>								
PCC crossheads (14m)							2	2				
PCC trough beam												





Activity	<u>2025</u>	2025									
	March	April	May	June	VINC	August	September	October	November	December	
PCC deck slabs											
Waste (in-situ)							2	2	2	<u>2</u>	
Waste (PCC)							1		1		
<u>Waste (Rebar)</u>											
Waste (Steel)				<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	
Waste (Fill)				<u>4</u>	<u>4</u>						
TOTAL Monthly HGVS	<u>40</u>	<u>40</u>	<u>178</u>	<u>281</u>	<u>143</u>	<u>43</u>	<u>124</u>	<u>124</u>	<u>121</u>	<u>121</u>	
TOTAL Daily HGVs	2	2	<u>7</u>	<u>12</u>	<u>6</u>	2	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	



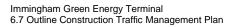


Table 18: Jetty HGV Trip Generation (One Way) - 2026

<u>Activity</u>	<u>2026</u>	2026										
	January	February	March	April	May	June	XInD	August	September	October	November	December
<u>Misc</u>			<u>43</u>									
<u>Concrete</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>
<u>Rebar</u>	<u>69</u>	<u>69</u>	<u>69</u>	<u>69</u>	<u>69</u>	<u>69</u>	<u>69</u>	<u>69</u>	<u>69</u>	<u>69</u>	<u>69</u>	<u>69</u>
Struct. Steel	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>
<u>Asphalt</u>	<u>3</u>	<u>3</u>	<u>3</u>						<u>3</u>	<u>3</u>	<u>3</u>	
<u>Piles</u>					<u>20</u>	<u>20</u>	<u>20</u>					
Fill Material												
Cut Volume												
PCC crossheads (5.1m)												
PCC crossheads (14m)	<u>3</u>	<u>3</u>	<u>3</u>									





Activity	<u>2026</u>	<u>2026</u>										
	January	February	March	April	May	June	λInL	August	September	October	November	December
PCC trough beam	<u>59</u>	<u>59</u>	<u>59</u>	<u>59</u>					<u>59</u>	<u>59</u>	<u>59</u>	<u>59</u>
PCC deck slabs	<u>78</u>	<u>78</u>	<u>78</u>	<u>78</u>					<u>78</u>	<u>78</u>	<u>78</u>	<u>78</u>
<u>Waste (in-situ)</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Waste (PCC)	<u>1</u>		1						1		<u>1</u>	
<u>Waste (Rebar)</u>		<u>1</u>			<u>1</u>			<u>1</u>		<u>1</u>		
Waste (Steel)	<u>4</u>	<u>4</u>	<u>4</u>						<u>4</u>	<u>4</u>	<u>4</u>	
Waste (Fill)												
TOTAL Monthly HGVS	<u>258</u>	<u>258</u>	<u>258</u>	<u>252</u>	<u>135</u>	<u>135</u>	<u>135</u>	<u>115</u>	<u>258</u>	<u>258</u>	<u>258</u>	<u>252</u>
TOTAL Daily HGVs	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>7</u>	<u>7</u>	<u>7</u>	<u>6</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>