

Viking CCS Pipeline

**Environmental
Statement Volume IV –
Appendix 13-3:
Construction Traffic
Noise Calculations**

Document Reference: EN070008/APP/6.4.13.3

Applicant: Chrysaor Production (U.K.) Limited,
a Harbour Energy Company
PINS Reference: EN070008
Planning Act 2008 (as amended)
The Infrastructure Planning (Applications: Prescribed Forms
and Procedure) Regulations 2009 - Regulation 5(2)(a)
Date: October 2023

PINS Reference	Document Reference	Document Revision	Date
EN070008	EN070008/APP/6.4.13.3	Revision 1	October 2023

Prepared by	Verified by	Approved by
TC	ER	MW
Senior Consultant	Associate Acoustics Consultant	EIA Technical Director

Prepared by:

AECOM Limited
Exchange Station
Tithebarn Street
Liverpool
Merseyside
L2 2QP

© AECOM Limited. All rights reserved.

Table of Contents

1	Construction Traffic Noise Assessment	1
---	---	---

Tables

Table 1: Traffic Data Associated with Pipe Set up and Transport	2
Table 2: Traffic Data for the Construction of Access Routes.....	6
Table 3: Construction Traffic Noise Assessment – Pipe Set up and Transport.....	10
Table 4: Construction Traffic Noise Assessment – Construction Associated with Site Access.....	12

1 Construction Traffic Noise Assessment

- 1.1.1 This appendix presents the potential changes in road traffic noise from construction and decommissioning as a result of the Viking CCS Pipeline (hereafter referred to as the Proposed Development). This forms *ES Volume IV Appendix 13.3 Construction Traffic Assessment (Application Document 6.4.13.3)*.
- 1.1.2 The potential changes in road traffic noise due to construction traffic associated with the Proposed Development have been considered by calculating the Basic Noise Level (BNL) calculation methodology from 'Calculation of Road Traffic Noise' (CRTN) and comparing the change between the future baseline and the future baseline with construction traffic. The CRTN BNL methodology is only applicable for Annual Average Weekday Traffic (AAWT) numbers greater than 1000. Consequently, the BNL for road links with an AAWT below 1000 have not been calculated.
- 1.1.3 Construction traffic that has been considered during peak periods for the two scenarios outlined below:
- Construction traffic for pipe delivery to construction compounds and sites; and
 - Construction traffic using access routes to site.
- 1.1.4 Raw traffic data used in the assessment for both scenarios is presented in **Table 1** and **Table 2**.

Table 1: Traffic Data Associated with Pipe Set up and Transport

Road Link	Future Two-way Baseline flows (year of completion, 2026)			Future Two-way Baseline Flows + Development Flows (2025)			Speed (mph)
	Total Vehicles	HGVs	% HGVs	Total Vehicles	HGVs	% HGVs	
B1210	10,213	726	7.1%	10,213	726	7.1%	40
A1173	6,451	786	12.2%	6,590	912	13.8%	50
A160	13,757	5,544	40.3%	14,168	5,933	41.9%	40
Healing Road	6,228	786	12.6%	6,228	786	12.6%	40
Wells Road	917	115	12.5%	917	115	12.5%	60
A18	6,180	1,110	18.0%	6,180	1,110	18.0%	50
Waltham Road 1	5,268	487	9.2%	5,268	487	9.2%	30
Waltham Road 2	2,781	244	8.8%	2,781	244	8.8%	30
A16	11,614	1,574	13.6%	11,614	1,574	13.6%	60
Thoroughfare	252	21	8.3%	252	21	8.3%	60
Unnamed between A18 and A16	1,798	311	17.3%	1,798	311	17.3%	60
A18	5,354	1,053	19.7%	5,354	1,053	19.7%	50
A16	12,223	1,732	14.2%	12,223	1,732	14.2%	60
A46	7,630	969	12.7%	7,630	969	12.7%	60
A46 - Grimsby Road	16,018	1,714	10.7%	16,059	1,751	10.9%	50
Unnamed off A18	111	6	5.4%	111	6	5.4%	60
Nooking Lane	1,524	168	11.0%	1,524	168	11.0%	40
A1173	3,867	473	12.2%	4,006	599	15.0%	60
A18 - Barton Street North	13,399	2,102	15.7%	13,538	2,228	16.5%	60
A18 - Barton Street South	10,615	1,585	14.9%	10,713	1,674	15.6%	50

Road Link	Future Two-way Baseline flows (year of completion, 2026)			Future Two-way Baseline Flows + Development Flows (2025)			Speed (mph)
	Total Vehicles	HGVs	% HGVs	Total Vehicles	HGVs	% HGVs	
A16 Peaks Parkway	17,095	1,697	9.9%	17,095	1,697	9.9%	40
Pear Tree Lane	2,147	291	13.6%	2,147	291	13.6%	60
Ings Lane	281	33	11.7%	281	33	11.7%	60
Alvingham Road	6,451	73	1.1%	6,451	73	1.1%	60
Yarburgh Road	613	79	12.9%	613	79	12.9%	60
Westfield Road	559	52	9.3%	559	52	9.3%	60
A18	3,734	581	15.6%	3,734	581	15.6%	50
A16	15,423	1,657	10.7%	15,423	1,657	10.7%	60
Louth Bypass	14,072	816	5.8%	14,072	816	5.8%	60
B1200 Manby Middlegate	3,859	478	12.4%	3,859	478	12.4%	60
A157	3,784	452	11.9%	3,784	452	11.9%	60
A157	2,371	271	11.4%	2,371	271	11.4%	60
Saltfleet Road	3,180	383	12.0%	3,221	420	13.1%	60
A1031	4,263	458	10.7%	4,263	458	10.7%	50
Thacker Bank	194	33	17.0%	194	33	17.0%	60
Thacker Bank	1,959	197	10.1%	1,959	197	10.1%	60
Alford Road	6,311	676	10.7%	6,311	676	10.7%	60
Three Bridge Lane	1,941	1,033	53.2%	1,941	1,033	53.2%	60
Mill Road	2,058	234	11.4%	2,058	234	11.4%	40
Station Road	194	56	28.9%	194	56	28.9%	40
Habrough Road	4,421	379	8.6%	4,421	379	8.6%	60
A1173	8,394	2,385	28.4%	8,394	2,385	28.4%	50
Mill Lane	108	4	3.7%	108	4	3.7%	60
A160	15,275	6,156	40.3%	15,595	6,464	41.4%	60

Road Link	Future Two-way Baseline flows (year of completion, 2026)			Future Two-way Baseline Flows + Development Flows (2025)			Speed (mph)
	Total Vehicles	HGVs	% HGVs	Total Vehicles	HGVs	% HGVs	
Killingholme Road	4,578	461	10.1%	4,578	461	10.1%	60
Lock Road	754	93	12.3%	754	93	12.3%	60
A16	9,751	1,575	16.2%	9,751	1,575	16.2%	60
B1219 - Station Road	13,745	906	6.6%	13,745	906	6.6%	40
A180 - Westgate	30,592	1,529	5.0%	30,592	1,529	5.0%	50
Grimsby Road	14,236	216	1.5%	14,277	253	1.8%	60
A1031	4,667	70	1.5%	4,708	107	2.3%	60
Thoresby Road	3,006	42	1.4%	3,047	79	2.6%	60
A1031 Main Road	2,528	78	3.1%	2,569	115	4.5%	60
Warren Road	3,174	79	2.5%	3,215	116	3.6%	60
Walk Lane	26	2	7.7%	26	2	7.7%	60
A1173	8,292	1,719	20.7%	8,292	1,719	20.7%	60
Roxton Road	162	6	3.7%	162	6	3.7%	60
Old Man Road	157	16	10.2%	157	16	10.2%	30
Little Grimsby Lane	423	53	12.5%	423	53	12.5%	60
Brackenborough Road	658	49	7.4%	658	49	7.4%	60
Brackenborough Road 2	1,252	87	6.9%	1,252	87	6.9%	60
North Holme Road	16,007	1,237	7.7%	16,007	1,237	7.7%	30
Keddington Road	3,337	259	7.8%	3,337	259	7.8%	30
Louth Road 1	2,415	183	7.6%	2,415	183	7.6%	60

Road Link	Future Two-way Baseline flows (year of completion, 2026)			Future Two-way Baseline Flows + Development Flows (2025)			Speed (mph)
	Total Vehicles	HGVs	% HGVs	Total Vehicles	HGVs	% HGVs	
Mill Hill Way	2,622	244	9.3%	2,622	244	9.3%	60
Red Leas Lane	95	10	10.5%	95	10	10.5%	60
Pick Hill Lane	244	23	9.4%	244	23	9.4%	60
Marsh Lane	1,880	250	13.3%	1,880	250	13.3%	60
Louth Road 2	1,479	126	8.5%	1,479	126	8.5%	60
Main Road	1,033	109	10.6%	1,033	109	10.6%	60
Kings Street	766	62	8.1%	766	62	8.1%	60
Weelsby Road	22,407	1,330	5.9%	22,444	1,364	6.1%	30
A46 Laceby Road	19,055	1,340	7.0%	19,092	1,374	7.2%	30
A16	17,071	1,602	9.4%	17,071	1,602	9.4%	30
A1173 Manby Road	6,114	1,688	27.6%	6,114	1,688	27.6%	60
Keelby Road	2,429	154	6.3%	2,429	154	6.3%	60
A180 - East of A1173	26,048	4,479	17.2%	26,048	4,479	17.2%	60
A180 - Between A1173 and A160	35,709	3,821	10.7%	35,857	3,956	11.0%	60
Mablethorpe Road	3,174	79	2.5%	3,211	113	3.5%	40

Table 2: Traffic Data for the Construction of Access Routes

Road Link	Future Two-way Baseline flows (year of completion, 2026)			Future Two-way Baseline Flows + Development Flows (2025)			Speed (mph)
	Total Vehicles	HGVs	% HGVs	Total Vehicles	HGVs	% HGVs	
B1210	10,213	726	7.1%	10,380	756	7.3%	40
A1173	6,451	786	12.2%	7,608	1,246	16.4%	50
A160	13,757	5,544	40.3%	13,993	5,668	40.5%	40
Healing Road	6,228	786	12.6%	6,228	786	12.6%	40
Wells Road	917	115	12.5%	917	115	12.5%	60
A18	6,180	1,110	18.0%	6,774	1,252	18.5%	50
Waltham Road 1	5,268	487	9.2%	5,268	487	9.2%	30
Waltham Road 2	2,781	244	8.8%	2,781	244	8.8%	30
A16	11,614	1,574	13.6%	12,431	1,631	13.1%	60
Thoroughfare	252	21	8.3%	400	78	19.5%	60
Unnamed between A18 and A16	1,798	311	17.3%	1,906	311	16.3%	60
A18	5,354	1,053	19.7%	5,874	1,185	20.2%	50
A16	12,223	1,732	14.2%	12,855	1,776	13.8%	60
A46	7,630	969	12.7%	7,823	1,022	13.1%	60
A46 - Grimsby Road	16,018	1,714	10.7%	16,323	1,798	11.0%	50
Unnamed off A18	111	6	5.4%	195	39	20.0%	60
Nooking Lane	1,524	168	11.0%	1,524	168	11.0%	40
A1173	3,867	473	12.2%	4,751	829	17.4%	60
A18 - Barton Street North	13,399	2,102	15.7%	14,174	2,424	17.1%	60
A18 - Barton Street South	10,615	1,585	14.9%	11,352	1,771	15.6%	50

Road Link	Future Two-way Baseline flows (year of completion, 2026)			Future Two-way Baseline Flows + Development Flows (2025)			Speed (mph)
	Total Vehicles	HGVs	% HGVs	Total Vehicles	HGVs	% HGVs	
A16 Peaks Parkway	17,095	1,697	9.9%	17,912	1,754	9.8%	40
Pear Tree Lane	2,147	291	13.6%	2,270	335	14.8%	60
Ings Lane	281	33	11.7%	281	33	11.7%	60
Alvingham Road	6,451	73	1.1%	6,533	73	1.1%	60
Yarburgh Road	613	79	12.9%	652	118	18.1%	60
Westfield Road	559	52	9.3%	559	52	9.3%	60
A18	3,734	581	15.6%	4,219	678	16.1%	50
A16	15,423	1,657	10.7%	16,285	1,754	10.8%	60
Louth Bypass	14,072	816	5.8%	14,451	904	6.3%	60
B1200 Manby Middlegate	3,859	478	12.4%	4,238	566	13.4%	60
A157	3,784	452	11.9%	3,784	452	11.9%	60
A157	2,371	271	11.4%	2,371	271	11.4%	60
Saltfleet Road	3,180	383	12.0%	3,325	419	12.6%	60
A1031	4,263	458	10.7%	4,263	458	10.7%	50
Thacker Bank	194	33	17.0%	308	69	22.4%	60
Thacker Bank	1,959	197	10.1%	2,061	197	9.6%	60
Alford Road	6,311	676	10.7%	6,311	676	10.7%	60
Three Bridge Lane	1,941	1,033	53.2%	2,189	1,081	49.4%	60
Mill Road	2,058	234	11.4%	2,070	234	11.3%	40
Station Road	194	56	28.9%	194	56	28.9%	40
Habrough Road	4,421	379	8.6%	4,522	412	9.1%	60
A1173	8,394	2,385	28.4%	8,491	2,385	28.1%	50
Mill Lane	108	4	3.7%	118	4	3.4%	60
A160	15,275	6,156	40.3%	15,520	6,281	40.5%	60

Road Link	Future Two-way Baseline flows (year of completion, 2026)			Future Two-way Baseline Flows + Development Flows (2025)			Speed (mph)
	Total Vehicles	HGVs	% HGVs	Total Vehicles	HGVs	% HGVs	
Killingholme Road	4,578	461	10.1%	4,639	494	10.6%	60
Lock Road	754	93	12.3%	754	93	12.3%	60
A16	9,751	1,575	16.2%	9,751	1,575	16.2%	60
B1219 - Station Road	13,745	906	6.6%	13,745	906	6.6%	40
A180 - Westgate	30,592	1,529	5.0%	31,066	1,622	5.2%	50
Grimsby Road	14,236	216	1.5%	14,414	335	2.3%	60
A1031	4,667	70	1.5%	4,845	189	3.9%	60
Thoresby Road	3,006	42	1.4%	3,184	161	5.1%	60
A1031 Main Road	2,528	78	3.1%	2,706	197	7.3%	60
Warren Road	3,174	79	2.5%	3,314	160	4.8%	60
Walk Lane	26	2	7.7%	26	2	7.7%	60
A1173	8,292	1,719	20.7%	8,317	1,719	20.7%	60
Roxton Road	162	6	3.7%	162	6	3.7%	60
Old Man Road	157	16	10.2%	179	16	8.9%	30
Little Grimsby Lane	423	53	12.5%	447	61	13.6%	60
Brackenborough Road	658	49	7.4%	678	49	7.2%	60
Brackenborough Road 2	1,252	87	6.9%	1,279	87	6.8%	60
North Holme Road	16,007	1,237	7.7%	16102	1237	7.7%	30
Keddington Road	3,337	259	7.8%	3460	259	7.8%	30
Louth Road 1	2,415	183	7.6%	2504	183	7.6%	60

Road Link	Future Two-way Baseline flows (year of completion, 2026)			Future Two-way Baseline Flows + Development Flows (2025)			Speed (mph)
	Total Vehicles	HGVs	% HGVs	Total Vehicles	HGVs	% HGVs	
Mill Hill Way	2,622	244	9.3%	2691	280	9.3%	60
Red Leas Lane	95	10	10.5%	107	10	10.5%	60
Pick Hill Lane	244	23	9.4%	266	23	9.4%	60
Marsh Lane	1,880	250	13.3%	1949	286	13.3%	60
Louth Road 2	1,479	126	8.5%	1523	170	8.5%	60
Main Road	1,033	109	10.6%	1047	109	10.6%	60
Kings Street	766	62	8.1%	805	101	8.1%	60
Weelsby Road	22,407	1,330	5.9%	22490	1413	6.1%	30
A46 Laceby Road	19,055	1,340	7.0%	19140	1423	7.2%	30
A16	17,071	1,602	9.4%	17240	1695	9.4%	30
A1173 Manby Road	6,114	1,688	27.6%	6139	1688	27.6%	60
Keelby Road	2,429	154	6.3%	2500	185	6.3%	60
A180 - East of A1173	26,048	4,479	17.2%	26217	4572	17.2%	60
A180 - Between A1173 and A160	35,709	3,821	10.7%	36787	4374	11.0%	60
Mablethorpe Road	3,174	79	2.5%	3283	115	3.5%	40

1.1.5 **Table 3** presents the results of the pipe set up and transport traffic assessment.

Table 3: Construction Traffic Noise Assessment – Pipe Set up and Transport

Road Link	Baseline BNL dB	Baseline with Construction Traffic BNL dB	Change in BNL dB	Effect Level
B1210	69.9	69.9	0.0	Negligible
A1173	70.2	70.5	0.3	Negligible
A160	75.5	75.7	0.3	Negligible
Healing Road	68.8	68.8	0.0	Negligible
A18	70.8	70.8	0.0	Negligible
Waltham Road 1	66.2	66.2	0.0	Negligible
Waltham Road 2	63.2	63.2	0.0	Negligible
A16	74.2	74.2	0.0	Negligible
Unnamed between A18 and A16	65.9	65.9	0.0	Negligible
A18	70.4	70.4	0.0	Negligible
A16	74.5	74.5	0.0	Negligible
A46	72.3	72.3	0.0	Negligible
A46 - Grimsby Road	73.9	74.0	0.0	Negligible
Nooking Lane	61.4	61.4	0.0	Negligible
A1173	69.3	69.8	0.5	Negligible
A18 - Barton Street North	75.1	75.2	0.1	Negligible
A18 - Barton Street South	72.8	72.9	0.1	Negligible
A16 Peaks Parkway	72.7	72.7	0.0	Negligible
Pear Tree Lane	66.5	66.5	0.0	Negligible
Alvingham Road	69.6	69.6	0.0	Negligible
A18	68.3	68.3	0.0	Negligible
A16	75.1	75.1	0.0	Negligible
Louth Bypass	73.9	73.9	0.0	Negligible
B1200 Manby Middlegate	69.3	69.3	0.0	Negligible
A157	69.1	69.1	0.0	Negligible
A157	66.7	66.7	0.0	Negligible
Saltfleet Road	68.3	68.5	0.2	Negligible
A1031	68.2	68.2	0.0	Negligible
Thacker Bank	65.4	65.4	0.0	Negligible
Alford Road	71.2	71.2	0.0	Negligible
Three Bridge Lane	69.3	69.3	0.0	Negligible
Mill Road	63.3	63.3	0.0	Negligible
Habrough Road	69.3	69.3	0.0	Negligible

Road Link	Baseline BNL dB	Baseline with Construction Traffic BNL dB	Change in BNL dB	Effect Level
A1173	73.3	73.3	0.0	Negligible
A160	78.0	78.2	0.2	Negligible
Killingholme Road	69.7	69.7	0.0	Negligible
A16	73.8	73.8	0.0	Negligible
B1219 - Station Road	71.1	71.1	0.0	Negligible
A180 - Westgate	75.7	75.7	0.0	Negligible
Grimsby Road	73.1	73.2	0.1	Negligible
A1031	68.3	68.5	0.2	Negligible
Thoresby Road	66.2	66.6	0.3	Negligible
A1031 Main Road	65.7	66.0	0.4	Negligible
Warren Road	66.7	67.0	0.3	Negligible
A1173	73.6	73.6	0.0	Negligible
North Holme Road	70.7	70.7	0.0	Negligible
Keddington Road	63.8	63.8	0.0	Negligible
Louth Road 1	66.2	66.2	0.0	Negligible
Mill Hill Way	67.0	67.0	0.0	Negligible
Marsh Lane	65.7	65.7	0.0	Negligible
Louth Road 2	63.5	63.5	0.0	Negligible
Main Road	61.3	61.3	0.0	Negligible
Weelsby Road	71.7	71.7	0.0	Negligible
A46 Laceby Road	71.3	71.3	0.1	Negligible
A16	71.4	71.4	0.0	Negligible
A1173 Manby Road	73.0	73.0	0.0	Negligible
Keelby Road	66.1	66.1	0.0	Negligible
A180 - East of A1173	78.2	78.2	0.0	Negligible
A180 - Between A1173 and A160	78.7	78.8	0.1	Negligible
Mablethorpe Road	63.6	64.0	0.3	Negligible

1.1.6 **Table 4** presents the results of the construction traffic associated with site access assessment

Table 4: Construction Traffic Noise Assessment – Construction Associated with Site Access

Road Link	Baseline BNL dB	Baseline with Construction Traffic BNL dB	Change in BNL dB	Effect Level
B1210	69.9	70.0	0.1	Negligible
A1173	70.2	71.5	1.3	Minor
A160	75.5	75.6	0.1	Negligible
Healing Road	68.8	68.8	0.0	Negligible
A18	70.8	71.3	0.5	Negligible
Waltham Road 1	66.2	66.2	0.0	Negligible
Waltham Road 2	63.2	63.2	0.0	Negligible
A16	74.2	74.5	0.2	Negligible
Unnamed between A18 and A16	65.9	66.1	0.2	Negligible
A18	70.4	70.9	0.5	Negligible
A16	74.5	74.7	0.2	Negligible
A46	72.3	72.4	0.2	Negligible
A46 - Grimsby Road	73.9	74.0	0.1	Negligible
Nooking Lane	61.4	61.4	0.0	Negligible
A1173	69.3	70.8	1.6	Minor
A18 - Barton Street North	75.1	75.5	0.4	Negligible
A18 - Barton Street South	72.8	73.1	0.4	Negligible
A16 Peaks Parkway	72.7	72.9	0.2	Negligible
Pear Tree Lane	66.5	66.9	0.5	Negligible
Alvingham Road	69.6	69.6	0.1	Negligible
A18	68.3	68.9	0.6	Negligible
A16	75.1	75.3	0.2	Negligible
Louth Bypass	73.9	74.1	0.2	Negligible
B1200 Manby Middlegate	69.3	69.8	0.5	Negligible
A157	69.1	69.1	0.0	Negligible
A157	66.7	66.7	0.0	Negligible
Saltfleet Road	68.3	68.6	0.3	Negligible
A1031	68.2	68.2	0.0	Negligible
Thacker Bank	65.4	65.7	0.2	Negligible
Alford Road	71.2	71.2	0.0	Negligible
Three Bridge Lane	69.3	69.8	0.5	Negligible
Mill Road	63.3	63.3	0.0	Negligible
Habrough Road	69.3	69.5	0.2	Negligible

Road Link	Baseline BNL dB	Baseline with Construction Traffic BNL dB	Change in BNL dB	Effect Level
A1173	73.3	73.3	0.0	Negligible
A160	78.0	78.1	0.1	Negligible
Killingholme Road	69.7	69.8	0.1	Negligible
A16	73.8	73.8	0.0	Negligible
B1219 - Station Road	71.1	71.1	0.0	Negligible
A180 - Westgate	75.7	75.8	0.1	Negligible
Grimsby Road	73.1	73.3	0.2	Negligible
A1031	68.3	68.9	0.6	Negligible
Thoresby Road	66.2	67.2	1.0	Minor
A1031 Main Road	65.7	66.8	1.1	Minor
Warren Road	66.7	67.4	0.7	Negligible
A1173	73.6	73.6	0.0	Negligible
Brackenborough Road 2	62.1	62.2	0.1	Negligible
North Holme Road	70.7	70.7	0.0	Negligible
Keddington Road	63.8	63.9	0.1	Negligible
Louth Road 1	66.2	66.4	0.2	Negligible
Mill Hill Way	67.0	67.3	0.3	Negligible
Marsh Lane	65.7	66.0	0.4	Negligible
Louth Road 2	63.5	64.1	0.6	Negligible
Main Road	61.3	61.4	0.1	Negligible
Weelsby Road	71.7	71.8	0.1	Negligible
A46 Laceby Road	71.3	71.4	0.1	Negligible
A16	71.4	71.5	0.1	Negligible
A1173 Manby Road	73.0	73.0	0.0	Negligible
Keelby Road	66.1	66.4	0.3	Negligible
A180 - East of A1173	78.2	78.2	0.1	Negligible
A180 - Between A1173 and A160	78.7	79.0	0.3	Negligible
Mablethorpe Road	63.6	64.1	0.4	Negligible

