

Viking CCS Pipeline

9.58 Technical Note on Construction Traffic Noise

Document Reference: EN070008/EXAM/9.58

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)(q)
Date: July 2024

Technical Note

Project name Viking CCS Pipeline	Project number 60668955	Client Harbour Energy	Subject Construction Traffic Noise Assessment
Date July 2024	Issued by AECOM	Reason for issue Review of updated construction traffic numbers	Prepared by Eddie Robinson
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1. Introduction

Details about the construction traffic required to construct the Proposed Development were updated to reflect a new detailed phased construction programme. This technical note provides an updated assessment of construction traffic noise with reference to the updated construction traffic data.

2. Updated Construction Traffic Calculations

Updated construction noise calculations based on data presented at Appendix A is provided in Table 2-1. The difference in noise as a result of updated construction traffic flows has been compared to the changed in traffic noise from Table 4 of Appendix 13.3 [APP-110] to identify how the assessment has changed as a result of the updated construction traffic data.

Table 2-1 Updated Construction Traffic Noise Predictions

Link Reference	Road Link	Baseline BNL dB	Baseline with Updated Construction Traffic BNL dB	Change in BNL dB	Old assessment Change in BNL dB	Difference dB
1	B1210	69.9	70.0	0.1	0.1	0.0
2	A1173	70.2	71.5	1.3	1.3	0.0
3	A160	75.5	75.6	0.1	0.1	0.0
4	Healing Road	68.8	68.8	0.0	0.0	0.0
6	A18	70.8	71.3	0.5	0.5	0.0
7	Waltham Road 1	66.2	66.2	0.0	0.0	0.0
8	Waltham Road 2	63.2	63.2	0.0	0.0	0.0
9	A16	74.2	74.5	0.3	0.2	-0.1
11	Unnamed between A18 and A16	65.9	66.5	0.6	0.2	-0.4
12	A18	70.4	70.9	0.5	0.5	0.0
13	A16	74.5	74.7	0.2	0.2	0.0
14	A46	72.3	72.4	0.1	0.2	0.1
15	A46 - Grimsby Road	73.9	74.1	0.2	0.1	-0.1

Link Reference	Road Link	Baseline BNL dB	Baseline with Updated Construction Traffic BNL dB	Change in BNL dB	Old assessment Change in BNL dB	Difference dB
17	Nooking Lane	61.4	61.4	0.0	0.0	0.0
18	A1173	69.3	70.8	1.5	1.6	0.1
19	A18 - Barton Street North	75.1	75.5	0.4	0.4	0.0
20	A18 - Barton Street South	72.8	73.1	0.3	0.4	0.1
21	A16 Peaks Parkway	72.7	72.9	0.2	0.2	0.0
22	Pear Tree Lane	66.5	66.9	0.4	0.5	0.1
24	Alvingham Road	69.6	69.8	0.2	0.1	-0.1
27	A18	68.3	68.9	0.6	0.6	0.0
28	A16	75.1	75.3	0.2	0.2	0.0
29	Louth Bypass	73.9	74.1	0.2	0.2	0.0
30	B1200 Manby Middlegate	69.3	69.8	0.5	0.5	0.0
31	A157	69.1	69.1	0.0	0.0	0.0
32	A157	66.7	66.7	0.0	0.0	0.0
33	Saltfleet Road	68.3	68.7	0.4	0.3	-0.1
34	A1031	68.2	68.2	0.0	0.0	0.0
36	Thacker Bank	65.4	65.7	0.3	0.2	-0.1
37	Alford Road	71.2	71.2	0.0	0.0	0.0
38	Three Bridge Lane	69.3	69.8	0.5	0.5	0.0
39	Mill Road	63.3	63.3	0.0	0.0	0.0
41	Habrough Road	69.3	69.5	0.2	0.2	0.0
42	A1173	73.3	73.3	0.0	0.0	0.0
44	A160	78.0	78.1	0.1	0.1	0.0
45	Killingholme Road	69.7	69.8	0.1	0.1	0.0
47	A16	73.8	73.8	0.0	0.0	0.0
48	B1219 - Station Road	71.1	71.1	0.0	0.0	0.0
49	A180 - Westgate	75.7	75.8	0.1	0.1	0.0
50	Grimsby Road	73.1	73.4	0.3	0.2	-0.1
51	A1031	68.3	69.0	0.7	0.6	-0.1
52	Thoresby Road	66.2	67.3	1.1	1.0	-0.1
53	A1031 Main Road	65.7	66.9	1.2	1.1	-0.1
54	Warren Road	66.7	67.5	0.8	0.7	-0.1
56	A1173	73.6	73.6	0.0	0.0	0.0
61	Brackenborough Road 2	62.1	62.2	0.1	0.1	0.0
62	North Holme Road	70.7	70.7	0.0	0.0	0.0
63	Keddington Road	63.8	64.1	0.3	0.1	-0.2

Link Reference	Road Link	Baseline BNL dB	Baseline with Updated Construction Traffic BNL dB	Change in BNL dB	Old assessment Change in BNL dB	Difference dB
64	Louth Road 1	66.2	66.6	0.4	0.2	-0.2
65	Mill Hill Way	67.0	67.3	0.3	0.3	0.0
68	Marsh Lane	65.7	66.2	0.5	0.4	-0.1
69	Louth Road 2	63.5	64.1	0.6	0.6	0.0
70	Main Road	61.3	61.4	0.1	0.1	0.0
72	Weelsby Road	71.7	71.8	0.1	0.1	0.0
73	A46 Laceby Road	71.3	71.4	0.1	0.1	0.0
74	A16	71.4	71.6	0.2	0.1	-0.1
75	A1173 Manby Road	73.0	73.0	0.0	0.0	0.0
76	Keelby Road	66.1	66.5	0.4	0.3	-0.1
77	A180 - East of A1173	78.2	78.3	0.1	0.1	0.0
78	A180 - Between A1173 and A160	78.7	79.0	0.3	0.3	0.0
79	Mablethorpe Road	63.6	64.2	0.6	0.4	-0.2

3. Updated Construction Traffic Assessment

Updated calculations of construction traffic noise during construction of site access indicate a change in road traffic noise of, at worst, 1.5 dB. This is equivalent to a Minor Adverse effect, which is not significant. The following roads have been predicted to have a Minor Adverse effect (not significant):

- A1173;
- Thoresby Road; and
- A1031 Main Road.

Changes in road traffic noise have only been calculated from roads with flows of greater than 1,000 AAWT. This is because the Calculation of Road Traffic Noise method is unreliable for low-flow roads with traffic flows below an AAWT of 1,000. Consequently, a qualitative assessment of potential construction traffic noise effects has been undertaken based on average hourly construction traffic flows.

Paragraph 13.7.85 of Chapter 13 Noise and Vibration [APP-055] identified a worst-case where there would be approximately 6 construction vehicles per hour on a low-flow road. This average number per hour has reduced to 4, which is forecast to occur on Yarburgh Road, Kings Street and Kings Street. Whilst this level of construction traffic may cause disturbance, construction traffic flows are not considered of sufficient magnitude to result in a significant effect i.e., “having to keep windows closed most of the time because of the noise” (referenced from Table 13-3 of Chapter 13 Noise and Vibration [APP-055]). Consequently, construction traffic noise effects on low flow roads are considered to be, at worst, Minor Adverse and not significant.

The changes in construction traffic flow data do not result in a material change to the results of the original construction traffic assessment with differences in noise ranging from

-04.dB to +0.1dB. The identified noise effects are consistent with the residual effects identified in Chapter 13 [APP-055].

4. Summary

Construction traffic noise calculations have been updated based on updated construction traffic flow data. Where there are forecast increases in construction traffic, corresponding noise increases are no greater than 0.1 dB. As such, there are no changes to the conclusions of the original construction traffic noise assessment presented in Chapter 13 [APP-055], which identifies, at worst, a Minor Adverse effect (not significant).

Appendix A Traffic Flow Data

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%	7,606	1,257	16.5%	50
A160	13,757	5,544	40.3%	13,994	5,671	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%	6,773	1,250	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%	12,430	1,630	13.1%	60
Thoroughfare	252	21	8.3%	354	33	9.3%	60
Unnamed between A18 and A16	1,798	311	17.3%	1,960	347	17.7%	60
A18	5,354	1,053	19.7%	5,890	1,193	20.3%	50
A16	12,223	1,732	14.2%	12,854	1,775	13.8%	60
A46	7,630	969	12.7%	7,821	1,021	13.1%	60
A46 - Grimsby Road	16,018	1,714	10.7%	16,322	1,811	11.1%	50
Unamed 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%	4,747	840	17.7%	60
A18 - Barton Street North	13,399	2,102	15.7%	14,172	2,421	17.1%	60
A18 - Barton Street South	10,615	1,585	14.9%	11,351	1,770	15.6%	50
A16 Peaks Parkway	17,095	1,697	9.9%	17,911	1,753	9.8%	40
Pear Tree Lane	2,147	291	13.6%	2,269	334	14.7%	60
Ings Lane	281	33	11.7%	281	33	11.7%	60
Alvingham Road	6,451	73	1.1%	6,571	111	1.7%	60
Yarburgh Road	613	79	12.9%	651	117	18.0%	60
Westfield Road	559	52	9.3%	559	52	9.3%	60
A18	3,734	581	15.6%	4,221	678	16.1%	50
A16	15,423	1,657	10.7%	16,286	1,753	10.8%	60
Louth Bypass	14,072	816	5.8%	14,455	904	6.3%	60
B1200 Manby Middlegate	3,859	478	12.4%	4,242	566	13.3%	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%	3,324	433	13.0%	60
A1031	4,263	458	10.7%	4,263	458	10.7%	50
Thacker Bank	194	33	17.0%	310	70	22.6%	60
Thacker Bank	1,959	197	10.1%	2,061	197	9.6%	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	
Alford Road	6,311	676	10.7%	6,311	676	10.7%	60
Three Bridge Lane	1,941	1,033	53.2%	2,193	1,082	49.3%	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%	4,521	411	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	6,283	40.5%	60
Killingholme Road	4,578	461	10.1%	4,638	493	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%	31,063	1,620	5.2%	50
Grimsby Road	14,236	216	1.5%	14,448	348	2.4%	60
A1031	4,667	70	1.5%	4,879	202	4.1%	60
Thoresby Road	3,006	42	1.4%	3,218	174	5.4%	60
A1031 Main Road	2,528	78	3.1%	2,740	210	7.7%	60
Warren Road	3,174	79	2.5%	3,348	173	5.2%	60
Walk Lane	26	2	7.7%	26	2	7.7%	60
A1173	8,292	1,719	20.7%	8,389	1,719	20.5%	60
Roxton Road	162	6	3.7%	162	6	3.7%	60
Old Man Road	157	16	10.2%	215	16	7.5%	30
Little Grimsby Lane	423	53	12.5%	519	61	11.8%	60
Brackenborough Road	658	49	7.4%	714	49	6.9%	60
Brackenborough Road 2	1,252	87	6.9%	1,279	87	6.8%	60
North Holme Road	16,007	1,237	7.7%	16,280	1,237	7.6%	30
Keddington Road	3,337	259	7.8%	3,628	259	7.1%	30
Louth Road 1	2,415	183	7.6%	2,610	183	7.0%	60
Mill Hill Way	2,622	244	9.3%	2,745	280	10.2%	60
Red Leas Lane	95	10	10.5%	125	10	8.0%	60
Pick Hill Lane	244	23	9.4%	302	23	7.6%	60
Marsh Lane	1,880	250	13.3%	2,003	286	14.3%	60
Louth Road 2	1,479	126	8.5%	1,523	170	11.2%	60
Main Road	1,033	109	10.6%	1,047	109	10.4%	60
Kings Street	766	62	8.1%	804	100	12.4%	60
Weelsby Road	22,407	1,330	5.9%	22,686	1,412	6.2%	30
A46 Laceby Road	19,055	1,340	7.0%	19,336	1,422	7.4%	30
A16	17,071	1,602	9.4%	18,187	1,693	9.3%	30
A1173 Manby Road	6,114	1,688	27.6%	6,211	1,688	27.2%	60
Keelby Road	2,429	154	6.3%	2,537	186	7.3%	60
A180 - East of A1173	26,048	4,479	17.2%	26,519	4,570	17.2%	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	
A180 - Between A1173 and A160	35,709	3,821	10.7%	36,782	4,370	11.9%	60
Mablethorpe Road	3,174	79	2.5%	3,318	129	3.9%	40