VikingCCS

Viking CCS Pipeline

9.18 Applicant's Comments on Written Representations

Document Reference: EN070008/EXAM/9.18

Applicant: Chrysaor Production (U.K.) Limited,
a Harbour Energy Company
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Table of Contents

Tables

1 Introduction

1.1 Purpose of this Document

1.1.1 This document has been prepared for the Viking CCS Pipeline (the 'Proposed Development') on behalf of Chrysaor Production (UK) Limited ('the Applicant'), in relation to an application ('the Application') for a Development Consent Order (DCO) that has been submitted under Section 37 of the Planning Act 2008 (PA 2008) to the Secretary of State (SoS) for Energy Security and Net Zero.

1.1.2 This document provides the Applicant's responses to the Written Representations submitted by Interested Parties at Deadline 1.

1.2 The DCO Proposed Development

1.2.1 The Proposed Development comprises a new onshore pipeline which will transport CO_2 from the Immingham industrial area to the Theddlethorpe area on the Lincolnshire coast, supporting industrial and energy decarbonisation, and contributing to the UK target of Net-Zero by 2050. The details of the Proposed Development can be found within the submitted DCO documentation. In addition to the pipeline, the Proposed Development includes a number of above ground infrastructure, including the Immingham Facility, Theddlethorpe Facility and three Block Valve Stations.

1.2.2 A full, detailed description of the Proposed Development is outlined in Environmental Statement (ES) Volume II Chapter 3: Description of the Proposed Development **[APP-045]**.

2 The Applicant's comments on Written Representations

2.1.1 This section provides the Applicant's comments on the Written Representations submitted at Deadline 1, in addition to the additional Written Representations accepted at the discretion of the Examining Authority following the deadline.

Table 2-1: Air Products (BR) Limited – REP1-085

<table>
<tr><th>Ref</th><th>Topic</th><th>Matter raised in Written Representation</th><th>Applicant response</th></tr>
<tr><td>2.1.1</td><td>General</td><td>INTRODUCTION

This Written Representation is made on behalf of Air Products (BR) Limited (Air Products) in respect of the application for development consent for the Viking CCS Pipeline (the Project) submitted by the Applicant to the Planning Inspectorate which was Accepted for Examination on 17 November 2023.

Air Products made a Relevant Representation [RR-003] on this Application on 8 January 2024 seeking to protect its existing infrastructure and assets within Order Limits. As set out in its Relevant Representation, Air Products supports the Project subject to its concerns relating to its assets in the area being fully addressed.</td><td>The Applicant notes Air Products' position and will continue to engage with them with a view to addressing their remaining concerns.</td></tr>
<tr><td>2.1.2</td><td>Land / Compensation</td><td>SUMMARY OF AIR PRODUCTS' POSITION

Air Products welcomes the ExA's Procedural Decision set out in Annex C of its Rule 8 letter [PD-009] accepting the Applicant's proposed changes into the Examination. The effect of the changes is to remove from the Order Limits a substantial area of land in which Air Products has an interest.

Notwithstanding this, Air Products remains an affected person in respect of existing pipelines within the current Order Limits that currently supply oxygen (above and below ground pipelines) and nitrogen (above ground pipelines) to two refineries in the Stallingborough area. The revised Land Plans [AS049] and Book of Reference [AS-045] submitted with the Applicant's change request identify the following plots where Air Products has a Category 2 interest:

<table><tr><th>Plots</th><th>Powers sought</th></tr><tr><td>1/32, 1/57, 1/59</td><td>Permanent acquisition of land</td></tr><tr><td>1/43, 1/62</td><td>Permanent rights and temporary use of land</td></tr><tr><td>1/53, 1/61, 1/67, 1/71, 1/72, 1/73, 1/74, 1/79</td><td>Permanent acquisition of subsurface</td></tr></table>
Air Products objects to the proposed powers of compulsory acquisition over land in which it has an interest.

The refineries served by Air Products' assets are recognised as significant pieces of infrastructure that are critical to the regional and national economy. The Applicant's proposals for compulsory acquisition have the potential to compromise the security of existing pipes and associated infrastructure used by Air Products in connection with its pre-existing business activities. It is therefore critical that, notwithstanding the Project, Air Products can continue to use the pipelines in the manner to which they are accustomed, and which is vital to the local industry.</td><td>The Applicant notes this response and will continue to engage with Air Products with a view to agreeing protective provisions that address their remaining concerns.</td></tr>
</table>

Ref	Topic	Matter raised in Written Representation	Applicant response
		To the extent that the Applicant seeks powers in the draft DCO to either (a) compulsorily acquire land (including subsurface) or rights or (b) to extinguish, suspend or override existing rights, Air Products' ability to maintain and operate its existing infrastructure must be preserved. Following Compulsory Acquisition Hearing 1 on 27 March 2024, Air Products has received a draft set of protective provisions which are being reviewed. Air Products will endeavour to return comments to the Applicant on those by Deadline 2. Air Products is also seeking to agree a separate asset protection agreement with the Applicant; while a draft agreement is not yet in circulation, this is a matter Air Products will continue to engage with the Applicant on. Subject to the agreement of protective provisions for Air Products' benefit being included in the DCO and an appropriate asset protection agreement, Air Products will be in a position to withdraw its objection to the Proposed Development. Until agreement is reached, Air Products will maintain its interest in the Examination and reserves its position with regard to any matters arising from submissions made during the Examination.	
2.1.3	Land / Compensation	INCONSISTENCY IN LAND PLANS AND BOOK OF REFERENCE As set out in Air Products' response to ExQ1.5.23 submitted at Deadline 1, there is a discrepancy in relation to Plot 1/57. This plot is shaded green (temporary possession and use) on the Land Plans Revision B [AS-049] and is included in Table 5 (Temporary Possession Land) of the Statement of Reasons Revision B [AS-043], however, is described in the Book of Reference Revision B [AS-045] as "permanent acquisition". Air Products requests that the Applicant clarify the powers sought in respect of Plot 1/57.	The Applicant can confirm the powers sought for plot 1/57 is Temporary Possession of Land. The Book of Reference (Revision C) **(document reference 3.3)** has been updated and submitted at Deadline 2 to reflect this.

Table 2-2: Anthony Croft – REP1-105

Ref	Topic	Matter raised in Written Representation	Applicant response
2.2.1	General Environmental Impacts	I have recently moved to [omitted] in Theddlethorpe St Helen and am extremely concerned about the Viking CCS proposals here and wish to officially object. We moved here to have a new start after a [omitted]. We thought this could be our dream home (once renovated), in a beautiful unspoilt area with a bit of land, 10 minutes from the beach. We were aware of the possibility of the nuclear dump as that showed up on our searches at the time prior to purchasing this property, but this did not. Why not? It appears to have sneaked in the back door with other major things such as National Grids proposals for pylons, and the nuclear dump taking precedence. If we had known about all three proposals we would certainly not have moved here. I am unclear how close the pipeline will be in relation to my property or, what I will actually be able to see, but it is going to be a huge blot on our beautiful landscape in these area. This is a place with a nature reserve and coastline of national importance and this project is a huge environmental risk with possible storage leaks contaminating groundwater and soil. We have amazing wildlife here and that was one of the reasons we came here but with so much decline in our wildlife	The Applicant recognises that individuals who live close to an infrastructure project will have concerns about the impact that it might have on them. The project was registered with the Planning Inspectorate in March 2022 and in the pre-application phase, the Applicant has undertaken considerable consultation with local communities. As part of this, it has communicated the potential impacts from the Proposed Development to potentially affected people through consultation materials and supporting technical documents. The Applicant has also taken account of their comments and feedback in designing the project, the Applicant has designed the pipeline to avoid and reduce any potential impacts on residential properties. This has meant there are no residential properties included within the Order Limits. An interactive map is available on the Applicant's website at https://pipeline.vikingccs.co.uk/information/interactive-map where you can see where the Order Limits are in relation to your property. Effects on landscape character and visual amenity/views are considered in detail in ES Chapter 7: Landscape and Visual **[APP-049]**. This includes assessment of changes in views because of the vent stack at the Theddlethorpe Above Ground Facility, under Option 1 (Preferred) and Option 2 of its potential siting. In relation to Option 1, effects on landscape character are assessed as 'negligible adverse', reflecting its location within the former TGT terminal. Those

Ref	Topic	Matter raised in Written Representation	Applicant response
		throughout the world in general, we should be doing everything we can to save it, not destroy important habitat.	from Option 2 are assessed as 'minor adverse', reflecting its greater visibility outside of the former TGT terminal. The effects on views are assessed by reference to multiple viewpoints in and around Theddlethorpe and consider the context and degree of screening and/or distance of the viewer (including residential properties). Viewpoints in and around Theddlethorpe are assessed as VP24-VP27 in Appendix 7.2 of the ES **[APP-088]**. From residential locations the effects on views are assessed as 'negligible adverse', which is not considered to be a significant change. The nearest landscape designated for its scenic value/beauty is the Lincolnshire Wolds AONB/National Landscape) which is approximately 12km from the former TGT site. The Lincolnshire Coronation Coast National Nature Reserve (NNR) largely consolidates two existing NNRs: the Donna Nook NNR and the Saltfleetby-Theddlethorpe Dunes NNR. The Proposed Development will have no direct or indirect effects on the features for which the Lincolnshire Coronation Coast NNR was designated, as reported in Table 6-13 in ES Chapter 6: Ecology and Biodiversity **[APP-048]**. Extensive surveys of other habitats and species have been undertaken to inform the ecological impact assessment reported in ES Chapter 6 and mitigation measures identified to avoid or reduce any potential effects to minor or negligible at most, which is not considered to be significant. As set out in the Bridging Document **[APP-128]**, the Viking reservoirs are located approximately 140 km offshore in the Southern North Sea and 2.7km beneath the seabed. Therefore, there cannot be any impact on groundwater or soil from the storage site.
2.2.2	Safety	From what I can make out from the map, the pipeline goes right up to thousands of caravans in Mablethorpe, an area heavily reliant on tourism, and this proposal cannot possibly be safe! If there were to be a leak it could potentially lead to neurological problems at best, or at worse, death for holiday makers as well as for residents. Why would anyone want to put people at risk? Having recently heard about the accident on 3rd April 2024 in Louisiana, where calls went unanswered, cameras were not working and nobody was actually on site and that it took 2 hours before somebody got there to fix the leak!! It could have been extremely serious but fortunately on that day, the weather conditions dispersed it! The public were very lucky on that occasion. In 2020 there were major flaws and the leak at the Mississippi site caused many people to convulse, become unconscious and confused. Some people are still experiencing neurological problems as a result. This is just not a safe proposition to do this here. I found out that CO2 kills 100 workers on site EVERY YEAR globally. How can that be acceptable? Also something else I thought about was that in the event of a serious leak vehicles will stop running due to lack of oxygen. How would the emergency services manage to get through should the inevitable happen? Infrastructure constantly fails, as there are problems with the technology and what guarantees are there that the CO2 will even stay underground?	The Applicant is highly experienced in health and safety management and takes very seriously its legal duty under the UK's Health and Safety at Work Act to protect workers and the public from its activities. The Applicant places the utmost importance on the safety of the communities it interacts with, its employees and its contractors who will work on the Proposed Development. The Applicant has adopted a robust design and route selection process for the Proposed Development, with safety of local communities being a key consideration. The routeing and design accords with adopted guidance, including on managing risk, and has been informed by advice from experienced technical consultants. The incident in Mississippi in February 2020 was caused by large-scale ground movement. The Proposed Development does not cross any areas with historic records of landslides, as identified from the British Geological Survey National Landslide Database. With respect to emergency procedures, please refer to the Applicant's response to the Examining Authority's First Written Questions 1.1.23 **[REP1-045]** which details the approach that will be taken to any emergency event.
2.2.3	Need Case	The proponants cite the CCS can reduce CO2 by 80-90% but in reality, from what I can glean, it is actually only10%. Burning fossil fuels in order to capture the CO2 is hardly energy efficient, as it is one of the most expensive emissions reduction measure. We need to stop producing it in the first place and we need to rapidly transition to 100% renewable energy. I really don't feel carbon capture is the	The UK government has a target of achieving net zero by 2050 and meeting this target will require reduced emissions of CO_2 from existing industries within the Humber and Lincolnshire region. Carbon capture and storage (CCS) is recognised by the Intergovernmental Panel on Climate Change (the IPCC) and the UK government as a vital step on the road to achieving net

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		answer. It is not an amazing solution for solving climate change. It is just going to lock us into decades of more usage of fossil fuels - great for the greedy oil and gas industry and their investors who seem to be at the helm of this proposal!!! I urge this proposal is dropped immendiately. It is NOT SAFE. We know more about the dangers now, unlike the general public when previous sites were built in the US. We must save tomorrow for our planet, our children and grandchildren. This is NOT the answer. What with proposals for this, the nuclear dump and pylons I am completely overwhelmed and don't understand why people are wanting to destroy everywhere.	zero carbon dioxide emissions, with the 6th Carbon Budget outlining plans to capture and store between 20 and 30 million tonnes of CO_2 a year by 2030. The revised draft National Policy Statement for Energy (EN-1) recognises that there is "an urgent need for new CCS infrastructure to support the transition to a net zero economy". CCS is one of many proposed approaches to tackling CO_2 emissions and climate change and is considered a transitional technology. More information is available in the Need Case **[APP-131]**.

Table 2-3: Cadent Gas Limited – REP1-090

Ref	Topic	Matter raised in Written Representation	Applicant response
2.3.1	Protective Provisions	Cadent Gas Limited ("Cadent") is a statutory undertaker for the purposes of the Planning Act 2008. Cadent submitted a relevant representation (Document Reference RR-020) which sets out Cadent's position on the Project and the application of the tests pursuant to the Planning Act 2008. Cadent will require protective provisions to be included within the DCO to ensure that its interests are adequately protected and to ensure compliance with relevant safety standards. The current protective provisions included in the draft DCO do not afford adequate protection to Cadent. Cadent is liaising with the Applicant in relation to bespoke protective provisions in respect of Cadent's assets. Negotiations are ongoing but the protective provisions are not yet agreed. Cadent will continue to liaise with the Applicant with a view to concluding matters as soon as possible during the DCO Examination, keeping the Examining Authority updated in relation to these discussions. Cadent reserves its right to make further submissions and to respond to any comments submitted by the Promoter at Deadline 1.	The Applicant notes this response and will continue to engage with Cadent Gas Limited with a view to agreeing protective provisions that address their remaining concerns.

Table 2-4: David Thomas Walter House – REP1-101

Ref	Topic	Matter raised in Written Representation	Applicant response
2.4.1	General	I'm writing this on behalf of my father David House who is a landowner and partner in Swallow Park. I'm Alice House also a partner in Swallow Park therefore also has an interest in this matter.	Noted.
2.4.2	Need Case	We object to the plan for several reasons: It fails to address the root cause of carbon emissions stemming from environmentally harmful practices such as oil and gas extraction. There are concerns that CCS may serve as a justification for perpetuating destructive fossil fuel production.	The UK government has a target of achieving net zero by 2050 and meeting this target will require reduced emissions of CO_2 from existing industries within the Humber and Lincolnshire region. Carbon capture and storage (CCS) is recognised by the Intergovernmental Panel on Climate Change (the IPCC) and the UK government as a vital step on the road to achieving net zero carbon dioxide emissions, with the 6th Carbon Budget outlining plans to capture and store between 20 and 30 million tonnes of CO_2 a year by 2030.

Ref	Topic	Matter raised in Written Representation	Applicant response
			The revised draft National Policy Statement for Energy (EN-1) recognises that there is "an urgent need for new CCS infrastructure to support the transition to a net zero economy". CCS is one of many proposed approaches to tackling CO_2 emissions and climate change and is considered a transitional technology. More information is available in the Need Case **[APP-131]**.
2.4.3		The potential unforeseen circumstances stemming from the extensive geological storage of CO2 – including the possibility of CO2 seepage back into the atmosphere. Recent studies have emphasized that the geological challenges associated with the prolonged storage of CO2 may have been previously underestimated.	The Viking Area reservoir is uniquely suited to long-term carbon storage because of the knowledge acquired during previous gas developments. These reservoirs held natural gas over millions of years due to the proven presence of an extensive "SuperSeal" that prevents gas from escaping. The Applicant initially developed the Viking Area gas fields in the 1970s to fuel the UK's energy transition from coal to gas. With the gas fields now decommissioned, there is an opportunity to refill these depleted reservoirs with carbon dioxide, safely preventing this carbon dioxide from being released to the atmosphere. The Applicant was awarded a UK carbon storage licence from the UK's regulatory body in 2021, after a comprehensive technical assessment. As set out in the Bridging Document **[APP-128]**, the Viking reservoirs are located approximately 140 km offshore in the Southern North Sea and 2.7km beneath the seabed. The depth of storage, combined with a regional "SuperSeal" caprock, makes the reservoirs secure for storing captured CO_2. The caprock is made up primarily of layers of salt, hundreds of feet thick, which acts as a high-strength barrier through which the CO_2 cannot pass. This caprock gives the Applicant a high confidence in the ability of the storage site to keep CO_2 in place. Furthermore, a secondary permeable formation above the primary storage site, known as the Bunter Sandstone, has the capability to act as secondary containment which adds to the security of the site.
2.4.4	Safety	There are potential dangers associated with the transportation and storage of CO2. CO2 is an asphyxiant in high concentrations; leaks from pipelines could lead to catastrophic outcomes.	Please refer to the Applicant's response to the Examining Authority's First Written Question 1.1.19 **[REP1-045]**, detailing the Applicant's engagement with the UK regulatory body, the Health and Safety Executive. The Applicant will ensure that no CO_2 is conveyed in the Viking CCS pipeline until the Applicant has identified all hazards, assessed the risk and provided suitable mitigations. Similar to the UK's extensive network of gas pipelines, the hazards associated with the Viking CCS pipeline relate to both high pressure and the properties of the fluid within the pipeline. While CO_2 is neither flammable or explosive, it can cause harm in high concentrations due to potential toxic effects. The pipeline has been designed in compliance with Engineering Standard BSI PD 8010- 1:2016, which makes specific provision for CO_2 pipelines and the approach to routeing including minimum distances to buildings. In addition, pipeline has been designed in accordance with the established principle of ALARP ("As Low As Reasonably Practicable"), as described in the Health and Safety Executive's (HSE's) longstanding framework document "Reducing Risks, Protecting People." The purpose of ALARP is to ensure risks are reduced as far as is reasonably practicable. The Applicant has referenced the HSE's Tolerability of Risk framework (which is defined in the 'Reducing Risks, Protecting People' framework document mentioned above) to assess the pipeline risks. This assessment shows that the risk to members of the public living near to the Viking CCS pipeline route is well within the framework's lowest classification of risk. Under the framework, the HSE considers that *"risks falling into this region are generally regarded as insignificant and adequately controlled".*

Ref	Topic	Matter raised in Written Representation	Applicant response
2.4.5	Land / Compensation	How will this affect my business/livelihood/family's land: • As a partner in Swallow Park Caravan Site, how will this plan exactly affect the shower block next to the road/entrance at Bleak House Farm? If we incur financial losses, then compensation will be required.	The Applicant is not seeking rights in land that directly impact the Swallow Park Caravan Site. Any Compensation will be assessed on a case-by-case basis in accordance with the Compensation Code.
2.4.6	Access	• There is an unwarranted suggestion to expand the entrance to the farmyard of Bleak House Farm. The roads and surrounding land leading to the gas chambers are no longer capable of accommodating heavy traffic. This needs to be discussed.	Regarding the entrance, this has been designed on a worst-case basis (the largest entrance that could be required) and will be optimised through the detailed design process, which would take place if development consent is granted for the Proposed Development. The Applicant will undertake the necessary works required so that access can be maintained to the Dune Isolation Valve.
2.4.7	Ecology	• The land is a nature conservation area, which has taken 20 years to develop. The land is home to many protected birds and wildlife. Any work completed on this land will patently disturb this wildlife.	The Applicant notes the concerns regarding birds and wildlife. A suite of ecology surveys has been completed to inform the ecological baseline and measures are proposed within ES Chapter 6: Ecology and Biodiversity **[APP-048]** to make sure there are no significant adverse effects upon important ecological features. A report to inform the Habitats Regulation Assessment (Revision B) **(document reference 6.5)** has been prepared to test if the proposed development could significantly harm the designated features of European sites. Stage 1 of this report identifies any pathways of effect between the development and the qualifying features of the European designated sites, and Stage 2 confirms the mitigation that will be applied to make sure there are no adverse effects upon site integrity. Proposed avoidance and mitigation measures identified in the reports include: - Preconstruction checks by an ecologist; - Timing of works to avoid the most sensitive periods for certain bird species; - Use of noise and visual screening where appropriate to avoid / minimise disturbance; - Implementation of a Construction and Environmental Management Plan; - Implementation of a Drainage Strategy; and, - A Water Management Plan. With the application of mitigation, there will be no adverse effects upon the integrity of European designated sites and there will be no significant residual effects upon biodiversity.

Table 2-5: Elizabeth Lawton – REP1-112

Ref	Topic	Matter raised in Written Representation	Applicant response
2.5.1	Need Case	I was stunned to learn on the local news of plans for a carbon capture pipeline and pad in Theddlethorpe, Lincolnshire. I strongly object to this project because: 1. This is a greenwashing project - an IEEFA study (Institute for Energy Economics and Financial Analysis - active in Asia, Australia, Europe & North America) reviewed the capacity and performance of 13 flagship projects. They found 10 failed or underperformed against designed capacities. See Figure one.	The UK government has a target of achieving net zero by 2050 and meeting this target will require reduced emissions of CO_2 from existing industries within the Humber and Lincolnshire region. Carbon capture and storage (CCS) is recognised by the Intergovernmental Panel on Climate Change (the IPCC) and the UK government as a vital step on the road to achieving net zero carbon dioxide emissions, with the 6th Carbon Budget outlining plans to capture and store between 20 and 30 million tonnes of CO_2 a year by 2030. The revised draft National Policy Statement for Energy (EN-1) recognises that there is "an urgent need for new CCS infrastructure to support the transition to a net zero economy". CCS is one of many proposed approaches to tackling CO_2 emissions and climate change and is considered a transitional technology.
2.5.2	Need Case	2. 90% of carbon dioxide emissions are "Scope 3 emissions" - not covered by this capture project.	

Ref	Topic	Matter raised in Written Representation	Applicant response
2.5.3	Need Case	3. The entire efficacy of the carbon capture and storage process has been called into question by the IPCC (Intergovernmental Panel on Climate Change).	More information is available in the Need Case **[APP-131]**.
2.5.4	Cumulative Effects	4. Infrastructure will overwhelm the local area	The infrastructure required for the Proposed Development, in the vicinity of Theddlethorpe, comprises a buried 24" (609.6 mm) diameter pipeline and the Theddlethorpe Facility. Once reinstated, the land above the pipeline will return to its existing use, which is largely agriculture. The Theddlethorpe Facility is required to enable the CO_2 to flow from the new pipeline into the existing LOGGS pipeline, and then onwards to be stored in the depleted gas fields within the southern North Sea (the Viking reservoirs). The dimensions of the Theddlethorpe Facility are approximately 100m x 200m. Most of the infrastructure within the facility will be relatively low-level and will be screened from view by existing (Option 1) or new (Option 2) screen planting. There is a need for a permanent vent stack at the Theddlethorpe Facility which will be a maximum of 25m high, with a diameter of approximately 24" (609.6 mm). Although this vent stack will be visible in views, it is not considered that this amount of above ground infrastructure would overwhelm the local area. ES Chapter 7: Landscape and Visual **[APP-049]** sets out the assessment of visual impacts.
2.5.5	Offshore storage	5. Carbon stored below ground can find its way back into the atmosphere.	As set out in the Bridging Document **[APP-128]**, the Viking reservoirs are located approximately 140 km offshore in the Southern North Sea and 2.7km beneath the seabed. The depth of storage, combined with a regional "Superseal" caprock, makes the reservoirs secure for storing captured CO_2. The caprock is made up primarily of layers of salt, hundreds of feet thick, which acts as a high-strength barrier through which the CO_2 cannot pass. This caprock gives the Applicant a high confidence in the ability of the storage site to keep CO_2 in place. Furthermore, a secondary permeable formation above the primary storage site, known as the Bunter Sandstone, has the capability to act as secondary containment which adds to the security of the site. Further, a pipeline Leak Detection System would monitor the whole pipeline length and would alert the operator to potential leaks, together with the location, along the pipeline route. The operator would have the ability to exercise direct control of the pipeline isolation valves as necessary. The type of Leak Detection System would be considered at the Front-End Engineering Design (FEED) stage. See ES Chapter 3: Description of the Proposed Development **[APP-045]** for more detail.
2.5.6	Offshore storage	6. Contamination of ground/sea water is a very real risk.	
2.5.7	Safety	7. Potential for earthquakes.	Risks to the Proposed Development as a result of earthquakes was scoped out of the assessment reported in ES Chapter 19: Major Accidents and Disasters **[APP-061]**. This is because although earthquakes in the UK are moderately frequent, they are unlikely to be powerful enough to damage infrastructure.
2.5.8	Consultation / Engagement	8. Lack of community engagement/transparency.	In the pre-application phase, the Applicant undertook considerable consultation with local communities. Through the consultation process the Applicant communicated the potential impacts from the Proposed Development to potentially affected people through consultation materials and supporting technical documents. This included making information available online and in hard copy; holding a series of consultation events along the route of the pipeline; and contacting all residents and businesses located within 3km of the route (over 20,000 people). Details of how the Applicant carried out consultation and had regard to all of the responses received are set out in the Consultation Report **[APP-034]**.

Table 2-6: Environment Agency – REP1-072

Ref	Topic	Matter raised in Written Representation	Applicant response
2.6.1	General	In 11 January 2024, the Environment Agency made Relevant Representations [RR-034] on the proposal by Chrysaor Production (UK) Limited ('the Applicant') to construct, operate and maintain a pipeline to transport compressed and conditioned CO2 from a facility at Immingham to store in depleted gas reservoirs under the Southern North Sea ('the Project'). The purpose of these Written Representations is to provide an update on further discussions that have taken place since we submitted those Relevant Representations. The Environment Agency and the Applicant have been engaging on a draft Statement of Common Ground (SoCG) and met to discuss this, along with all the issues included in the Relevant Representations, on 7 March 2024. Progress on all these matters is now recorded in the draft SoCG, which the Applicant will submit on our behalf at Deadline 1. Further progress on resolving these matters will continue to be recorded in future iterations of the SoCG. Alongside this, the Environment Agency is currently reviewing its standard protective provisions which all applicants are expected to enter into before we will agree to disapplication. We expect to complete this exercise by the end of May and will then update the Applicant and the Examining Authority on our position regarding the acceptability of the form of protective provisions put forward by the applicant.	The Applicant confirms this position and looks forward to continued discussions with the Environment Agency to resolve outstanding issues.

Table 2-7: G & S Forman – REP1-113

Ref	Topic	Matter raised in Written Representation	Applicant response
2.7.1	Construction impacts	The project is proposing to use an existing access leading to the Theddlethorpe Terminal which sits immediately adjacent to our holiday cottages. This will have a detrimental effect on people staying in the properties and will consequently have a negative impact on our business. The immediate area around the holiday cottages to include the access which the scheme is proposing to use is often used as a play area for children staying in the holiday cottages posing a significant risk of an accident as a result of the use of the access by construction traffic. The holiday cottages are our main source of income and only have planning consent to be used as holiday cottages. An alternative and obvious solution would be to use the main access route into the Theddlethorpe Terminal instead. This particular point has been raised directly with the Scheme Agents a year ago and they assured us that our concerns have been escalated to the highest level of the project however as yet we have not received a response.	The Applicant notes the concerns expressed by the Interested Party and intends to use the route suggested in the Written Representation as the main access route during construction into the Southern Compound and Theddlethorpe Facility.

Table 2-8: George Peter Strawson – REP1-115

Ref	Topic	Matter raised in Written Representation	Applicant response
2.8.1	Routeing	Please can you be good enough to explain why you are to construct this pipeline along the shortest route and in places you make big detours for no apparent reason.	The Applicant has adopted a robust design and route selection process for the Proposed Development. Several important factors were considered in routeing the pipeline. These were the safety of local communities, avoiding built up areas and sensitive buildings, areas protected

Ref	Topic	Matter raised in Written Representation	Applicant response
			for their habitat and species, the Lincolnshire Wolds Area of Outstanding Beauty, areas that are liable to flood and historic monuments. ES Chapter 2: Design Evolution and Alternatives **[APP-044]** and Chapter 3: Description of the Proposed Development **[APP-045]** set out the background to the routeing in more detail. In terms of the route on the Interested Party's land and the specific change they requested, the Applicant has used common pipeline routeing practice when identifying a proposed route for the pipeline. This aims to maximise straight or unhindered pipeline lengths, with a preference for open terrain to support an efficient construction programme. The Applicant also considered how to mitigate (as much as possible) the environmental impact of the works both during and after construction. It was noted that the alternative route proposed in the statutory consultation feedback would require the navigation of mature in-field trees (or their removal).

Table 2-9: Gillian Henshaw – REP1-115

Ref	Topic	Matter raised in Written Representation	Applicant response
2.9.1	Consultation / Engagement	I have written numerous emails and no one ever replies with the information I need. I only receive set non meaningful paragraphs that do not address my concerns. The whole process seems to have been designed to confuse the layman.	Please refer to the Applicant's response to RR-036 as set out in **[REP1-044]**.
2.9.2	Land / Compensation	There is documentation to state how the local land owners land has been acquisitioned for the purpose of the pipeline and building the facility but why has no one contacted the residents who are in the area and are affected too. Why is there no offer to purchase their homes from them to enable them to relocate? On this basis of non communication and lack of empathy for local residents wellbeing and mental health, I strongly OBJECT to the carbon capture facility and 25 metre high vent stack that you plan to build very close to my home.	The Applicant has designed the Viking CCS pipeline to avoid and minimise any potential impacts on residential properties. This has meant there are no residential properties included within the Order Limits. In the pre-application phase, the Applicant undertook considerable consultation with local communities. Through the consultation process the Applicant communicated the potential impacts from the Proposed Development to potentially affected people through materials and supporting technical documents. This included making information available online and in hard copy; holding a series of consultation events along the route of the pipeline; and contacting all residents and businesses located within 3km of the route (over 20,000 people).

Table 2-10: James Edward Hewitt – REP1-118

Ref	Topic	Matter raised in Written Representation	Applicant response
2.10.1	Design	A) Contrary to what the Applicant proposes in Clauses 3.5.11, 3.7.2, 3.7.5 and others of Environmental Statement Volume II – Chapter 3: Description of the Proposed Development (EN070008/APP/6.2.3), pipelines for transporting dense phase CO2 should not be designed under BS PD8010 – Part 1. I refer here to the current "Guidance on conveying carbon dioxide in pipelines in connection with carbon capture and storage projects" published by the UK's Health and Safety Executive. As at 18 April 2024, this states that: *"Codes IP6, BS EN 14161, BS PD 8010 and DNV OS-F101 are all applicable to pipelines used to transport CO2. However none of these standards address CO2 transported in its dense or supercritical phases."*	The Applicant notes that the standard referred to on the webpage was updated in 2015 to account for dense phase CO_2. The current standard is BSI PD 8010-1 + A1 - Pipeline systems – Part 1: Steel pipelines on land – Code of practice - AMD: November 2016. The Applicant has designed the Proposed Development to this updated standard.

Ref	Topic	Matter raised in Written Representation	Applicant response
2.10.2	Design	B) The proposed pipeline might be incompatible with the existing (LOGGS) offshore pipeline into which it would discharge at Theddlethorpe – begging fundamental questions about the application's credentials. The CO2 transported along the former would be dense phase CO2 (flowing like a liquid). The gas (not flowing as a liquid) which was transported from the offshore Viking field was under the same pressure as that within the geological formation from which it was extracted. I understand that no dense phase CO2 pipelines operate in the UK – and that the UK does not manufacture the requisite pipes.	Please refer to the Applicant's response to the Examining Authority's First Written Question 1.3.2 **[REP1-45]**, which gives information about the in-depth engineering assessment work completed to evaluate the suitability of the LOGGS pipeline for reuse.
2.10.3	Emitters	C) Since this planning enquiry started, the owners of the proposed pipeline and the owners of Drax power station have signed a Memorandum of Understanding to explore options for transporting CO2 from Drax power station. A DCO was recently granted for a carbon capture facility at that power station, to supply 8 million tonnes of CO2 each year (– if the implausibly optimistic capture rate prescribed is achieved and sustained). That facility is likely to operate intermittently or at variable flow rates – for example in the following situations. (i) When not required by the grid. (ii) When its owners choose, as they did during 2022-2023 (with the generating unit to which Contracts for Difference subsidy applied) when the grid and UK consumers most needed it – at times when the market reference price exceeded the strike price. (iii) When failing to perform as proposed. (iv) When operating at less than full capacity (to provide grid stabilisation services (for which subsidy might not be available) rather than to dispatch electricity. Intermittence and variability would destabilise operation of the downstream pipeline and geological injection and might jeopardise the purity of the captured CO2). Connecting into the proposed Viking CCS pipeline poses corresponding risks.	In its Ten Point Plan, the UK Government committed to establish four industrial clusters for carbon capture utilisation and storage. Two clusters were initially progressed through a 'Track-1' process. The UK government committed to further development of carbon capture, usage and storage through the 'Track-2' process which will establish two further clusters. This will contribute to the government ambition to capture and store 20-30 million tonnes per annum of CO_2 across the economy by 2030. On 31 July 2023, the Department for Energy Security and Net Zero (DESNZ) announced that Viking CCS (plus one other) transport and storage system remained best placed to deliver government objectives for Track-2. Once those clusters are identified, individual emitter partners submit bids to DESNZ as part of the cluster sequencing process. This is designed to select individual carbon capture projects to then move forward to commercial negotiations for the relevant support contracts. DESNZ will therefore decide in due course which emitters are to be sequenced to the Viking CCS project.
2.10.4	Need Case	D) Clause 4.3 of the "Secretary of State Decision Letter including the Statement of Reasons" concerning the Nationally Significant Infrastructure Project "Yorkshire and Humber Carbon Capture and Storage Cross Country Pipeline" – proposed in association with Drax' White Rose CCS project – states: *The Secretary of State considers that EN-1 does not provide support for ccs transport infrastructure in isolation and it is necessary for the Applicant to show that there is a reasonable likelihood of the Development forming part of a full chain of CCS.* The proposal now being considered – the Viking CCS pipeline – is similarly an isolated component of a complex project. Most of its other (perhaps technically more awkward) components seem to be, at best, at a very preliminary stage of development. Of the two suppliers of CO2 which the proposal indicates would "anchor" the Viking CCS pipeline, only one seems to have published estimates for the amount of CO2 it expects to supply. The symbolism of this proposal may have value, even if it is never established. It gives the (probably false) impression that progress against timelines for carbon capture and storage targets are realistic and scientifically valid - irrespective of whether these disregard the lack of progress which has been made world-wide since the Climate Change Act (2008) deemed 2050 as the UK target to achieve Net	National Policy Statement EN-1 has been updated since the decision of the Secretary of State in respect of the Yorkshire and Humber Carbon Capture and Storage Cross Country Pipeline. As set out in the Planning Design and Access Statement Addendum **[REP1-049]**, the updated EN-1 (2023) states that there is an "urgent" need for new CCS infrastructure to support the transition to a net zero economy. Paragraphs 4.9.18 – 4.9.2- of EN-1 (2023) recognise that different elements of the CCS chain could be consented separately, and that the transport infrastructure of an onshore pipeline could require its own development consent, progressed separately to any power station or offshore infrastructure. This approach has been taken in other recent Development Consent Order applications for CCS pipelines, including the HyNet Carbon Dioxide Pipeline. In her decision letter dated 20 March 2024, the Secretary of State afforded very great positive weight to the needs case for the pipeline. The Applicant has provided information on the full CCS chain within the application. The Applicant has set out detail of emitters that it is anticipated would be sequenced to the Viking CCS Project (i.e. Phillips 66 and VPI Immingham). In its response to the Examining Authority's first written questions (WQ1.1.6) **[REP1-063]**, North Lincolnshire Council confirmed that those applications were *"at an advanced stage of the determination process"* and it was anticipated that remaining issues *"will be resolved without significant further delay and that decisions will be issued on both applications prior to the close of the examination".*

Ref	Topic	Matter raised in Written Representation	Applicant response
		Zero. It may nevertheless both boost the profile (and share price) of proponent enterprises and help maximise but misdirect government support.	
2.10.5	Offshore storage	E) The supposedly independent, necessarily theoretical, report indicates that the capacity of the geological store would be exhausted within 30 years at the proposed initial flow rate, correspondingly less if, as proposed, flow rates exceed 10 million tonnes per year. This contrasts with actual experience from two of the only sites of comparably large scale Equinor at its Sleipner and Snøhvit CO2 storage sites – which have performed substantially less favourably than anticipated.	Viking CCS has been awarded three carbon storage licences: CS005, CS023 and CS024. CS005 was the first licence to be awarded and the first site within that licence, will be targeted as the project's first store. CS005 has been independently verified to provide a contingent storage resource of 300MT. It is expected that the two new licences, CS023 and CS024, have the potential to increase the total storage capacity of Viking by over 50%. The Applicant plans to submit the first draft Storage Permit application in Q2 2025. The storage of carbon dioxide in the United Kingdom's territorial waters and on the United Kingdom Continental Shelf ('UKCS') is subject to a licensing regime overseen by the NSTA. Anyone who wishes to explore for or use a geological feature for the long-term storage of carbon dioxide in a UK offshore area must hold a Carbon Dioxide Appraisal and Storage Licence ('CS Licence'), pursuant to section 18 of the Energy Act 20082 (the 'Act'). Under a CS Licence, Licensees require the grant of a storage permit by the NSTA for the construction of facilities for the purpose of injection of carbon dioxide with a view to storage within the licensed area and for such storage. The Storage Permit Application is made up of eight key documents which must fulfil the requirements of The Storage of Carbon Dioxide (Licensing etc.) Regulations 20103.
2.10.6	Draft DCO	E) The DCO should give particular attention to liability for CO2 leaks both short and very long-term – or for delays and underperformance (both of which are likely). The industry lacks social licence to operate (or continue operating) and should not be underwritten by government. Operational and maintenance environmental management plan is the heading of Clause 15 of Part 2 (Ancillary works), Schedule (Requirements), Part 1 (Requirements) on page 61 of Document Reference: EN070008/APP/2, 2.1 Draft Development Consent Order, Revision B – Tracked, March 2024". The text of this appears generic – without due consideration for the hazards involved in transporting dense phase CO2.	The Applicant is highly experienced in health and safety management and takes very seriously its duties under relevant legislation and guidance. The Applicant has designed the pipeline in accordance with prevailing guidance, including BSI PD8010-1:2016. The Applicant has elected to exceed the design requirements set by the standard and will use a thick wall design across the full pipeline length. The utilisation of thick wall pipe will increase the integrity of the pipeline to withstand accidental third-party impact, minimising the risk of damage that could cause a leak. Furthermore, as set out in paragraph 3.7.28 of ES Chapter 3: Description of the Proposed Development **[APP-045]**, a pipeline leak detection system would monitor the whole pipeline length and would alert the operator to potential leaks along the pipeline route. Requirement 15 (operational phase mitigation plan) of the draft DCO requires an operational phase mitigation plan to be approved by the local planning authority prior to completion of the commissioning of the Proposed Development. The final version of that plan will be based on the Operational Phase Mitigation (Revision A) **[REP1-015]** and will include, amongst other things, details of how the Proposed Development would be safely shutdown in an emergency situation (commitment Op12) and details of an Emergency Response Plan (commitment Op20).

Table 2-11: Joanna Helen House – REP1-119

Ref	Topic	Matter raised in Written Representation	Applicant response
2.11.1	Need Case	I oppose the above scheme due to the following reasons. Firstly where is the evidence to support a carbon scheme on a large scale? Carbon capture is a risky, unproven, costly and dangerous distraction from the urgent and drastic emission cuts needed to prevent catastrophic climate change. It is not proven to achieve the goal of negative emissions on a large scale. No project is delivering CCS at a meaningful scale despite political and economical support. Many projects have been abandoned. There is a need to concentrate on reducing emissions not hiding them. It is not known how long term storage of carbon will behave. There is an high risk of a major leak and this will be catastrophic with huge social and economic impact. Former gas beds and pipelines are no reassurance infact very concerning. The carbon emissions from building such a system are horrendous with the use of	The UK government has a target of achieving net zero by 2050 and meeting this target will require reduced emissions of CO_2 from existing industries within the Humber and Lincolnshire region. Carbon capture and storage (CCS) is recognised by the Intergovernmental Panel on Climate Change (the IPCC) and the UK government as a vital step on the road to achieving net zero carbon dioxide emissions, with the 6th Carbon Budget outlining plans to capture and store between 20 and 30 million tonnes of CO_2 a year by 2030. The revised draft National Policy Statement for Energy (EN-1) recognises that there is "an urgent need for new CCS infrastructure to support the transition to a net zero economy". CCS is one of many proposed approaches to tackling CO_2 emissions and climate change and is considered a

Ref	Topic	Matter raised in Written Representation	Applicant response
		steel, cement, carbon release, fuel. Where does it stop? There is an huge impact on the land, nature, livelihoods and the land including that used for agriculture will never return to its original structure and production. Evidence has been submitted by greenpeace and friends of the earth to oppose carbon capture schemes. Who benefits? Oil companies and similar who continue to exploit the earth and produce carbon and arguing they are contributing to protect the environment. Factors to take into account are an early warning scheme for leakage and long term stewardship.	transitional technology. More information is available in the Need Case **[APP-131]**.
2.11.2	Access	Secondly how does it effect my land. a) Unnecessary proposal to widen entrance to farm yard of bleak house farm. The roads and land to the gas chambers are no longer suitable for heavy traffic. Needs to be a proper discussion on this.	Regarding the entrance, this has been designed on a worst-case basis (the largest entrance that could be required) and will be optimised through the detailed design process, which would take place if development consent is granted for the Proposed Development. The Applicant will undertake the necessary works required so that access can be maintained to the Dune Isolation Valve.
2.11.3	Land / Compensation	b) How will it effect the caravan business at Swallow Park including the toilet/shower block at entrance and next to road. If financially effected compensation is important.	The Applicant is not seeking rights in land that directly impact the Swallow Park Caravan Site. Any Compensation will be assessed on a case-by-case basis in accordance with the Compensation Code.
2.11.4	Ecology	c) Importantly this is a nature conservation area which has taken almost 20 years to develop.	The Applicant notes the concerns regarding birds and wildlife. A suite of ecology surveys has been completed to inform the ecological baseline and measures are proposed within ES Chapter 6: Ecology and Biodiversity **[APP-048]** to make sure there are no significant adverse effects upon important ecological features. A report to inform the Habitats Regulation Assessment (Revision B) **(document reference 6.5)** has been prepared to test if the proposed development could significantly harm the designated features of European sites. Stage 1 of this report identifies any pathways of effect between the development and the qualifying features of the European designated sites, and Stage 2 confirms the mitigation that will be applied to make sure there are no adverse effects upon site integrity. Proposed avoidance and mitigation measures identified in the reports include: - Preconstruction checks by an ecologist; - Timing of works to avoid the most sensitive periods for certain bird species; - Use of noise and visual screening where appropriate to avoid / minimise disturbance; - Implementation of a Construction and Environmental Management Plan; - Implementation of a Drainage Strategy; and, - A Water Management Plan. With the application of mitigation, there will be no adverse effects upon the integrity of European designated sites and there will be no significant residual effects upon biodiversity.
2.11.5	Ecology	d) If consent is given which I oppose consideration of the time of any work due to the easy disturbance of wildlife. This land has many protected birds including avocet, skylarks, curlews and plovers of high importance but also buzzards, terns,shelducks,geese, snipe,kestrel,heron,egrets,redshank,owls, fieldfare to name some others. It also has the protected natterjack toad.	

Table 2-12: Mablethorpe & Sutton Town Council – REP1-061

Ref	Topic	Matter raised in Written Representation	Applicant response
2.12.1	Safety	The danger of this pipeline for Theddlethorpe and the surrounding area, including Mablethorpe, is the possibility of rupture or damage to the pipeline causing rapid release of large quantities of CO2.	The Applicant is highly experienced in health and safety management and takes very seriously its legal duty under the UK's Health and Safety at Work Act to protect workers and the public from its activities. The Applicant places the utmost importance on the safety of the communities it interacts with, its employees and its contractors who will work on this project.

Ref	Topic	Matter raised in Written Representation	Applicant response
		Carbon dioxide is a gas which is heavier than air and an explosion of the gas from a ruptured pipeline would rapidly sink to ground level. Concentrations between 2% and 10% CO2 can cause nausea, dizziness, headache, mental confusion, increased blood pressure and respiratory rate. Above 8% nausea and vomiting occur and above 10% suffocation and death can occur within minutes. Contact with the cold gas can cause rapid freezing of exposed tissue. In the view of the Town Council, this poses an unacceptable risk for the residents in our community. It cannot be guaranteed that this pipeline will never rupture, and should it ever do so, this would be a catastrophe for our area with the potential for massive loss of life.	Several important factors were considered in routeing the pipeline. These were the safety of local communities, avoiding built up areas and sensitive buildings, areas protected for their habitat and species, the Lincolnshire Wolds Area of Outstanding Beauty, areas that are liable to flood and historic monuments. The pipeline has been designed in compliance with Engineering Standard BSI PD 8010-1:2016, which makes specific provision for CO_2 pipelines and the approach to routeing including minimum distances to buildings. In addition, the pipeline has been designed in accordance with the established principle of ALARP ("As Low As Reasonably Practicable"), as described in the Health and Safety Executive's (HSE's) longstanding framework document "Reducing Risks, Protecting People". The purpose of ALARP is to ensure risks are reduced as far as is reasonably practicable. The Applicant has referenced the HSE's Tolerability of Risk framework (which is defined in the "Reducing Risks, Protecting People" framework document mentioned above) to assess the pipeline risks. This assessment shows that the risk to members of the public living near to the Viking CCS pipeline route is well within the framework's lowest classification of risk. Under the framework, the HSE considers that *"risks falling into this region are generally regarded as insignificant and adequately controlled."* The HSE does not usually require further action to reduce risks in this lowest classification unless reasonably practicable measures are available, such as developing comprehensive emergency response plans. The Applicant will work with all relevant local authorities to develop such plans. The Applicant has engaged with the HSE, including their science division, to seek their expert opinion on the pipeline design and associated risk assessments. The Applicant has also engaged with other industry experts and will continue to engage both regulator and industry experts throughout the pipeline design and subsequent operation.
2.12.2	Need Case	The principle behind the scheme is also extremely dubious. Currently such schemes around the world capture around 45 million tonnes of CO2 a year but by 2050 it is estimated that 32 billion tons of CO2 would need to be captured and removed. Many authorities believe that it would be far better to concentrate on reducing CO2 emissions in the first place by ceasing the use of fossil fuels. Essentially, this scheme places the lives of our residents in jeopardy for no sensible reason other than to increase the profits of the company behind the scheme. Mablethorpe & Sutton Town Council urges the Inspectorate to reject this project.	The UK government has a target of achieving net zero by 2050 and meeting this target will require reduced emissions of CO_2 from existing industries within the Humber and Lincolnshire region. Carbon capture and storage (CCS) is recognised by the Intergovernmental Panel on Climate Change (the IPCC) and the UK government as a vital step on the road to achieving net zero carbon dioxide emissions, with the 6th Carbon Budget outlining plans to capture and store between 20 and 30 million tonnes of CO_2 a year by 2030. The revised draft National Policy Statement for Energy (EN-1) recognises that there is "an urgent need for new CCS infrastructure to support the transition to a net zero economy". CCS is one of many proposed approaches to tackling CO_2 emissions and climate change and is considered a transitional technology. More information is available in the Need Case **[APP-131]**.

Table 2-13: Malcolm Grebby – REP1-122

Ref	Topic	Matter raised in Written Representation	Applicant response
2.13.1	Consultation / Engagement	Dear sirs, I have contacted you before regarding this. I attended 2 open day meetings with Harbour energy, we were told a new pipeline was needed for the waste product produced by the manufacture of blue hydrogen.	Please refer to the Applicant's response to the Interested Party's Relevant Representation RR-057 **[REP1-044]**.

Ref	Topic	Matter raised in Written Representation	Applicant response
		This was obviously a lie. Hydrogen was to be made from gas, then turned into electricity.	
2.13.2	Safety	A great chance of leakage a pipe only 1.2 meters deep, a trench depth of 1.8 metres. Should a leakage occur it will kill everything within a five mile radius.	Design code PD 8010 requires pipelines to be buried to a minimum depth of 1.2m from the top of the pipe to ground level in residential, industrial and commercial areas, and to 1.1m in agricultural areas. The applicant had chosen to apply a burial depth of 1.2m across the entire route to allow for any future erosion of the soil levels due to farming activities. A pipeline Leak Detection System would monitor the whole pipeline length and would alert the operator to potential leaks, together with the location, along the pipeline route. The operator would have the ability to exercise direct control of the pipeline isolation valves as necessary. The type of Leak Detection System would be considered at the Front-End Engineering Design (FEED) stage. The Applicant has also elected to exceed the design requirements set by the standard and will use a thick wall design across the full pipeline length. The utilisation of thick wall pipe will increase the integrity of the pipeline to withstand accidental third-party impact, minimising the risk of damage that could cause a leak. Please refer to section 3.7 of ES Chapter 3: Description of the Proposed Development **[APP-045]** for more detail.
2.13.3	Landscape and Visual Impact	Our King payed us a visit in Theddlethorpe and granted the site a place of natural beauty !!!!how can this be with new buildings to drive the carbon waste under the sea, no doubt it will be driven by diesel.	The Lincolnshire Coronation Coast National Nature Reserve (NNR) largely consolidates two existing NNRs: the Donna Nook NNR and the Saltfleetby-Theddlethorpe Dunes NNR. There are some small additions to the overall area covered, but these are minor in the vicinity of the Proposed Development. NNRs are open to the public, though the designation itself seeks to protect important habitats and geological features. The Proposed Development will have no direct or indirect effects on the features for which the Lincolnshire Coronation Coast NNR was designated, as reported in Table 6-13 in ES Chapter 6: Ecology and Biodiversity **[APP-048]**.

Table 2-14: Mark Casswell – REP1-123

Ref	Topic	Matter raised in Written Representation	Applicant response
2.14.1	Land / Compensation	Further the representation submitted on 11 January 2023, Mr Casswell wishes to make the following additional comments. Mr Casswell has submitted a pre-application for a commercial pig unit on land subject to the pipeline scheme. Further discussion is required to determine if there are any mitigation measures that could be implemented to alter the route of the pipeline. At the moment the propsed route of the pipeline would run directly through the centre of the pig farm development. To date there has been an inadequate amount of engagement with Mr Casswell by the scheme and its agents	The Applicant notes the comments and acknowledges that discussions on the Option Agreement for Lease remain ongoing. The Applicant has been engaging with DDM Agriculture Ltd on behalf of Mark Casswell since March 2022 and has been discussing commercial terms since July 2023. The Applicant will continue to engage with a view to reaching a commercial agreement. Any Compensation will be assessed on a case-by-case basis in accordance with the Compensation Code.

Table 2-15: National Grid Electricity Transmission Plc – REP1-075

Ref	Topic	Matter raised in Written Representation	Applicant response
2.15.1	Protective Provisions	National Grid Electricity Transmission plc ("NGET") is a statutory undertaker for the purposes of the Planning Act 2008.	The Applicant acknowledges NGET's comment. The Applicant has proposed protective provisions for NGET within Part 3, Schedule 9 of the draft DCO. The Applicant will continue to engage with NGET with a view to agreeing the terms of those protections.

Ref	Topic	Matter raised in Written Representation	Applicant response
		NGET assets which have been identified as being within or within close proximity to the proposed Order limits are: (a) Overhead lines: (i) 2AH 400kV overhead line - Grimsby West to South Humber Bank Killingholme – South Humber Bank; and (ii) 4KG 400kV overhead line - Grimsby West to South Humber Bank Grimsby West – Keadby Further to NGET's relevant representations, NGET will require protective provisions to be included within the DCO to ensure that its interests are adequately protected and to ensure compliance with relevant safety standards.	
2.15.2	Other Schemes	In addition to the existing infrastructure set out above, NGET are looking to bring forward the following projects in the area which are likely to interact with the Viking CCS Project. The Proposed Infrastructure which has been identified as being within or within close proximity to the proposed Order limits are: o Eastern Green Link (EGL) 3 & 4 projects. o Walpole to Grimsby upgrade. together the "Proposed NGET Projects". Walpole to Grimsby undertook its first public consultation between January and March 2024 and the first public consultation for the EGL 3 and 4 is ongoing. Therefore, as well as providing satisfactory protection for NGET's existing rights and assets, the protective provisions will also need to cover the interaction between the Proposed NGET Projects and the Viking CCS Project to ensure that all projects can be brought forward satisfactorily and efficiently. The NGET Proposed Projects are both Nationally Significant Infrastructure Projects which will come forward as DCOs and which are recognised as being essential to the Country's future energy security and meeting net zero targets. The NGET Proposed Projects are recognised as being projects of critical national priority under the National Policy Statements. It is therefore essential that the protective provisions ensure that future working can be agreed between the parties and that there are no restrictions which would prevent this e.g. wide restrictive covenants over land which would be required for the Proposed NGET Projects.	The Applicant acknowledges NGET's comment. The Applicant has engaged with NGET on the future projects that it is proposing within or within close proximity to the Order limits. The Applicant will continue to engage with NGET to ensure that both projects can co-exist.
2.15.3	Protective Provisions	NGET is liaising with the Applicant in relation to bespoke protective provisions in respect of NGET's assets. Negotiations are ongoing but the protective provisions are not yet agreed.	The Applicant acknowledges NGET's comment. The Applicant will continue to engage with NGET with a view to agreeing the terms of protective provisions to be included within the DCO.

Table 2-16: National Highways – REP1-077

Ref	Topic	Matter raised in Written Representation	Applicant response
2.16.1	General	1 Introduction This written representation is National Highways Limited's ("NH") formal written response to the application by Chrysador Production (UK) Limited ("Applicant") for an order granting development consent for the Viking CCS Pipeline Project	The Applicant is undertaking ongoing engagement with National Highways to discuss a range of matters and has drafted a SoCG submitted at Deadline 1 **[REP1-029]** (dated 19 April 2024), and further discussion on these topics will be captured in forthcoming iterations of this document related to areas of agreement and/or matters to be resolved.

Ref	Topic	Matter raised in Written Representation	Applicant response
		("DCO"). The Applicant seeks development consent for proposed authorised development described in Schedule 1 of the draft DCO ("Authorised Development"). NH submitted a section 56 representation on 15 January 2024. Whilst NH has no in principle objection to the DCO and the Authorised Development, it does object to the application in its current form. NH set out its principal concerns in its section 56 representation. Since then, it has had time to consider the application further. Its remaining concerns in respect of the application as submitted are detailed below.	The document covers items such as agreement on using DfT Circular 01/2022 for assessment, accident assessment, traffic count data clarifications, traffic growth assumptions and agreement on cumulative impacts. The Applicant notes this objection.
2.16.2	General	2 National Highways [Text on National Highways' role as a statutory body not included]	Noted.
2.16.3	Construction Traffic	3 NH's objections NH has concerns with regard to the approach undertaken to derive the traffic impact resulting from the Authorised Development. NH has concerns about potential impacts on the SRN because sufficient information has not been provided to enable National Highways to form a sound opinion on the impacts of the Authorised Development. There is a substantial rise in local area development, which is expected to lead to an accumulative surge in both operational and construction-related traffic. This increase in traffic should be taken into consideration in the Transport Assessment which National Highways feel is currently deficient in this regard. As an important statutory consultee in the DCO process NH should be able to inform the ExA whether the Authorised Development will or will not have adverse impacts on the SRN. It is currently not able to do this. It is critical that this information is made available to National Highways to enable National Highways to play a meaningful part in this examination and to ensure that adequate protections are in place, should they be necessary, to protect this vital national asset.	The Applicant notes this objection and will continue to engage with National Highways with a view to resolving its concerns.
2.16.4	Traffic and Transport	It is the view of NH that the application, particularly the Transport Assessment, has a number of deficiencies that will need to be addressed. These are: a) transport impacts, particularly peak hour impacts, should be considered relative to national planning policies relevant to the SRN, including Circular 01/2022 and The Strategic Road Network: Planning for The Future;	The Applicant is continuing to engage with National Highways and is currently updating documents, including the Transport Assessment, in response to these discussions.
2.16.5	Traffic and Transport	b) the Personal Injury Collision analysis should include an assessment of clusters and causations;	
2.16.6	Traffic and Transport	c) the Applicant should investigate the discrepancy between the Automatic Traffic Counter derived values and the DfT WebTRIS reported Average Annual Daily Traffic;	
2.16.7	Traffic and Transport	d) clarification should be provided on whether separate TEMPro growth factors have been applied for the SRN and Local Highway Network;	
2.16.8	Traffic and Transport	e) the operational phase impact should be defined;	

Ref	Topic	Matter raised in Written Representation	Applicant response
2.16.9	Traffic and Transport	f) the assumptions for the daily construction workforce profile should be justified;	
2.16.10	Traffic and Transport	g) a detailed, evidence-based construction programme should be submitted for review;	
2.16.11	Traffic and Transport	h) the Transport Assessment does not present any evidence or supplementary narrative on the influence of daily variation on baseline traffic to support conclusions on non-materiality;	
2.16.12	Traffic and Transport	i) based on the outcomes of supplementary information required, merge/diverge assessments could be required for an appropriate opening year and future year, taking into account background traffic growth, and committed development;	
2.16.13	Traffic and Transport	j) NH does not agree that there will be an even HGV distribution throughout the day for pipe delivery as assumed; this is based on the intention to use port access points with specified sailing times. The impact for the SRN should be detailed;	
2.16.14	Traffic and Transport	k) the Applicant should provide certainty that a full Construction Traffic Management Plan and a Construction Workers' Travel Plan will be submitted and agreed with National Highways prior to the commencement of works;	
2.16.15	Traffic and Transport	l) the Applicant should identify the relationship between the proposed development and the emerging carbon capture plants, and, considering all other development in the area, identify the cumulative impacts during the construction and operational phases; and	
2.16.16	Traffic and Transport	m) no Travel Plan is included within the DCO Application for the Operational phase or the Construction phase. Pending information considering the Operational Phase of the proposed development, if appropriate, National Highways could recommend in future that an operational Travel Plan is produced for review.	
2.16.17	Traffic and Transport	The Authorised Development involves subterranean pipe crossings of the SRN however insufficient detail has been provided to identify the form of infrastructure required or the mechanism for delivery of such infrastructure. National Highways has significant concerns around safety in respect of such works and must fully understand the Applicant's proposals to be able to meaningfully contribute to this examination. It is noted that the description of Works in Schedule 1 to the draft DCO states "construction and installation of the pipeline by trenched and trenchless methods…" Both of these methods pose significant safety concerns. They are also very different. NH would welcome some clarity on the Applicant's proposals in this regard.	
2.16.18	Traffic and Transport	In addition to the named Works, the final entry in Part 1 of Schedule 1 includes provisions which provide wide powers that could result in works being undertaken to the SRN. NH would like to better understand why such powers are required for works to the SRN and would ideally request that the power does not apply to the SRN, unless appropriate protections are in place.	The Applicant considers that any works with the potential to impact the SRN can be suitably managed by protective provisions being included within the draft DCO. The Applicant has included protective provisions for the protection of National Highways within Part 9, Schedule 9 of the draft DCO. Negotiations are ongoing and the Applicant hopes to reach agreement before the end of the Examination.
2.16.19	Draft DCO	4 Protecting the SRN Unlike many other statutory consultees involved in the consenting of nationally significant infrastructure projects, NH is a very active promoter of development consent orders and understands keenly the pressures and requirements placed on	This comment is noted by the Applicant.

Ref	Topic	Matter raised in Written Representation	Applicant response
		applicants to balance the delivery of the scheme with the protections afforded to statutory consultees. NH has been at the vanguard of DCO-consented development since the Planning Act 2008 was introduced and has offered many commitments for the protection of electricity and gas apparatus, water and drainage infrastructure, railway undertakings and other infrastructure owned by statutory consultees as a consequence of its own development consent orders. The SRN deserves the same measure of protection, proportionate to the extent of interference caused by the Authorised Development.	
2.16.20	Draft DCO	NH understands the need for proportionality in the context of such protections and considers that a proportionate level of protection in all cases and as a minimum standard where there is the potential for impact to the SRN should be the following: (a) that NH be held harmless from the impact of third party development; (b) that NH procedures put in place for the protection of property and persons are adhered to in accordance with NH's strict requirements on network occupancy; (c) that any works carried out to the highway, on NH land, underneath the highway, above the highway and to apparatus forming part of the highway estate should be carried out in accordance with the relevant standards; (d) that financial provision should be put in place to ensure that in the event of the Applicant commencing works which may impact the SRN (including for example, underground works beneath the SRN or oversailing above it) and falling into financial difficulty or defaulting on completion of the works, NH has the resources needed to put the SRN and the highway estate into the position it was in before the Applicant commenced works; (e) that NH be indemnified for any loss or damage to the SRN or the highway estate as a result of the works; (f) that the Applicant requests approval from NH before exercising any powers under the DCO in relation to the SRN or the highway estate (such approval not to be unreasonably withheld) to enable proportionate rights and reservations to be secured for the protection of the SRN; g) that emergency procedures be agreed for NH to access the SRN to carry out works, repair any damage or remove dangerous obstacles resulting from the Authorised Development which pose a risk to life.	The Applicant has included protective provisions for the protection of National Highways within Part 9, Schedule 9 of the draft DCO. Negotiations are ongoing and the Applicant hopes to reach agreement before the end of the Examination.
2.16.21	Protective Provisions	NH has a standard form of protective provisions which includes measures to ensure the above points are addressed. NH considers that without an appropriate form of protective provisions, there is a considerable risk of serious detriment to the SRN, as any damage or injury to the SRN or wider highway estate would require funding to rectify that is not within NH's budget. There is no recourse to public funding for emergency works of this nature and a reserve of funding is not available. Without prejudice to whether the Authorised Development would cause a serious detriment to the SRN, it remains the case that the public purse should not be left to meet or subsidise costs of impacts caused by third party development to the SRN. Further, NH's estate comprises more than just the corpus of the highway (the 'top two spits'). Unlike local roads, where the local highway authority typically controls only the highway strata and sufficient vertical limits above and beneath the	The Applicant has included protective provisions for the protection of National Highways within Part 9, Schedule 9 of the draft DCO. Negotiations are ongoing and the Applicant hopes to reach agreement before the end of the Examination.

Ref	Topic	Matter raised in Written Representation	Applicant response
		highway to maintain necessary apparatus and street furniture, in most cases NH controls the freehold of the land beneath the highway to the centre of the earth and to the heavens above. This estate is held inalienably for the benefit of the statutory undertaking, to ensure that the SRN is not compromised and that maintenance work at any required depth can take place free from risk of trespass or ransom. Where apparatus is co-located in the highway (which is commonplace), that apparatus has been authorised by NH or has been installed through industry standard processes (such as under the New Roads and Street Works Act 1991), where statutory protection is afforded to NH as the highway or street authority. Whilst NH is prepared to approve the acquisition of sub surface interest and grant rights to co-locate apparatus in the highway, where it is geotechnically possible and respecting other apparatus that is in, on, under or over the highway – the land take must be proportionate and necessary and cannot be to the detriment of NH, the SRN or other undertakers. It cannot be acceptable that apparatus is placed in, on, under or over the SRN through a DCO by disapplying statutory protections that NH has and not accepting to acquiesce to the terms which are required by NH to manage its network in accordance with regulatory requirements. For the sake of clarity and transparency, NH has no desire to stymy development or to impose requirements on the Applicant which are disproportionate to the potential harm that could be caused to the SRN. NH is legally obliged to co-operate with third parties exercising planning or highway functions, which includes the Applicant in this statutory process. NH is prepared to engage fully and assist in whatever way is reasonable to ensure that the Authorised Development proceeds as quickly and efficiently as possible.	
2.16.22	Protective Provisions	5 Protective Provisions NH is grateful to the Applicant for including protective provisions for the benefit of NH in the draft DCO. These protections go a long way to addressing some concerns that NH would otherwise have. For example, although land interests of NH are included in the Book of Reference, paragraph 121 of Part 9 requires the Applicant to obtain NH's approval before exercising any acquisition powers. This is the correct way to deal with acquisition of rights and interests belong to an important statutory undertaker. Similarly, although numerous Articles within the draft DCO would give the Applicant powers to undertake works on the SRN, or interfere with interests of NH, paragraph 115(2) of Part 9 is clear that these powers do not apply to in respect of the SRN4 unless separate approval has been given by NH. That being said, the protective provisions that the Applicant has included in the draft DCO for the benefit of NH are not completely in accordance with the standard position of NH. Whilst NH looks to take a proportionate and pragmatic view of each development on a case by case basis, there are some protections that it cannot compromise on. Negotiations in this regard will continue with the Applicant and it is hoped that agreement on the protective provisions for NH's benefit can be reached.	The Applicant has included protective provisions for the protection of National Highways within Part 9, Schedule 9 of the draft DCO. Negotiations are ongoing and the Applicant hopes to reach agreement before the end of the Examination.
2.16.23	General	6 Summary For the reasons given above, NH objects to the DCO in its current form. NH will continue to work with the Applicant in respect of all of its concerns with the hope that NH's objection can be withdrawn before the close of the examination.	Acknowledged. The Applicant would be pleased to collaborate as detail evolves throughout the process.

Ref	Topic	Matter raised in Written Representation	Applicant response
		Should it assist the ExA, NH will respond to any written questions that the panel may have and is willing to attend an appropriate hearing to detail the impacts of the Authorised Development to NH.	

Table 2-17: Natural England – REP1-079

Ref	Topic	Matter raised in Written Representation	Applicant response
2.17.1	General	Natural England's advice in these Written Representations is based on information submitted by Chrysaor Production (UK) Limited in support of its application for a Development Consent Order ('DCO') in relation to Viking CCS Pipeline ('the project'). Part I of these Written Representations provides a summary and overall conclusions of Natural England's advice. This advice identifies whether any progress in resolving issues has been made since submission of our Relevant Representations (RR-073). Part II of these Written Representations updates and where necessary augments Part II of the Relevant Representations (RR-073). It expands upon the detail of all the significant issues ('amber' issues) which, in our view remain outstanding and includes our advice on pathways to their resolution where possible. Part II also shows 'green' issues which have been agreed since our Relevant Representations (RR-073) (subject always to the appropriate requirements being secured adequately). Part III of these Written Representations details Natural England's response to the Examining Authority's (ExA's) first written questions. 1.5 Part IV of these Written Representations details Natural England's comments on the draft Development Consent Order (DCO). Our comments are set out against the following sub-headings which represent our key areas of remit as follows: • International designated sites • Nationally designated sites • Soils and Best and Most Versatile agricultural land • Biodiversity net gain • Protected species • Protected landscapes	Noted.
2.17.2	General	Natural England has been working with AECOM, on behalf of Chrysaor Production (UK) Limited to provide advice and guidance on the project since 2022. This has included a currently running contract with the applicant under our Discretionary Advice Service. We have also been engaged on the draft Statement of Common Ground (SoCG). Natural England will continue discussions with AECOM, on behalf of Chrysaor Production (UK) Limited to seek to resolve these concerns throughout the	The Applicant is in agreement and will continue to engage with Natural England.

Ref	Topic	Matter raised in Written Representation	Applicant response
		examination. Natural England advises that the matters indicated as 'amber' will require continued consideration by the Examining Authority during the examination.	
2.17.3	Ecology & Biodiversity **Nationally Designated Sites**	Natural England's position regarding internationally designated sites has changed since submission of our Relevant Representations (RR-073) for a number of key issues. 2.1.2. Our updated advice regarding impacts on internationally designated sites on the basis of further information submitted is set out below. Further detail on our reasoning for this is given against each impact pathway within Part II. Natural England is not yet satisfied for 'amber' issues identified in the text below that it can be ascertained beyond reasonable scientific doubt that the project would not have an adverse effect on the integrity (AEoI) of the following internationally designated sites: • Humber Estuary Special Area of Conservation (SAC). • Humber Estuary Special Protection Area (SPA). • Humber Estuary Ramsar. Further information is required to assess the following impact pathways: • Temporary loss of functionally linked land for non-breeding birds during construction (NE3, NE6, NE12) ('amber'). • Noise and visual disturbance to non-breeding birds within functionally linked land during construction and decommissioning (NE3, NE16, NE18) ('amber'). • Noise and visual disturbance to breeding birds within functionally linked land during construction (NE15) ('amber'). • Lighting disturbance to breeding and non-breeding birds within functionally linked land during all phases (NE8) ('amber'). • Noise and visual disturbance to breeding birds within functionally linked land during operation (NE9) ('amber'). • In-combination assessment (NE24) ('amber'). Natural England has also noted a number of 'yellow' issues in relation to the Humber Estuary designated sites. As stated in section 1, we would ideally like these to be addressed, but we are satisfied that for this particular project it is unlikely to make a material difference to our advice or the outcome of the decision-making process. Please find a summary of each 'yellow' issue below, and refer to Table 1 for further details: • Non-breeding bird surveys - pipeline route (NE4) ('yellow'). • Assessment of impacts to black-tailed godwit (NE7) ('yellow'). Natural England is satisfied that 'green' issues are unlikely to result in adverse effects on the integrity (AEoI) of the Humber Estuary designated sites, subject always to the appropriate mitigation / compensation as outlined in the application documents being secured adequately. For a full list of 'green' issues please see NE1, NE11, NE13, NE19, NE20 of our Relevant Representations (RR-073). Please	Noted. The Report to inform the Habitats Regulation Assessment (Revision B) **(document reference 6.5)** has been updated to address these amber issues.

Ref	Topic	Matter raised in Written Representation	Applicant response
		find a summary of each new 'green' issue below, and refer to Table 1 for further details: • Inclusion of the most recent list of component species of the Humber Estuary SPA waterbird assemblage (NE2) • SPA non-breeding bird usage at the Northern Compound (NE5) • SPA non-breeding birds at Viking Fields during maintenance visits to the dune isolation valve (NE10) • Timing of works at Viking Fields (NE14) • In-combination assessment of disturbance to SPA birds at Rosper Road Pools (NE17) • Works within the SAC (NE21) • Cumulative impacts assessment (NE25)	
2.17.4	Ecology & Biodiversity **Protected Species**	Natural England's position regarding Protected Species has not changed since submission of our Relevant Representations (RR-073). Natural England is not providing bespoke advice on the protected species information provided in the Environmental Statement (ES) for this project. Please refer to Table 1 for a summary of our standing advice ('grey') (NE27). Natural England have released a countersigned IACPC to the customer via our District Level Licencing Scheme for Great Crested Newts; have not received any further correspondence in relation to other protected species licences (NE27) ('grey').	The Applicant acknowledges this representation from Natural England and has no further comments.
2.17.5	Ecology & Biodiversity **Biodiversity Net Gain Provision**	Natural England's position regarding provision of biodiversity net gain has not changed since submission of our Relevant Representations (RR-073). Please refer to Table 1 for our unchanged advice on Biodiversity Net Gain (NE28) ('grey').	The Applicant acknowledges this representation from Natural England and has no further comments.
2.17.6	Landscape & Visual **Protected Landscapes**	Natural England's position regarding Protected Landscapes has not changed since submission of our Relevant Representations (RR-073). However, we have provided the applicant with further detailed advice since the submission of our relevant representations and continue to work with them to overcome our concerns. A summary of our advice relating to landscapes is set out below, whilst our detailed advice and recommendations are set out within Part II (Table 1). For clarity, we have also provided the full advice letter and commentary provided to the applicant on this matter within Annex A - this document provides full justification for our comments within these representations, where it is not apparent within Table 1. The following items are considered 'amber'; further information is required: • Assessment of alternatives (NE29a). • Assessment of the Special Qualities of the Lincolnshire Wolds National Landscape (NE29b-c).	The Applicant has reviewed this further detailed advice and prepared a supplementary note that has been shared with Natural England. A meeting has been arranged for 21 May to discuss the supplementary note, a copy of which the Applicant intends to issue at Deadline 3.

Ref	Topic	Matter raised in Written Representation	Applicant response
		• Residual landscape and visual effects on the statutory purposes of the Lincolnshire Wolds National Landscape during construction and operation (NE29d-h). The following items are considered 'grey': • Consideration of the potential Lincolnshire Heritage Coast (NE29i) Further information is sought principally on the need to directly impact the Lincolnshire Wolds National Landscape; the impacts on special qualities; mitigation, including the use of trenchless methods; and whether the route can be successfully reinstated.	
2.17.7	Agriculture & Soils **Soils and best most versatile agricultural Land**	Natural England's position regarding soils and the best and most versatile agricultural land has changed since submission of our Relevant Representations (RR-073). Our updated advice relating to Soils and Best and Most Versatile Land is set out below. Further detail regarding each item is set out in Part II, Table 1. The following items are considered 'amber'; further information is required: • Survey Approach – Extent (NE26b) ('amber'). • Outline Soil Management Plan (NE26c-e) ('amber'). Please find a summary of each 'yellow' issue below and refer to Table 1 for further details. As stated in section 1, we would ideally like these to be addressed, but we are satisfied that for this particular project it is unlikely to make a material difference to our advice or the outcome of the decision-making process. • Survey Approach - Timing (NE26a) ('yellow'). • Outline Soil Management Plan (NE26f-g) ('yellow')	Noted – responses provided to the following comments.
2.17.8	General	Part II of these Representations updates and where necessary augments Part II of the Relevant Representations. It expands upon the detail of all the significant issues ('amber' issues) which, in our view remain outstanding and includes our advice on pathways to their resolution where possible. Part II also shows 'green' issues which have been agreed since our Relevant Representations (RR-073) (subject to the completion of agreed revisions to the Habitats Regulations Assessment (HRA) for internationally designated sites issues and to the appropriate requirements being secured adequately). Natural England's advice is that there are a number of matters which have not been resolved satisfactorily since the submission of our Relevant Representations (RR-073), as summarised in Part 1, Section 2 above and outlined in further detail in Table 1 below. Some of these matters are important enough to mean that if they are not satisfactorily addressed it would not be lawful to permit the project due to its impacts on the SAC, SPA, Ramsar and SSSI interests. However, Natural England's advice is that all of these matters are capable of being overcome. The specific concerns in relation to each are detailed in Table 1.	The Report to Inform HRA has been updated to address concerns that relate to European designated sites. Revision B of the HRA has been submitted at Deadline 2 **(document reference 6.5)**.

Ref	Topic	Matter raised in Written Representation	Applicant response
		Natural England advises that, if approved, the project must be subject to all necessary and appropriate requirements which ensure that unacceptable environmental impacts either do not occur or are sufficiently mitigated. Natural England will continue engaging with the applicant to seek to resolve these concerns throughout the examination. Natural England advises that the matters indicated as 'amber' will require consideration by the Examining Authority during the examination. Natural England understands that a Statement of Common Ground ('SoCG') will be submitted by the Applicant at Deadline 1. Our advice in Table 1 refers to clarifications and agreed updates to the Report to Inform a Habitats Regulations Assessment as outlined in the draft SoCG issued to Natural England on 16 February 2024.	
2.17.9	**NE2** **International designated sites** • Humber Estuary SPA • Humber Estuary Ramsar	Natural England advises that the most recent list of component species of the Humber Estuary SPA waterbird assemblage (Appendix A) should be referred to in determining the relevant features, with justification provided where impacts on a more limited list of species are assessed. Natural England welcomes the commitment to include the updated waterbird assemblage in Appendix A of the Report to Inform the HRA (SoCG ref. 36). We therefore advise that this issue can be resolved.	Appendix A of the Report to Inform HRA has been updated with the updated waterbird assemblage. Revision B of the HRA has been submitted at Deadline 2 **(document reference 6.5)**.
2.17.10	**NE3** **International designated sites** • Humber Estuary SPA • Humber Estuary	We note that the significance of qualifying bird populations has been assessed on a per field basis. We advise there is potential for cumulative impacts to SPA birds using functionally linked land across the project area. The HRA should therefore consider the significance of bird numbers across the project area and the potential for cumulative impacts (see key issue NE12 below). Natural England welcomes that the baseline survey data will be reviewed in order to provide further clarification (SoCG ref. 37). Further detail should be provided on the sequence / timing of works and the availability of roost and feeding sites within the study area to provide context on the proportion of suitable habitat that would be affected at any one time. Natural England welcomes the commitment to update the Report to Inform the HRA to provide further justification for conclusions on loss of functionally linked land (SoCG ref. 37) and will review this once submitted. Discussions are ongoing with the applicant regarding this.	The Report to Inform HRA **[AS-026]** has been updated to discuss the likelihood of cumulative impacts across the development site. The key areas of value for SPA birds are identified in 1 and 5 of the route, which are separated by a large distance, and the pipeline route sections will be constructed sequentially rather than simultaneously. Therefore, it is considered that there is limited potential for cumulative impacts from multiple parts of the Proposed Development being worked simultaneously. Revision B of the HRA has been submitted at Deadline 2 **(document reference 6.5)**.
2.17.11	**NE4** **International designated sites** • Humber Estuary SPA • Humber Estuary Ramsar	Section 1.3.16 of Appendix 6-7 states that surveys were conducted once per month during the non-breeding season. Natural England generally advises that two surveys per month during the winter and spring and autumn passage periods should be completed (with weekly visits during the autumn and spring passage periods where birds are likely to be present in the migration period only, due to high turnover of birds during migration). Based on the temporary nature of construction works of the pipeline route, Natural England considers that the survey frequency is sufficient to inform the assessment in this case. However, we advise that a precautionary approach should be taken to assessing the results in the HRA, with appropriate consideration given to potential limitations of the data, such as the potential for peak counts of SPA birds to have been missed. Discussions are ongoing with the applicant regarding the assessment of the survey results, and we	Surveys were undertaken in line with the methodology that was set out in the scoping report and PEIR submitted by AECOM, and on which no objections were raised by stakeholders. The Applicant notes that Natural England considers the survey effort to be sufficient. A precautionary approach has been taken within the HRA regarding use of peak counts, but this has been further reviewed and assessed within the updated Revision B of the HRA submitted at Deadline 2 **(document reference 6.5)**.

Ref	Topic	Matter raised in Written Representation	Applicant response
		consider this will be adequately addressed through the proposed updates to the Report to Inform the HRA.	
2.17.12	**NE5** **International designated sites** • Humber Estuary SPA • Humber Estuary Ramsar	We note from Figure 3 of Appendix 6-7 that no bird surveys have been undertaken at the location of the Northern Compound, which is within 10km of the Humber Estuary SPA. The applicant has confirmed that the Northern Compound will be located within an arable field immediately south of the A160. This site has previously been used as a construction compound for other projects which have now been completed. The land at the Northern Compound was appraised for its suitability to support breeding and wintering birds during a scoping visit on the July 4th 2022 and again on 17th August 2022, and due to the proximity to a major road, was considered unlikely to be functionally linked (SoCG ref. 21). We welcome that further clarity will be provided in the updated Report to Inform the HRA. Natural England accepts this justification and agrees that likely significant effects from the loss of land at the Northern Compound can be screened out of the HRA. We therefore advise that this issue can be resolved.	This has been confirmed within the updated Revision B of the Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)**.
2.17.13	**NE6** **International designated sites** • Humber Estuary SPA • Humber Estuary Ramsar	However, Figures 13-31 of Appendix 6-7 indicate other qualifying SPA bird species, including lapwing and pink-footed goose, have been recorded in numbers greater than 1% of qualifying populations in proximity to the red line boundary. We advise that likely significant effects for lapwing and pink-footed goose cannot be screened out and should be included in the list of species in Table 7-1 for further assessment. Natural England welcomes that lapwing and pink-footed goose will be added into Table 7-1 in the updated Report to Inform the HRA (SoCG ref. 37). We advise that the appropriate assessment should consider the potential cumulative impact on these species across the project area (as per key issue NE3).	Lapwing and pink-footed goose have been added into Table 7-1 in the updated Revision B of the Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)**.
2.17.14	**NE7** **International designated sites** • Humber Estuary SPA • Humber Estuary Ramsar	Significant numbers of black-tailed godwit are present at Rosper Road Pools. We therefore advise that likely significant effects for black-tailed godwit cannot be screened out and should be included in the list of species in Table 7-1 for further assessment. Natural England welcomes that greater clarity will be provided in the updated Report to Inform the HRA on whether black-tailed godwit is taken forward to appropriate assessment (SoCG ref. 37).	The Applicant has included greater clarity in the HRA on whether black-tailed godwit is taken forward to appropriate assessment. Revision B of the HRA has been submitted at Deadline 2 **(document reference 6.5)**.
2.17.15	**NE8** **International designated sites** • Humber Estuary SPA • Humber Estuary Ramsar	We advise that further details should be provided on the proposed lighting across the project area, for all phases. We advise potential impacts from lighting should be considered at the HRA screening stage, proceeding to appropriate assessment where likely significant effects cannot be ruled out. Natural England welcomes that information on lighting will be provided in the updated Report to Inform the HRA (SoCG ref. 37) and we will review this once submitted.	Further detail has been added to the updated Revision B of the Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)** to provide further clarity on potential impacts from lighting during construction, operation, and decommissioning.

Ref	Topic	Matter raised in Written Representation	Applicant response
2.17.16	**NE9** **International designated sites** • Humber Estuary SPA • Humber Estuary Ramsar	We note from Table 7-1 of the HRA that likely significant effects from noise and visual disturbance to SPA breeding birds during operation has been screened out. However, section 4.2.30 of the Environmental Statement Volume I – Non-Technical Summary states maintenance to the Dune Isolation Valve is required. We advise that further assessment is required to determine potential impacts to SPA breeding birds at 'Viking Fields' during maintenance visits. The applicant has clarified that maintenance visits will require a maximum of two workers using hand tools or small powered hand tools. The applicant considers it unlikely that the minor maintenance works necessary to maintain the dune valve would create a disturbance event greater than existing baseline levels (SoCG ref. 37). The applicant has verbally confirmed it is expected that visual inspection of the dune value will occur once per month and maintenance visits will occur annually. Natural England welcomes that clarity will be provided in the updated Report to Inform the HRA. However, although the maintenance visits are expected to occur infrequently, there is still a possibility that works will be undertaken in proximity to nests and have the potential to cause disturbance and nest abandonment. We advise that further assessment should be made on the suitability of habitat near to the dune valve, to assess if there is potential for SPA birds to nest to in close proximity to the working area. We will review this once submitted.	Clarification has been added into the updated Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)**. The Applicant has committed to undertaking routine maintenance work outside of the bird breeding season, the commitment being included in an update to ES Appendix 3-6 Operational Phase Mitigation **[REP1-015]**.
2.17.17	**NE10** **International designated sites** • Humber Estuary SPA • Humber Estuary Ramsar	We advise that further assessment is required to determine potential impacts to SPA non-breeding birds at 'Viking Fields' during maintenance visits. The applicant has clarified that maintenance visits will require a maximum of two workers using hand tools or small powered hand tools. The applicant considers unlikely that the minor maintenance works necessary to maintain the dune valve would create a disturbance event greater than existing baseline levels (SoCG ref. 37). The applicant has verbally confirmed it is expected that visual inspection of the dune value will occur once per month and maintenance visits will occur annually. Natural England welcomes that clarity will be provided in the updated Report to Inform the HRA. Based on the information provided, we agree that likely significant effects to non-breeding birds from maintenance visits can be screened out of the HRA. We therefore advise that this issue can be resolved, subject to agreed updates to the shadow HRA.	This clarification has been added into the updated Report to Inform HRA submitted at Deadline 2 (Revision B) **(document reference 6.5)**.
2.17.18	**NE12** **International designated sites** • Humber Estuary SPA • Humber Estuary Ramsar	Justification is provided in section 7.3.8 of the HRA as to why the temporary loss of land will not have negative implications at the population level of SPA bird species. Natural England does not agree that the assessment is sufficient to rule out adverse effects on the Humber Estuary SPA in this case, due to the location of proposed works and number of SPA birds recorded within/adjacent to the construction area. Therefore, we advise that further assessment is required regarding the potential impacts to Humber Estuary SPA birds, in particular curlew, from temporary loss of functionally linked land during construction. Natural England highlights that loss of habitat may result in an increase in local bird densities and have consequences for individual bird fitness in terms of increased energy expenditure for flight, competition with other birds for food, and lack of knowledge of foraging resources in other areas which might make it more difficult to find food (Mander et al., 2021[1]). Consequently, this may lead to effects on breeding productivity and ultimately population size (Baker et al., 2004[2] ; Piersma et al., 2016[3] ; Studds et al., 2017[4]).	Further detail has been added to the updated Revision B of the Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)** to provide further clarity on potential impacts.

Ref	Topic	Matter raised in Written Representation	Applicant response
		Satellite tagging of curlews on the Humber has demonstrated that individuals are highly site faithful and forage within a short distance of their high tide roost sites. During the study period, curlew home ranges were found to be between 4.4 and 9.6 km2 (Cook et al, 2016[5]). Displacement from foraging sites will therefore have consequences for the birds' fitness in terms of increased energy expenditure for flight, competition with other birds for food, and lack of knowledge of foraging resources in other areas which might make it more difficult to find food. Therefore, we advise further consideration should be given to potential impacts on curlew associated with displacement from known foraging areas. We advise further assessment is required on the scale and timing of construction (i.e. if cable works happening sequentially or simultaneously across the project area) during sensitive periods to understand cumulative impacts. We advise further assessment of available alternative roosting/feeding sites in proximity to the works areas is required. If impacts cannot be ruled out, it may be necessary to consider mitigation measures such as restrictions on the timing/extent of works at sensitive times of the year. Natural England welcomes that the baseline survey data will be reviewed in order to provide further clarification (SoCG ref. 37). Further detail should be provided on the sequence / timing of works and the availability of roost and feeding sites within the study area to provide context on the proportion of suitable habitat that would be affected at any one time. As detailed above (NE6), we advise that the assessment should include pink-footed geese and lapwing. Natural England welcomes the commitment to update the Report to Inform the HRA to provide further justification for conclusions on loss of functionally linked land (SoCG ref. 37) and will review this once submitted. Discussions are ongoing with the applicant regarding this.	
2.17.19	**NE14** **International designated sites** • Humber Estuary SPA • Humber Estuary Ramsar	Section 4.2.29 of the Environmental Statement Volume I – Non-Technical Summary states a replacement valve is required. We advise that further clarification is provided in the HRA on the nature of this work and if it will also be restricted to August/September. Natural England notes that paragraph 7.3.13 of the Report to Inform the HRA states that all works at Viking Fields will need to be undertaken during August / September. We welcome that this paragraph will be updated to clarify that this includes replacement of the Dune Valve. We therefore advise that this issue is resolved, subject to agreed updates to the shadow HRA.	The timing of work on the Dune Valve has been added to the updated Revision B of the Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)**.
2.17.20	**NE15** **International designated sites** • Humber Estuary SPA • Humber Estuary Ramsar	We note no assessment is provided regarding potential noise and visual disturbance impacts to breeding SPA birds using Viking Fields from works associated with the Theddlethorpe Facility and Southern Compound. Therefore, we advise that further information is required to determine potential impacts. LEM Natural England welcomes the commitment to update the Report to Inform the HRA (SoCG ref. 35) and will review this once submitted.	As agreed, further detail has been added to the updated Revision B of the Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)**.

Ref	Topic	Matter raised in Written Representation	Applicant response
2.17.21	**NE16** **International designated sites** • Humber Estuary SPA • Humber Estuary Ramsar	Section 7.3.16 of the HRA states that, with mitigation, average construction noise would be below the baseline. Section 7.3.19 of the HRA states 'noise fencing will be included for works within 500m of the relevant survey fields'. We advise that further detail is provided regarding the locations at which noise mitigation is required, taking into consideration our advice on functionally linked land assessment above (NE12). Natural England welcomes that additional information will be provided in the updated Report to Inform the HRA outlining the sectors where noise fencing will be required (SoCG ref. 38) and we will review this once submitted.	As agreed, further detail has been added to the updated Revision B of the Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)**.
2.17.22	**NE17** **International designated sites** • Humber Estuary SPA • Humber Estuary Ramsar	Section 7.3.12 of the HRA states that, with close-board fencing as mitigation, construction noise levels at Rosper Road Pools would be below the baseline. On the basis of the information provided, Natural England agrees with the conclusion of no adverse effects on the Humber Estuary SPA/Ramsar from of the project alone, subject to securing and adequate implementation of these mitigation measures. The applicant has clarified that there will be no contribution to any cumulative or in-combination noise effects at Rosper Road Pools (SoCG ref. 35). Based on the information provided, Natural England agrees there will be no adverse effects on integrity to species at Rosper Road Pools, subject to securing and adequate implementation of these mitigation measures.	As agreed, further detail has been added to the updated Revision B of the Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)**. The commitment to close board fencing has been included in the updated CEMP **[REP1-014]**.
2.17.23	**NE18** **International designated sites** • Humber Estuary SPA • Humber Estuary Ramsar	We note no assessment is provided regarding potential disturbance impacts to non-breeding SPA birds using 'Viking Fields' from works associated with the Theddlethorpe Facility and Southern Compound. Therefore, we advise that further information is required to determine potential impacts. Natural England welcomes the commitment to update the Report to Inform the HRA (SoCG ref. 35) and will review this once submitted.	As agreed, further detail has been added to the updated Revision B of the Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)**.
2.17.24	**NE21** Saltfleetby – Theddlethorpe Dunes and Gibraltar Point SAC	Clarification needed that no works/fencing/vehicle access will take place within the SAC. The applicant has confirmed that no works/ fencing/ vehicle access will be required within the SAC (SoCG ref. 38). We welcome that this will be further clarified in the updated Report to Inform the HRA Report. We therefore advise that this issue can be resolved, subject to agreed updates to the shadow HRA.	As agreed, further detail has been added to the updated Revision B of the Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)**.
2.17.25	**NE24** **International designated sites** • Humber Estuary SPA	Natural England notes that Table 7-2 of the HRA considers in-combination effects with other plans and projects. However, we advise that this table should identify where impacts have been fully avoided through mitigation and where there is still a residual impact that could act in-combination. This assessment should consider the residual effects of the identified developments acting together. If mitigation or compensation has completely avoided or removed the effect, then this would not act in-combination with other projects. We note that section 7.4.4 of the HRA states 'Where similar impact pathways exist… the mitigation that is proposed for both the other project and Proposed Development will collectively ensure that overall impacts are reduced to a non-significant level.' However, this does not take into	As agreed, further detail has been added to the updated Revision B of the Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)**.

Ref	Topic	Matter raised in Written Representation	Applicant response
	• Humber Estuary Ramsar	consideration residual effects. Therefore, we advise that the in-combination assessment should be revised. Natural England welcomes that this will be made clearer and clarified within the updated Report to Inform the HRA (SoCG 35) and we will review this once submitted.	
2.17.26	**NE25** **International designated sites** • Humber Estuary SPA • Humber Estuary Ramsar	In addition to the requirement for an in-combination assessment (outlined above), it is also necessary to consider the existing influences on the site which have affected and are continuing to affect the condition of relevant designated site features. These influences constitute what is referred to as the 'current environmental baseline'. A cumulative effect might arise when a succession of individual impacts, which have each been previously assessed in isolation as being trivial or insignificant, accumulate over time to reach an incremental scale of loss which becomes adverse (or risks becoming adverse if it continues). The assessment should make reference to the Supplementary Advice on Conservation Objectives. Where the Supplementary Advice includes targets to restore an attribute of the site feature (such as habitat area or species population size), consideration should be given to whether cumulative impacts will hinder the restoration of these attributes. Natural England welcomes the further information provided and the commitment to include further references to the conservation objectives of the European sites in the updated Report to Inform the HRA (SoCG ref. 39). We agree that there is not a requirement for a separate cumulative assessment section and consider that the assessment and additional information adequately address this point (SoCG ref. 39). We therefore advise that this issue can be resolved, subject to agreed updates to the shadow HRA.	As agreed, further detail has been added to the updated Revision B of the Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)**.
2.17.27	**NE26a** **Soils and Best and Most Versatile Land**	Natural England consider the survey approach taken could be improved, whereby the ALC survey is undertaken pre-consent, to most accurately inform the ES. This is primarily as a pre-consent survey could input into the final route selection and project design, enabling further avoidance of Best and Most Versatile Land across all elements of the development. Nonetheless, for this development, with the commitment to undertake a detailed ALC survey post consent, and as a result of the small overall permanent land take (10.6.9, APP-052), commitments for restoration of the pipeline corridor (4.7.10, APP096), and implementation of a soil management plan, undertaking detailed ALC survey post-consent is unlikely to make a material difference to our advice or the outcome of the decision-making process.	Natural England's comment is noted. It remains the Applicant's intention to conduct the detailed ALC survey post-consent.
2.17.28	**NE26b** **Soils and Best and Most Versatile Land**	oSMP Paragraph 1.1.5 (APP-052) states that the ALC survey will incorporate all land which will be subject to direct disturbance, however, direct disturbance has not been defined & the extent of the survey is unclear. Natural England consider that the ALC survey should cover the whole development area, in line with the DEFRA Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, BSSS guidance and IoQ guidelines. There is a risk of soil damage, ALC degradation and long term or permanent loss of BMV. Soil will need to be handled according to best practice and reinstated to a high standard to reduce the impacts. The results from a detailed ALC survey would provide soils data to inform the soil management plan for the whole site regardless of whether the use is permanent or temporary in nature. ALC survey should normally be at a detailed level, e.g. one auger boring per hectare, supported by pits dug in each main soil type to confirm the physical characteristics of the full depth of the soil resource, i.e. 1.2 metres. We welcome the commitment of the oSMP for soil data collected as part of the ALC survey to be used to inform the soil resource and	The Applicant confirms that the detailed ALC survey will incorporate all agricultural land which will be subject to direct disturbance, defined as: • all agricultural land that will be subject to above-ground built development and which was therefore considered to be permanent development within the Environmental Statement (ES). This incorporates the three Block Valve Stations and Theddlethorpe Facility Option 2, including the associated access road; and • all agricultural land that will be subject to temporary development, including all land within the construction corridor working width and the temporary construction compounds. Note that for the majority of the pipeline route, the working width is set at 30 metres, expanding up to 50 metres at certain crossing points, whilst reducing below 30 metres at other sensitive locations.

Ref	Topic	Matter raised in Written Representation	Applicant response
		management plan, in line with the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites.	
2.17.29	**NE26c** **Soils and Best and Most Versatile Land**	Natural England welcome use of the 'Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (2009)' to guide soil management during construction. Where soils are being reinstated, we welcome the commitment to reinstate soils to their pre-development agricultural use (4.7.10, APP-096). Alongside this, Natural England welcome the acknowledgement at oSMP paragraph 4.12.5 that 'The main objective for the restoration of agricultural land is to reinstate the land to its original (predevelopment) Agricultural Land Classification (ALC) grade'. Natural England consider there should be a specified & clearly stated commitment for 'best and most versatile' (BMV) agricultural land temporality disturbed during construction to be returned to its original ALC grade. To achieve this, the proposed restoration soil profiles should be provided in the detailed oSMP. Details should include the target soil profiles to be reinstated (soil volumes, soil textures, soil depth, stone content, likely depth to slowly permeable layers, moisture balances etc) and their predicted ALC grade where appropriate. Decommissioning: Paragraph 4.5.1 of the Decommissioning Strategy Plan (APP-072) notes that Block Valve locations may be restored to agricultural use. Similarly to the above, where soils at these locations are to be reinstated, there should also be a specific commitment for 'best and most versatile' (BMV) agricultural land to be returned to its original Agricultural Land Classification (ALC) grade.	Natural England's comments are noted. The detailed SMP will build upon the Outline SMP and will ensure that appropriate mitigation is in place to protect the soil types present (as identified through survey). Application of the SMP (and the good practice measures contained within) will ensure soil quality is maintained allowing soils to support/achieve the same ALC grading upon restoration as prior to the Scheme, regardless of whether the land was originally of BMV or non-BMV status. It is noted that the return to original ALC status would not be immediate as acknowledged in Section 1: Introduction of the ALC Guidelines[1], which states that the physical conditions on restored land may take several years to stabilise; and therefore, restored land is not normally graded until either the end of the statutory aftercare period, or otherwise not until five years after soil replacement to ensure that the correct grading is assigned. Although, with application of the mitigation measures set out in the SMP, it is likely that the original ALC grading would be achieved well in advance of this. The Applicant therefore agrees to the following commitment, which is contained within, and secured through, the revised Draft CEMP as Mitigation Measure F14 **[REP1-013]**: All BMV agricultural land (land of Grades 1, 2 or Subgrade 3a) which is temporarily disturbed during construction will be returned to its original ALC grade by the end of the five-year aftercare period. The detailed ALC survey (to be undertaken post-consent, see response to NE26a) will record details of the pre-development soil profiles and will be used to describe the proposed restoration profiles in the detailed SMP, with the restoration profiles mirroring the original profiles. The predevelopment ALC grading will be recorded and mapped as part of the detailed ALC survey; and used as a baseline against with restoration ALC grading will be assessed. As stated in paragraph 10.8.9. of ES - Chapter 10: Agriculture and Soils **[APP-052]**, it is expected that the mitigation measures employed at decommissioning would be the same as or similar to those set out in the detailed SMP, taking into account any changes in guidance or best practice which may occur in the intervening period. Therefore, all land which is returned to agricultural use upon decommissioning will, following a period of stabilisation, achieve its pre-development ALC grading. Requirement 16 of the draft DCO **[REP1-002]** requires a Decommissioning Environmental Management Plan (DEMP) to be approved by the relevant planning authority prior to decommissioning of the Proposed Development. The DEMP will be developed in accordance with best practice at the time. [1] *MAFF (1988).* 'Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of agricultural land'.
2.17.30	**NE26d** **Soils and Best and Most Versatile Land**	oSMP paragraphs 4.2.7 & 4.5.6 (APP-096) discusses soil handling in wet conditions. All soils should only be handled in a dry and friable condition, and it is expected that soil handling will be confined to the drier summer period to minimise risk of soil damage. Soil handling methods should normally be as specified in the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (including accompanying Toolbox Talks). Soil handling should normally be avoided during October to March inclusive, irrespective of soil moisture conditions, because it will generally not be possible to establish green cover over winter to help dry out soils and protect them from	Pipeline installation is seasonal with soil handling operations generally restricted to the drier months of April to September, although this may be extended in drier years. Similarly, soil handling operations connected to the construction of other elements of the Project would also be restricted to these drier months, where this is practicable. It is therefore expected that soil handling will occur in the period April to September except where there are extenuating circumstances. For this reason, as noted at paragraph 4.2.7 of the Outline SMP **[APP-096]** a commitment to a project-wide seasonal constraint to the construction programme is not recommended as this may not be achievable in practice. This is reflected in Commitment B16 of the Mitigation

Ref	Topic	Matter raised in Written Representation	Applicant response
		erosion. Soils should only be handled in a dry and friable condition. Natural England note this is recognised as part of the additional mitigation and enhancement measures (ES para 10.8.1 B16, APP-052) to be adopted during the construction phase, therefore soil handling methodology across the two documents is inconsistent. Please could the Applicant confirm what is proposed.	Register included within the Draft CEMP (as also referenced in paragraph 10.8.1 of ES Chapter 10: Agriculture and Soils **[APP-052]**) which states that topsoil stripping should be undertaken outside of the winter period (October to March inclusive) where possible. Both the Outline SMP and ES Chapter 10: Agriculture and Soils **[APP-052]** are therefore considered to be consistent in their approach, promoting an April to September soil handling period, but allowing for working outside of these times should extenuating circumstances arise. Consequently, although the detailed SMP (and Commitment B16) will promote the avoidance of soil handling from October to March inclusive, it is proposed that the detailed SMP will allow for soil handling outside of these times, if there is no practicable alternative. It is also acknowledged that there may be periods within the April to September preferred working window when soils are in a wet condition (plastic state), but where handling of soils is required, for example to complete a crossing within a timeframe agree with a consenting authority. Again, these operations would be restricted to occasions where there are extenuating circumstances and no practicable alternative. As some soil handling when the soils are wet and therefore more susceptible to compaction and damage may be necessary, paragraph 4.2.8 of the Outline SMP **[APP-096]** sets out additional measures to be applied during wet working. The Outline SMP has been amended as follows (with additional text in bold): Section 4.2: Stop Conditions, paragraph 4.2.7. A project-wide seasonal constraint to the construction programme is not recommended as this may not be achievable in practice. The soil types identified within the DCO Site Boundary combined with winter rainfall in the Region, mean that soil handling should be restricted to the drier periods of the year when the soils are below their plastic limit wherever possible. However, due to the scale of the Proposed Development, it is understood that some soil handling when the soils are wet (in a plastic state) may be necessary, although wet handling of soils should only be undertaken if there is no practicable alternative or if there are extenuating circumstances such as a requirement complete a crossing within a timeframe agree with a consenting authority. Additionally, these wet working measures should be applied to the highly sensitive (wetter, clay) soils of the Salop association, as required. Section 4.2: Stop Conditions, paragraph 4.2.8. If the soil is excavated and placed in stockpiles when wet (above the plastic limit), they are easily compacted by the machinery handling them, or by the weight of the soil above in the stockpile, and additional measures will be required to minimise damage to soil structure as far as practicable. Such additional measures may include, but are not limited to, reducing stockpile heights to low single tiered mounds, reducing the number of times the soil is handled during wet, using equipment that is less detrimental to soil structure (excavator and dump truck). As well as this damage to soil structure, when soils within a stockpile are compacted, the core of the stockpile remains anaerobic throughout the storage period. This damage results in the soil being very difficult to handle and re-spread at the time of reinstatement (i.e., it will not be in a friable state and will not break down into a suitable tilth). In this case, in order to achieve the required standard of restoration, a period of drying and appropriate additional cultivation is required (to repair soil structure and re-aerate the soil) to ensure the soil is acceptable for planting. Should wet handling of soils be required, appropriate soil handling, drying and cultivation methodologies will be set out in the Detailed SMP and in site-specific construction method statements, as required. Wet working of soils will be monitored by a suitably qualified individual; and toolbox talks will be given to site staff prior to any wet working commencing to ensure that the specific requirements are fully understood.
2.17.31	**NE26e**	oSMP paragraph 4.5.1 discusses topsoil and subsoil storage. In all cases topsoil and subsoil must be separately handled to avoid mixing. Where soils are stored, the different soil types will need to be kept separated in the storage bunds. This	Natural England's comment is noted and the Outline SMP has been amended as follows (with additional text in **bold**):

Ref	Topic	Matter raised in Written Representation	Applicant response
	Soils and Best and Most Versatile Land	should be reflected in the Restoration Plans (1-12), accompanied with a detailed soil balance.	Section 4.5: Soil Stripping, paragraph 4.5.1. **Soil horizons should be stripped according to their natural occurrence and separately according to their main functional characteristics. Therefore, to avoid mixing of different soil horizons and soil types, topsoil and subsoil will be handled and stored separately, this includes the separate handling and storage of any different district subsoil horizons; and similarly different types of topsoil and subsoil will also be handled and stored separately. See also section 4.9: Stockpile Records.** Topsoil can be stored on either topsoil (of the same type) or on subsoil. Subsoil can ONLY be stored on subsoil and therefore the topsoil must be stripped from subsoil storage areas in advance of subsoil stripping and subsequent storage. Section 4.5: Soil Stripping, paragraph 4.5.2. The stripping method should follow one of the suggested methods as described in the Institute of Quarrying's Good Practice Guide for Handling Soils in Mineral Workings (Ref. 3). As stated above, topsoils and subsoils will be stored separately. **Prior to stripping commencing, the location of each stockpile should be determined, ensuring separation of the different soil types to be stripped, See also section 4.9: Stockpile Records.** Section 4.9: Stockpile Records, paragraph 4.9.1. The locations and footprints of each stockpile should be accurately recorded on a plan of appropriate scale**. Each stockpile should be assigned a unique identifier code, so that records regarding the stockpile are clearly traceable and distinguishable from those of other stockpiles.** Marker posts should be provided in locations which have been surveyed and recorded**; marker posts should display the stockpile identifier code.** Section 4.9: Stockpile Records, paragraph 4.9.2. The approximate volume of each **(uniquely identified)** stockpile should be recorded, along with details of the type of soil stored **and the location from which the soil was stripped, which will allow cross reference with the detailed soil survey data if required.** New paragraph added at Section 4.9: Stockpile Records, paragraph 4.9.3. **The detailed SMP will contain a soil balance.** The Applicant believes that the reference to Restoration Plans (1-12) within Natural England's comment is erroneous, as plans of this description were not submitted with the ES or any DCO supporting documentation. However, the Applicant confirms that the locations and footprints of each stockpile will be accurately recorded on a plan of appropriate scale.
2.17.32	**NE26f** **Soils and Best and Most Versatile Land**	oSMP paragraph 4.7.5 (APP-096) discusses stockpile height. Best practice advises topsoil bunds shall not exceed 3 m in height and subsoil (or subsoil substitute) bunds shall not exceed 5 m in height. There is an increased risk of soil compaction when increasing height of storage mounds, particularly where long term storage is expected. As a result, exceeding these heights should be avoided unless absolutely necessary and agreed by a suitably qualified specialist. Mowing and stripping should not be carried out during wetter periods when soils moisture content exceeds their lower plastic limit. Tracking of heavy machinery for maintenance interventions will increase the risk of soil compaction.	Natural England's comment is noted. Section 4.7 of the Outline SMP **[APP-096]** discusses the good practice that will be in place for the creation of stockpiles, and states that topsoil stockpiles should not exceed 3 m in height and subsoil stockpiles should not exceed 5 m in height. Stockpile heights appropriate to specific to the soil types /conditions present on site will be set out in the detailed SMP. Stockpiles above the maximum heights referred to above are not anticipated to be required, and the Applicant confirms that this will be avoided unless absolutely necessary. Should higher stockpiles be required, their appropriateness will be established on a location-specific basis by a suitably experienced person, taking into account factors such as soil texture and soil wetness. Natural England's comment and the importance of maintaining healthy stockpiles are noted. As stated in the Outline SMP paragraph 4.7.5 **[APP-096]**, vegetation cover on the stockpiles will be managed by spraying, mowing or stripping as appropriate and location-specific construction method statements, or similar, will be prepared to manage these operations. These documents will define the conditions when maintenance operations will/ will not be permitted including preventing maintenance operations in wet weather conditions or when the stockpiled soil is in wet state (above their plastic limit). See sections 4.2 and 4.3 of the Outline SMP. The

Ref	Topic	Matter raised in Written Representation	Applicant response
			construction method statements will also cover the types of machinery to be used to limit the risk of soil compaction.
2.17.33	**NE26g** **Soils and Best and Most Versatile Land**	oSMP paragraphs 4.12.6 and 4.12.15 discuss decompaction. The depth of decompaction should reflect the depth of compaction. Additionally, where compaction is likely to take place further consideration should be given to providing a decompaction strategy to maximise the effectiveness of decompaction methods. Further guidance may be found here; https://f.hubspotusercontent30.net/hubfs/885685/Soils%20Guidance/IQ%20Soil%20Guidance%20Sheet%20O.pdf	Natural England's comment is noted and for completeness the Outline SMP has been amended as follows (with additional text in **bold**): Section 4.12: Restoration, paragraph 4.12.15. Due to the use of subsoil as the working surface, subsoil decompaction will be required prior to the placement of the topsoil, **with depth of decompaction reflecting the depth of compaction so that the compacted layer is fully removed**. **The decompaction** method using a low ground pressure bulldozer either fitted or towed with winged subsoiler tines is recommended; **and further details will be provided in the detailed SMP based upon measures set out in Sheet O: Soil Decompaction by Bulldozer Drawn Tines, of the IoQ guidance. If required, for example on steep and/or complex landforms where use of a tined subsoiler is not possible, the detailed SMP will set out an alternative decompaction methodology based upon Sheet N: Soil Decompaction by Excavator Bucket, of the IoQ guidance.** For the decompaction to be effective, the moisture content of the soil must be below the lower plastic limit, so that the soil is dry enough to shatter and for fissures to be created. As the soil in the trench is to be deposited through loose tipping (see earlier section), no ripping of the trench area will be required. Further information on the issues surrounding soil compaction can be found in the IoQ Guidance: Supplementary Note 3 – Compaction. Note: IoQ guidance = Institute of Quarrying (2021). Good Practice Guide for Handling Soils in Mineral Workings.
2.17.34	**NE27** **Protected Species**	Natural England has adopted standing advice for protected species, which includes guidance on survey and mitigation measures. Natural England is not providing bespoke advice on the protected species information provided in the ES for this project. A separate protected species licence from Natural England or Defra may be required. Applicants should refer to the guidance at Wildlife licences: when you need to apply to check to see if a mitigation licence is required. Applicants can also make use of Natural England's charged service Pre Submission Screening Service for a review of a draft wildlife licence application. Natural England can then review a full draft licence application to issue a Letter of No Impediment (LONI) which explains that based on the information reviewed to date, that it sees no impediment to a licence being granted in the future should the DCO be issued. See Advice Note Eleven, Annex C – Natural England and the Planning Inspectorate | National Infrastructure Planning for details of the LONI process. Natural England have released a countersigned IACPC to the customer via our District Level Licencing Scheme for Great Crested Newts. Natural England have not received any further correspondence in relation to other protected species licences.	Noted.
2.17.35	**NE28** **Biodiversity Net Gain (BNG)**	The Environment Act 2021 includes NSIPs in the requirement for Biodiversity Net Gain (BNG). The biodiversity gain objective for NSIPs is defined as at least a 10% increase in the predevelopment biodiversity value of the on-site habitat. It's the intention that BNG should apply to all terrestrial NSIPs accepted for examination from November 2025. This includes the intertidal zone but excludes the subtidal zone. We welcome the commitment to delivering BNG on this project. We recommend that the target increase in BNG of at least 10% across all biodiversity unit types is secured by a suitably worded requirement in the DCO. Natural England has not	The Applicant has responded in detail to these points within its Response to the Examining Authority's First Written Questions **[REP1-045]**. Please see the responses to WQs 1.8.12 and 1.7.35.

Ref	Topic	Matter raised in Written Representation	Applicant response
		reviewed the draft BNG strategy and assessment in depth. In addition to the applicant's intent to link current BNG sites to new proposals we would advise that opportunities are explored to extend appropriate habitats to designated sites. The biodiversity baseline should include all land contained within the site's red line boundary and proposals can be iteratively refined over time and throughout detailed design. We encourage developers to: • develop BNG proposals in adherence with well-established BNG principles: o BS 8683:2021 Process for designing and implementing Biodiversity Net Gain o CIEEM/IEMA/CIRIA good practice principles (2016) and guidance (2019). • use the Defra biodiversity metric to calculate BNG and adhere to the rules and principles set out within the metric guidance. Biodiversity gains should be secured for a minimum of 30 years and be subject to adaptive management and monitoring. BNG plans should be secured by a suitably worded requirement in the DCO.	
2.17.36	**NE29a** Protected Landscapes	Comment: Natural England advises that the ES does not include a full justification as to why the project cannot avoid the Lincolnshire Wolds National Landscape. Recommendation • A full justification behind the need to directly impact the National Landscape should be provided, inclusive of why route Option B1 is the only valid alternative route that directly avoids the National Landscape, and why Option B2A is the preferred route given that this option cuts through the National Landscape directly—with open trenching—and abuts it for around 3km along the A18 boundary (AS-020).	Many potential constraints were considered when developing the route of the Proposed Development, however there were six key considerations, which were: • The safety of local communities • Built up areas or sensitive buildings such as schools • Areas protected for their habitats and species • The Lincolnshire Wolds Area of Outstanding Natural Beauty (no the Lincolnshire Wolds National Landscape (LWNL)) • Areas that are vulnerable to flooding, and • Historic monuments Of these, routeing away from local communities and built up areas were the primary considerations. Routeing south from Immingham it is necessary to cross either east or west of Laceby. Crossing to the west of Laceby means it is inevitable that the route would be in the LWNL. Crossing to the east of Laceby would avoid the LWNL, however it would mean the pipeline would have to cross somewhere between the Laceby and the large urban area of Grimsby. In addition to the existing extensive urban development on the outskirts of Grimsby, North East Lincolnshire Council has allocated a large area west of Wybers Wood and Laceby Acres for future housing development (North East Lincolnshire Council Local Plan 2013 to 2032 (adopted in 2018)). This area (reference HOU342 Grimsby) is estimated to deliver 2,593 housing units by 2032. In addition, there are four smaller housing allocations around the edge of Laceby. The existing residential communities, in addition to this considerable extension to the western side of Grimsby means it would not be possible to route the pipeline in this area, whilst remaining compliant with our key routeing criteria relating to local communities and built-up areas. There are no other viable options available to route south from Immingham to Theddlethorpe that avoid the LWNL. For this reason, coupled with the fact that the development is a buried pipeline above which land would be returned to its previous condition and use, the decision was taken to route a short section of the pipeline in the LWNL, but to exit the area as soon as reasonably practicable to do so.

Ref	Topic	Matter raised in Written Representation	Applicant response
			From the point where the pipeline exits the LWNL the route is again dictated to a large extent by the presence of larger centres of population including Waltham and Holton le Clay, which is why the route remains adjacent to the A18 for several kilometres.
2.17.37	**NE29b** Protected Landscapes	Comment Natural England do not consider that a full assessment of the impacts on special qualities has been provided, and therefore cannot agree with the conclusion that potential landscape effects on the Lincolnshire Wolds National Landscape are not significant for the purposes of EIA (minor adverse effects during construction reducing to negligible adverse during operation, paragraph 7.12.1, APP-049). Recommendation • Assess impacts to all relevant special qualities, including chalk streams. • Distinguish between effects on defined special qualities grouped under the heading "landscape character". • We recommend that the effects of the proposed scheme on the special qualities of the Lincolnshire Wolds National Landscape are provided in table format	The Applicant has reviewed this further detailed advice and prepared a supplementary note that will be shared with Natural England. A meeting has been arranged for 21 May to discuss the supplementary note, a copy of which the Applicant intends to issue at Deadline 3.
2.17.38	**NE29c** Protected Landscapes	Comment Natural England cannot agree with the conclusion to the assessment of impacts to special qualities provided, which is that "the affected section of the AONB would be small in extent and any impacts would be of short duration and reversible" (paragraph 7.8.82, APP-049). Recommendation • Remove reliance in the assessment on the mitigating effect of geographic extent on the assessed harm to the special qualities. • Provide details on which elements of the project have been assessed as being situated within the setting of the Lincolnshire Wolds National Landscape • A key embedded mitigation measure for the Lincolnshire Wolds National Landscape is a short construction timeframe. Clarity is needed on the expected timeframe for works in the Lincolnshire Wolds National Landscape. • Further clarity on whether the route can be fully and successfully reinstated.	The Applicant has reviewed this further detailed advice and prepared a supplementary note that will be shared with Natural England. A meeting has been arranged for 21 May to discuss the supplementary note, a copy of which the Applicant intends to issue at Deadline 3.
2.17.39	**NE29d** Protected Landscapes	Comment Natural England advises that the evidence presented does not rule out the persistence of significant residual effects on the statutory purposes of the Lincolnshire Wolds National Landscape within the operational phase. Recommendation • A list of the potential impacts to the Lincolnshire Wolds National Landscape that are not fully reversible, and their significance. • Remove reliance on the mitigating effect of remaining field boundaries in the landscape when concluding the impact of hedgerow loss with potential to affect the Lincolnshire Wolds National Landscape. • Clarify the maximum hedgerow removal distance.	The Applicant has reviewed this further detailed advice and prepared a supplementary note that will be shared with Natural England. A meeting has been arranged for 21 May to discuss the supplementary note, a copy of which the Applicant intends to issue at Deadline 3.
2.17.40	**NE29e** Protected Landscapes	Comment Natural England advise that the assessment of cumulative effects should include an assessment of the impacts of relevant proposals currently at scoping stage, such as the Grimsby to Walpole National Grid project (Section 7.11, APP-049). Recommendation	At the time the cumulative assessment was undertaken National Grid had not submitted a Scoping Report for the Grimsby to Walpole Project. As of the date of this response a Scoping Report has still not been submitted. It is therefore not possible for the Applicant to include an assessment of cumulative effects with the Grimsby to Walpole project. It will be necessary, however, for applicant for the Grimsby to Walpole project to consider the Viking CCS Pipeline in its cumulative assessment.

Ref	Topic	Matter raised in Written Representation	Applicant response
		• Provide justification as to whether the assessment of cumulative effects should include the Grimsby to Walpole National Grid project.	
2.17.41	**NE29f** Protected Landscapes	Comment Natural England advise that all visible surface infrastructure is considered within the landscape and visual assessment, inclusive of the temporary access and laydown areas, one of which includes HGV parking and hard infrastructure within the Lincolnshire Wolds National Landscape boundary near Irby upon Humber (Chapter 3, Figure 3-30 1 of 3, APP-045). Recommendation • Provide justification that all visible surface infrastructure is considered within the landscape and visual assessment. • Ensure the landscape and visual assessment considers the impact of temporary access and laydown areas.	All visible infrastructure associated with the Proposed Development including the impact of temporary access and laydown areas have been assessed within ES Chapter 7 Landscape and Visual **[APP-049]**.
2.17.42	**NE29g** Protected Landscapes	Comment Natural England advise that there is a need for clarity on whether the route can be successfully reinstated. Recommendation • The ES should include a clear assessment, based on a full survey of the route, of the potential for and risks to full reinstatement of the route within the Lincolnshire Wolds National Landscape and its setting. • Information should be provided on the feasibility and risks of using trenchless methods for avoiding trees, including the suitability of a 2m minimum depth under trees. • The LVIA should reference the Soil Management Plan, which is important in ensuring the land is restored suitably to enable successful vegetation reinstatement. • We advise that information is supplied on whether the trenchless methods described risk disturbing sensitive chalk streams, and what residual impacts could occur. • Clarity is sought on any requirement for signage along the route of the pipeline during the operation.	• There are considered to be no risks to successful reinstatement of the pipeline route within the Lincolnshire Wolds National Landscape (LWNL). Successful reinstatement of land depends in part upon the resilience of the soils to damage when they are moved and reused. A soil's natural resilience to damage is a function of its texture (how clayey or sandy the soils is, with clay soils being less resilient than more sandy soils), and the soil's drainage characteristics (with wetter soils being less resilient to damage than drier, better drained, soils). This is reflected in the assessment methodology set out in the Institute of Environmental Management & Assessment (IEMA) guidance document 'A New Perspective on Land and Soil in Environmental Impact Assessment' which was followed in the assessment presented in ES Chapter 10: Agriculture and Soils **[APP-052].** Within the LWNL the pipeline will be routed through soils of the Holderness and Burlingham 2 soil associations, both of which are classed as being of medium sensitivity and which are readily protected from damage through the application of industry standard good practice measures for soil handling. Detailed surveys to further describe the soils present within the working areas of the pipeline (including those within the LWNL) will be undertaken post-consent to inform the detailed Soil Management Plan (SMP). This will build upon the Outline SMP [**ES Appendix 6.4.10.1 Revision B** submitted at deadline 2] in setting out the appropriate / soil-specific soil handling methods to be applied during construction and reinstatement. Consequently, there would be no discernible loss or reduction in soil functions or soil volumes that would restrict or prevent the pre-construction land use from being reinstated (i.e., no downgrading of land quality would occur). • As set out in the Outline SMP **[ES Appendix 6.4.10.1 Revision B]** submitted at deadline 2, the quality of the soil reinstatement will be verified by the project's Land Officer (or similar); and post-restoration surveys will be conducted across all land reinstated to agriculture, to determine whether target soil profile specifications have been met. This 'after' statement will be compared to the 'before' statement (the pre-construction survey data) to verify that the land has been restored to the required standard. • It is highly unlikely that trenchless techniques will need to be used to avoid trees as the route within the LWNL has been designed to avoid treed areas wherever possible. Where there are lines of trees to be crossed there are typically gaps between them that are sufficiently wide so that tree loss can be avoided or reduced. If trenchless techniques were used, it is considered that the proposed 2m minimum depth would be sufficient. Typically, the roots of UK native

Ref	Topic	Matter raised in Written Representation	Applicant response
			trees extend to a depth of no greater than 2 metres. Around 80-90% of the widespread root structure is found within the top 60 centimetres of the soil profile. • A reference to the relevant soil monitoring and management measures in the Soil Management Plan **[APP-096]** has been included in update B of the Outline Landscape and Ecological Management Plan (OLEMP) [6.8] • There is considered to be no risk to chalk streams as a result of the trenchless techniques proposed to cross under them. • There is no need for signage along the route of the pipeline other than to identify PRoW diversions and at the side of the construction access routes to guide/manage traffic.
2.17.43	**NE29h** Protected Landscapes	Comment Natural England advise that there is a need for clarity on what monitoring arrangements will be put in place and what remedial works might be undertaken if an adequate level of reinstatement is not being achieved. Recommendation • Provide more information on what monitoring arrangements will be put in place and what remedial works might be undertaken if an adequate level of reinstatement is not being achieved. • Ensure the outline Landscape and Ecological Management Plan includes the Landscape Design Principle (embedded mitigation) for monitoring. • Provide clarity on when the detailed plan for the establishment and management of new hedgerows will be developed	• Reinstatement of agricultural land will be undertaken in line with the Soil Management Plan **[APP-096]**. This plan includes a requirement for annual monitoring to check for significant differences in crop performance, compaction and waterlogging between the restored and undisturbed land, until such time as unrestricted agricultural use can commence. As described in the response to Topic NE29g, pre-construction and post-restoration survey data will be used to verify that the land has been restored to the required standard. It is not expected that remedial works would be required, however if a need is identified the remedial measures would be similar to the proposed reinstatement work (as described in the Outline SMP [**ES Appendix 6.4.10.1 Revision B** submitted at deadline 2]) and may include reinstalling underdrainage, further decompaction of subsoil (see response to Topic NE26g), further topsoil cultivation (tilling), application of lime or fertiliser, etc. Any remediation measures would be undertaken in agreement with landowners and (if applicable) tenant farmers. • The Outline Landscape and Ecological Management Plan (OLEMP) (Revision A) **(document reference 6.8)** sets out the monitoring periods during the five-year establishment maintenance period and long term maintenance period for newly created hedges. A detailed plan for the establishment, management and monitoring of new hedgerows will be developed within the Final LEMP.
2.17.44	**NE29i** Protected Landscapes	The proposal is located partly within/within an area which Natural England has assessed as meeting the criterion for designation as a Heritage Coast. Whilst this assessment process does not confer any additional planning protection, the impact of the proposal on the natural beauty of this area may be a relevant matter in the determination of the proposal. At present, Natural England considers the Lincolnshire heritage Coast to be a valued landscape in line with paragraph 180 of the National Planning Policy Framework (NPPF). Without formal definition of the landscape and it's special character, specific assessment of the impact on the landscape is not possible. Nonetheless, NE consider that any infrastructure development should consider its impact on the area, reflect or enhance its intrinsic character and natural beauty and be in line with relevant National Policy Statements and development plan policies. A new Heritage Coast is formally defined once a Memorandum of Agreement is signed by Natural England and the local authorities which cover the area. Following signing of the agreement planning policies and decisions should be consistent with the special character of the area and the importance of its conservation, in line with NPPF Paragraph 184 and NPS EN-1 sections 5.6.13, 5.10.10 and 5.10.11.	Impacts on landscape character to Local Character Area (LCA) J1: Tetney Lock to Skegness Coastal Outmarsh and LCA K1: Donna Nook to Gibraltar Point Naturalistic Coast have been assessed within ES Chapter 7 Landscape and Visual **[APP-049]** following guidance and methodology as set out within the Chapter.
2.17.45	**WQ 1.7.27** Requirement 5	Are there other bodies, such as NE, EA and HE and/or local groups that should be consulted, along with those already identified? If so, please amend as necessary, if	The Applicant has no further comments.

Ref	Topic	Matter raised in Written Representation	Applicant response
		not please explain. Please clarify how long the parties would be given to review and comment on the documents? Natural England does not need to be consulted on the final CEMP for this project. However, we highlight that any mitigation measures relied upon in the conclusions of the shadow HRA should be included in the draft and final CEMP. We also refer to our outstanding comments regarding the assessment of impacts and required mitigation measures. Therefore, we may have additional comments on the draft CEMP, as discussions on proposed mitigation measures progress.	
2.17.46	**WQ 1.8.6** Invasive Non-Native Species (INNS)	The Applicant has identified that invasive non-native species are present in the Order Limits [APP-048]. Mitigation measure B1 suggests a management plan will be prepared to ensure such species do not spread. 1) Is it considered, given the species identified, that any specific measures need to be taken and/or committed to now? 2) Should the project adopt a more proactive policy of seeking to remove such species where encountered along the pipeline-laying route? 3) Would micro-siting around such INNS be an appropriate technique with assured biosecurity? Natural England consider the INNS identified at the site are unlikely to cause a significant effect to any designated sites; as such, have no detailed comments to make in this regard. Nonetheless, we welcome the intent to develop an INNS Management Plan as part of the CEMP to prevent the spread of INNS; would always encourage a proactive approach to removal of INNS wherever possible and/or feasible.	The Applicant has no further comments.
2.17.47	**WQ 1.8.9** Cumulative Effects	Cumulative Effects State whether or not the Applicant's approach to scoping and identifying likely cumulative effects, and the subsequent conclusions drawn within ES Chapter 6 is acceptable and inclusive [APP-048, section 6.11]? Natural England has no comments to make on the approach to scoping and identifying likely cumulative effects. We have no specific additional comments to make on the conclusions drawn within ES Chapter 6; however, we highlight that discussions are ongoing regarding potential intra-project effects from disturbance to functionally linked land during construction (NE3, NE12)	As agreed, further detail on potential cumulative effects has been added to the updated Revision B of the Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)**.
2.17.48	**WQ 1.9.3** Methodology	Are NE (and others) content that the Applicant has used an appropriate methodology and guidance to inform the assessments and calculation of effects' significance in ES Chapter 6 [APP-048, Paragraph 6.4.9]? Natural England has no comments to make on the methodology and guidance to inform the assessments and calculation of effects' significance in ES Chapter 6.	The Applicant has no further comments.
2.17.49	**WQ 1.9.11** Cumulative effects	In ES Chapter 6 [APP-048, Paragraph 6.11.4] it states that because ecological reports had not been submitted for other developments, it had not been possible to assess potential cumulative effects. This reasoning appears elsewhere across the ES as well. Are there any concerns about the Applicant's approach to determining or calculating cumulative effects or is the justification for not considering certain developments justified in this instance? Natural England accepts that because ecological reports had not been submitted for other developments, it has not been possible to assess potential cumulative effects in detail for this project. We consider that the potential for cumulative effects between these projects should be assessed in detail in the assessments for the subsequent projects.	The Applicant has no further comments.

Ref	Topic	Matter raised in Written Representation	Applicant response
2.17.50	**WQ 1.11.7** Soil Management Plan	In their submission [RR-073], NE confirm that they are advising the Applicant on soil resources. NE also said they would be reviewing the Soil Management Plan [APP-096]. Are there any further comments on this? Natural England's detailed advice in relation to soils and the oSMP is contained within our written representations (NE26a-g).	The Applicant has no further comments.
2.17.51	**WQ 1.12.5** Pathway for Likely Significant Effects (Stage 1 screening)	The HRAR [AS-026, Paragraph 6.2.64] suggests that pollution in watercourses has to travel a long way to the Humber Estuary and thus will be strongly diluted to a point there will not be a likely significant effect. However, this does not consider a potential pathway of effect of water pollutants on functionally linked land or upon inland pools/ ponds used by SPA-component bird species. For example, if a pollutant entered the water and travelled downstream to functionally linked land its concentration would be higher. Can it be explained whether or not this is a pathway of concern and why this has not featured in the HRAR? Natural England considers that the existing assessment of potential water quality impacts in the Report to Inform the HRA also applies to potential impacts on functionally linked land associated with the Humber Estuary SPA. Natural England agrees that, with the embedded mitigation and a Construction Environmental Management Plan described in paragraph 6.2.63 of the Report to Inform the HRA, impacts from run-off are predicted to be short term, intermittent and spatially local. We agree with the conclusions in paragraph 6.2.66 that there will be no likely significant effects from changes in water quality and this pathway of effect can be screened out.	The Applicant has no further comments.
2.17.52	**WQ 1.12.7** Natterjack Toads	The Applicant has assessed the only pathway for a likely significant effect on natterjack toads is for encroachment of machinery into the living habitat, proposing mitigations to avoid such an occurrence happening [AS-026, Paragraphs 6.2.93, 7.3.39]. Are NE content that the works to the Dune Valve Station (and access thereto, including use of a crane [AS-026, Paragraph 6.2.130]) would not cause other pathways of effect to occur (for example from noise and visual disturbance, vibration or dust)? Natterjack toads are not known to be present in the location of the Dune Valve Station or access route. NE consider the key sensitivities of the species to be loss and damage to suitable habitat. As a result, other possible disturbance effects of the works at the Dune Valve station are considered minor, and unlikely to cause a significant effect on Natterjack toads associated with the nearby designation. In addition, Tables 2 and 7, at Appendix G and H of the Report to inform the HRA (AS-026), respectively, indicate that the impact of dust and particulates have been assessed regarding Natterjack toad; it is considered that with the implementation of the CEMP, no adverse effect on the species is considered likely. NE concurs with this conclusion. Nonetheless, it is a protected species; therefore if Natterjack toads are identified during works, a Mitigation Licence would be required to continue.	The Applicant has no further comments.
2.17.53	**WQ 1.12.8** Grey seals	No Adverse Effects on Integrity (AEoI) is predicted in respect of the grey seal feature of the Humber Estuary Special Area of Conservation (SAC) [AS-026, Paragraph 6.2.91]. This is due to the breeding site being 13.25km north of the Proposed Development. For the purposes of clarity, are there no recorded seal	The Applicant has no further comments.

Ref	Topic	Matter raised in Written Representation	Applicant response
		haul-out sites (or other records of seal foraging activity) in proximity to the Saltfleetby-Theddlethorpe Dunes and Gilbraltar Point SAC? No seal haul out sites are known to be present within proximity to the proposed development. Natural England does not consider that there are any potential impacts on seal haul-out sites from the proposed development.	
2.17.54	**WQ 1.12.9** Noise and disturbance mitigation	Does NE consider that the simple erection of closeboarded fencing would sufficiently reduce noise and disturbance to a level whereby an AEoI can be ruled out [AS-026, Paragraphs 7.3.12, 7.3.19 et al]? As per the key issues NE3 and NE12 above, further assessment is required on the sequence / timing of works and the availability of roost and feeding sites within the study area to provide context on the proportion of suitable habitat that would be affected at any one time and determine whether additional mitigation measures, such as restrictions on the timing/extent of works at sensitive times of the year, may be required. Therefore, there is currently not enough information to agree that the erection of close-boarded fencing is sufficient mitigation. However, we will continue discussions with the applicant on this topic.	Further detail on proposed locations for noise and visual screening has been added to the updated Revision B of the Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)**.
2.17.55	**WQ 1.12.10** Pink-footed geese mitigation	Given the abundance of pink-footed geese in the locality [AS-026], are the mitigations proposed by the Applicant sufficient to rule out an AEoI? If not, what measures should be adopted? As per the key issues NE3 and NE12 above, further assessment is required on the sequence / timing of works and the availability of roost and feeding sites within the study area to provide context on the proportion of suitable habitat that would be affected at any one time and determine whether additional mitigation measures, such as restrictions on the timing/extent of works at sensitive times of the year, may be required. There is currently not enough information to agree that the proposed mitigation is sufficient. However, we will continue discussions with the applicant on this topic.	Further detail on the sequence and timing of works has been added to the updated Revision B of the Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)**.
2.17.56	**WQ 1.12.11** Red-throated diver assessment and mitigation	The ExA notes from NE's relevant representation [RR-073] that there are no concerns regarding the Greater Wash SPA. Nonetheless, the ExA notes that the Applicant states red throated diver from the Greater Wash SPA, whilst not present in the Order Limits, may fly over the Proposed Development [AS-026, Paragraph 6.2.147]. The species is known to demonstrate high levels of avoidance and subsequent displacement effects may occur. 1) Why has displacement not been considered as a potential pathway of effect, particularly given the 25m stack at Theddlethorpe? 2) How much more of a likely significant effect would occur if the 'emergency' 50m stack were to be erected? Red Throated-Diver are a seabird; Conservation advice for the species states that: 'Red-throated diver do not return to land during the non-breeding season, spending time rafting and fishing in shallow coastal waters'. As a result, significant effects upon this species from onshore development may be unlikely. Nonetheless, Natural England would be pleased to review the information/assessment provided when the Applicant has responded to this question.	Displacement of red-throated diver is only considered a concern from structures or ships in the marine environment in which they forage and roost outside of the breeding season. There is no evidence of red-throated diver being displaced due to structures on land or being displaced while on the wing over land. There is therefore no reason to conclude that the vent stack at the Theddlethorpe Facility would be disruptive to red-throated diver. Although it is widely known that wintering red throated divers can move long distances to locate food sources, their distribution in winter is restricted mainly to coastlines and other offshore or near shore waters, rarely being found inland.[1] Furthermore, the former Theddlethorpe Gas Terminal plot held significant infrastructure including pipe racks and flare stacks until around the middle of 2021, by which time most of the above-ground infrastructure had been removed. Therefore, until recently baseline conditions included infrastructure similar to that proposed by the Applicant and it would be expected that any birds that do move inland would be habituated to its presence. For these reasons, impacts on red-throated diver were screened out of the assessment of Likely Significant Effects submitted as part of the DCO application.

Ref	Topic	Matter raised in Written Representation	Applicant response
			[1] Natural England (2012). Red-throated diver: species information for marine Special Protection Area consultations. Natural England Technical Information Note TIN141
2.17.57	**WQ 1.12.13** Position Statement	Position Statement The content of [RR-073] is fully acknowledged and clear. However, for the purposes of full disclosure, please can the following questions be briefly responded to: 1. Can NE confirm whether or not the HRA screening matrices [AS-026, Appendices G and H] are complete and acceptable? If not, why not? 2. Are NE satisfied that the amount of survey data used to inform the HRA and Appropriate Assessment is both sufficient and robust to reach reasoned scientific judgements? If there are perceived deficiencies, explain what these are and the concerns that emerge from this. 3. Can NE confirm whether or not it agrees with the Applicant's conclusions regarding potential for likely significant effects? It may be beneficial to use the table [AS-026, Table 7-1] and add a column to confirm NE's agreement or disagreement. If there is disagreement, please set out the reasons. 4. Can NE confirm its position, in tabular format, at this stage whether an AEoI can be ruled out in respect of each designated European site. This table may be updated during the Examination as, when and if NE's position changes. If the Applicant's AEoI conclusions are disputed, please explain why in separate free-flowing text. 1. Can NE confirm whether or not the HRA screening matrices [AS-026, Appendices G and H] are complete and acceptable? If not, why not? <u>Appendix G</u> Natural England considers that, with the above agreed updates, the information in the screening matrices in Appendix G to be complete and acceptable. As per key issue NE8, we advise that impacts from lighting should be considered at the screening stage. As per key issue NE7, we advise black-tailed godwit should be screened in for further assessment on noise and visual disturbance at Rosper Road Pools. <u>Appendix H</u> Natural England's position is that the matrices in Appendix H cannot be considered complete until the outstanding 'amber' issues are resolved. Please refer to our advice on NE3, NE6, NE8, NE9, NE12, NE15, NE16, NE18, NE24 for further detailed advice on these issues. Table 9 of appendix H contains tick marks against an Adverse Effect on the Integrity of SaltfleetbyTheddlethorpe Dunes and Gibraltar Point SAC from Dust and Particulates during construction and decommissioning. This is assumed to be a mistake, as the rationale at footnote 'c' (and at para 7.3.25 of AS-026) explains how effects have been ruled out when considering implementation of the CEMP. This should be updated for clarity. 2. Are NE satisfied that the amount of survey data used to inform the HRA and Appropriate Assessment is both sufficient and robust to reach reasoned scientific judgements? Natural England are satisfied with the amount of survey data used to inform the HRA and Appropriate Assessment. We consider that our previous advice regarding NE4 and NE5 has been adequately addressed, as detailed above. 3. Can NE confirm whether or not it agrees with the Applicant's conclusions regarding potential for likely significant effects? It may be beneficial to use the table	Detail has been added to the updated Revision B of the Report to Inform HRA submitted at Deadline 2 **(document reference 6.5)** to address NE comments.

Ref	Topic	Matter raised in Written Representation	Applicant response
		[AS-026, Table 7-1] and add a column to 55 confirm NE's agreement or disagreement. If there is disagreement, please set out the reasons. Natural England agrees with the applicants' overall conclusions regarding potential for likely significant effects in Table 7-1. As per key issues NE6 and NE7, we have advised that additional SPA bird species are screened in for further assessment. 4. Can NE confirm its position, in tabular format, at this stage whether an AEoI can be ruled out in respect of each designated European site. This table may be updated during the Examination as, when and if NE's position changes. If the Applicant's AEoI conclusions are disputed, please explain why in separate free-flowing text. As per the key issues noted above, Natural England considers there is not currently enough information for adverse effects on integrity to be ruled out for the following pathways: <u>Humber Estuary SPA/Ramsar</u> • Temporary loss of functionally linked land on the pipeline route (construction) • Noise and visual disturbance to birds using functionally linked land on the pipeline route (construction) • Disturbance to breeding birds at Viking Fields during dune valve maintenance (operation) • Disturbance to breeding and non-breeding birds at Viking Fields from works at the southern compound and Theddlethorpe facility (construction and decommissioning) • Lighting disturbance to birds across the development area (construction, operation, decomissioning) We welcome the Applicant's commitment to provide updated assessments for these key issues, and we will review these once submitted. Natural England considers adverse effects on integrity can be ruled out for all other pathways and European sites.	
2.17.58	**WQ 1.12.15** Marine Environment	NE recommends the terrestrial and marine aspects are considered at a holistic level because the Proposed Development is intrinsically linked to an offshore project [RR-073]. 1) What implications does / would this have on the HRA carried out to date? 2) How should the competent authority approach or consider such matters when undertaking the Appropriate Assessment? Natural England are unable to provide a detailed answer to this question at this stage. The matter is the subject of wider internal discussions which are as yet unresolved. We would request that an answer to this question could be submitted at the next deadline (D2 – 17th May 2024).	No further comments.
2.17.59	**WQ 1.13.9** Protected Landscapes	Are NE and the Local Authorities satisfied with scope of mitigation measures (including how it is secured) for the section of AONB within the Order Limits? Have the impacts and mitigation been satisfactorily dealt with for potential impacts on Lincolnshire Heritage Coast? Natural England's detailed advice relating to protected landscapes is contained within our written representations (NE29a-i). We are not yet satisfied with the	No further comments.

Ref	Topic	Matter raised in Written Representation	Applicant response
		assessment of the impact of the development on the Lincolnshire Wolds National Landscape. We will continue to work with the applicant to overcome our concerns on these matters.	

Table 2-18: Network Rail Infrastructure Limited – REP1-081

Ref	Topic	Matter raised in Written Representation	Applicant response
2.18.1	General	This written representation (Written Representation) is submitted on behalf of Network Rail Infrastructure Limited (Network Rail) in response to the application by Chrysaor Production (UK) Limited (Applicant) for the Viking CCS Pipeline Terminal Development Consent Order (Proposed DCO). The Applicant seeks development consent for the authorised development described in Schedule 1 to the Proposed DCO (Proposed Development). Network Rail submitted its section 56 representation (Examination Library Reference No. RR-074) on 22 December 2023. The Proposed Development will require the Applicant to install a pipeline underneath the BR1 Brocklesby to Immingham Branch as well as the Habrough to Grimsby branch (Railway Lines). This land has been acquired by Network Rail for the purpose of its statutory undertaking. The Book of Reference (BoR) identifies 19 plots as land that Network Rail owns or has an interest in. (Network Rail acknowledges that a change request has been made (a decision on which is pending at the date of this submission) that may reduce the number of Network Rail plots affected.)	Noted.
2.18.2	Construction	The Construction Traffic Management Plan (CTMP) is not clear where construction traffic is proposed to be routed, particular with regards to level crossings. Network Rail requires further information to ascertain the extent to which level crossings may be adversely affected by the proposed number and type of vehicle movements. Amendments to the CTMP may be required to ensure that Network Rail's assets are adequately protected.	The Applicant will continue to engage with Network Rail as part of the Statement of Common Ground process to discuss this matter. The proposed construction routes, with information about whether they are proposed for all traffic or LGV traffic only, are shown on Figure 3.46, provided in ES Volume III Supporting Figures **(document reference 6.3)**.
2.18.3	Protective Provisions	Network Rail therefore requests that its standard protective provisions for the benefit of the safety of railway interests (the form of which are at Appendix 1 to this Written Representation) (NR Protective Provisions) are included in the Proposed DCO. Network Rail will update the Examination with further details of any amendments that may be required to the CTMP to deal with impacts to level crossings. Unless the NR Protective Provisions (and any necessary amendments to the CTMP) are included in the Proposed DCO, Network Rail considers that the Secretary of State cannot conclude that the Proposed DCO can be granted without detriment to Network Rail's statutory undertaking and risk to users and operators of the Railway Lines arising.	The Applicant acknowledges Network Rail's comments and notes that the Applicant is in ongoing discussions with Network Rail with a view to reaching agreement on protective provisions before the end of the Examination. As set out in the Draft Statement of Common Ground between the Applicant and Network Rail **[REP1-031]**, the parties have also entered into a Basic Asset Protection Agreement in respect of the Proposed Development.
2.18.4	Protective Provisions	Both permanent and temporary rights are sought over Network Rail land, including operational railway being the Railway Lines. Network Rail's engineers have confirmed that they do not object in principle to the proposed routing of the cables under the Railway Lines, however further work is required to assess any adverse impacts to operational railway and further agreements will need to be entered into	The Applicant acknowledges Network Rail's comment.

Ref	Topic	Matter raised in Written Representation	Applicant response
		to enable those assessments to take place. In addition, Network Rail's standard protective provisions will be required to dictate the process for future assessment.	
2.18.5	Construction	The Construction Traffic Management Plan (CTMP) is not clear where construction traffic is proposed to be routed, particular with regards to level crossings. The Applicant has confirmed that: (a) Roxton Road level crossing would be used by light goods vehicles only and traffic would be limited only to the trenchless crossing crew at that location; and (b) Little London level crossing would be part of a delivery route of linepipe to the central compound and would be used by other support vehicles (including heavy goods vehicles) and light goods vehicle movements. Network Rail is raising further queries with the Applicant to determine the numbers of vehicles proposed to be routed over these level crossings and whether any other level crossings are affected in order to determine whether such vehicle movements would adversely affect the level crossings and require mitigation works to ensure the safety of the railway and its users. Network Rail may seek amendments to the CTMP in order to capture any necessary movement restrictions or approvals and/or seek an agreement to regulate the use of level crossings. The Applicant has confirmed that Queens Road and the Queens Road Bridge which passes over the Railway Lines will not be used for construction traffic. Network Rail therefore will not be seeking mitigation with regards to Queens Road Bridge. Notwithstanding the position with regards to construction traffic, in order to be able to withdraw its objection, Network Rail will need to be confident that the other works proposed within the vicinity of the Railway Lines will not impact the safety of the Railway Lines. To achieve this, appropriate protective provisions in the Proposed DCO that protect and safeguard Network Rail's statutory undertaking will need to be in place.	The Applicant is in ongoing discussions with Network Rail with a view to reaching agreement on protective provisions before the end of the Examination.
2.18.6	Engagement	Network Rail is keen to resolve the issues referred to above to enable it to withdraw its objection to the Proposed Development. Network Rail's solicitors will continue to engage with the Applicant's solicitors to move towards resolution.	The Applicant will continue to engage with Network Rail throughout the examination process.
2.18.7	Protective Provisions	Network Rail invites the Examining Authority to requests that the Applicant amends the DCO by including the NR Protective Provisions at Part 6 of Schedule 9 to the Proposed DCO, as we refer to above (and as attached at Appendix 1).	The Applicant acknowledges Network Rail's comment and notes that the Applicant is in ongoing discussions with Network Rail with a view to reaching agreement on protective provisions before the end of the Examination. As set out in the Draft Statement of Common Ground between the Applicant and Network Rail **[REP1-031]**, the parties have also entered into a Basic Asset Protection Agreement in respect of the Proposed Development.
2.18.8	Protective Provisions	Network Rail does not object in principle to the Proposed Development. However, it requires further information to assess any impacts to level crossings and needs to ensure that works taking place in proximity to its property are properly mitigated. Until such time as Network Rail is given the protection and assurances requested as detailed in this Written Representation, Network Rail's objection to the Proposed DCO will not be withdrawn.	The Applicant acknowledges Network Rail's comment.

Table 2-1920: PD Port Services Limited – REP1-092

Ref	Topic	Matter raised in Written Representation	Applicant response
2.19.1	General	This Written Representation is submitted on behalf of PD Port Services Limited (Company Registration Number 01233997) of 17-27 Queen's Square, Middlesbrough, TS2 1AH ("PD Ports"). This Written Representation follows PD Ports' Relevant Representation [RR-082]. PD Ports makes this Written Representation on two grounds. Firstly, in order to protect its position in relation to land within and adjacent to the proposed Order limits which PD Ports has the benefit of a restrictive covenant ("the Covenanted Land"). Secondly, to ensure that access to and from the PD Ports warehousing site at Unit 7 Laporte Road, Stallingborough, Immingham DN40 2PR ("Laporte Road") is retained and PD Ports' operations from Laporte Road can continue unaffected from any impacts of the Project.	Noted.
2.19.2	Land / Compensation	The Covenanted Land is known as Unit 1 and Unit 2 Manby Road, South Killingholme North Lincolnshire and is registered under HMLR titles HS294686 and HS19809. The Covenanted Land is currently owned by Phillips 66 Limited ("P66"). The Covenanted Land is subject to a covenant for PD Ports' benefit restricting its use to those within Use Class B2 or B8 with an ancillary B1 user. As set out in PD Ports earlier Relevant Representation, compulsory acquisition powers were sought for the subsurface of Plot 1/15, being the northern corner of the Covenanted Land and Plots 1/37, 1/46, 1/58, being the eastern tip of the Covenanted Land as shown on Sheet 1 of 36 of the Lands Plans [APP-016]. The Change Request [AS-038] to [AS-054] has been accepted by the Examining Authority, which removes Plot 1/15 from the Order Limits. In respect to PD Ports interests, only Plots 1/37, 1/46, 1/58, being the eastern tip of the Covenanted Land, are still affected by the DCO. P66 were reported to have undertaken lengthy discussions with Chrysaor in CAH 1. Chrysaor in turn stated negotiations with P66 are at an advanced stage and a suite of agreements consisting of a lease, a deed of easement and a separate agreement are being progressed. Although PD Ports is listed with the Book of Reference [APP-11], Chrysaor has not engaged with PD Ports concerning the impact of the compulsory acquisition of the Project in respect of the Covenanted Land. PD Ports does not appear on the Compulsory Acquisition Tracker [APP-030]. Therefore, PD Ports still considers that it is presently unclear as to how any rights given to Chrysaor through the DCO will take into account the benefit of its restrictive covenant and that the location of the pipeline will not affect the future development potential of the Covenanted Land.	The Applicant will engage with Philips 66 as landowner with the hope of reaching a voluntary agreement that would ensure there was no interference with PD Ports' operations.
2.19.3	Access	In addition, the works comprised in the Application will require road closures and diversions which may affect access to PD Ports site at Laporte Road. Access to Laporte Road will also be affected by the proposed Immingham Green Energy Terminal DCO ("IGET"). Road closures and diversions may be exacerbated if the impacts of the two projects overlap. The IGET proposed road closures and diversions will restrict access to Laporte Road from the Immingham Dock to a three mile diversion route using the A1173 and Kiln lane during its construction phase. Egress from Laporte Road uses the Kiln Lane to access the A180 and the wider national road network.	Pipeline route and construction traffic are not required to use Laporte Road with no actual works in the area that would directly affect this access route. All pipeline crossings of the road network in this area, including of the A1173 and A180, are planned by trenchless technique, hence no diversion or closures would be required. A full construction traffic management plan will be developed during the FEED stage and updated accordingly prior to commencement of the construction phase. Potential cumulative effects with IGET have been considered and are reported in ES Chapter 12: Traffic and Transport (Revision A) **(document reference 6.2.12)**.

Ref	Topic	Matter raised in Written Representation	Applicant response
		The Project proposes works along the A180 and A1173 as shown at Sheets 5 and 8 (at Point 8-SB) of the Public Access and Rights of Way Plan [APP-033]. These works may affect access to and from Laporte Road and potentially interfere with PD Ports' operations. It is unclear how access will be maintained while the IGET diversions are also in place and that these will not result in a further interference with PD Ports' operations. Further, PD Ports considers there is a lack of information provided by Chrysaor with respect to vehicle restrictions, particularly regarding potential weight and height restrictions on the A180 and A1173. Altogether, the lack of this information means that PD Ports cannot fully consider the impact on its own operations as a result of the Project or its impact alongside that of IGET.	
2.19.4	General	In light of the above, PD Ports will continue to participate as a Interested Party to the Examination and reserves the right to make further representations during the Examination process in response to any further information provided by Chrysaor. PD Ports has also requested to speak at CAH 2 on 24 June 2024.	

Table 2-2021: Residents of Corner Farm – REP1-137

Ref	Topic	Matter raised in Written Representation	Applicant response
2.20.1	Safety	The Written Representation: • CO2 is toxic well below asphyxiant concentrations: 5% -> debilitating effects, 10% -> rapid mortality, 20% -> near-instant mortality. • Dense-phase CO2-pipeline ruptures can result in hazard to humans, including toxicity, blast, and thermal shock.	The Applicant is highly experienced in health and safety management and takes very seriously its legal duty under the UK's Health and Safety at Work Act to protect workers and the public from its activities. The Applicant places the utmost importance on the safety of the communities it interacts with, its employees and its contractors who will work on the Proposed Development. Several important factors were considered in routeing the pipeline. These were the safety of local communities, avoiding built up areas and sensitive buildings, areas protected for their habitat and species, the Lincolnshire Wolds Area of Outstanding Beauty, areas that are liable to flood and historic monuments. The pipeline has been designed in compliance with Engineering Standard BSI PD 8010- 1:2016, which makes specific provision for CO_2 pipelines and the approach to routeing including minimum distances to buildings. In addition, the pipeline has been designed in accordance with the established principle of ALARP ("As Low As Reasonably Practicable"), as described in the Health and Safety Executive's (HSE's) longstanding framework document "Reducing Risks, Protecting People." The purpose of ALARP is to ensure risks are reduced as far as is reasonably practicable. The Applicant has referenced the HSE's Tolerability of Risk framework (which is defined in the 'Reducing Risks, Protecting People' framework document mentioned above) to assess the pipeline risks. This assessment shows that the risk to members of the public living near to the Viking CCS pipeline route is well within the framework's lowest classification of risk. Under the framework, the HSE considers that "*risks falling into this region are generally regarded as insignificant and adequately controlled."*
2.20.2	Safety	• A full-bore rupture would have a fatal blast limit of ~90 m. • A 4" rupture of an 18" pipe would have a down-wind toxic footprint extending to 90 m for near-instant mortality, 200 m for rapid mortality, and 380 m for debilitating effects. • Safe shelter could be provided by buildings over 150 m from the release.	
2.20.3	Safety Routeing	• It is necessary both to minimise the frequency and to mitigate the severity of potential hazards. Safe distance is a recommended primary method of mitigation. • In diverting its originally preferred route past Grimoldby it seems that, in its eagerness to give the appearance of safety, the applicant has both increased the potential frequency of hazard events, by lengthening the route, and the potential severity of hazard events, by placing residential properties within the near-instant-mortality or rapid-mortality zones, where none previously lay. If the applicant has used a minimum safe distance in its calculations, it is evidently insufficient to have an appreciable effect in mitigating fatal hazards. • Alternative safe routes are available and have been suggested to the applicant. We hope that they may yet be adopted.	

Ref	Topic	Matter raised in Written Representation	Applicant response
2.20.3	Safety	Comments on First Written Questions: • Routine odorisation of CO2 may assist emergency responders in the event of a rupture. • Plume modelling for vent design should be confirmed by fresh experiment. • Deeper pipelines result in greater hazard ranges.	The HSE does not usually require further action to reduce risks in this lowest classification unless reasonably practicable measures are available, such as developing comprehensive emergency response plans. The Applicant will work with all relevant local authorities to develop such plans. The Applicant has engaged with the HSE, including their science division, to seek their expert opinion on the pipeline design and associated risk assessments. The Applicant has also engaged with other industry experts and will continue to engage both regulator and industry experts throughout the pipeline design and subsequent operation. The Applicant has adopted a robust design and route selection process for the Proposed Development, with safety of local communities being a key consideration. The routeing and design accords with adopted guidance, including on managing risk, and has been informed by advice from experienced technical consultants.
2.20.4	Ecology	Comments on Relevant Representations: • Disruption of grass verges to create passing places could impact on barn owl hunting.	Revision A of ES Chapter 12: Traffic and Transport **(document reference 6.2.12)** has resulted in Pick Hill Lane no longer being identified for use by HGV. This road will now be limited to LGV traffic only, with an estimated number of LGV trips of 20 per week. Red Leas Lane was only ever intended for use by LGVs and again is estimated to have only 20 LGV movements per week. It is therefore not anticipated that passing places would need to be provided. Should passing places be required on other construction access routes, these would be limited in scale and removed and reinstated on completion of the works, with verges restored to their original state.
2.20.5	Consultation / Engagement	• We agree that consultation was inadequate, affected by lack of integrity, and treated more as a PR exercise than a genuine attempt to engage.	In the pre-application phase, the Applicant has undertaken considerable consultation with local communities. As part of this, it has communicated the potential impacts from the Proposed Development to potentially affected people through consultation materials and supporting technical documents. The Applicant has also taken account of their comments and feedback in designing the project, the Applicant has designed the pipeline to avoid and reduce any potential impacts on residential properties.
2.20.6	Need Case	• We agree that the supposed benefits of the Viking CCS project, as proposed, are highly questionable, citing research which concludes that "governments should rapidly scale up CCS but reserve it only for essential use cases" and warns that "using CCS to facilitate ongoing fossil fuel use would be, globally, highly economically damaging".	The UK government has a target of achieving net zero by 2050 and meeting this target will require reduced emissions of CO_2 from existing industries within the Humber and Lincolnshire region. Carbon capture and storage (CCS) is recognised by the Intergovernmental Panel on Climate Change (the IPCC) and the UK government as a vital step on the road to achieving net zero carbon dioxide emissions, with the 6th Carbon Budget outlining plans to capture and store between 20 and 30 million tonnes of CO_2 a year by 2030. The revised draft National Policy Statement for Energy (EN-1) recognises that there is "an urgent need for new CCS infrastructure to support the transition to a net zero economy". CCS is one of many proposed approaches to tackling CO_2 emissions and climate change and is considered a transitional technology. More information is available in the Need Case **[APP-131]**.
2.20.7	General	(1) We wish to thank the ExA for First Written Questions 1.1.22 and 1.3.11, and for the opportunity to submit a Written Representation.	Noted.
2.20.8	Safety	(2) Twenty Relevant Representations cite safety concerns. Unfortunately some misinformation has slipped into circulation, but, while the fear expressed by four representations that a pipeline rupture would asphyxiate every breathing creature within a 15 km radius is incorrect, the concerns of those living close to the proposed route are real and justified.	Please refer to the Applicant's response to 2.20.1-3 above.

Ref	Topic	Matter raised in Written Representation	Applicant response
2.20.9	Safety	(3) CO2 is in fact toxic at concentrations well below those required for asphyxiation, so that, for instance, concentrations ≥20% result in 100% probability of death within a minute, concentrations ≥10.5% result in ≥50% mortality within 10 minutes, and concentrations as low as 6.3% cause disorientation, can lead to loss of consciousness within minutes and even 1% mortality if sustained for ≥1 hour (CO2RISKMAN – Level 3, section 5.12.2; Energy Institute (2010), Tables 3-5, Figure 5).	
2.20.10	Safety	(4) A number of large-scale tests have been conducted to study, and help to model, the range of hazards associated with CO2 pipeline rupture. Perhaps the most illustrative of these is the COSHER JIP test rupture of a buried, dense-phase CO2 pipeline, conducted at the DNV-GL Spadeadam testing and research centre in Cumbria, pictured on the cover of the CO2RISKMAN reports and reported in detail by Ahmad et al. (2015). Please note that this test used an 8" diameter pipe, one third of the 24" diameter proposed. In this test, the visible plume of condensate and ice extended roughly 60 m vertically and 400 m in a downwind direction. However, please note that the visible plume does not necessarily represent the extent of the dense gas hazard and that it boils off well before the invisible blanket-cloud has dispersed. As seen in Ahmad et al. (2015), Fig. 4, the initial plume cascades under its own weight, forming a gas blanket which then drifts in the wind. The toxic gas cloud is accompanied by a rapid drop in temperature (Figures 13 and 14), sufficient to induce cold shock in humans and shatter windows and windscreens. Fine dry-ice particles (-78°C) carried in the cloud may cause freeze burns to airways, eyes, etc. As confirmed in the Satartia incident, the CO2 cloud may be sufficient to stop combustion engines, hampering escape and the emergency response (see also CO2RISKMAN – Level 3, sections 6.3 – 8).	DNV's test was conducted in 2013 as part of a joint industry project. A CO_2 pipeline was deliberately ruptured at the safe environment of DNV's Spadeadam facility to collect data on the release of CO_2. The Applicant continues to work with organisations including DNV to improve industry's application of safe CO_2 pipeline design.
2.20.11	Safety	(5) Larger-bore rupture tests have been conducted at the same site, reported by Xiong Liu et al. (2019), who found that hazard levels of CO2 extended over several hundred metres, depending on windspeed, and that consequence distance varied almost linearly with pipe diameter. In the modelling exercise reported in Energy Institute (2010), fatality ranges are estimated for both toxicity and blast, for a range of pipe diameters at 117 barg (Figures 19-21); higher pressures would render these underestimates. Interpolating for a 24" pipe, the limit of fatal blast would be approximately 90 m. However, this is exceeded by the limit of fatal toxicity. Again by interpolation, the limit of 1% toxic fatality (conservatively equivalent to the HSE's Specified Level Of Toxicity (SLOT)) for a full-bore rupture of a 24" pipe would be approximately 345 m directly downwind. This will be an underestimate, because versions of the PHAST model prior to 8.9 do not include the 'gas blanket' model based on plume behaviour in the above COSHER JIP experiment. For a 4" jet, considered to be an order of magnitude more common, SLOT would similarly be exceeded at approximately 185 m for an unimpeded jet and at approximately 320 m for an impeded jet (e.g. from under a roadway); higher pressures would render these underestimates.	Please refer to the Applicant's response to 2.20.1-3 above.
2.20.12	Safety	(6) In Witkowski et al.(2013), the downwind limits of 5% (debilitating), 10% (rapidly fatal), and 20% (near-instantly fatal) CO2 concentrations are estimated for a 20% (4") rupture of an 18" pipe at 153 barg, placing these at roughly 380 m, 200 m, and 90 m respectively; the duration being dependent on the volume of CO2 expelled. They recommend that "A leak from high pressure pipelines can result in hazard to humans. Therefore, safety considerations require that safety zones should be established around such pipelines, and that the pipelines should be fitted with	

Ref	Topic	Matter raised in Written Representation	Applicant response
		safety valves that, in the case of rupture, shut off the damaged section of the pipeline, limiting in this way the amount of gas released into the surroundings."	
2.20.13	Safety	(7) CO2RISKMAN (2013) also echoes HSE advice in emphasising the need both to minimise the frequency and to mitigate the severity of hazard events. Among mitigation measures, it highlights the need for safe distance, or "segregation by distance between inventories and potential receptors of harm".	
2.20.14	Safety	(8) At short range, escape from a pipeline rupture may be impractical; however, buildings may provide refuge (if not ruptured by blast or temperature differential). Lyons et al. (2015), used the DNV-GL COOLTRANS model with a simplified infiltration scenario, assuming valve closure within 15 minutes, to conclude that "safe shelter will be provided in any building located more than 150m from the release for this case study". Leakier buildings such as the average old Lincolnshire farmhouse, will reach a SLOT DTL at greater distances (see Lyons' published thesis), but in the absence of better data, this is an appropriate working figure.	
2.20.15	Routeing	(9) Following the first round of consultation (EN070008/APP/3.2, 5.3.2), an alteration was made to the preferred route as it passes Grimoldby (EN070008/APP/4.3, sheets 27-29). This new, longer section of the preferred route is the one that concerns us personally, as the DCO limit runs ~33 m from our property (see above for implications in the event of rupture). However, the concern applies generally. The original route, which we assume met other QRA requirements, placed 8 homes, on Pickhill Lane and around the junction of Northgate Lane with Middlesykes Lane, within outdoor SLOT range for a full-bore rupture. None of these were within indoor SLOT range and none within fatal blast or near-instant-mortality range. The diverted route placed 7 different homes, on Red Leas Lane, Marsh Lane, and Pickhill Lane, within outdoor SLOT range. One of these (ours) was placed within indoor SLOT range, fatal blast range, and outdoor near-instant-mortality range. Following further consultation a small adjustment was made to the preferred route (sheet 29), too small however to take Corner Farm out of any of these ranges. (The applicant told us that the route would run "equidistant between Corner Farm and the nearest property" and comments in our Relevant Representation were based on that assumption, but examination of sheet 29 shows that it does not.) Taking measurements from Sheet 29, from the midpoint of the DCO limits, Corner Farm lies within the near-instant-mortality zone, Pickhill Farm lies within the rapid-mortality zone, and both lie within indoor SLOT range and could not be relied upon for safe refuge in the event of a rupture (depending, of course, on wind direction, etc.).	The Applicant has undertaken a detailed and robust route selection process, which gave detailed consideration to alternative routes. The Applicant had regard to the policy context set out in NPS EN-1 and EN-4. As set out in both the 2011 version of EN-1 (section 4.4) and the 2023 version (section 4.3) the policy expectation is that Applicant's will set out within their Environmental Statement the reasonable alternatives that they have studied. This should include an indication of the main reasons for the applicant's choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility. The Secretary of State's consideration of the alternatives studies is to be carried out in a proportionate manner. EN-1 makes it clear that there is no general requirement to consider alternatives or establish whether the proposed project represents the "best option" from a policy perspective. EN-4 sets out guidance on what factors might influence site selection for natural gas and oil pipelines and includes guidance on pipeline safety considerations (section 2.19 of the 2011 version and section 2.21 of the 2023 version). The guidance in EN-4 is also relevant to other nationally significant infrastructure projects for pipeline development and is therefore relevant to the Proposed Development. The guidance on pipeline safety sets out, amongst other things, that: • The principal legislation governing the safety of pipelines (the Pipelines Safety Regulations 1996) requires that pipelines are designed, constructed and operated so that the risks are as low as is reasonably practicable (ALARP). • In determining compliance, HSE expects pipeline operators to apply relevant good practice as a minimum. • In the pipeline industry there are well established standards, covering design, operation and maintenance of major accident hazard pipelines which can be used to demonstrate risks are ALARP. The policy set out within EN-1 and EN-4 reflects the fact that the aim of legislation, guidance and design standards for major infrastructure projects, in a safety context, is to reduce the likelihood of a major incident occurring to a level where the risk is considered to be as low as reasonably practicable, and therefore adequately managed.
2.20.16	Routeing	(10) In diverting its originally preferred route past Grimoldby it seems that, in its eagerness to give the appearance of safety, the applicant has both increased the potential frequency of hazard events, by lengthening the route, and the potential severity of hazard events, by placing residential properties within the near-instant-mortality or rapid-mortality zones, where none previously lay. If the applicant has used a minimum safe distance in its calculations, it is evidently insufficient to have an appreciable effect in mitigating fatal hazards.	
2.20.17	Safety	(11) We assume that the applicant has used a QRA approach similar to that outlined by Cooper & Barnett (2014), and that the requirements of this model were satisfied by both the original preferred route and the diverted route. The difficulty of this approach is that, while it controls overall societal risk, it can leave residents of smaller clusters and isolated dwellings exposed to elevated individual risk and	The Applicant has set out within ES Chapter 2: Design Evolution and Alternatives **[APP-044]** a summary of the site selection process that it undertook whilst the design of the Proposed Development was evolving. That site selection process considered a range of factors, as set out in Table 2-2. The Applicant has explained the main reasons for the route selection that was adopted, which was selected following a robust and detailed process. The detail set out in ES

Ref	Topic	Matter raised in Written Representation	Applicant response
		without safe refuge in the event of a rupture. These residents can effectively be left living under the sword of Damocles.	Chapter 2 aligns with what is required by EN-1. In respect of safety of the pipeline, the Applicant has followed relevant legislation, guidance and design standards for pipelines. The Applicant's approach follows the guidance in EN-4 and the Applicant has demonstrated that the risk is ALARP. In reference to the reroutes proposed by the residents of Corner Farm the Applicant makes the following points: **Point 1 – possible short connection between Corridor E-1B and E-2** The reasons for selecting corridor E-2 over E-1B (and E1A) were set out in ES Chapter 2 **[APP-044]**, as follows: <u>Environment</u> On balance, Corridor E2 is preferred due to most of the corridor being outside of the alluvium superficial geology and outside of Flood Zones 2 and 3, and the presence of fewer biodiversity priority habitats and planning applications. Where other environmental sub-topics have preferences for Corridor E1A or E1B, these are marginal, and are not considered to outweigh the overall preference and suitability of Corridor E2. <u>Technical and Cost</u> Corridor E2 is preferred due to most of the corridor being outside of the alluvium superficial geology and outside of Flood Zones 2 and 3, making in theory for easier construction. There is better access from the local roads than for Corridors E1A and E1B and access for main river crossings (particularly canal crossings) is good. The difficulties of routeing through the Saltfleetby area (Corridor E1A and E1B) are likely to result in additional cost and time (programme). <u>Lands</u> Corridor E1B or Corridor E2 are preferred to avoid Saltfleetby B Gas Terminal. If a connection were made from E-1B to E-2, this would still result in approximately 4.8 km of additional pipeline construction works in Flood Zone 2&3, nearly 4.5 km of which is Flood Zone 3, the highest risk zone. Construction work in Flood Zone 2 and 3 presents several increased challenges and is typically avoided wherever possible. • The works are more likely to be impacted by flooding than works in Flood Zone 1. It is also more likely that construction works will be delayed in areas at a higher risk of flooding. • There is an increased risk to people working within the flood plain, with additional safety measures being needed to allow for the potential increased risk of flooding. • Construction materials, including excavated topsoil and subsoil, must be stored outside of the floodplain, presenting a greater challenge when reinstating soils. As such, it remains the view of the Applicant that corridor E-2 is the preferred corridor, even with the subsequent minor diversion to the east. **Point 2 – proposed green and blue alternative routes.** Regarding the proposed alternative alignments shown in green and blue in the Figure of Alternative Routes document **[REP1-132]**, these again increase the length of route that would need to be constructed within Flood Zones 2 and 3, albeit to a smaller degree than the above proposal.
2.20.18	Safety	(12) "Until the assessment of CCS CO2 stream pipeline hazards becomes a mature subject with accepted industry guidance on determining hazardous distances there will be uncertainty. Factors such as the influence of topographical features (e.g. valleys), crater shape and impurities, need to be adequately understood and models and modelling approaches developed and validated. Increasing separation distances will help manage the current uncertainty" (CO2RISKMAN – Level 4, p 39). Research has advanced slightly since 2013, but significant technical uncertainties and regulatory deficiencies remain (Lu et al. (2020); Kuprewicz (2022); El-Kady et al. (2024)). Given that experience with CCS is somewhat limited (CO2RISKMAN – Level 3, section 4.4.1) and that, as the HSE acknowledges, safety codes remain a work in progress (ISO/TC 265, Carbon dioxide capture, transportation, and geological storage), hazard mitigation should take priority over other technical considerations in design and planning and we would urge a cautious, layered approach, making use of safe distance wherever practicable. QRA calibrated to control societal risk should at minimum be supplemented by a safe-refuge requirement in residential settings to control individual risk. That is, at minimum, to control indoor exposure in the event of a rupture below the SLOT DTL, and, on the ALARP principle, wherever practicable, to control outdoor exposure below the SLOT DTL.	
2.20.19	Safety	(13) On the face of it, the diversion should be reversed in the interests of safety, but, in consultation with the applicant, we suggested alternative routes that would take all residential properties along the diversion out of the most serious hazard zones. First, examining the original route options (see Alternative_Routes.pdf, attached), the applicant decided against route E-1B, as it was constrained by ribbon development on the B1200. This, however, is a false choice; if E-1B is linked to E-2 between the Greyfleet and the B1200 (marked in pink), across open farmland with access routes, the resulting E-1B+link and E-2 form two sides of a lens-shape, incurring no significant increase in pipeline length and crossing the B1200 on the current preferred route. We do not consider the small additional incursion into flood zones 2 and 3 to be significant when weighed against safety. To consider a substantial reroute at this stage of application would incur costs, but, to quote Trevor Kletz, "if you think safety is expensive, try an accident".	
2.20.20	Routeing	(14) Alternatively, we suggested shorter reroutes that would have a similar result (see Alternative_Routes.pdf, attached). Anticipating the stagger in the red route by following the green route would take three residences out of the most serious hazard zones and following the blue route would take a further four residences out of outdoor SLOT range. The applicant's only response was "noted".	
2.20.21	Routeing	(15) Safe alternative routes are available and we hope that they may yet be adopted in the interests of safety and of reducing the burden of risk imposed by this project more meaningfully ALARP.	

Ref	Topic	Matter raised in Written Representation	Applicant response
			The route of the Proposed Development approaches and crosses Greyfleet Drain (Environment Agency designated Main River) perpendicularly, with the length of route to be constructed in Flood Zones 2 and 3 being approximately 200 m. The proposed green and blue route alternatives would require 800 m of pipeline construction in Flood Zone 2 and 3, a fourfold increase over the proposed route. This may also require the route to cross an area of floodplain grazing marsh, a Priority Habitat that is entirely avoided by the proposed route. The blue route would also run parallel to the main river for a length of approximately 1.3 km, a situation that would usually be avoided through routeing design.
2.20.22	Odour	Comments on First Written Questions: (16) In First Written Questions 1.2.3, the ExA enquires about odour during operation. We would comment that odorisation, similar to natural gas, has been suggested, not so much as a way to help detect leaks (Kilgallon et al. (2015)), but as a way to assist emergency responders in the event of a rupture.	Please refer to the Applicant's response to 2.20.1-3 above.
2.20.23	Air quality	(17) In relation to First Written Questions 1.2.1 and 1.2.10, we would suggest that modelling exercises be confirmed by fresh experiment.	
2.20.24	Safety	(18) In First Written Questions 1.5.10, the ExA queries the variation in pipeline depth. We would comment that there is a slightly counterintuitive balance to be struck. Rupture of a pipeline that is buried deeper will result in a release with a larger proportion of its momentum removed, leading to lower dispersion rates and correspondingly greater hazard distances.	
2.20.25	Ecology	Comments on Relevant Representations: (19) In its Relevant Representation, Lincolnshire County Council notes that "at ATC 66 and 67 – Red Leas Lane and Pick Hill Lane – both these are narrow (3m) lanes and vehicles have to pass at house/field accesses or on the verges. Given that the increases on these links are over 30% and the roads are not really suitable for significant 2-way traffic flows it is therefore recommended that some passing places are provided, unless it can be demonstrated that they would not be required". We would comment that these verges, together with the banks of the Greyfleet, provide the main hunting areas for local barn owls. Loss and disruption of these habitats would have a negative impact in addition to those listed by Natural England.	Please refer to the Applicant's response to 2.20.4 above.
2.20.26	Consultation / Engagement	(20) 52 Relevant Representations cite failures in consultation and even "lack of integrity/disingenuous conversations", mainly in connection with property and commercial interests, but also failure to provide information in a reasonably understandable form. Our own experience of the consultation was that our written responses tended to be misquoted or quoted selectively so as to misrepresent their substance. If this represents the general treatment of responses then we feel the ExA can place little faith in the applicant's summaries. The applicant was consistently reluctant or unwilling to engage at a technical level. From our experience and that of others, we conclude that the consultation was inadequate and treated more as a PR exercise than a genuine attempt to engage.	The Applicant notes that the majority of the Relevant Representations referred to relate to specific aspects of landowner negotiations, rather than the Applicant's approach to consultation. The Applicant has carried out significant pre-application engagement, which included four stages of consultation (one targeted). The feedback provided to these consultations has resulted in demonstrable changes to the Proposed Development design, through the pre-application consultation. This includes helping to inform changes to the route corridor following the initial stage of consultation, and the changes outlined in Chapter 7 of the Consultation Report **[APP-034]**. All of the feedback received has been reviewed and considered by the Applicant's technical experts, to assess whether it could make a beneficial change to the project design. When reporting back on this feedback review, it

Ref	Topic	Matter raised in Written Representation	Applicant response
			has been necessary to summarise and group comments on similar themes due to the level of feedback received. As with all major infrastructure projects, it was not possible to accept all of the changes requested by consultees, but where the Applicant was not able to act on feedback it has sought to explain this. Through the pre-application stage, the Applicant sought to provide information at varying levels of detail to allow people to engage with the proposals at a level they deem appropriate. Consultation materials (such as the Consultation Brochure) were written in accessible, non-technical language.
2.20.27	Need Case	(21) Two Relevant Representations questioned the benefits of the Viking Project as a whole. There is a broad consensus that CCS will be vital in achieving 'Net Zero'. However, there is also broad acknowledgement that not all CSS projects are equally beneficial. Reputable climate think tanks E3G and the Bellona Foundation have created what they call a CCS Ladder of priorities for CCS (E3G & Bellona Foundation (2023)), emphasising the need to avoid "fossil fuel lock-in", and concluding that "The climate value of CCS is lowest in the power sector and is expected to diminish considerably over time. CCS's climate value is greatest for industrial applications with significant process emissions, particularly in non-metallic mineral sectors such as cement and lime."	Please refer to the Applicant's response to 2.20.6 above.
2.20.28	Need Case	(22) Similarly, a recent report from The Smith School of Enterprise and the Environment, University of Oxford (Bacilieri et al. (2023)), has assessed "the relative costs of low-CCS [10% of today's emissions] and high-CCS [50% of today's emissions] pathways to 1.5°C using scenarios developed for the IPCC's Sixth Assessment Report (AR6)". They conclude that "From 2021 to 2050, taking a low-CCS pathway to net zero emissions will [globally] cost at least US$30 trillion less than taking a high-CCS route – saving approximately a trillion dollars per year". They advise that "governments should rapidly scale up CCS but reserve it only for essential use cases" and warn that "Using CCS to facilitate ongoing fossil fuel use would be, globally, highly economically damaging". Judging by its known emitter partners, the Viking project appears to be designed primarily to serve CSS which would promote fossil fuel lock-in and be economically damaging.	
2.20.29	Need Case	(23) Journalists and campaigners doubt whether the fossil-fuels industry can be trusted not to use CCS for enhanced recovery of oil and gas from otherwise spent fields, given its recent enthusiasm for doing precisely that. Enhanced recovery could be profitable, but would undermine any carboncapture gains from CCS and should be specifically prohibited in any relevant consent	
2.20.30	Need Case	(24) Any decarbonisation scenario consistent with the 1.5°C target in the Paris Agreement will require a large and increasing component of nuclear power generation. This in turn will require Geological Disposal Facilities. The NWS proposals for GDF at the Theddlethorpe site rely on mature technology and safety protocols and should be regarded as a national priority. However, combining GDF operations with any technology with the potential to fail explosively in close proximity would be 'crazy dangerous'. We do not believe that GDF and CCS are compatible in proximity. We suggest that NWS be given exclusive priority to pursue its investigations and local engagement, in the national interest.	

Ref	Topic	Matter raised in Written Representation	Applicant response
2.20.31	Need Case	(25) In First Written Question 1.3.10, the ExA has identified that CO2 emitters south of the Humber could opt instead to connect to the Endurance Pipeline, rendering the long Theddlethorpe pipeline redundant.	The Applicant's understanding is that none of the emitters on the South Bank of the Humber were sequenced to the Endurance project. That includes Phillips 66 and VPI Immingham, which are together progressing the Humber Zero project to reduce emissions of critical industry in the Immingham area using carbon capture. As outlined in the Need Case for the Scheme **[APP-131]** and in the representations by Phillips 66 **[RR-084]** and VPI Immingham **[RR-115]**, the Applicant is working with those parties with a view to having them sequenced to the Viking CCS Project. The UK Government's ambition and commitment to developing carbon capture usage and storage infrastructure through the Track-1 and Track-2 process, together with the wider policy ambition to decarbonise the Humber industrial region, means that the Applicant is confident that emitters will be sequenced to the Viking CCS Project.
2.20.32	Need Case	(26) Is the Viking CCS project, as envisaged, really in the national interest? Is the national benefit from it really so great as to outweigh all the local detriments? We are not convinced.	

Table 2-2122: Sarah M Goodley – REP1-139

Ref	Topic	Matter raised in Written Representation	Applicant response
2.21.1	Safety	I am most concerned regarding the carbon capture pipeline and the proposed Chimney stack and pad for the project. I have health concerns, environmental concerns being next to the Cut that feeds our chalk bed river. Should this pipeline rupture we could be looking at mass fatalities with up to 15 km radius being affected by oxygen deprivation and acidification of soil and water. This technology has not been used anywhere successfully in the world despite billions being spent.	The Applicant is highly experienced in health and safety management and takes very seriously its legal duty under the UK's Health and Safety at Work Act to protect workers and the public from its activities. The Applicant places the utmost importance on the safety of the communities it interacts with, its employees and its contractors who will work on this project. The pipeline has been designed in compliance with Engineering Standard BSI PD 8010-1:2016, which makes specific provision for CO_2 pipelines and the approach to routeing including minimum distances to buildings. However, the Applicant has elected to exceed the design requirements set by the standard. This includes taking a conservative approach with thick wall design across the full pipeline length.
2.21.2	Landscape and Visual	The visual impact on Greenfield farmlands will be very detrimental to our village.	The infrastructure required for the Proposed Development, in the vicinity of Theddlethorpe, comprises a buried 24" (609.6 mm) diameter pipeline and the Theddlethorpe Facility. Once reinstated, the land above the pipeline will return to its existing use, which is largely agriculture. The Theddlethorpe Facility is required to enable the CO_2 to flow from the new pipeline into the existing LOGGS pipeline, and then onwards to be stored in the depleted gas fields within the southern North Sea (the Viking reservoirs). The dimensions of the Theddlethorpe Facility are approximately 100m x 200m. Most of the infrastructure within the facility will be relatively low-level and will be screened from view by existing (Option 1) or new (Option 2) screen planting. ES Chapter 7: Landscape and Visual **[APP-049]** sets out the assessment of visual impacts.
2.21.3	Offshore pipeline	I have grave concerns about the integrity of the old pipeline that has now been redundant for several years under the sea. Leakage here will have a massive environmental impact to marine life.	Please refer to the Applicant's response to the Examining Authority's First Written Question 1.3.2 **[REP1-45]**, which gives information about the in-depth engineering assessment work completed to evaluate the suitability of the LOGGS pipeline for reuse.
2.21.4	Need Case Safety	I am aware this project is just a hoovering up of subsidies and total green washing while real solutions are being suppressed. We are the very people paying for this with our taxes and likely our lives if things go wrong. It's no good saying it won't happen here as when looking at accidents with carbon capture in other areas we know our safety cannot be guaranteed. We have a population of 800 people including 100 children attending a primary school where the pipeline passes only meters away. Mablethorpe within the 15 k radius has a summertime population of 100000. Should we have a rupture how can this many people be evacuated when vehicles would not operate and first responders would	To date, all investment in the Proposed Development has been funded by the Applicant. The UK government has a target of achieving net zero by 2050 and meeting this target will require reduced emissions of CO_2 from existing industries within the Humber and Lincolnshire region. Carbon capture and storage (CCS) is recognised by the Intergovernmental Panel on Climate Change (the IPCC) and the UK government as a vital step on the road to achieving net zero carbon dioxide emissions, with the 6th Carbon Budget outlining plans to capture and store between 20 and 30 million tonnes of CO_2 a year by 2030. The revised draft National Policy Statement for Energy (EN-1) recognises that there is "an urgent need for new CCS infrastructure to support the transition to a net zero economy". CCS is

Ref	Topic	Matter raised in Written Representation	Applicant response
		themselves be incapacitated. Please will someone see sense and stop this ridiculous waste of recourses.	one of many proposed approaches to tackling CO_2 emissions and climate change and is considered a transitional technology. More information is available in the Need Case **[APP-131]**. With respect to emergency procedures, please refer to the Applicant's response to the Examining Authority's First Written Questions 1.1.23 **[REP1-045]** which details the approach that will be taken to any emergency event.

Table 2-22232425: Susan House – REP1-140

Ref	Topic	Matter raised in Written Representation	Applicant response
2.22.1	Ecology	Harbour Energy have been informed of protected species in fields on section 5 of the proposed route. Many birds on the red list for conservation concern and Schedule 1 feed and breed in the field. The British Trust for Ornithology regularly survey the site because of its importance for wading birds. The birds should not be disturbed between November and June. Naterjack toads have been recorded by Lincolnshire Wildlife Trust. The land is part of an environmental scheme and needs to be protected. It is not part of English Nature NNR. In previous work Harbour Energy showed no concerns for the wildlife or their environment. They were told they needed to check for hibernating toads before laying down heavy tracks. They made no atempts to contact Lincolnshire Wildlife Trust for advice. There is also the medieval sea wall Crook Bank on the route. I would like this to be protected.	The Applicant notes the concerns regarding birds and wildlife. A suite of ecology surveys has been completed to inform the ecological baseline and measures are proposed within ES Chapter 6: Ecology and Biodiversity **[APP-048]** to make sure there are no significant adverse effects upon important ecological features. A report to inform the Habitats Regulation Assessment (Revision B) **(document reference 6.5)** has been prepared to test if the proposed development could significantly harm the designated features of European sites. Stage 1 of this report identifies any pathways of effect between the development and the qualifying features of the European designated sites, and Stage 2 confirms the mitigation that will be applied to make sure there are no adverse effects upon site integrity. Proposed avoidance and mitigation measures identified in the reports include: - Preconstruction checks by an ecologist; - Timing of works to avoid the most sensitive periods for certain bird species; - Use of noise and visual screening where appropriate to avoid / minimise disturbance; - Implementation of a Construction and Environmental Management Plan; - Implementation of a Drainage Strategy; and, - A Water Management Plan. With the application of mitigation, there will be no adverse effects upon the integrity of European designated sites and there will be no significant residual effects upon biodiversity.
2.22.2	Access	Harbour Energy plan to use farm tracks and widen gateways for their plans. This will significantly affect a farm and caravan site. The tracks are not suitable for heavy vehicles. Harbour Energy have already caused damage to tracks by bringing in heavier vehicles than agreed with the owner. This damage has not been repaired. The public road required for access is not suitable for large vehicles. It is a busy narrow road with no footpaths. The proposed entrance is near a sharp bend.	The Applicant has met with the Interested Party and her Agent regarding repairs. The Affected Party had requested that the repairs do not take place any sooner than May 2024 to accommodate her farming operations. The Applicant is seeking quotes from suitably qualified contractors and will continue to engage with the Interested Party in respect of the required works.
2.22.3	Ecology	I question the green credentials of Harbour Energy and the carbon recovery program when they have already shown litle respect for the local wildlife and their environment. I am not confident Harbour Energy have any plans to prevent as litle disturbance as possible to the wildlife.	Please see the response provided to point reference 2.22.1 above.

Ref	Topic	Matter raised in Written Representation	Applicant response
2.22.4	Need Case Safety	There is no evidence for the validity of carbon capture in preventing climate change. I am concerned about the damage to people and the environment caused if large amounts of carbon dioxide were leaked into the atmosphere or under the sea.	The UK government has a target of achieving net zero by 2050 and meeting this target will require reduced emissions of CO_2 from existing industries within the Humber and Lincolnshire region. Carbon capture and storage (CCS) is recognised by the Intergovernmental Panel on Climate Change (the IPCC) and the UK government as a vital step on the road to achieving net zero carbon dioxide emissions, with the 6th Carbon Budget outlining plans to capture and store between 20 and 30 million tonnes of CO_2 a year by 2030. The revised draft National Policy Statement for Energy (EN-1) recognises that there is "an urgent need for new CCS infrastructure to support the transition to a net zero economy". CCS is one of many proposed approaches to tackling CO_2 emissions and climate change and is considered a transitional technology. More information is available in the Need Case **[APP-131]**.

Table 2-2326: Town Legal LLP on behalf of Associated Petroleum Terminals (Immingham) Limited and Humber Oil Terminals Trustee Limited – REP1-089

Ref	Topic	Matter raised in Written Representation	Applicant response
2.23.1	General	These are the Written Representations ("WRs") for and on behalf of Associated Petroleum Terminals (Immingham) Limited ("APT") and Humber Oil Terminals Trustee Limited ("HOTT") (collectively referred to in the WRs as "the IOT Operators") in respect of the application ("the Application1 ") made by Chrysaor Production (UK) Limited ("the Applicant") for The Viking CCC Carbon Dioxide Pipeline Development Consent Order ("the Proposed Order") to authorise the construction, operation and decommissioning of a pipeline ("Proposed Development") that will transport captured carbon dioxide from Immingham to the Theddlethorpe Facility, together with associated development ("the Scheme"). The Application for the Proposed Order was submitted and is being promoted by the Applicant and has been allocated Planning Inspectorate reference EN070008. These WRs should be read together with and alongside the Relevant Representations ("RRs") of the IOT Operators relating to the Application dated 15th January 2024. In addition to expanding upon the RRs, these WRs also: (a) Comment on the Applicant's request to make changes to the Application, received on 19 March 2024 ("Change Request"); and (b) Contain the notification by the IOT Operators that they wish to speak at a second Compulsory Acquisition Hearing ("CAH 2') and (as necessary) an Issue Specific Hearing ("ISH") to consider the terms of the Proposed Order.	Noted.
2.23.2	General	Summary The IOT Operators continue to support the principle and objectives of the Scheme. They welcome the Change Request and the Applicant's response to its proposal to start the necessary technical discussions on the interface between the Scheme and its operations both during the construction and operational phase for the Scheme to include considering the proposed limits of deviation for the Proposed Developments and its interrelationship with the IOT Operators wayleave that runs across the proposed pipeline corridor for the Proposed Development.	The Applicant notes and welcomes that the IOT Operators support the principle and objectives of the Proposed Development. The Applicant is engaged with the IOT Operators in negotiating suitable terms for Protective Provisions to be included in the draft DCO. The Applicant has recently received an amended draft from the IOT Operators and intends to respond in early course, with a view to agreement being reached before the end of the Examination.

Ref	Topic	Matter raised in Written Representation	Applicant response
		A draft set of Protective Provisions("PPs") has also now been prepared by the Applicant and shared with the IOT Operators. These are being reviewed and considered by the IOT Operators and will need to be iterated alongside progressing the necessary technical discussions which started on 23rd April. While it is sincerely hoped that agreement can be reached on the above matters during the course of the Examination, to protect its position, the IOT Operations maintain the following grounds of objection to the Proposed Order at the current time relating (in summary) to the following matters: (a) The details of the proposed permanent acquisition of the subsurface in Order Plot 1/74 and its interrelationship with the HOTT pipelines. (b) The current absence of Protective Provisions ('PPs') to protect and safeguard the IOT Operators interests and operations. (c) The interface of the IOT Operators interests and operations with the construction and operational impacts of the Scheme and the need to robustly consider, address and co-ordinate such matters.	
2.23.3	General	3 Introduction and Background [background information text not included in this document]	Noted.
2.23.4	General	In summary, and as particularised in the RRs, the headline points of the IOT Operators position on the Application is as follows: (a) The IOT Operators support the objectives and principle of the Scheme. The Humber area is the highest emitting region within the UK and very much stands to benefit from the deployment of technologies such as carbon capture and storage and lower carbon hydrogen to be facilitated, among other things, by the Scheme. (b) Notwithstanding the in-principle support for the Scheme, the IOT Operators objected to the Proposed Order (as submitted), in summary, for the following 5 main reasons. (i) First, the Application failed to properly assess and address the adverse effects on the IOT Operators interests and operations arising from the proposed permanent and temporary acquisition and use of land, and the construction and operation of the Scheme.	The Applicant is engaged with the IOT Operators in negotiating suitable terms for Protective Provisions to be included in the draft DCO. The Applicant has recently received an amended draft from the IOT Operators and intends to respond in early course, with a view to agreement being reached before the end of the Examination. The Applicant anticipates being able to agree a suitable set of Protective Provisions that will maintain the necessary access to the IOT Operators' pipelines during construction of the Proposed Development and that will avoid any adverse impact on them.
2.23.5	Access	(ii) Second, during the construction phase of the Scheme, the IOT Operators need to ensure that there is permanent vehicular access (for purposes including operational and emergency vehicles) to its wayleave that runs along the pipeline corridor.	
2.23.6	Construction impacts	(iii) Third, and depending on the ultimate routing and precise location of the Pipeline Route and how close in proximity they will be to its pipelines, robust arrangements need to be put in place to continue to allow for and enable the full operation and use of the IOT Operators pipelines including the need to ensure that uninterrupted access is maintained and the ability to repair and maintain in an emergency without requiring the Applicant's permission in respect of any areas where the pipelines cross or otherwise interact.	

Ref	Topic	Matter raised in Written Representation	Applicant response
2.23.7	Land / Compensation	(iv) Fourth, the proposed temporary and permanent land take in the Proposed Order (for example in relation to the proposed Pipeline Route) exceeded that which is reasonably and proportionately required to carry out the Scheme;	
2.23.8	Protective Provisions	(v) Fifth, the Applicant had not incorporated into the Proposed Order and/or otherwise provided for proper mitigation of the Scheme's impacts on the IOT Operators nor sufficiently safeguarded the IOT Operators critically important interests and operations, among other things, through the inclusion of suitably worded PPs in the Proposed Order (see further below).	
2.23.9	Change Request	Following the lodging of the RRs, the IOT Operators are encouraged to note that the Applicant has submitted the Change Request which, in summary: (a) Reduces the Order Limits for works related to the Immingham Facility and associated accesses; and (b) Removes Pipeline Route Option 22 in section 1 of the Proposed Development. Having reviewed the Change Request documentation, the IOT Operators are content that the Change Request satisfactorily addresses the substance of its objections insofar as they relate to Order Plots 1/22, 1/24, 1/33, 1/68, 1/69 and 1/70 (in particular ground 4 above) of the Proposed Order.	Noted.
	Land / Compensation Construction	For the avoidance of doubt, the objections of the IOT Operators remain insofar as they relate to the details of the proposed permanent acquisition of the subsurface in Plot 1/74. Among other things, the IOT Operators remain concerned, in relation to the Proposed Order, as submitted at the proposed limits of deviation for the Proposed Development which, as drafted, seem to provide the Applicant with very wide flexibility and judgmental discretion as to the depth of the pipeline. One of the key issues that the IOT Operators want to robustly address in the technical discussions with the Applicant is the proposed location of the Proposed Development relative to the HOTT pipelines and their interface. In this regard, the IOT Operators want to fully understand the implications of the Scheme for its operations and the extent to which, if at all, the construction and operational phases of the Scheme will adversely impact on its operations and, if so, what mitigation measures can be put in place to preferably avoid or if not minimise such adverse effects. Points to bear in mind in terms of the interface between the Scheme and the operations include that the IOT Operators need the continuing ability, as may be required from time to time, (for example): (a) To dig down into the ground to out, for example, civil bases in for line pipe supports; and (b) To retain the unfettered access and passage of the cables running in ducts at approximately 200 to 300mm below surface in areas.	The Applicant welcomes the engagement from the IOT Operators on both the technical interaction between their infrastructure and the Proposed Development, and how necessary legal arrangements are put in place to provide them with adequate comfort that their assets will be protected. The Applicant will continue to engage on these matters.
2.23.10	Protective Provisions	Concerning the first, second and third grounds of objection summarised above, the IOT Operators welcome the response (albeit somewhat belated) from the Applicant to its repeated request for the necessary technical discussions to start to consider, among other things, the interface between the Scheme and the interests and operations of the IOT Operators. Whether within the scope of the PPs and/or in a voluntary contractual agreement, the IOT Operators would be seeking, among other things, measures such as the	

Ref	Topic	Matter raised in Written Representation	Applicant response
		establishment and operation of a Working and Programme Group to consider, inter alia: (a) The construction and operational interface issues; (b) To programme and phase the Scheme works to avoid or minimise any disruption to its operations and interests; (c) To enable the programme and phasing of delivery and construction of the Proposed Development to be reviewed and updated from time to time between the parties. (d) To enable, as necessary, copies of construction issue drawings and as built records etc to be provided to the IOT Operators. (e) To enable a forum for the sharing of information and discussion and resolution of any interface issues.	
2.23.11	Protective Provisions	As to the fifth ground of objection concerning the current absence of any PPs in the Proposed Order in relation to the IOT Operators interests and operations, since the RRs have been lodged, the Applicant has now recently shared a first draft of a set of PPs with the IOT Operators for comment. These are currently being internally reviewed and assessed and will need to be refined and developed as the necessary technical discussions take place with the Applicant's team.	The Applicant has recently received an amended draft from the IOT Operators and intends to respond in early course, with a view to agreement being reached before the end of the Examination.
2.23.12	Protective Provisions	In summary, the IOT Operators are seeking the following main safeguards in the PPs with such measures being necessary to adequately protect its high value operations and interests, namely: (a) Plans and sections of the proposed works to cross its operational land must be submitted to the IOT Operators; (b) No works which may have an impact on the operation, maintenance or abandonment of IOT Operators pipelines or access to them may commence until those plans and sections are approved; provided that (i) No approval may be unreasonably withheld or delayed; and (ii) The IOT Operators may impose such reasonable requirements on the Applicant as may be required for the continuing safety and operational viability of the pipelines and the IOT's requirement to have uninterrupted access to them at all times. (c) An ability for the IOT Operators to withhold its authorisation for any crossing works where it can reasonably demonstrate that the Scheme would significantly adversely affect the safety of its pipeline; (d) Provisions for the resolution of any differences between the Applicant and the IOT Operators by reference to an expert; (e) A minimum period of 28 days' notice of the commencement of works to be provided to the IOT Operators so that an engineer can observe the relevant works being carried out; (f) Minimum clearance required between the existing pipelines and the Scheme; (g) Monitoring of the IOT Operators pipelines during the carrying out of works in their vicinity;	The Applicant has recently received an amended draft from the IOT Operators and intends to respond in early course, with a view to agreement being reached before the end of the Examination.

Ref	Topic	Matter raised in Written Representation	Applicant response
		(h) Provisions for the immediate cessation of works and evacuation of personnel in the event of any of the IOT Operators pipeline assets being damaged; (i) In carrying out any works the Applicant is to comply with relevant regulations concerning health and safety; (j) Restrictions on the exercise of the powers in the Proposed Order so as to minimise impacts on the operation of the IOT Operators existing pipeline corridor; (k) A requirement for the Applicant to obtain appropriate insurance (and provide the IOT Operators with evidence of such) before carrying out works which may affect its pipeline assets; (l) The payment of the IOT Operators' reasonable costs incurred in relation to the supervision or other engagement with the Applicant in respect of any crossing works; (m) The provision of an indemnity to the IOT Operators in respect of all damages, expenses, consequential loss and damages arising from crossing works; and (n) A series of further measures requiring notice in the event of certain circumstances under the operation of the remainder of the Proposed Order.	
2.23.13	Protective Provisions	The draft PPs are currently being worked up and iterated with the Applicant. It is sincerely hoped that agreement can be reached on a final agreed form set of PPs during the Examination period whereupon the IOT Operators would be requesting that the Applicant make a further change request to the Examining Authority to seek to include these PPs in the Proposed Order as a new bespoke part of what is currently Schedule 9 of the Proposed Order.	
2.23.14	Engagement	5 Update on Negotiations Throughout the process, the IOT Operators have been ready, willing, and able to proactively engage with the Applicant in relation to the Scheme. The Applicant has now belatedly responded to the request for technical discussions to commence which is welcomed by the IOT Operators and an introductory meeting took place on 23 April. It is hoped that through these necessary technical discussions, a robust set of safeguards, mitigation measures, and PPs will be agreed upon to satisfactorily address the concerns of the IOT Operators as to the interface of the Scheme with its critically important interests and operations. However, as at the date of the submission of these WR's, it remains the case that no agreement on such matters has been reached with the Applicant. As such, the IOT Operators maintain its objections (originally lodged with the RRs) insofar as they relate to Order Plot 1/74 of the Proposed Order and unless and until a voluntary agreement has been entered into, a robust set of PPs agreed, and the other residual concerns outlined in the RRs and these WRs have been thoroughly and satisfactorily addressed. It is the intention of the IOT Operators to continue to work closely and collaboratively with the Applicant during the examination period to seek to address and resolve these remaining issues in a timely manner.	The Applicant has recently received an amended draft from the IOT Operators and intends to respond in early course, with a view to agreement being reached before the end of the Examination.
2.23.15	Land / Compensation	6 Notification by the IOT Operators that they wish to speak at CAH 2 and future ISHs	Noted.

Ref	Topic	Matter raised in Written Representation	Applicant response
		For the reasons set out above, and in the current absence of any voluntary agreement and/or a set of agreed PPs having been agreed, the IOT Operators would wish to attend and speak at: (a) a CAH 2 hearing in respect of the proposed permanent acquisition of subsurface in Order Plot 1/74; and (b) An ISH hearing (if required) to consider the terms of the Proposed Order and, in particular, the limits of deviation and details of the proposed set of PPs.	
2.23.16	General	7 Conclusion The IOT Operators hereby reserve the right to expand on the points made in these WRsin response to how the Applicant's case is further promoted through the Examination, and in response to any further questions from and Applicant responses to the ExA. The IOT Operators further continue to seek its costs of engaging in the Proposed Order process, in accordance with the Secretary of State's Guidance 'Awards of costs: examinations of applications for development consent orders', which provides that (page 13, Part D, paragraph 2): *" Where the objections to a compulsory acquisition request have neither been disregarded by the Examining Authority nor withdrawn before the decision of the Secretary of State on a development consent application and the objectors have been successful in objecting to the compulsory acquisition request, an award of costs will normally be made against the applicant for development consent and in favour of the objectors..."*	Noted.

Table 2-2427: Town Legal LLP on behalf of Phillips 66 Limited – REP1-093

Ref	Topic	Matter raised in Written Representation	Applicant response
2.24.1	General	1 Introduction These are the Written Representations ("WRs") for and on behalf of Phillips 66 Limited ("P66") in respect of the application ("the Application1 ") made by Chrysaor Production (UK) Limited ("the Applicant") for The Viking CCC Carbon Dioxide Pipeline Development Consent Order ("the Proposed Order") to authorise the construction, operation and decommissioning of a pipeline that will transport captured carbon dioxide from Immingham to the Theddlethorpe Facility, together with associated development ("the Scheme"). The Application for the Proposed Order was submitted and is being promoted by the Applicant and has been allocated Planning Inspectorate reference EN070008. These WRs should be read together with and alongside P66's Relevant Representations ("RRs") relating to the Application dated 15th January 2024. In addition to expanding upon P66's RRs, these WRs also: (a) Comment on the Applicant's request to make changes to the Application, received on 19 March 2024 ("Change Request");	Noted.

Ref	Topic	Matter raised in Written Representation	Applicant response
		(b) Respond to the relevant Examining Authority's First Written Questions ("EXQ1s"); and (c) Contain the notification by P66 that they wish to speak at a second Compulsory Acquisition Hearing ("CAH 2')	
2.24.2	General	2 Summary P66 supports the principle of the Scheme and remains committed to assist in its implementation. It welcomes the Change Request and notes that negotiations on a suite of voluntary agreements and a set of Protective Provisions are at an advanced stage of negotiation with the Applicant. While it is anticipated that the voluntary agreements will be concluded during the Examination period and protective provisions agreed, to protect its position, P66 maintains its objections to the Proposed Order at the current time (in summary) relating to: (a) Whether compulsory acquisition ("CA") and/or temporary possession ("TP") powers are necessary in the public interest and meet the conditions in section 122 of the Planning Act 2008 (b) The current absence of Protective Provisions ('PPs') in relation to P66s landholdings and operations. (c) The interface of the HR with the construction and operational impacts of the Scheme and the need to robustly consider, address and co-ordinate such matters. (d) The absence of detailed review and assessment of any impact on the COMAH risk scenarios, mitigation measures and emergency response measures	The Applicant notes and welcomes that P66 supports the principle and objectives of the Proposed Development. The Applicant is engaged with P66 in negotiating terms for acquisition of necessary land and rights for the Proposed Development where P66 is the landowner. In addition, the Applicant is negotiating Protective Provisions to be included in the draft DCO. The Applicant considers that such agreements can address all concerns raised by P66 and that negotiations are at an advanced stage.
2.24.3	General	3 Consideration For details of P66s business and its operations as owner and operator of the Humber Refinery ("HR"), please see section 5 of the RRs. In summary, and as particularised in the RRs, the headline points of P66s position on the Application is as follows: (a) P66 supports the objectives and principle of the Scheme. The Humber area is the highest emitting region within the UK and very much stands to benefit from the deployment of technologies such as carbon capture and storage and lower carbon hydrogen to be facilitated, among other things, by the Scheme. (b) Notwithstanding the in-principle support for the Scheme, P66 objected to the Proposed Order (as submitted), in summary, for the following five (5) main reasons. (i) Firstly, the Applicant was seeking CA and/or TP powers in the Proposed Order over excessive amounts of P66's interests and landholdings, greater than was necessary for the purposes of the Scheme and which would adversely impact upon P66's operations. (ii) Secondly, the Proposed Order did not include appropriate Protective Provisions ('PPs') in relation to P66s assets, landholdings and operations. (iii) Thirdly, one of the two alternative options included in the Proposed Order for section 1 of the pipeline ("Proposed Development") from the Immingham Facility to the A180, which would go through the HR Site exiting between Houlton's Covert and Children's Avenue, ("Pipeline Route Option 2") was highly detrimental to P66s interests and operations.	

Ref	Topic	Matter raised in Written Representation	Applicant response
		(iv) Fourthly, the construction and operational impacts of the Scheme and its interrelationship with P66s operations and interests needed to be robustly considered and addressed and mitigated to ensure no adverse impacts on the HR. (v) Fifthly, the absence of detailed review and assessment of any impact on the COMAH risk scenarios, mitigation measures and emergency response measures.	
2.24.4	Change Request	Following the lodging of the RRs, P66 was encouraged to note that following a series of technical discussions with the Applicant that it has submitted the Change Request (in recognition of P66s concerns) which, in summary: (a) Reduces the Order Limits for works related to the Immingham Facility and associated accesses; and (b) Removes Pipeline Route Option 2 in section 1 of the Proposed Development. 3.4 Having reviewed the Change Request documentation, P66 is content that the Change Request satisfactorily addresses the substance of its third main ground of objections. Concerning the first ground of objection, P66 notes that the Change Request proposes to remove all and any of the Order Plots associated with Pipeline Route Option 2 and/or HR operational land. P66 also welcomes the proposals in the Change Request to limit the proposed permanent and temporary land take in respect of P66's landholdings to that what is proportionate and reasonably necessary and required for the purposes of carrying out the Scheme.	The Applicant notes that P66 supports that change that has been made by the Change Request submitted by the Applicant.
2.24.5	Land / Compensation	As set out in its RRs and updated below, P66 are at an advanced stage of negotiations with the Applicant in relation to a lease of the Immingham Facility and have agreed a lease of the Pipeline Route Option 1 for the Proposed Development ("Voluntary Agreements") whereby the proposed pipeline leaves the tie-in at the Immingham Facility, crosses Humber Road (twice) and the railway line, and then runs parallel to Manby Road before crossing it south of the Immingham Calor Cylinder Distribution site, heading in a south westerly direction north of Immingham towards the former Immingham Golf Club. The pipeline would then continue to travel westwards before changing direction southwards towards Mill Lane which it then crosses, before crossing Harborough Road between the Old School House and Luxmore Farm before continuing southwards and crossing the A180. It is anticipated that these Voluntary Agreements will be settled and completed shortly whereupon the Applicant will have the necessary contractual rights and interests in the relevant land required to carry out this section of the Proposed Development. As such, and in these circumstances, P66 would query whether the conditions in section 122 of the Planning Act 2008 for which CA and TP powers may be authorised are met namely: (a) Whether CA ands TP powers are required for this section of the Proposed Development when the Applicant will have acquired through the Voluntary Agreements the necessary rights and interests to carry out the works to construct this part of the Scheme; and/or (b) Whether there is a compelling case in the public interest for the CA and TP powers sought in these circumstances.	As set out in the Statement of Reasons **[AS-042]**, the Applicant's strong preference remains to acquire all land and rights necessary for the Proposed Development through voluntary agreement. However, until those agreements have been reached, it is necessary for the Applicant to have the option to use the compulsory acquisition powers, as otherwise there is no certainty that Proposed Development can proceed. The Applicant will continue to negotiate with P66 with a view to reaching a concluded voluntary agreement prior to the conclusion of the Examination.

Ref	Topic	Matter raised in Written Representation	Applicant response
		If contrary to P66s position, it is considered that CA and TP powers remain necessary and justified and meet the section 122 conditions then P66 would be seeking an express undertaking from the Applicant stating- expressly and in specific terms- that the CA and TP powers are only sought as a fallback measure and no steps would be taken by the Applicant to exercise these powers pursuant to the Proposed Order unless and until P66 were in material breach of the terms of the Voluntary Agreements.	
2.24.6	Protective Provisions	As to the second ground of objection concerning the current absence of any PPs in the Proposed Order in relation to P66s landholdings and operations, since the RRs have been lodged, the Applicant has shared a draft set of PPs with P66 for comment. P66s position in relation to the PPs, which are necessary to protect and safeguard P66s operations and interests, are that subject to any Scheme specific changes that these should be no less substantive and thorough in breadth and scope than the set of PPs included in the VPI Immingham DCO which were accepted by the Secretary of State and included in that DCO made on 7 August 2020. A copy of these PPs are attached herewith for the attention of the Examining Authority ("ExA").	The Applicant will continue to engage with P66 with a view to agreeing a form of protective provisions to be included within the draft DCO.
2.24.7	Protective Provisions	In summary, P66 are seeking the following main safeguards in the PPs in recognition that the HR is a high value refinery asset, classified as UK Critical National Infrastructure, with such measures being necessary to adequately protect P66s operations and interests, namely: (a) Plans and sections of the proposed works to cross P66's operational land must be submitted to P66; (b) No works which may have an impact on the operation, maintenance or abandonment of P66's pipelines or access to them may commence until those plans and sections are approved; provided that:	
2.24.8	Protective Provisions	(i) No approval may be unreasonably withheld or delayed; and (ii) P66 may impose such reasonable requirements on the Applicant as may be required for the continuing safety and operational viability of the pipelines and P66's requirement to have uninterrupted access to them at all times. (c) An ability for P66 to withhold its authorisation for any crossing works where it can reasonably demonstrate that the Scheme would significantly adversely affect the safety of its pipeline; (d) Provisions for the resolution of any differences between the Applicant and P66 by reference to an expert; (e) A minimum period of 28 days' notice of the commencement of works to be provided to P66 so that an engineer can observe the relevant works being carried out; (f) Minimum clearance required between the existing pipelines and the Scheme; (g) Monitoring of P66's pipelines during the carrying out of works in their vicinity; (h) Provisions for the immediate cessation of works and evacuation of personnel in the event P66's pipeline asset is damaged;	

Ref	Topic	Matter raised in Written Representation	Applicant response
		(i) In carrying out any works the Applicant is to comply with relevant regulations concerning health and safety; (j) Restrictions on the exercise of the powers in the Proposed Order so as to minimise impacts on the operation of P66's existing pipeline; (k) A requirement for the Applicant to obtain appropriate insurance (and provide P66 with evidence of such) before carrying out works which may affect P66's pipeline; (l) The payment of P66's reasonable costs incurred in relation to the supervision or other engagement with the Applicant in respect of any crossing works; (m) The provision of an indemnity to P66 in respect of all damages, expenses, consequential loss and damages arising from crossing works; and (n) A series of further measures requiring notice in the event of certain circumstances under the operation of the remainder of the Proposed Order The draft PPs are currently being worked up and iterated with the Applicant. It is hoped that agreement can be reached shortly on a final agreed form set of PPs whereupon P66 would be requesting that the Applicant make a further change request to the Examining Authority to seek to include these PPs in the Proposed Order as a new bespoke part of what is currently Schedule 9 of the Proposed Order.	
2.24.9	Protective Provisions	As to the fourth ground of objection concerning the interrelationship between P66s operations and interests at the HR and the construction and operational impacts of the Scheme, whether within the scope of the PPs and/or in the Voluntary Agreements, P66 would be seeking the establishment and operation of a Working and Programme Group with the Applicant to consider, among other things: (a) The construction and operational interface issues (b) To programme and phase the Scheme works to avoid or minimise any disruption to P66s operations and interests at the HR; (c) To enable the programme and phasing of delivery and construction of the Proposed Development to be reviewed and updated from time to time between the parties. (d) To enable, as necessary, copies of construction issue drawings and as built records etc to be provided to P66. (e) To enable a forum for the sharing of information and discussion and resolution of any interface issues.	The Applicant notes the request from P66 to form a Working and Programme Group and will continue to engage on this matter.
2.24.10	Design	As to the fifth ground of objection, P66s position remains that this position needs to be explored further with the Applicant carrying out, alongside any other necessary investigations, a Quantitative Risk Assessment based on the current layout to understand any impacts, among other things, and particularly on rail loading.	The Applicant is currently engaging P66 in the FEED process and joint reviews are being undertaken. Future works will include detailed review and assessment of any impact on the COMAH risk scenarios, mitigation measures and emergency response measures.
2.24.11	Land / Compensation	4 Update on Negotiations P66 continues to proactively engage with the Applicant in relation to the Scheme. Through those constructive discussions, a series of safeguards, mitigation measures, and protective provisions have been identified as necessary to address	The Applicant notes that P66 is maintaining its objection at this time and will continue to engage with a view to addressing P66's residual concerns.

Ref	Topic	Matter raised in Written Representation	Applicant response
		P66's concerns as to the interface of the Scheme with its interests and operations which are being addressed through the Change Request, suite of Voluntary Agreements and the draft PPs. Specifically, terms are being negotiated with respect to the suite of Voluntary Agreements compromising: (a) A lease of the Immingham Facility and Pipeline Route Option 1 ("Lease"); and (b) An overarching agreement ("Overarching Agreement") to sit above the Lease and Easement to regulate, if granted, (i) the proposed exercise by the Applicant of the CA and TP powers; and (ii) the proposed withdrawal of P66s objections to the Proposed Order (c) A robust set of PPs 4.4 However, as at the date of the submission of these WR's, it remains the case that the Voluntary Agreements have not been completed, albeit are close to being in agreed form subject to the internal approvals required by the P66 Board and a final form agreed version of the PPs has not yet been reached. As such, P66 maintains its objection originally lodged with the RRs unless and until the Voluntary Agreements have been entered into, the PPs agreed, and the other residual concerns outlined in the RRs and these WRs have been addressed. It is the intention of P66 to continue to work closely and proactively with the Applicant during the examination period to seek to address and resolve these remaining issues in a timely manner.	
2.24.12	Change Request	5 EXQ 1s Turning to the relevant EXQ 1s that have been raised: 1.5.8 Proposed Change Request and the IAGI (P66, VPI Immingham) The Applicant has just submitted a Change Request which relates to: a) the reduction of the Order Limits for works related to the IAGI and associated accesses; and b) the removal of Option 2 for the pipeline route in the vicinity of the IAGI. Phillips 66 Limited [RR-084] and Immingham VPI LLP [RR-115] both made objections to the Application. The concerns related not just to the proposed Option 2 but also such issues as the amount of the permanent and temporary land take and also the safeguarding through the Protective Provisions. Do these companies wish to maintain their objections to the application for a DCO and, if so, on what basis? As to question 1.5.8, for the reasons set out in paragraphs 3.5 to 3.9 of these WRs, P66 maintains (at the current time and in the absence of completion of the Voluntary Agreement and agreed PPs) its objections to the proposed CA and TP powers sought in the Proposed Order	Noted.
2.24.13	Land / Compensation	1.5.20 Immingham and Theddlethorpe (Applicant, National Gas Transmissions PLC, P66) The terms of the restrictive covenants set out at page 35 of the SoR [AS-013] appear rather wide. Please clarify over which land these covenants are being sought as according to the BoR [AS-015] it would appear to be limited to the	Noted.

Ref	Topic	Matter raised in Written Representation	Applicant response
		blue land at the proposed IAGI and TAGI? Do the Landowners have any further comments concerning the imposition of these covenants? As to question 1.5.20, the proposed terms of the restrictive covenants at page 35 of the Statement of Reasons ("SoR") refer to refers to Order Plots 36/12, 36/13, 36/14, 36/15, 36/16 which do not relate to P66s landholdings. As such, P66 does not consider that this question is relevant to or concerns them.	
2.24.14	Routeing	1.5.26 Routeing from the IAGI (Applicant, P66) The position may have moved on with the submission of the Change Request but in the CA Tracker [AS-030] submitted in January, it is submitted that "Phillips 66 intend to lease the land at Immingham to Chrysoar and the lease agreement is in the final stages of negotiation." However, as at the date of their submission [RR-084] on 15 January 2024, Phillips 66 Limited state that "no legal agreement has been entered into." It is noted that Phillips 66 Limited objected to the Application in their RR though the CA Tracker does not record any objections at all to the DCO. Please clarify? As to question 1.5.26, P66 considers that this question is primarily addressed to the Applicant. For the reasons set out in the RRs and these WRs, P66 maintains its objection to the CA and TP powers sought at the present time and in the absence of the Voluntary Agreements having been entered into albeit (as stated above) negotiations in respect of the Lease, PPs and Overarching Agreement are all at an advanced stage and it is hoped and anticipated that the terms of these agreements will be settled shortly and during the currency of the Examination.	Noted.
2.24.15	General	6 Notification by P66 that they wish to speak at CAH 2 and ISH For the reasons set out in paragraphs 3.5 to 3.9 of these WRs, and in the current absence of a completed suite of Voluntary Agreement and set of agreed PPs, P66 would wish to attend and speak at a CAH 2 hearing and an ISH hearing (if required to consider the dDCO and, in particular, the proposed PPs)	Noted.
2.24.16	General	7 Conclusion P66 reserves the right to expand on the points made in these WRs in response to how the Applicant's case is further promoted through the Examination, and in response to any further questions from and Applicant responses to the ExA. P66 further continues to seek, at the current time, its costs of engaging in the Proposed Order process, in accordance with the Secretary of State's Guidance 'Awards of costs: examinations of applications for development consent orders', which provides that (page 13, Part D, paragraph 2): *" Where the objections to a compulsory acquisition request have neither been disregarded by the Examining Authority nor withdrawn before the decision of the Secretary of State on a development consent application and the objectors have been successful in objecting to the compulsory acquisition request, an award of costs will normally be made against the applicant for development consent and in favour of the objectors..."*	Noted.

Table 2-2528: Veale Wasbrough Vizards LLP on behalf of Driver and Vehicle Standards Agency – REP1-070

Ref	Topic	Matter raised in Written Representation	Applicant response
2.25.1	General	DVSA is the owner and occupier of land registered under title number HS347729 (the "Site"), which has been identified by Chrysaor Productions (UK) Limited (the "Applicant") as being affected by the Scheme. We have been engaging with the solicitors and agent acting for the Applicant to negotiate terms for an option for lease and lease of the Site to enable the installation and operation of the Scheme. Under the current proposals for the Scheme, the Applicant will have to take temporary possession of the Site in order to install the pipeline. Following installation, the Site will then be returned to DVSA, subject to a subsoil lease granted to the Applicant for the expected lifetime of the pipeline.	The Applicant acknowledges the DVSA's comment.
2.25.2	Construction Impacts	Whilst DVSA does not object to the principle of the Scheme as a whole, DVSA has significant concerns regarding the disruption that the Scheme will cause DVSA's operations at the Site. DVSA currently uses the Site to conduct roadside checks on commercial drivers and vehicles, enabling them to fulfil their functions of enforcing roadway laws and promoting road safety. DVSA has been assured by the Applicant's agent that every effort will be made to route the pipeline around DVSA's site, using the site only for a storage and welfare facilities, so as to avoid the need for DVSA to relocate. However, the Applicant's agent has confirmed that, as a last resort, the pipeline may be routed directly through DVSA's site. This will result in DVSA needing to fully relocate its operations for the duration of construction.	The Applicant acknowledges the DVSA's comment. The Applicant confirms that it will endeavour to route the pipeline in a manner that avoids any direct impact on the site used by DVSA for their operations.
2.25.3	Consultation / Engagement	To enable continuity of DVSA's operations and fulfilment of statutory duties, it is essential that any alternative site is within close proximity of the major roadway, has suitable vehicular access and is of appropriate size and layout to allow the assessment of vehicles. From DVSA's initial enquiries, it is becoming increasingly apparent that the likelihood of finding a suitable alternative site in the locality is very small, and potentially impossible. DVSA continues to engage with the Applicant in negotiating commercial terms including relocation provisions. However, DVSA objects to any proposed route of the Scheme that will cross the Site and result in DVSA needing to relocate due to the significant disruption it will cause to DVSA's operations.	As part of the ongoing discussions of heads of terms, the Applicant has agreed to provide the DVSA with at least 12 months' notice of where the final route of the pipeline would be located. If the DVSA required to relocate its operations from the site, then the Applicant would be willing to assist the DVSA in locating an alternative.

Table 2-2629: Vince Loy – REP1-144

Ref	Topic	Matter raised in Written Representation	Applicant response
2.26.1	Safety	I have raised on numerous occasions with Harbour Energy and subsequently VIKING CCS serious concerns over the above application - at the original roadshow held in Theddlethorpe Village Hall I provided a set of questions and concerns to the "Expert" team present by their own addmision they had no answers and some of the items raised seemed to come as a surprise to them. This deeply concerns me that due diligence will not be carried out and that as the duty holder they felt that the subcontractor they will engage to run the plant at Immingham	The Applicant is highly experienced in health and safety management and takes very seriously its legal duty under the UK's Health and Safety at Work Act to protect workers and the public from its activities. The Applicant places the utmost importance on the safety of the communities it interacts with, its employees and its contractors who will work on this project. Several important factors were considered in routeing the pipeline. These were the safety of local communities, avoiding built up areas and sensitive buildings, areas protected for their habitat

Ref	Topic	Matter raised in Written Representation	Applicant response
		would ultimately be the responsible for regulatory compliance and liability, not their responsibility and Government (BEIS ?) would be responsible for auditing compliance is a very lacklustre and laissez-faire attitude in my opinion. I am an Oil and Gas professional with nearly 38 years in the industry so I am perhaps better informed than most and I object strenuously to this application being approved as there is no evidence that the concerns that have been raised (detailed below) have been adequately assessed , discussed and mitigated	and species, the Lincolnshire Wolds Area of Outstanding Beauty, areas that are liable to flood and historic monuments. The pipeline has been designed in compliance with Engineering Standard BSI PD 8010-1:2016, which makes specific provision for CO_2 pipelines and the approach to routeing including minimum distances to buildings. However, the Applicant has elected to exceed the design requirements set by the standard. This includes taking a conservative approach with thick wall design across the full pipeline length. In addition, the pipeline has been designed in accordance with the established principle of ALARP ("As Low As Reasonably Practicable"), as described in the Health and Safety Executive's (HSE's) longstanding framework document "Reducing Risks, Protecting People". The purpose of ALARP is to ensure risks are reduced as far as is reasonably practicable. The Applicant has referenced the HSE's Tolerability of Risk framework (which is defined in the "Reducing Risks, Protecting People" framework document mentioned above) to assess the pipeline risks. This assessment shows that the risk to members of the public living near to the Viking CCS pipeline route is well within the framework's lowest classification of risk. Under the framework, the HSE considers that *"risks falling into this region are generally regarded as insignificant and adequately controlled."* The HSE does not usually require further action to reduce risks in this lowest classification unless reasonably practicable measures are available, such as developing comprehensive emergency response plans. The Applicant will work with all relevant local authorities to develop such plans. The Applicant has engaged with the HSE, including their science division, to seek their expert opinion on the pipeline design and associated risk assessments. The Applicant has also engaged with other industry experts and will continue to engage both regulator and industry experts throughout the pipeline design and subsequent operation. The Applicant has adopted a robust design and route selection process for the Proposed Development, with safety of local communities being a key consideration. The routeing and design accords with adopted guidance, including on managing risk, and has been informed by advice from experienced technical consultants. Please refer, in addition, to the Applicant's response to the Examining Authority's First Written Questions 1.1.19 **[REP1-045]**, detailing the Applicant's engagement with the UK regulatory body, the Health and Safety Executive.
2.26.2	Safety	1) The Pipe line inventory at 53km and 84bar (1200psi) is circa 9858tons of CO2. 1 ton of CO2 is 556.2m3. The Block valves as per the latest map are spaced at 10.5km,10.5km,15.5km and final leg to Theddlethorpe is 16.5km - this means 1,953 tons CO2 between Immingham and block 1, also 1,953 tons between block 1 and block 2, between block 2 and block 3 = 2,883 tons CO2 and the final leg between block 3 and Theddlethorpe will have 3069 tons CO2. When converted into cubic meters at atmospheric pressure to make it easier to visualise these figures become as below 1953 tons becomes 1,086,258m3 2883 tons becomes 1,603,524m3 3069 tons becomes 1,706,977m3 - if broken down further each and every meter of pipeline contains 103m3 of CO2 and given the fatal concentration is accepted as 10% that becomes 1030m3 affected, CO2 is heavier than air so will not reach any great altitude so will spread further than it rises - I acknowledge that the above figures are based on no external influence by environmental or geological factors and assume a uniform expansion rate. If a breach/failure were to occur does VIKING CCS consider this volume of CO2 being released into the local	Please refer to the Applicant's response to the Examining Authority's First Written Questions 1.1.22 **[REP1-045]**.

Ref	Topic	Matter raised in Written Representation	Applicant response
		population/environment to be acceptable and complies with reducing the risk to ALARP.	
2.26.3	Safety	2) in the event an emergency depressurisation had to be conducted as per the above figures a significant volume of CO2 would have to be vented. A 25m stack will route to CO2 to an assumed "safe" height but you must agree is very much dependant upon metrological condition at the time of release i.e. if nil wind there will minimal to no dispersion and CO2 will sink to the ground level very quickly - CO2 when changing to gas phase cools to between -54 Celsius and -78 celsius - this will be significantly colder than the ambient temperature even on the coldest of winter days and is extremely likely to result in the formation of micro weather system at the vent/breach site whereby a convective downdraft will be formed and fed by the continued release /venting of CO2. As long as the downdraft air is denser (colder) than the environmental air at the same level, it will continue to accelerate. It will not decelerate until it becomes less dense (warmer) than the environment or until it begins to spread out in response to the surface. Couple with this the relative humidity at the breach site or venting site and it will rapidly cool the water droplets in the surrounding air causing potential carbonic acid hail/rain to form which will further exacerbate the downdraft potential not to mention the environmental and health related issues that will arise from acid hail/rain and the groundwater acidification due to increased CO2 at ground level, What has VIKING CCS done to mitigate this potential event specifically with regard to harm to human health and environmental impacts.	Venting requirements will be confirmed as part of the detailed design process. Any venting that does take place will comply with any prevailing legislation and associated guidance in place at that time (e.g. the Control of Substances Hazardous to Health Regulations 2002 relating to exposure of employees to hazardous substances, such as CO_2). Please also refer to the Applicant's response to the Examining Authority's First Written Questions 1.2.10 **[REP1-045]**.
2.26.4	Safety	3) The process used in carbon capture utilises amines to scrub the CO2 from exhaust gases - it is then processed and the CO2 is captured dewatered and compressed/heated ready for transport, as part of the process Nitramines and Nitrosamines are produced - Permissible total concentrations of nitrosamines and nitramines proposed by Norwegian Institute of Public Health are 0.3 ng/ m3 in air and 4 ng/l in drinking water. According to WHO, Health Canada and U.S. EPA, the NDMA limit in drinking water are 100 ng/l and 0.7 ng/l respectively. In contrast to nitrosamines, data on chronic toxicity of aliphatic nitramines are very limited and there is not sufficient toxicological information for a proper evaluation of their health hazard. Although nitramines are less mutagenic and carcinogenic than their corresponding nitrosamines, they should also be considered as highly toxic. DMNA, N-diethylnitramine (DENA) and MNA should still be regarded as carcinogen of high potency. Many research on nitramines have shown their carcinogenic potential in animals The studies confirm the toxicity of some nitramines. Their results exhibited that amongst MEA-NO2, 2-nitramine-2-methylpropanol and nitropiperazine, only MEA-NO2 showed positive mutagenic effect. The other two nitramines were found not to be mutagenic. In turn, mutagenic potential of DMNA was not confirmed. To put into context 1ng is 1 billionth of a gram the recommended exposure is 0.3ng 1 grain of salt is approx 65,000ng therefore 1 grain of salt in an olympic sized swimming pool (25,000,000litres) is approximately 6 times the maximum recommended concentration of 0.3ng When asked how it would be monitored there was not a suitable answer given - it would be down to the contractor that was operating the site to manage. Not the answer I would have liked to hear from the Duty holder. What controls and mitigations are in place to prevent exposure and in the case of accidental release what Emergency response protocols will be implemented by VIKING CCS	Pipeline systems have strict entry requirements and the composition of CO_2 entering the Viking CCS pipeline will be continually monitored to ensure it meets the agreed specification. All potential connectors into the Proposed Development are designing their equipment to comply with the prescribed Viking CCS entry specification. Viking CCS will control the entry specification of CO_2 from emitters by way of approval of the emitter project metering and verification equipment and plans. Viking CCS shall be able to shut in any emitters that cannot meet the specification for entry to the Viking CCS system and have appropriate monitoring in place to assure that CO_2 entering the network meets the defined specification. With respect to emergency procedures, please refer to the Applicant's response to the Examining Authority's First Written Questions 1.1.23 **[REP1-046]** which details the approach that will be taken to any emergency event.

Ref	Topic	Matter raised in Written Representation	Applicant response
2.26.5	Safety	4) Water within the Dense phase CO2 is likely to be in the range of 500ppm to 1500ppm and most probably towards the higher end of the range, if the water droplets are allowed to pool into free water then strong acids (specifically carbonic, sulphuric and nitric) can be formed which will react adversely with carbon steel and are likely to cause niche environment corrosion hotspots leading to rapid degradation of the internal surface of the pipeline and may result in localised failure at the corrosion site, H2S is also a byproduct of the combustion process (as well as sulphur dioxide, nitrogen dioxide, carbon monoxide and more) which is well know to cause embrittlement within carbon steel. A further concern regarding free water within the dense phase CO2 is clathrate hydrate formation which could cause further embrittlement and failure mechanisms. I note there are 12 area's within the current schematic of the pipeline where there are bends in the 70 - 90 degree range - will these be "cushioned" to prevent erosion and accelerated degradation of the pipeline. How will these concerns be addressed by VIKING CCS and integrity of the pipeline monitored.	Pipeline systems have strict entry requirements and the composition of CO_2 entering the Viking CCS pipeline will be continually monitored to ensure it meets the agreed specification. All potential connectors into the Proposed Development are designing their equipment to comply with the prescribed Viking CCS entry specification. Viking CCS shall control the entry specification of CO_2 from emitters by way of approval of the emitter project metering and verification equipment and plans. Viking CCS shall be able to shut in any emitters that cannot meet the specification for entry to the Viking CCS system and have appropriate monitoring in place to assure that CO_2 entering the network meets the defined specification. The pipeline will have a cathodic protection system which will be monitored. The pipeline will also be subject to in-line inspection with frequency determined on a risk-based approach.
2.26.6	Safety	5) Have lessons been learned and protocols implemented to prevent a similar occurrence with regards to the pipeline failure in Satartia, Mississippi February 22nd 2020, and more recent failure at the Exxon site in Louisiana 3 April 2024 - Still awaiting a response from VIKING CCS	The Applicant is aware of these two incidents. The incident in Mississippi in February 2020 was caused by large-scale ground movement. The Proposed Development does not cross any areas with historic records of landslides, as identified from the British Geological Survey National Landslide Database. Results of the investigation into the incident of 3 April, again in the USA, have not yet been released, therefore the Applicant is unable to comment further on that incident.
2.26.7	Safety	6) Has VIKING CCS developed a robust safety case / Emergency Response Plan / Site specific risk assessment and response plan / Environmental impact assessment and full assessment of impact on health, noise pollution, disruption, increased stress and inconvenience compensation with regards local residents within the catchment of the construction. Health Risk Assessment regarding increased low level exposure to CO2 and potential health issues arising from an increased background level of CO2 in both atmosphere, land and groundwater.	In line with the Planning Inspectorate's Scoping Opinion **[APP-075]**, a suite of assessments were submitted as part of the Environmental Statement, which is available in the Examination Library on the Planning Inspectorate's website.
2.26.8	Offshore storage	7) The age and design of the gas fields raises questions that should be addressed by VIKING CCS - Original casing design - are the casings in good condition, when were the last CBL/USIT (Cement bond log / UltraSonic Imager tool) logs conducted and did they confirm a homogenous competent cement - if H2S was produced with the natural gas there is a high probability of embrittlement/ corrosion. Is the cement suitable for CO2 sequestration - if water is present and strong acid formed the Portland cement can be adversely impacted. How successful was the original cementing, were remedial cement jobs required, deteriorated / inadequate cement bonding can provide micro annulus communication to surface. How were the wells abandoned - will the wells require intervention/ work over prior to utilisation for sequestration. Competent risk assessment carried out to address lock up in the injection phase resulting in the pipeline becoming static and cooling to the point supercritical/ dense phase can no longer be maintained and CO2 returning to a gas phase	In order to secure a Storage Permit from the NSTA to allow injection and permanent storage of CO_2, the project is required to assess all containment and conformance risks related to CO_2 at the storage site and must display that there is no significant risk of leakage. This includes assessing the impact of depletion and repressurisation on the reservoir.
2.26.9	Offshore storage	8) Have VIKING CCS conducted robust studies regarding micro seismology and earthquake propagation as a direct result of reservoir injection by dense phase fluids	In order to secure a Storage Permit from the NSTA to allow injection and permanent storage of CO_2, the project is required to assess all containment and conformance risks related to CO_2 at the storage site and must display that there is no significant risk of leakage. This includes assessing the impact of depletion and repressurisation on the reservoir.

Ref	Topic	Matter raised in Written Representation	Applicant response
2.26.10	Water	9) The cut is very close to the vent stack and the cut connects directly to the Great Eau river - there would be a high percentage risk that any slow/minor co2 leakage would go into solution in the cut raising the acidity as carbonic acid for sure and possibly Sulfuric or Nitric dependant on suitable chemical composition at the leak site - this would ultimately discharge into the Great Eau - Which has been classed as one of Lincolnshires best examples of chalk stream habitat as per Anglian water, Lincolnshire County Council, Environment agency, The Wildlife Trust, Wild Trout Trust, Lincolnshire Wolds and Natural England, with nearly £45,000 being spent in the maintenance and upkeep of the river What if any consideration has VIKING CCS given to protection of this habitat also there are numerous articles regarding the detriment that would be encountered if there was CO2 invasion into the groundwater system and subsequent acidisation which would effectively render the ground barren for all crops and livestock.	The impact of the project on the water environment is assessed in the Environmental Statement Chapter 11: Water Environment (Revision A) **(document reference 6.2.11)**.
2.26.11	Safety	These are the main concerns that I have raised with VIKING CCS directly, and through the parish council with Victoria Atkins MP -Secretary of State for Health and Social Care Also shown to Mrs Atkins was a video of the DNV test conducted at Spadeadam testing facility where an 8 inch pipeline 1km long was ruptured containing dense phase CO2 and the subsequent discharge and mass outflow recorded - apparently it had quite an effect on Mrs Atkins but there has been no subsequent support or communication from the Honourable MP I find this quite distressing given her role as Secretary of State for Health and Social Care	DNV's test was conducted in 2013 as part of a joint industry project. A CO_2 pipeline was deliberately ruptured at the safe environment of DNV's Spadeadam facility to collect data on the release of CO_2. The Applicant continues to work with organisations including DNV to improve industry's application of safe CO_2 pipeline design.

Table 2-2730: West Lindsey District Council – REP1-068

Ref	Topic	Matter raised in Written Representation	Applicant response
2.27.1	General	1. Introduction The proposed development comprises of the Viking CCS Pipeline, a Nationally Significant Infrastructure Project. The project consists of a 55km pipeline that will transport up to 10 million tonnes of carbon dioxide a year from Immingham to the former Theddlethorpe Gas Terminal. From here, it will join an existing offshore pipeline to the Viking area within the UK southern North Sea, where the carbon dioxide will be injected into depleted gas reservoirs 2.7km beneath the seabed. Associated infrastructure and ancillary works are also proposed. The applicant is Chrysaor Production (UK) Limited. WLDC is one of the host authorities for the project. The other host authorities consist of North Lincolnshire, North East Lincolnshire, East Lindsey and Lincolnshire County Council. So far as WLDC is concerned the pipeline would run underground through the District for approximately 2km, from the north east of the settlement of Riby, through agricultural fields, across the A18 and down to the south east where it enters into North East Lincolnshire. One of three proposed block valve stations (Washingdales Lane) will lie outside of, but close to (400m) the District boundary to the south east of Riby.	The Applicant notes these comments from WLDC and agrees that this provides an accurate description of the Proposed Development and location in WLDC.

Ref	Topic	Matter raised in Written Representation	Applicant response
2.27.2	Planning policy	2. Local and National Policy The Central Lincolnshire Local Plan (CLLP) forms part of the development plan for West Lindsey (replacing the previous Central Lincolnshire Local Plan, adopted in 2017). The Local Plan was adopted on 13th April 2023 and therefore represents an 'up to date' statutory development plan to which significant weight should be afforded in decision making under section 105 of the PA 2008. The Central Lincolnshire Joint Strategic Planning Committee (CLJSPC) recognises that there is the need to move towards a low carbon future, this is a key theme within the most recently adopted version of the CLLP 2023. This theme is detailed within Paragraphs 3.1.4. and 3.1.5. of the CLLP states that 3.1.4. The Central Lincolnshire Joint Strategic Planning Committee (CLJSPC) is rising to that challenge as set by parliament. No longer will planning decision makers in Central Lincolnshire merely 'encourage' development proposals to achieve certain standards, or only 'welcome' development that goes a little beyond certain building regulation basic minimums. Development in Central Lincolnshire must do, and can do, far better than that. We are legally obliged to do more. And, for future generations, we are morally obliged to do more. 3.1.5. The four authorities which are represented on the CLJSPC have all recognised the climate crisis we face and the urgent need for action. Indeed, if we continue to emit around 1.2 million tonnes of CO2 in Central Lincolnshire (as we did in 2018), then by around 2026/27 we will have emitted around 9 million tonnes. 9 million tonnes is Central Lincolnshire's entire CO2 lifetime budget (or fair share) of global emissions, as calculated by the Tyndall Centre, if the globe is to stay under 2°C rise in temperatures as recommended by the Intergovernmental Panel on Climate Change (IPCC). Put another way, if we continue to emit CO2 in Central Lincolnshire like we presently do, then from around 2027 we will have exceeded our budget or allowance, and we would then have to rely on other locations to emit less than their fair share to compensate for our excess emissions. Staying below 9 million tonnes does not mean we have to be net zero carbon here in Central Lincolnshire by 2026/27. But it does mean that the earlier we act now, the more energy we conserve now and the more renewable energy we generate now, then the longer timeframe we get to use up our 9 million tonnes of CO2 budget. The further we push that end date of consuming the 9 million tonnes beyond 2026, the greater chance we all have of achieving a smooth transition to a net zero carbon Central Lincolnshire. This is broadly reflected in Policy S16- Energy Infrastructure of the CLLP which states that; The Joint Committee is committed to supporting the transition to net zero carbon future and, in doing so, recognises and supports, in principle, the need for significant investment in new and upgraded energy infrastructure. Where planning permission is needed from a Central Lincolnshire authority, support will be given to proposals which are necessary for, or form part of, the transition to a net zero carbon sub-region, which could include: energy storage facilities (such as battery storage or thermal storage); and upgraded or new electricity facilities (such as transmission facilities, substations or other electricity infrastructure. However, any such proposals should take all reasonable opportunities to mitigate any harm arising from such proposals, and take care to select not only appropriate locations for such facilities, but also design solutions (see Policy S53) which minimises harm arising. NPS (National Policy Statement) EN-1 sets out the national policy for energy infrastructure and is an overarching document that does not specifically cover	The Applicant notes the comments from WLDC. The Applicant welcomes that WLDC is largely supportive of the Proposed Development in principle.

Ref	Topic	Matter raised in Written Representation	Applicant response
		CCS. However, it does include high level support for CCS projects. NPS EN-1 outlines the Government's ambition to reach the legally binding net zero target by 2050. NPS EN-1 recognises that: "the most likely method for transporting the captured CO2 is through pipelines". It is recognised that the proposal would not necessarily help towards net zero within the district, instead transporting CO2 through part of the District by the underground pipeline. Nevertheless the Central Lincolnshire Local Plan adopted in April 2023 and WLDC is largely supportive of such proposals in principle subject to other material considerations being satisfied.	
2.27.3	General	3. Key Issues WLDC WLDC have submitted a Local Impact Report (LIR) which addresses the relevant potential impacts of the development within the District so far as the 2km of underground pipeline is concerned and the development as a whole, where necessary. WLDC and the Central Lincolnshire Authorities are generally supportive of such projects as detailed within Section 1 of this statement.	The Applicant notes the comments from WLDC. The Applicant welcomes that WLDC is content with the Applicant's submission.
2.27.4	Landscape and Visual Impact	Visually, WLDC are content with the applicant's submission. Within the WLDC boundary the pipeline would be underground and therefore the visual impacts would likely only be temporary through the construction period with one of laydown areas directly adjacent to the north district boundary and the installation of a temporary access road along the A18- Barton Street. The Washingdales Lane Block Valve Station is to be located c. 400m to the south east of the WLDC boundary. It is minor in its scale and would be contained by appropriate landscaping strips. WLDC is content that the visual impacts upon the AGLV designation are acceptable.	The Applicant welcomes the comment from WLDC.
2.27.5	Ecology and Biodiversity	WLDC is satisfied with the submission in terms of Biodiversity Net Gain and the net increase proposed, which is predicted to be a net gain of 10.42% for area-based habitat units, a net gain of 2597.43% for hedgerow habitats and a net gain of 26.12% for watercourse habitats . The mitigation for the removal of trees and partial hedgerow removal is considered to be acceptable. Routing of the pipeline has been done to minimise as far as possible the impacts on habitats. Further survey work on the relevant ecology reports is needed and has been recognised by the applicant. WLDC finds that the ecology and biodiversity matters are acceptable.	The further surveys in question relate to potential blow wells on the route. The findings of the survey will be reported and shared with Interested Parties. The Applicant welcomes the comment from WLDC that the ecology and biodiversity matters are acceptable.
2.27.6	Agriculture and Soils	The pipeline would run through agricultural fields, which, in this location comprise of Grade 2 and 3 land as defined by Natural England Classifications. WLDC is content with the reinstatement of the agricultural land post burying of the pipeline as detailed within the submitted Outline Soil Management Plan.	The Applicant welcomes the comment from WLDC that the authority is content with the reinstatement of the agricultural land following installation of the pipeline as detailed within the submitted Outline Soil Management Plan.
2.27.7	Archaeology	The ongoing archaeology work, comprising of trial trenching is welcomed and the continued discussions between the applicant and Lincolnshire County Council is encouraged. The proposal would preserve the setting of the nearby Listed Buildings within the nearby settlements of Riby and Keelby.	The Applicant is undertaking a scheme of trial trenching and will present the findings to the authority once complete.
2.27.7	Traffic and Transport	With regard to Transport, Traffic and Archaeology, WLDC defers to Lincolnshire County Council as their specialist consultees. Traffic and Transport impacts are considered to be acceptable, recognising that the impacts during construction can	The Applicant notes that WLDC will defer to Lincolnshire County Council for Transport, Traffic and Archaeology matters.

Ref	Topic	Matter raised in Written Representation	Applicant response
	Archaeology	be appropriately managed through a Construction Environmental Management Plan (CEMP).	
2.27.8	Major Accidents and Disasters	The associated risks of accident and major disasters are detailed within a suite of documents within the DCO submission. WLDC considers that such risks could be appropriately managed through the construction period as well as post development.	The Applicant notes WLDC's comment that risks associated with accidents and major disasters could be appropriately managed.
2.27.9	General	4. Conclusion WLDC and the Central Lincolnshire Authorities support a move, and projects, that contribute towards a net zero future. Overall, the development is considered to have a neutral impact upon the District and WLDC are supportive of the Viking CCS project subject to the DCO securing the relevant considerations and mitigation measures.	The Applicant notes that WLDC is supportive of the Proposed Development and that it will have a neutral impact on the district.

Table 2-2831: The Partners of J W Needham and Co – AS-056

Ref	Topic	Matter raised in Written Representation	Applicant response
2.28.1	Land / Compensation	My client and I have been working with Gateley Hamer to agree an Option for a Lease. We have not been able to agree the depth of the leased area. Upper levels of the Leased area Currently the proposed lease depth (at the top of the pipe) is 70cm below the surface; my client mole plough's to 70cm, over time there is every chance that this soil cover will get less and there is not adequate headroom to enable sufficient clearance over the leased area to be maintained. At a depth of 70cm there is every possibility that my client will go into this leased area with his machinery and will be in breach of the lease. We require the lease depth to be 1.0m. Lower levels of the Leased area The proposed depth (at the bottom of the pipe) is 20metres below the upper limit. This appears excessive and we have not received an explanation why this depth is required. Without a clear explanation of why this depth is required we object to the depth at this level and require that the leased area only cover the depth of the constructed pipe area with a small amount of head room.	The Applicant notes the comments from Savills on behalf of The Partners of J W Needham and Co and acknowledges that discussions on the Option Agreement for Lease remain ongoing. The Applicant has been engaging and will continue to engage with Savills on behalf of The Partners of J W Needham and Co in respect of the points raised with a view to reaching a satisfactory position for all parties and to limit any impact ongoing agricultural operations. The Applicant will continue to engage with Savills on behalf of The Partners of J W Needham and Co with a view to reaching a commercial agreement.
2.28.2	Land / Compensation	Diminution in land value The consideration for the lease is proposed on the basis that agricultural operations won't be affected. If the upper depth is not increased to 1.0m then agricultural operations will be affected over the 8m (width) leased area, as well as impacting on the way they farm the remainder of the field; this injurious affection should be compensated and my client paid for the diminution in value of the area over the leased area (based on agricultural operations being affected) as well as the diminution in value to the remainder of the field to a greater value than the notional value offered of £13,500 per acre payable on the 8m (width) leased area.	The Applicant will continue to engage with the landowner and compensation will be assessed on a case-by-case basis in accordance with the Compensation code.

Table 2-2932: The Needham-Teanby Family – AS-057

Ref	Topic	Matter raised in Written Representation	Applicant response
2.29.1	Land / Compensation	My client and I have been working with Gateley Hamer to agree an Option for a Lease. We have not been able to agree the depth of the leased area. Upper levels of the Leased area Currently the proposed lease depth (at the top of the pipe) is 70cm below the surface; my client mole plough's to 70cm, over time there is every chance that this soil cover will get less and there is not adequate headroom to enable sufficient clearance over the leased area to be maintained. At a depth of 70cm there is every possibility that my client will go into this leased area with his machinery and will be in breach of the lease. We require the lease depth to be 1.0m. Lower levels of the Leased area The proposed depth (at the bottom of the pipe) is 20metres below the upper limit. This appears excessive and we have not received an explanation why this depth is required. Without a clear explanation of why this depth is required we object to the depth at this level and require that the leased area only cover the depth of the constructed pipe area with a small amount of head room.	The Applicant notes the comments from Savills on behalf of The Needham-Teanby Family and acknowledges that discussions on the Option Agreement for Lease remain ongoing. The Applicant has been engaging and will continue to engage with Savills on behalf of The Needham-Teanby Family in respect of the points raised with a view to reaching a satisfactory position for all parties and to limit any impact ongoing agricultural operations. The Applicant will continue to engage with Savills on behalf of The Needham-Teanby Family with a view to reaching a commercial agreement.
2.29.2	Land / Compensation	Diminution in land value The consideration for the lease is proposed on the basis that agricultural operations won't be affected. If the upper depth is not increased to 1.0m then agricultural operations will be affected over the 8m (width) leased area, as well as impacting on the way they farm the remainder of the field; this injurious affection should be compensated and my client paid for the diminution in value of the area over the leased area (based on agricultural operations being affected) as well as the diminution in value to the remainder of the field to a greater value than the notional value offered of £13,500 per acre payable on the 8m (width) leased area.	The Applicant will continue to engage with the landowner and compensation will be assessed on a case-by-case basis in accordance with the Compensation code.

Table 2-3033: The Shareholders of J W Needham Ltd – AS-058

Ref	Topic	Matter raised in Written Representation	Applicant response
2.30.1	Land / Compensation	My client and I have been working with Gateley Hamer to agree an Option for a Lease. We have not been able to agree the depth of the leased area. Upper levels of the Leased area Currently the proposed lease depth (at the top of the pipe) is 70cm below the surface; my client mole plough's to 70cm, over time there is every chance that this soil cover will get less and there is not adequate headroom to enable sufficient clearance over the leased area to be maintained. At a depth of 70cm there is every possibility that my client will go into this leased area with his machinery and will be in breach of the lease. We require the lease depth to be 1.0m. Lower levels of the Leased area The proposed depth (at the bottom of the pipe) is 20metres below the upper limit. This appears excessive and we have not received an explanation why this depth is required. Without a clear explanation of why this depth is required we object to the	The Applicant notes the comments from Savills on behalf of J W Needham and Co and acknowledges that discussions on the Option Agreement for Lease remain ongoing. The Applicant has been engaging and will continue to engage with Savills on behalf of J W Needham and Co in respect of the points raised with a view to reaching a satisfactory position for all parties and to limit any impact ongoing agricultural operations. The Applicant will continue to engage with Savills on behalf of J W Needham and Co with a view to reaching a commercial agreement.

Ref	Topic	Matter raised in Written Representation	Applicant response
		depth at this level and require that the leased area only cover the depth of the constructed pipe area with a small amount of head room.	
2.30.2	Land / Compensation	Diminution in land value The consideration for the lease is proposed on the basis that agricultural operations won't be affected. If the upper depth is not increased to 1.0m then agricultural operations will be affected over the 8m (width) leased area, as well as impacting on the way they farm the remainder of the field; this injurious affection should be compensated and my client paid for the diminution in value of the area over the leased area (based on agricultural operations being affected) as well as the diminution in value to the remainder of the field to a greater value than the notional value offered of £13,500 per acre payable on the 8m (width) leased area.	The Applicant will continue to engage with the landowner and compensation will be assessed on a case-by-case basis in accordance with the Compensation code.